

Designing for Earth Democracy transitions: Processes to foster an economics of radical interdependence

by Kiran Kashyap (they/them)

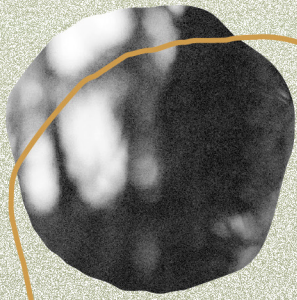
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School of Design

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Designing for Earth Democracy transitions

Processes to foster an economics
of radical interdependence

Kiran Kashyap

Certificate of Original Authorship

Statement of declaration

I, Kiran Kashyap, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Design, Faculty of Design, Architecture and Building at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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Acknowledgement of Country

I acknowledge the Traditional Custodians of Bulanaming, the land on which I live - the Gadigal peoples of the Eora Nation. I pay my deepest respects to Elders past and present. Sovereignty was never ceded, this always was and always will be Aboriginal land.

My multifaceted relationship with colonialism

I recognise the loss but also the resilience of Aboriginal cultures since colonisation began on these lands; and I reflect on the many layers of my own sometimes-contradictory relationship with colonialism, here outlined chronologically. (1) Whether consciously or not, I carry with me the history of oppression and plunder of my Tamil ancestors by British colonial forces, of which I have only been able to hear glimpses of first-hand accounts from my grandparents. (2) I have also inherited the privilege of my ancestry belonging to the Brahmin caste who benefitted from the oppression of 'lower' castes - this likely played a part in facilitating my parents' migration from India to Australia. (3) My existence in the settler-colonial nation of Australia is predicated on the genocide and continuing displacement of the Aboriginal peoples of these lands. (4) I have developed a solidarity against white supremacy due to my personal experiences of prejudice and structural racism as a brown person (imposed and internalised). (5) Last but not least, I recognise the hypocritical nature of my everyday life which relies upon unjust local and global systems that operate through oppressive neo-colonial relations.

Solidarity with the Palestinian cause

I pay heed to the plight of the Palestinian people, who continue to face brutal horrors and have their lives and sovereignty ripped away from them. Whilst the realities of genocide are livestreamed around the world, our Australian representatives in government are playing geopolitics with their settler-colonial friends. My thesis is not a response to this unfolding genocide (nor the ongoing Zionist occupation), however the geopolitical and neocolonial dynamics at play in Palestine, and in efforts for First Nations sovereignty at home, are also evident in the context of regenerative transitions. No zero sum solution will provide lasting relief, rather we must find nuanced ways of navigating larger than life tensions together.

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I have been able to undertake this doctoral research only because of the immense support I have had from my supervisors, colleagues, family, friends, and numerous inspiring practitioners. Thank you so much to **Cameron Tonkinwise** and **Abby Mellick Lopes** for guiding me through this wandering journey of not only professional, but also personal self-discovery. Your wise words and provocations have kept me on my toes, but always with a smile on my face - and I hope we can continue to collaborate. Your insightful direction has thoroughly helped me to attempt to push the boundaries of design practice in service of systemic transitions - with both curious reflexivity and groundedness.

The professional relationships and friendships formed at the Design Innovation Research Centre (DIRC) were profoundly important in finding meaningful avenues of design practice - and to all of my colleagues there, I say thanks for the inspiring work we did together. To the cohort of PhD students from across faculties with whom I undertook this journey - with its sizeable highs and lows - I am honoured to have shared all aspects of our explorations. In particular, I am so grateful to you **Juan Garzon**, **Karina Kallio**, **Kimberley Crofts**, **Samuel Wearne** and **Samuel Yu**.

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To my parents **Jyoti** and **Ravi**, I so greatly appreciate the attitude of lifelong learning that you have instilled in me; to my brother **Roshan**, my closest friends and those at the **Peach Palace**, thank you for keeping me focused and rejuvenated, and for bringing out the passion in me as I have undertaken this doctorate. And lastly, but certainly not least, to **Jade Court-Gold** my lifelong partner in crime, I would not have even embarked on this journey were it not for you - your unwavering encouragement has continually enabled me to approach this doctoral research in a fluid way, and as a whole person. A tremendous thank you.

Abstract

Humans and non-humans alike who make up the Earth Community face challenges of a previously unprecedented level of complexity. This is seen in the interconnected dynamics of the climate crisis, mounting social disparities and mass extinction of wildlife - also known as a polycrisis. Addressing these seemingly intractable social and ecological crises necessitates fundamental shifts in prevailing human systems from anthropocentric to ecocentric. Nascent approaches to design for the emergence of regenerative economics and bioregional governance champion these shifts and can help to develop systems-level transition pathways away from dominant neoliberal capitalist economic models.

My doctoral research investigates design practice in this context, and through a critical design ethnography methodology seeks to creatively unpack the specific qualities of processes that are valuable in facilitating systems-level transitions to bioregionally-adapted regenerative economies. The two sites of research that form the basis of this study are Regen Sydney and Coalition of Everyone - both organisations with which I have been intimately involved - allowing for my undertaking of extended participant observation as an insider researcher. The research hypotheses I am testing in these two sites are informed by preceding professional strategic design practice at the Design Innovation Research Centre (DIRC), University of Technology Sydney (UTS). The study seeks to identify the transformational value of design for the emergence of bioregionally-adapted regenerative economics, both within and across the two sites of research.

Design, co-design and systemic design manifest in diverse ways across the two sites, augmented by key approaches such as Transition Design, DEAL's Doughnut Unrolled, mission-oriented innovation and various others. Through this research I study the novel ways in which design practice manifests, including as amalgamations of these methods, as well as in the emerging project portfolios at Regen Sydney and Coalition of Everyone. This inquiry looks to surface the practical value of design in embedding non-human perspectives and relational ontologies into broader systems of economics and governance, including through systems convening, prefigurative practice, multi-stakeholder forums, theories of change, visual sensemaking and other methods, along with details about the challenges faced in these endeavours.

If you would like to go straight to the findings, please follow this link to section [8.1.1.2.](#)

Coming into being

I wish to situate my emerging path through this doctorate in the histories of my upbringing and personal life experience as they have played a significant role in shaping the types of questions that I ask. (1) The first aspect of my lived experience to fundamentally shape my axiology, ontology and epistemology is the Indian Tamil cultural heritage my parents have endowed upon me. Home life for me included an exposure to ethics of interconnectedness through nondualism, ahimsa (non-violence) and samsara (cyclicity of existence). (2) Secondly, growing up in the Inner West of Sydney moulded me in the image of a particular version of multicultural Australia. In social life and adventures with friends I came to value diversity, secularism, activism and creative expression. (3) A third aspect is an ongoing navigation of my existence as a settler on stolen, unceded Aboriginal lands. I continue to engage with what it means for the land to own me, and what it means to be an ally in the struggle for decolonisation. (4) Lastly, my recent navigation of the world as a person of non-binary gender has challenged me to further unpack essentialist and dualist ways of being in a deeply personal way. I see parallels between this journey of the integration of my whole self parts of myself and the move to dissolve human/non-human separations.

My professional research orientation

I have ten years of co-design experience across the Design Innovation Research Centre (DIRC), Regen Sydney and Coalition of Everyone that build upon my undergraduate design training. This has included engaging in numerous social/strategic design projects, working through various stages of participatory research, ideation, prototyping and design development. I have helped to write proposals, facilitated co-design workshops with clients from community, industry and government, created design artefacts as well as documented research in both traditional and non-traditional outputs such as reports, conferences, websites and exhibitions.

My skillset and outlook have been shaped by participatory design research carried out as a part of project work carried out over this time. Multi-stakeholder collaborations have been valuable processes through which to envision futures and confront tensions in the context of systems complexity. The various projects entailed have required the planning and continual adjustment of participatory design research processes and methods alongside the emergence of increased clarity of project intent. Participants were engaged through iterative design development processes such as site visits, needs analysis, journey mapping, systems mapping, storyboarding, mock-up testing, scenario development and backcasting. Sensemaking and data collection methods have included analysis of themes, interviews, systems maps and artefacts.

In particular, the Frame Creation process and Transition Design approach have been indispensable parts of my formative multi-stakeholder design toolkit (Dorst, 2015b; Irwin, 2015). These two methodologies offer valuable frameworks with which to creatively navigate systems complexity in practice. Through their use I have gained great insight into the value of co-design, strategic design and systemic design methods in responding to wicked problems. I have been guided to seek their further investigation in the context of this doctoral research, very much drawing from my experience in holding such intentional participatory spaces. With much of my earlier project work at DIRC situated in the social impact, justice and health sectors, this doctorate is a crucible through which I extend and explore the transformational value of design in ecological economics - engaging with Regen Sydney and Coalition of Everyone as sites of research, and interrogating my contributions as a Transition Designer.

Diagrams and voices in this thesis

Visual sensemaking has comprised a significant part of my inquiry into design, and continues to inform my practice as a mediator of emerging pattern languages. In this vein, diagrams and images included throughout this thesis will be labelled with a black circle to the top left to denote those that I have created as an analytical tool in my PhD. Other diagrams formed either within my sites of research, or by unaffiliated authors altogether will be left unmarked.

Lastly, I write this document not in the third person but in first person language so that it is an embodiment not of a position of illusory separation but instead of my critical intersubjectivity with the systems and practices which I am exploring. Where relevant the unfolding journeys of Regen Sydney and Coalition of Everyone are told from the perspective of the organisations. Statements from colleagues during the field research practitioner interviews are included as quotes which serve to enrich, corroborate or contrast from the arguments made. I have sought to attend to the nuanced position of insider researcher by integrating the different types of voices identified here, as appropriate to the thematically organised narrative that follows.

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Key terminology

Anthropocentrism

A concept developed by environmental ethicists, anthropocentrism describes the pervasive human-centred worldview that humans are the only bearers of intrinsic value (Kopnina et al., 2018). Anthropocentrism is epitomised by a perceived separation between the human world and the non-human world. In ignoring the essential interconnectedness of the Earth Community, anthropocentrism conceives of the non-human world as a resource for human consumption (Brown, 1995; Washington & Maloney, 2020).

Bioregionalism

Bioregionalism is a philosophy and movement calling for reconfigured political and economic systems along with a renewed emphasis on living in reciprocity with local bioregions, their ecosystems and bio-geo-physical realities (Thackara, 2019; Wahl, 2020a). Local cultures and knowledge are vital to determining bioregional boundaries, as exemplified by the language group regions of First Peoples around Australia. With this term I refer to the socio-material cultures, economies and distributed governance processes that enable a reciprocity with local bioregions.

Circular Economy

Circular economics is a model for production and consumption that aims to reduce and eliminate waste (as opposed to the linear 'take-make-waste' economy) through shifts in social practices and infrastructures to encourage sharing, leasing, reuse, repair, remanufacture, composting and recycling (Circle Economy, 2021). Through these processes, materials and products are kept in circulation, reducing land conversion for resource extraction, climate change impacts, biodiversity loss and pollution

Collaborative design (co-design)

I use the terms collaborative design and co-design interchangeably as a catch-all for various established and emerging multi-stakeholder methodologies that are characterised by a positioning of the designer as a facilitator of creative change processes. Approaches employing co-design include participatory design, human-centred design, service design, strategic design, systemic design and Transition Design. Co-design is characterised by processes of collective contextualisation, empathic exercises and holistic synthesis that lead to reframed action.

Community

A community is a group of people who share one or more things in common including proximity, values, customs or interests (James et al., 2012). In this thesis I use the term community to refer specifically to groups of humans who have commonalities, interdependencies and ties to a shared geographical locality or common cause (Light & Akama, 2012).

Cosmopolitan localism

Cosmopolitan localism is a social innovation approach that calls for the formation of nested multiscalar networks of mutually supportive communities, that are globally connected in their common yet pluralistic humanity (Kossoff, 2019; Manzini, 2014; Sachs, 1999). Ezio Manzini and Gideon Kossoff articulate cosmopolitan localism as characterised by place-based cultures, bioregionalism, distributed governance (polycentricity), distributed systems of production and global knowledge networks (Kossoff, 2019; Manzini & M'Rithaa, 2016; Ostrom, 2009).

Democracy

Democracy describes a system of government in which political control is exercised by the people, either directly or through representation (Dryzek, 1999; Hollo, 2020).

Earth Community

Earth Community describes the interdependent subjects of the Earth including humans and all variety of non-human entities that are entangled as the web of life at various scales (Burdon, 2014; Korten, 2007; Maloney, 2014; Shiva, 2006). This terminology captures the diversity of cultures, life forms and ecosystems that are in communion with one another (Berry, 1999; Gorbachev, 2003).

Earth Democracy

The concept Earth Democracy captures the creative and critical self-determination both *by* and *for* the Earth Community (Maloney, 2019; Shiva, 2006). Earth Democracy is based on the flourishing of vibrant local economies, and the fusing of ecocentric values with deep public participation for self-governance (Burdon, 2014).

Ecocentrism

Stemming from the deep ecology movement, ecocentrism is an alternative worldview that emphasises the interconnectedness of all members of our Earth Community. Ecocentrism fundamentally opposes the anthropocentric assumption that human beings are the only entities that possess intrinsic value and are rightful masters of nature (Washington et al., 2017).

Economic localisation

The movement for economic localisation calls for a renewed focus on the local production of essential food, water, energy and materials for human thriving (Hopkins, 2008; Norberg-Hodge & Read, 2016; Shiva, 2006). Momentum for economic localisation draws from both historical examples of localised economies whilst also supporting the emergence of novel circular systems of provision (Diez, 2017; Norberg-Hodge, 2019).

Governance

Governance includes both the formal and informal precepts by which communities and societies shape the qualities of their very existence and emergence (Maloney, 2020; Rosenqvist, 2017). This includes not only immaterial aspects such as policies and cultural norms but also socio-material practices and technological infrastructures. Through the ever changing landscape of these immaterial and material forces, groups of humans at various scales can creatively and critically self-determine the manner of custodianship and evolution of their societies and ecologies.

Neoliberalism

The term neoliberalism describes an ongoing project of market-oriented economic liberalisation characterised by free-market policy reform, privatisation of public assets and the commons as well as the deregulation of economies to prioritise global trade (Springer, Birch & MacLeavy, 2016; Washington & Maloney, 2020).

Pluriversalism

Pluriversalism describes a shared project that strives towards ‘a world where many worlds fit’ as articulated by the Zapatistas (de la Cadena & Blaser, 2018; Noel et al., 2023). As an alternative to the homogenisation of patriarchal-capitalist-modernity, pluriversalism upholds the reciprocal relationality of a multiplicity of ways of world-making (Escobar, 2018; Kothari et al., 2019).

Regenerative economics

Regenerative economics is an emerging discipline of ecological economics that is centred on fostering the wellbeing of the living world and socio-ecological systems - with the **Doughnut Economics** approach a notable mention. Through regenerative economics, human activity is sought to be guided to play a reciprocal rather than extractive role in the web of life - repairing the interconnected socio-ecological fabric - with economic localisation a key factor in enabling these efforts.

Systemic design

Systemic design is a nascent field of practice, with roots in participatory design and systems thinking, and seeks to move beyond the reformism of strategic design towards fostering system transformations (Leadbeater & Winhall, 2020). Practitioners convene cross-sector stakeholder alliances and seek to develop assemblages of living prototypes (Drew et al., 2021). **Transition Design** continues to be vital to the development of this field, and champions the need for transformational theories of change, along with multi-scale and multi-stage interventions, specifically for socio-ecological impact (Hölscher et al., 2018).



Part 1: Theoretical underpinnings

Finding valuable avenues for design-led approaches to systems-level transitions has required me to conduct a particularly wide-ranging analysis of both established and emerging theoretical frameworks. Each has influenced my approach to field research in a different manner, which I discuss through their relevance to my guiding framing of Earth Democracy.

Part 1 has two chapters: (1) Setting the research context, and (2) Literature review.

1. Setting the research context

1.1. Introduction

Humans and the Earth Community are currently facing challenges of a previously unprecedented level of complexity. The numerous seemingly intractable social and ecological crises are deeply interconnected and require systemic transformations in order to be meaningfully addressed. With the prevailing focus on endless economic growth on a finite planet, the world's societies are doomed to face a maelstrom of global systems failures accompanied by varying levels of local social and ecological devastation (Bendell, 2018; IPBES, 2019; Read & Alexander, 2019; Shiva, 2014; Washington, 2015). Responding to the climate crisis, increasing social inequalities and mass extinction of wildlife necessitates fundamental shifts in our prevailing socio-cultural narratives and systems from anthropocentric to ecocentric (Bendell, 2018; Brown, 1995). Despite the half-hearted nature of political action and the cacophony of misinformation there are indeed numerous emerging practices and systems that eschew prevailing anthropocentric and neoliberal capitalist economies and instead embody pluriversal-ecocentric models for living (Extinction Rebellion, 2019b; Hopkins, 2008).

The regenerative economics movement is one such emerging field which seeks to redirect the economic activity of city-scale regions towards socio-ecologically responsible systems that take into account the social and environmental costs of production and consumption, and are suitably localised to bio-geo-physical conditions. While there is no single blueprint for the establishment of such economies, numerous participatory processes are already fostering creative self-determination and the co-design of context-specific transitions towards bioregionally-adapted regenerative economies. Though they go by various names, these are the emerging models of an Earth Democracy - a participatory Earth-centred governance - of nested human economies - an expression of cosmopolitan localism (Escobar, 2019; Kossoff, 2019; Shiva, 2005). Through this thesis I have researched the novel design practices through which Regen Sydney and Coalition of Everyone look to foster systems-level transitions

Shifting local and regional economies towards increased local production for local consumption will only be achieved in complex multi-stakeholder integration processes with people taking a whole-systems design perspective in a collaborative effort to create regional abundance. Such a transition will require skill, persistence and patience, yet it promises diverse and vibrant regional economies, resilient and thriving communities, and the protection and regeneration of regional bio-cultural diversity (Wahl, 2019b, para. 3).

1.2. Background

A significant part of my early literature research included explorations of the commons and degrowth. These concepts offer strong theoretical underpinnings for alternatives to capitalism (and the neoliberal cult of individualism) and endless growth economics respectively. I first outline these terms and their influence in shaping my research direction.

1.2.1. Commons and commoning

There are numerous interpretations of what constitutes the commons, which range from urban planning framings of public space, economic views around community exchange and mutual aid, open source notions of digital commons, to ideological framings of the commons as the entirety of planet Earth as a shared reality in need of custodianship (Bollier & Helfrich, 2019; Weber, 2015). These widely varying definitions are not necessarily at odds with one another and actually exemplify the versatility of the commons as a concept that brings together various disciplines under a cause with united intent. The commons as a conceptualisation of shared natural resources has its roots in European intellectual history where the term was used to refer to agricultural lands and forests (Basu et al., 2017; Bollier, 2011). The term itself derives from the English legalese for common land and before that from the Roman legal category ‘res communis’ for things in common (Basu, Jongerden & Ruivnekamp, 2017). Subsequent centuries have seen drastic privatisation and market enclosures of this ‘common wealth’, notably during the growth of industrial capitalism and resulting urbanisation, encouraged by Garret Hardin’s ‘Tragedy of the Commons’ (Bollier, 2018; Hardin, 1968).

Contemporary definition of the commons builds upon political scientist Elinor Ostrom’s empirical repudiation of Hardin’s analyses, and avoids a narrow framing of it as a static resource (Bauwens et al., 2017, Ostrom, 1990). Rather, the commons is a living process that “is primarily about the social practices of *commoning*” (Bollier, 2016, p. 2). The term commoning captures the central role of active participation in the design, creation, governance and management of the commons (Marttila, Botero & Saad-Sulonen, 2014). It is this process of participatory collaboration that brings the commons to life and better allows it to permeate our collective social imaginaries (Manzini, 2015; Perkins, 2019). Commoning is vital to opposing and reversing the forces of neoliberalism, however the commons are not the only domain of the economy that have been devalued through neoliberalism. As regenerative economist Kate Raworth points out, the economic domains of the *commons*, the *household* and the *state* are increasingly invisible in the face of the *market* (Raworth, 2017). Rebuilding an economy that is Earth-centred and balances the value and role of all four domains is crucial (Shiva, 2005). With this view, my research into systemic design engages with the commons movement and attempts to find a healthy dynamic between all four economic domains.

1.2.2. Finding a nuanced framing of degrowth

Degrowth is an economic transition process focused on the Global North, involving the downscaling of production and consumption to comply with ecological limits along with a simultaneous increase in human well-being through egalitarianism (Alexander, 2017). Economic anthropologist Jason Hickel states that degrowth calls for a “fairer distribution of existing resources and the expansion of public goods” (2019, p. 54). Degrowth stands critically opposed to prevailing underlying cultural assumptions that endless economic growth is both possible and necessary for flourishing societies (Kallis et al., 2018).

I wholeheartedly agree with the subversive stance of degrowth and find it invaluable as an eco-political foundation for dematerialisation that is difficult to be co-opted (Remblance, 2023). The term degrowth itself is fairly unpalatable in the wealthy Global North - including in Gadi (Sydney, Australia) where I conduct my practice. While some frame this issue as a branding problem (Raworth, 2015), a more honest appraisal would suggest that it is an issue of neocolonialism, with ignorance on the part of citizen stakeholders (wilful or otherwise), requiring tactfully orchestrated education and narrative-shifts (Tyberg, 2020). *Degrowth continues to play a vital role in agitating greater understanding of the existentially insane addiction to endless economic growth, however it must be complemented by other framings of ecological economics* (e.g., wellbeing economics, regenerative economics) that can strategically and urgently mobilise broad-based support - whilst acting as trojan horses for degrowth in the increasingly protectionist Global North transition contexts (Brockington, 2020; Michaux, 2022).

As indicated in the introductory section [Diagrams and voices in this thesis](#), diagrams with a black circle to the top left denote those that have been created by me as an analytical tool in my thesis - as opposed to those diagrams formed either within my sites of research, or by unaffiliated authors altogether.

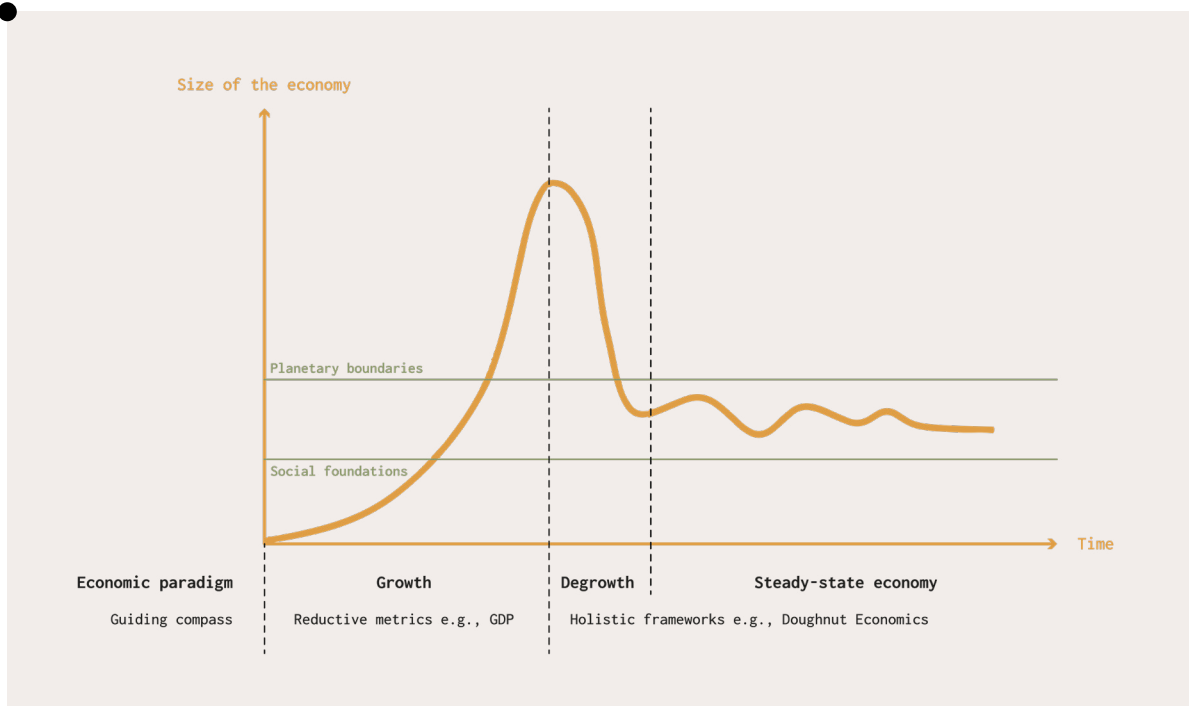


Figure 1. Doughnut Economics and Global North degrowth transitions [adapted] (McFarlan, 2023; O'Neill, 2012)

- 1. Setting the research context
- 1.2. Background
- 1.2.2. Finding a nuanced framing of degrowth

Figure 1 depicts degrowth as a transition process for Global North societies towards steady state economies. The pivotal role of a guiding compass becomes especially clear when considering growth, degrowth and steady state economies as the result of complex, dynamic cultural and political processes. Just as the GDP (Gross Domestic Product) metric has been ubiquitously leveraged during this period of endless economic growth, holistic frameworks such as Doughnut Economics can help to realise a degrowth transition to steady state economics in Global North contexts. All three of these frames - degrowth, steady state economics and Doughnut Economics - must be harnessed according to the context (intent, place and participants), instead of having dogmatic arguments that reinforce silos in ecological economics (Kallis, 2015; Raworth, 2015).

These alternative terms can help to contextualise what exactly degrowth entails to Global North citizens - it is not immediately clear to all that the degrowth of economies and their consumption footprints is compatible with other forms of human growth and prosperity (Raworth, 2015). Context-specific collaboration through the alternative framings could most definitely still be motivated by the underlying need for economic degrowth in helping to articulate which economic sectors and socio-material practices need to be phased out and which need to be embraced - in order to shift towards societies that can flourish symbiotically and fairly within the carrying capacity of Earth.

1.2.2.1. Introducing Doughnut Economics

The Doughnut Economics model - developed by Kate Raworth - is well placed to act as a compass with which to guide economies into the safe

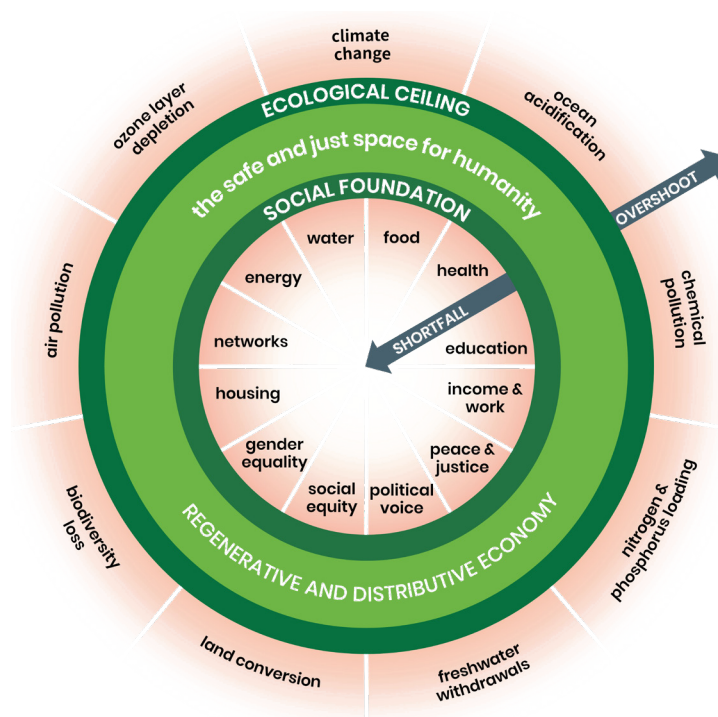


Figure 2. The Doughnut Economics model (Raworth, 2017)

- 1. Setting the research context
- 1.2. Background
- 1.2.2. Finding a nuanced framing of degrowth
- 1.2.2.1. Introducing Doughnut Economics

and just space for humanity. As Figure 2 above depicts, ‘the Doughnut’ is comprised of an outer ring representing the ecological ceiling - the thresholds of planetary processes which must not be crossed, and an inner ring of social foundations - bare minimum foundational aspects for human and societal wellbeing (Raworth, 2017).

Kate Raworth describes this model as one that is fundamentally aligned with degrowth, but at the same time, she highlights its preferred framing around collaborative action towards post-growth and socio-ecological wellbeing (Raworth, 2015). The model itself embodies an elegant simplicity and sense of fun, which have helped it to gather interest from ordinary citizens as well as from dominant neoliberal capitalist Global North institutions. There are shortcomings to the model (which I will explore more deeply later in the thesis), including the lack of a decolonial perspective and a focus on human wellbeing rather than that for all life. However these aspects, as well as the need for deepened explorations of degrowth are able to be collaboratively facilitated using this model - when collectively hacked and adapted in context.

The visual provocation from Kate Raworth seen below, uses the Doughnut to build on previous research into ecological footprints, and depicts all nations according to how well their social foundations are being met and how egregiously planetary boundaries are being transgressed (Raworth, 2018). When seeing this, it is clear that neither is any country yet *developed*, nor is addressing the neocolonial dynamics of present-day geopolitics divisible from efforts towards regenerative economics.

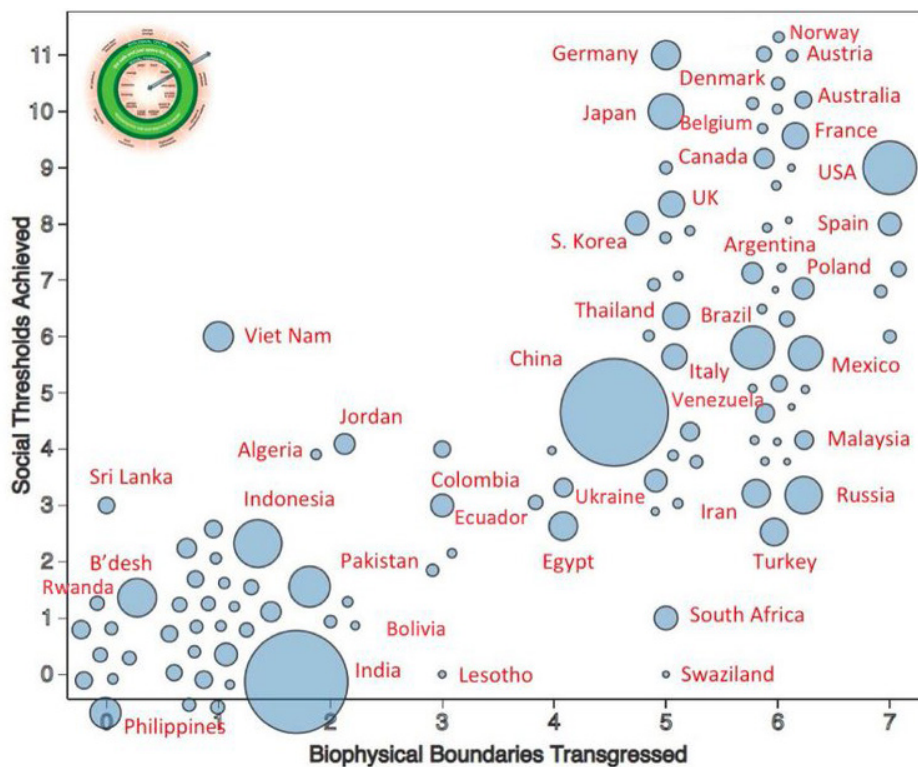


Figure 3. We are all developing countries now (Raworth, 2018)

1.3. Research scope

I am politically aligned with the emergence of an Earth Democracy - a movement that stands for participatory democracy, the commons and justice for all the Earth Community (Brownhill, 2010; Shiva, 2010). The shifts that my research will explore are (1) from human-nature separation to Earth-centred interconnectedness, (2) from neoliberal globalised economies to cosmopolitan localism and regenerative economics, as well as (3) from monopolised power and deregulated markets to distributed power and collaboratively designed commons; in particular I will consider the ways in which design practice can foster these systems-level transitions.

Figure 4 below depicts my research focus area as a confluence of these three domains.

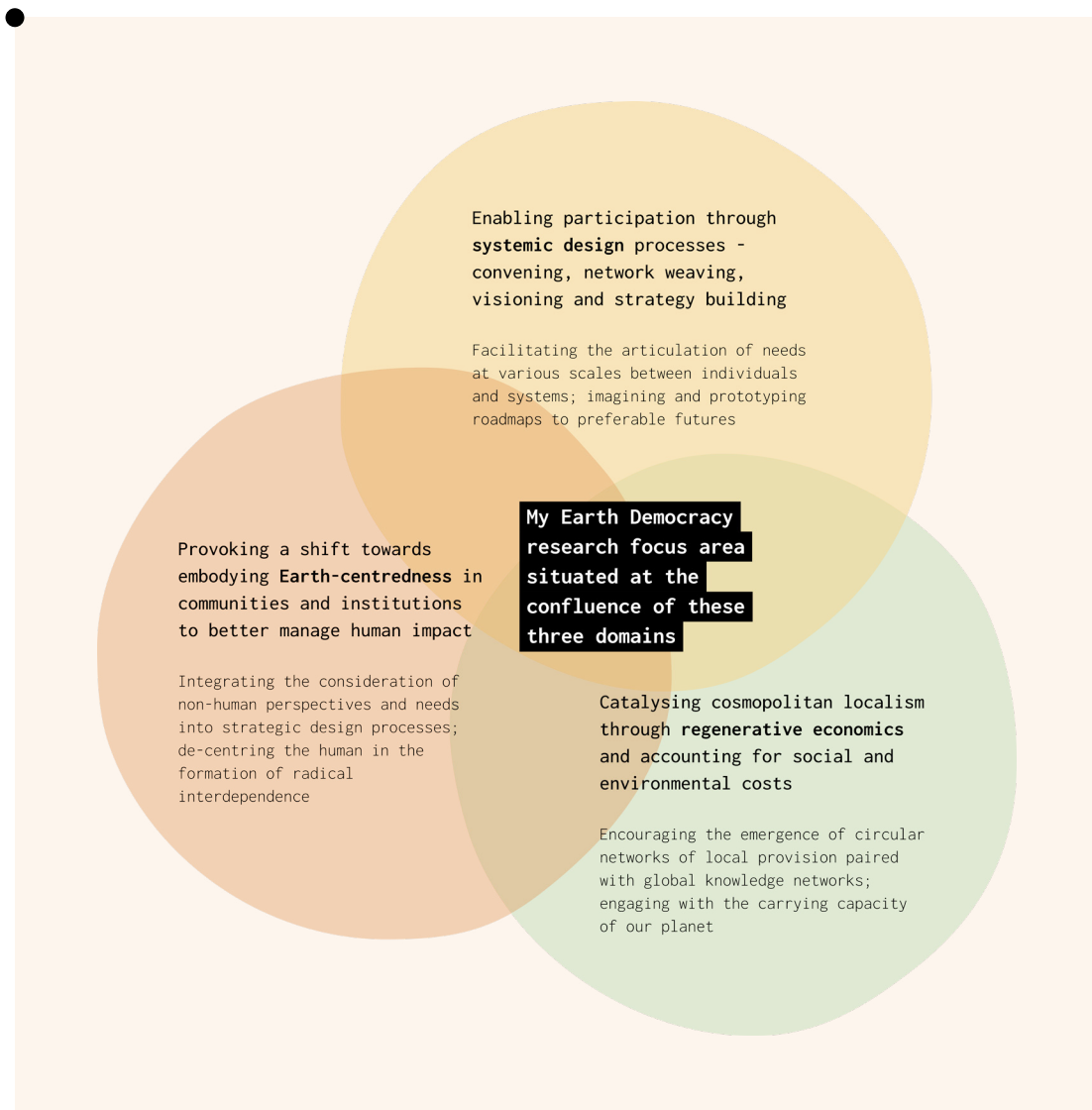


Figure 4. My research focus area as a confluence of three domains

The literature review in the following chapter is organised into four sections, with each exploring distinct themes. The first (2.1.) further outlines the Earth Democracy framing and introduces the primary principles of the concept. (2.2.) Secondly, I present the critical underpinning *transformative worldviews* of Earth Democracy, including

those of ecocentrism and pluriversalism. The third section (2.3.) is an exploration of the *regenerative economics* of Earth Democracy, primarily with respect to economic localisation, bioregionalism and cosmopolitan localism. The final section (2.4.) in the literature review is a deep dive into the dynamics around *participatory governance* for Earth Democracy. Here I unpack multi-stakeholder design processes and their engagement with deliberation, ecological limits, non-human perspectives and de-centring the human.

The authors and themes shown below are the primary sources from which my theoretical framework has emerged. In the discussions to follow I draw out the ways in which these authors and themes have shaped my area of research and navigate aspects of tension in their propositions.

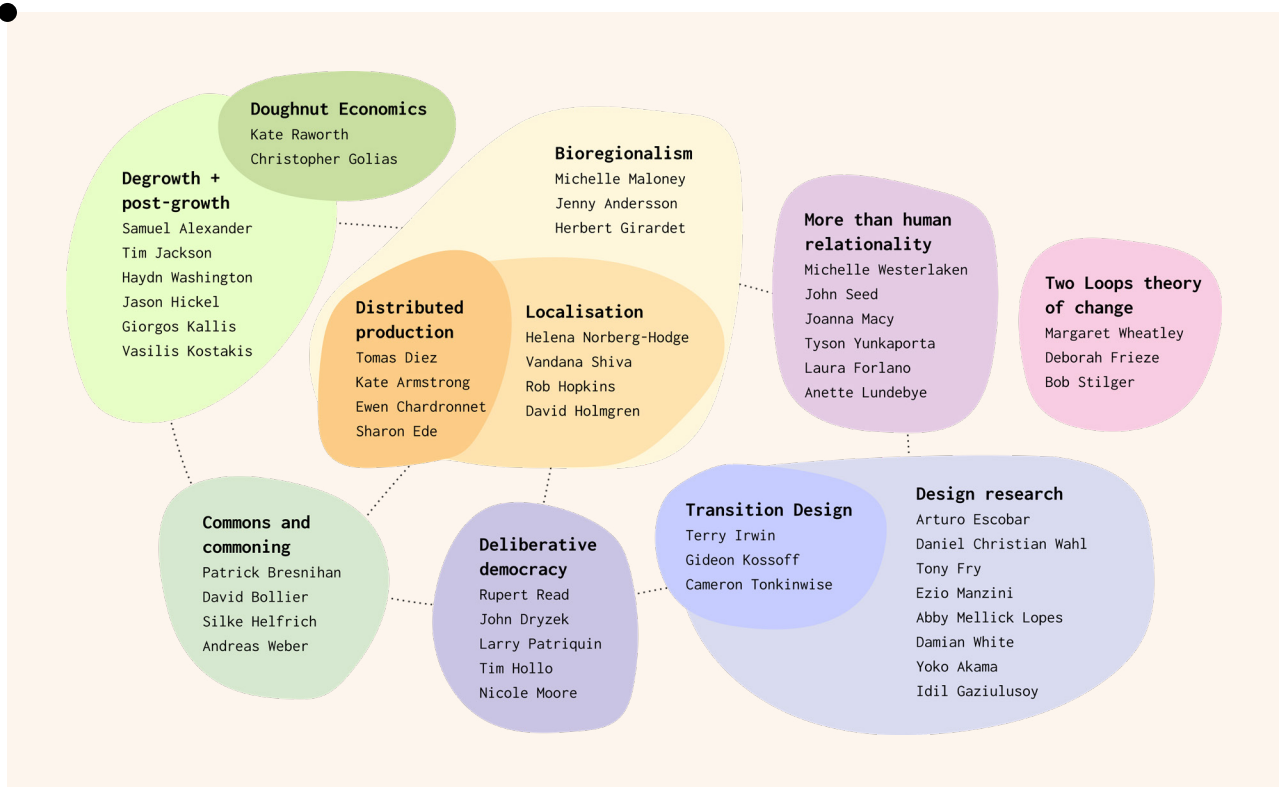


Figure 5. Conceptual relations of Earth Democracy perspectives underpinning my field research

1.3.1. Research questions

Engaging with the three primary domains of exploration outlined above – systemic design, regenerative economics and Earth-centredness – my research seeks to investigate the following questions:

What kinds of design best foster systems-level transitions to bioregionally-adapted regenerative economies?

- What processes help to strategically convene collaborative activation of place-based visions and strategies?
- What processes encourage an emergent engagement with the interconnected needs and thresholds of the living world?

2. Literature review

2.1. What is Earth Democracy?

As democracies worldwide are challenged by the threat of neoliberal autocracy (evidenced by growing political polarisation, centralisation of power and social inequality), many argue that there is an increasingly urgent need to transition our societies to regenerative modes of being, with numerous approaches offering themselves up as ways to meaningfully engage and empower communities to lead place-based change (Australian Democracy Network, 2022; Dryzek, 1999; Hollo, 2020; Hollo, 2022; Pettifor, 2017). *Earth Democracy* is a term that is used to describe both the process of change-making as well as the ever-evolving destination of a regenerative future. The term attempts to broadly capture the need for (re)establishing societies in which citizens and communities are engaged in processes of creative and critical self-determination that are underpinned by ecocentric ethics - engaged democracies that are geared towards developing regenerative livelihoods and systems that are deeply interconnected with Earth (Brownhill, 2010; Burdon, 2014; Shiva, 2010).

A very similar call to action is expressed through the concept of *Ecological Democracy* which has its own adherents, both academics and practitioners (Hammond, Dryzek & Pickering, 2019; Hollo, 2020; Hollo, 2022). I personally prefer the term Earth Democracy however, as I believe it better conveys a sense that our planet is a living entity. On the other hand, Ecological Democracy errs slightly towards framing Earth merely as sets of ecoregions and ecosystem services to be objectified and quantified by humans. In saying this, although both conceptualisations are evocative articulations that coalesce otherwise distributed and disparate actions, they are not comprised of specific methods in and of themselves. Neither prescribe given sets of practices and approaches that work towards their intents as described above. The question then is, what place-based participatory approaches could help to develop context-specific Earth Democracies?

2.1.1. Principles of Earth Democracy

Vandana Shiva outlines ten principles that capture the essence of Earth Democracy and articulate the motivation for their creation (Shiva, 2005). The principles are in effect a guiding manifesto for my sites of research and outline the shapes of relevant worldviews, economies and democracies. The full ten principles can be found in **Appendix A**; shown below are three of the most relevant principles around which the following three chapters of my literature review have been organised (Shiva, 2005, p. 9):

2. The Earth Community is a democracy of all life

6. Living economies are built on local economies

7. Earth Democracy is a living democracy

2.2. (Transformative) worldviews for Earth Democracy

The Earth Community is a democracy of all life

We are all members of the Earth family, interconnected through the planet's fragile web of life. We all have a duty to live in a manner that protects the Earth's ecological processes, and the rights and welfare of all species and all people. No humans have the right to encroach on the ecological space of other species and other people, or to treat them with cruelty and violence (Shiva, 2005, p. 9).

2.2.1. From anthropocentrism to ecocentrism

The 2020 global Living Planet Index shows a staggering 68% average fall in wildlife populations between 1970 and 2016 amidst the growing threat of extinction to countless species (WWF, 2020). The most significant cause of biodiversity loss across ecosystems is land-use change driven by an increasing consumption footprint which demands more land for agricultural systems and resource extraction amongst other things. The sixth mass extinction which is unfolding before our very eyes not only poses a risk to our economies which depend upon Earth's life-support systems but also to the very existence of a rich diversity of life on Earth (IPBES, 2019). There is of course a human self-interest in conserving wildlife and ecosystems so that we may enable a continuation of human civilisation. However, contrary to some religious framings, the non-human world does not exist solely for its service to humanity (Attfield, 1983). To navigate the relationships that exist between humans and the non-human world with more reciprocity requires humans to reconceptualise our existence through the lens of ecocentrism and to listen to the needs of the other members of our Earth Community.

Prevailing anthropocentrism ignores the essential interconnectedness of the Earth Community. Such views are epitomised by humans perceiving themselves as being *in the world* rather than being *of the world*, as well as by a perception of the living world as a resource for human consumption (Brown, 1995; Washington & Maloney, 2020). Stemming from the deep ecology movement, ecocentrism is an alternate worldview that emphasises the interconnected nature of all members in our Earth Community (Brown, 1995). Ecocentric views fundamentally oppose the anthropocentric assumption that human beings are the only entities that possess intrinsic value and are rightful masters of nature. In line with social ecological thinking, ecological philosopher Charles Brown identifies that "the challenge for ecological thinking today is to conceptualise humanity's place in the cosmos in a way that recognises humanity's unique potential for cultivating value, without separating humankind from nature in a way that alienates humans from nature" (1995, p. 200). With a recognition that all members of the Earth Community have intrinsic value, how can the non-human world be given agency in human design processes? Rather than being valued only through reductive quantitative metrics, how can the agency of non-humans also be fostered through qualitative processes?

2.2.2. Towards pluriversalism

The spirit of mutually engaged relationality is beautifully captured in the Zapatista call for ‘a world where many worlds fit’ (de la Cadena & Blaser, 2018). Removing the anthropocentric veil of human and imperial exceptionalism and acknowledging the many unique and diverse embodiments of existence is crucial in moving towards pluriversalism (Escobar, 2018). In her doctoral thesis, multispecies interaction designer Michelle Westerlaken conceptualises of a many-world world in which humans engage with the agencies and perspectives held by all members of our Earth Community, whether human or non-human (Westerlaken, 2020). Currently, a large proportion of worlds within the many-world world have their very existence dismissed or suppressed by the prevailing forces of anthropocentric-patriarchal-neoliberal-capitalist-modernity (Escobar, 2018). Despite this, the many worlds continue to co-emerge “each with their own sets of histories as well as preferable futures” (Skjøtt, 2020, para. 7). The diagram below (created by the author) portrays these vital distinctions between a one-world world and a pluriverse.

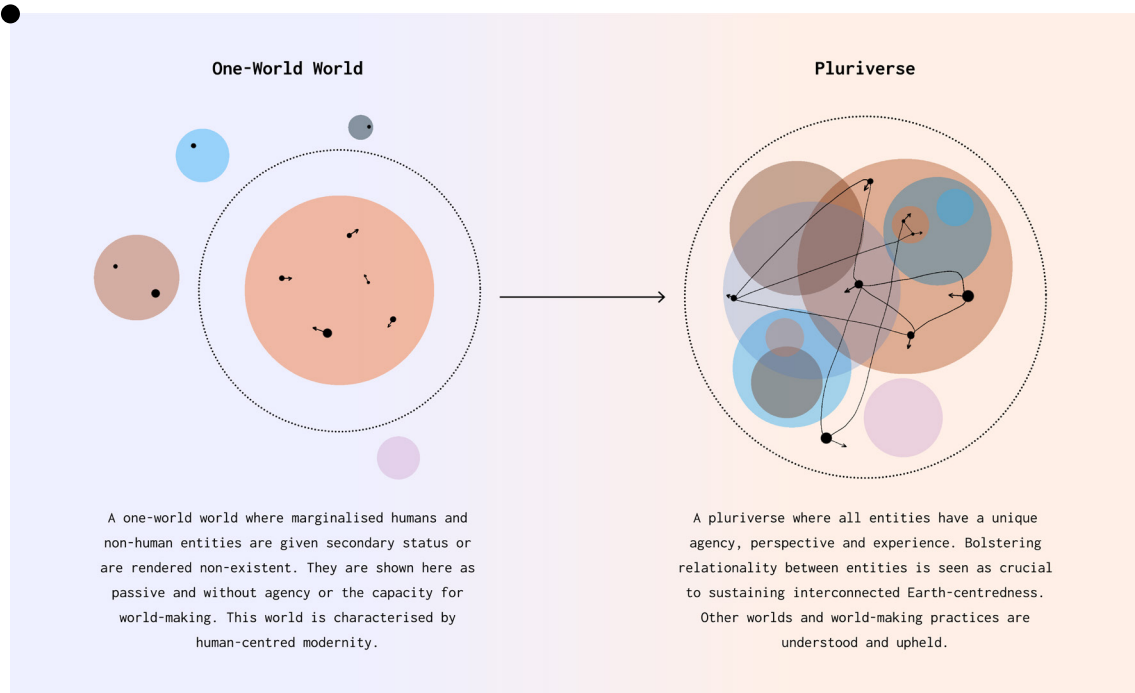


Figure 6. A portrayal of the shift from a one-world world to a pluriverse

It is important to note that while ecocentrism is crucial in the pursuit of “equality and justice for humans and non-humans alike” (Forlano, 2017, p. 29) - it is fundamentally incompatible with ecofascist and ecomodernist ideologies. Ecofascists and ecomodernists are not ecocentric as they do not actually embody a belief that all members of the Earth Community have intrinsic value. Rather, they subscribe to hierarchical notions that purport the inferiority of some human communities (explicit in the case of ecofascists, and implicit with ecomodernists), whilst still upholding the intrinsic value of the non-human world. To help prevent such co-

option of ecological values, endeavours to create cultures of ecocentrism must be underpinned by a move towards pluriversalism. Dismantling and circumventing the power dynamics that structurally silence parts of the Earth Community (both human and non-human) is absolutely necessary to cultivate agency amongst those that are voiceless. Which of the worlds in the many-world world are currently invisible in the prevailing one-world world of modernity?

2.2.3. Prefigurative politics

Through the practice of prefigurative politics, worldviews of ecocentrism and pluriversalism can find tangible expression in protected spaces of organisational governance, collaborative forums and pilot projects. This approach to *living ones values into being* is particularly poignant in light of institutional failure to adequately respond to social inequality and ecological collapse (in the Australian context and globally). Rather than attempting to appeal to the state and corporate actors to shift socio-cultural dynamics in a top-down manner, prefigurative practice seeks embodied worldview shifts using a bottom-up approach.

Prefigurative politics is not a worldview per se, but a strategically intentional approach taken by many radical socio-political movements through which the modes of organisation and social relationships strive to *embody the future conditions being sought* (Swain, 2019). According to Carl Boggs, who coined the term, prefiguration refers to “the embodiment, within the ongoing political practice of a movement, of those forms of social relations, decision-making, culture, and human experience that are the ultimate goal” (Boggs, 1977, p. 7). This continues to elevate transition management approaches that are otherwise socio-technically focused, to be better engaged in movement-building, and to evocatively make the future tangible in the present.

Anton Törnberg, who is a Swedish sociology researcher, suggests that “instead of engaging with the state, prefigurative politics model or prefigure a future society at a micro level with the aim to instantiate radical social change in and through practice” (2021, p. 83). This is not to say that engaging with state and corporate actors is worthless or impossible, however prefiguration is characterised by experimentation outside of institutional constraints, to better showcase possibilities for alternate systemic paradigms. Leading anthropologist and anarchist activist, David Graeber describes the potential of radical socio-political movements to sustain prefigurative modes of sociality as thus:

Rather than a cataclysmic seizure of power, they [propose] the continual creation and elaboration of new institutions, based on new, non-alienating modes of interaction - institutions that could be considered 'prefigurative' insofar as they [provide] a foretaste of what a truly democratic society might be like (Graeber, 2009, p. 235).

2.3. (Regenerative) economics for Earth Democracy

Living economies are built on local economies

Conservation of the Earth's resources and creation of sustainable and satisfying livelihoods are most caringly, creatively, efficiently and equitably achieved at the local level. Localisation of economies is a social and ecological imperative. Only goods and services that cannot be produced locally - using local resources and local knowledge - should be produced non-locally and traded long distance. Earth Democracy is based on vibrant local economies, which support national and global economies. In Earth Democracy, the global economy does not destroy and crush local economies, nor does it create disposable people. Living economies recognise the creativity of all humans and create spaces for diverse creativities to reach their full potential. Living economies are diverse and decentralised economies (Shiva, 2005, p. 10).

2.3.1. Economic localisation

The term economy is derived from the Ancient Greek word 'oikonomia' which translates to 'household management' (Raworth, 2017). Viewing the concept of economy through an Earth Democracy lens allows 'household management' to be understood in an expanded sense to facilitate the thriving of all in the Earth Community (Shiva, 2005). Vandana Shiva argues that the localisation of economies would see a shift towards the custodianship of the commons. Localisation is a key tenet in moving away from the current commodification of ecologies and livelihoods and in the emergence of regenerative economics.

2.3.1.1. Context

The redesign of communities so that they are economically localised is an idea whose time has truly come due to both mounting *external pressures* as well as *novel socio-material capacities*. The deregulated, extractivist, globalised economies that currently underpin a majority of modern societies are continuing to fuel the externalisation of social and environmental costs - some of the most urgent symptoms of which include the climate crisis, the sixth mass extinction and unprecedented global wealth inequality. Economies and cultures of localisation might be better guided towards greater accountability for these costs.

The COVID-19 pandemic has also helped to highlight the ineffectiveness and wastefulness of global production networks that prioritise efficiency over resilience. There has been greater impetus during the pandemic than in any other recent time for communities to provide for many of their own needs through mutual aid and local production supply chains due to the disruption of global supply chains (Russell, 2020). With pandemic lockdowns now firmly in the rear view mirror, many societies have reverted to deregulated global supply chains in the name of reinvigorating their economies, however wise we would have been to heed calls to deeply address the aforementioned systemic threats (Lemos, 2020).

2.3.1.2. System dynamics of localisation

My own attraction to the concept of economically localised communities is informed by my previous explorations of closed loop cycles in permaculture design¹ as well as of life cycle assessments in industrial design². Underlying these approaches is a systemic view of material flows, human activity and ecological impact which aims to prevent the externalisation of costs as well as to identify opportunities for circularity. The movement for economic localisation also captures this need to internalise social and environmental costs as a response to prevailing neoliberal patterns of production. Over centuries, and through the abundance of cheap fossil fuels, industrialised economies have become increasingly divorced from the specific resource bases of local bioregions (Girardet, 2010; Read, 2015). Regenerative systems designer Daniel Christian Wahl points out that corporations “ship raw materials to the other side of the world for processing, simply because labour costs and environmental protection standards [are] low there” (Wahl, 2019b, para. 6). Neocolonial architectures of policy and trade agreements enact the deregulation of economies for globalised production such as this, whilst conversely strictly regulating various means of local provision (Norberg-Hodge, 2016; Norberg-Hodge & Read, 2016).

Is it possible to regulate our economies to uphold environmental protection and the value of labour whilst still having a predominantly global system of trade? The short answer is partially, but mostly no. Regulating our economies to actually account for the social and environmental costs of global supply chains would likely mean that a large proportion of our patterns of production and consumption are unviable in their current incarnations (Andersson, 2021). Techno-centric, ecomodernist imaginations of the future might envision container ships powered by green hydrogen and an abundance of Fairtrade biomaterials; however, such visions do not account for the underlying culture of consumerism, the religion of economic growth at all costs, the realities of deregulated extractivism, nor the resulting ecological and social *sacrifice zones* in the Global South (Bassey et al., 2023).

Advocates for economic localisation do not argue that our societies need to be completely self-sufficient or that global trade needs to be completely abolished; rather the call for action is to mobilise the emergence of resilient communities that can provide for their basic needs through localised, circular supply chains (Hopkins, 2008; Norberg-Hodge, 2019). Ongoing discussions (such as those in my sites of field research) might help to define what types of global trade are viable and valuable - whilst redesigning economies to be largely defined by local production coupled with a global knowledge commons (Read, 2015). Shortening supply chains and localising the production of essential food, water, energy and

1
Permaculture is a holistic design system formed at the confluence of ecology, agriculture and landscape architecture (Holmgren, 2017). Closed loop systems especially as they pertain to food production aim to form synergies between actors in an ecosystem such that everything is recycled and waste is eliminated by design.

2
Life cycle assessment in industrial design is a method of analysing the environmental impacts of a product or service across the stages of its entire lifetime including its material extraction, manufacturing, distribution, use and end of life (Golsteijn, 2020).

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goods can help to shift us away from throwaway cultures towards conscious living within the limits of our planet (Bleischwitz, 2017).

2.3.1.3. More than just material flows

It is much easier to see the impact on other beings and to honour their sovereignty in a localised economy, with deep reconnection to others, and to life itself. Economic localisation helps to catalyse the growing movement for pluriversalist, distributed communities that strive to meet social foundations and ecological limits. This means that plural, vernacular design imaginations will be valued rather than the imposition of homogenous, modernist dreams upon so-called ‘developing’ and ‘developed’ communities alike (Escobar, 2018). The table below outlines two co-evolving socio-material dynamics that are helping to catalyse localised economies - the dominant *technical* approaches to localisation, which must also be complemented by *cultural* approaches:

| Technical | Cultural |
|--|--|
| <p>This involves building decentralised local circular economies by analysing material flows and services with the aim of identifying opportunities to form synergistic networks to locally cycle materials, increase resilience and self-sufficiency as well as reduce waste. Shorter supply chains through distributed production reduces reliance on global production networks that externalise social costs onto other communities, whilst also bolstering local producers and manufacturers.</p> | <p>This is primarily to do with bolstering individual and organisational practices of making, repair, sharing and commoning as alternatives to a reliance on passive consumption of goods and entertainment that primarily serves to increase GDP. The lifestyles and infrastructures that tap into a culture of localisation creatively embody the need for communities to slow down, build reciprocal relationships, consume less and live within ecological limits.</p> |

2.3.2. Distributed production

The capacity for distributed production coupled with a globally connected network of knowledge sharing turns economic localisation into a paradigm-shifting proposition. With the internet affording the existence of online communities for skill-sharing and open-source design, the development of local circular economies for food, water, energy and materials is not stifled for innovation as it might have been previously. The Fab City Global Initiative taps into this evolution of distributed production by fashioning a model for self-sufficient neighbourhood building (Diez, 2017). Their test case in the neighbourhood of Poblenou in Barcelona shows what it would look like to embody a DIDO (data-in, data-out) model rather than the prevailing PITO (product-in, trash-out) model (Chardonnet, 2019). “Fab City focuses on the movement of data, use of local material supply chains and digital fabrication” (Armstrong et al., 2019, p. 13). In some cases, this has removed the production-consumption supply chain altogether, with citizens supposedly having the ability to collaborate on an open-source design before the product is fabricated

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in their local makerspace. “For communities to locally produce material goods efficiently, physical products should follow open-source principles similar to the ones applied to the digital commons” (Lemos, 2020, p. 172). *Cosmolocalism* refers to these distributed patterns of production, whilst *cosmopolitan localism* (detailed in section 2.3.4.) has a broader socio-cultural remit. Figure 7 below shows the Fab City model for a distributed production ecosystem:

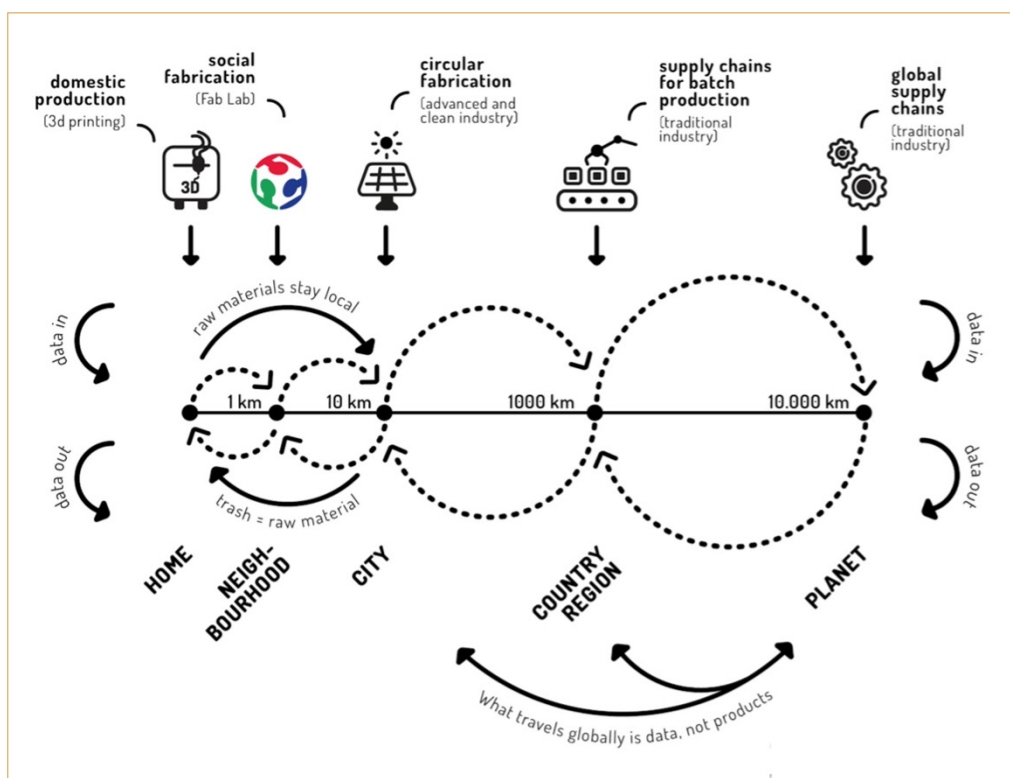


Figure 7. A multiscalar and complementary fabrication ecosystem (Fab City Global Initiative 2016, p. 5)

The various nested scales of distributed production work together to facilitate the development of local circular economies and global collaboration on innovation. Biomaterial production along with thriving repair networks are important complements to makerspaces and distributed production networks in helping to localise our economies. Cultivating cultures of repair as a vital part of local material recirculation can offset industrial material recycling processes that are energy intensive and actually enable a continuation of our throwaway culture. The challenge is for makerspaces and designers to embrace and develop practices that subvert the prevailing stigma of unfashionableness associated with repair and refurbishment (Crosby & Stein, 2020). Repair needs to become synonymous with design and consumption as an expression of custodianship of the materials and resources we use. The Bower Reuse and Repair Centre in Sydney is a fantastic example of the growing engagement with upcycling practices, as is seen not only through their individual customers but also their numerous partner organisations and local councils who are looking to challenge consumerism and ‘close their loops’. The emergence

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of these practices and networks is a step towards systems of local production and consumption, however their economic viability is hindered by poor policy (Lockrey et al., 2023). The literature suggests a vital need to shift towards cultures of repair, and my field research looks to surface the forms that this might take in practice.

2.3.3. Bioregional adaptation

Adding nuance to calls for economic localisation and distributed production, bioregionalists argue for a renewed emphasis on *living in reciprocity* with local places, their ecosystems and bio-geo-physical realities - through socio-cultural and econo-political systems that are underpinned by kinship and sharing of the commons (Thackara, 2019; Wahl, 2020a). The emergence of networks of distributed human systems that are contextually situated within their bioregional ecological systems would be a fundamental shift to the way industrial economies are presently organised. Adapting to the bioregional realities of any given place would require communities to have a greater understanding of both the opportunities and limitations present, with which to shape their local economy. Bioregional adaptation of economies could see the emergence of distinct production cultures as they are uniquely fostered by the conditions of each bioregion (Wahl, 2020b). The following map shows the 89 bioregions of the Australian continent - classified based on climate, geomorphology, landform, lithology and characteristic flora and fauna:

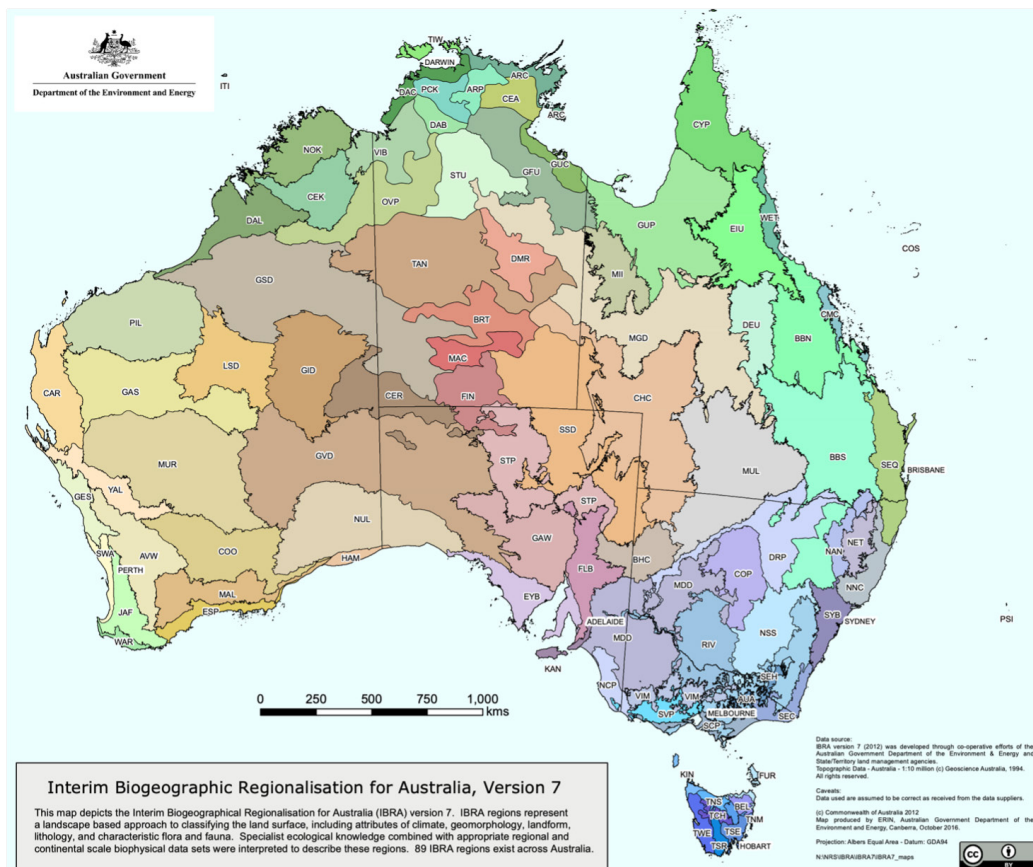


Figure 8. Interim Biogeographic Regionalisation for Australia, Version 7 (ERIN 2016, p. 1)

3
The co-option of the Cascadia bioregional movement in the Pacific Northwest of North America by right wing groups such as 'True Cascadia' and 'The Northwest Front' tangibly exemplify the risk of white supremacy taking hold, when regenerative action is not adequately grounded in intersectional decolonial approaches (Taylor, 2020).

4
I use the term 'community-led' here to denote bottom-up participatory processes whereby people can meaningfully shape and guide economic development in their regions, rather than merely feeling the impacts of decisions made by others.

It would be prudent to also note that the term 'community-led' itself is contested, both as a concept and in its practice. When conducted without due process, community-led approaches can replicate the bureaucracies of state authorities, seek legitimacy despite obscuring fair representation, and even perpetuate prevailing power dynamics (Castleden & Sylvestre, 2023; Costanza-Chock, 2020).

2.3.3.1. The decolonial imperative

It is important to note that this drive to live in harmony with the qualities of a place is not a new phenomenon and that Aboriginal nations across the Australian continent (like Indigenous communities around the world) have embodied such imperatives for tens of thousands of years, with great understanding of the dynamics of their local ecosystems (Turnbull et al., 2023). First Nations knowledge systems, laws and social practices have emerged from reciprocal relationships with Country and an ethos of custodianship. On the contrary, industrial, neocolonial 21st century cities and lifestyles are very much characterised by a homogenous dislocation from place and an illusory disconnection with their ecological support systems. It is imperative that projects aiming to foster regenerative economies in settler-colonial societies also seek decolonisation³ (Redvers et al., 2022; Taylor, 2020). In moving towards bioregional adaptation there is much to learn from First Nations people, but any and all engagement must help to empower Indigenous communities rather than continue a tradition of transactional appropriation.

2.3.3.2. Critique of bioregionalism

There is an important distinction to be made between on the one hand, encouraging community-led⁴ economic adaptation to bioregions, and on the other hand an imposition of strict bioregional boundaries upon communities and their economies. The former is an orientation that is aligned with Earth Democracy and looks to deeply connect the economy with the ecosystems and bio-geo-physical qualities of a place; the latter not only lacks cognisance of permeable boundary areas and changing bioregional boundaries over time (due to the climate crisis and otherwise) but also in the Australian context, could risk the continuation of colonial erasure of Aboriginal nationhood and regional dynamics. Rather than using the bioregional framework as a top-down solutioning mechanism, it would be preferable to use an understanding of bioregions as but one way to provoke the emergence of regenerative economies that are characteristic of their local ecosystems and bio-geo-physical contexts - an approach that have sought to further uncover in my field research.

2.3.4. Cosmopolitan localism

Transition Designer and social ecologist Gideon Kossoff describes localisation as "the process through which human needs are satisfied within the constraints and opportunities presented by particular bioregions" (2019, p. 54). Kossoff articulates cosmopolitan localism as a concept that aligns with bioregionalism and economic localisation, but also draws from *cosmopolitanism* which concerns itself with the co-emergence of cultures on equal terms, and with the dynamic relation between local and global. Cosmopolitan localism draws from both cosmopolitanism and localism and does not conceptualise of the two as

dichotomies, but as united in their critique of neoliberal globalisation. Economic localisation would be well served by an underpinning approach of cosmopolitan localism so as to avoid the pitfalls of isolationism and protectionism (Manzini & M'Rithaa, 2016; Wahl, 2020b).

Argentinian philosopher Walter D. Mignolo describes cosmopolitan localism as a decolonial alternative to the universalist imperial cosmopolitanism that prevails in our globalised world (Mignolo, 2011). Mignolo frames the pairing of cosmopolitanism and localism with one another as crucial in the global project of connecting decolonial threads across cultures. In doing so, cosmopolitan localism facilitates the global networking of local expressions of pluriversalism. "Cosmopolitan localism is another expression for pluriversalism as a global project" (Mignolo, 2011, p. 43). Cosmopolitan localism, as a conceptual framing has the paradoxical challenge of simultaneously networking towards shared goals of cultural and economic transformation whilst also upholding and valuing those approaches that are unique, uncommon or peripheral. For these reasons cosmopolitan localism shows the importance of researching sustainability in terms of localised politics within communities of difference.

2.3.4.1. Multiscalar economics

Advocates of cosmopolitan localism call for the formation of nested networks of mutually supportive communities, with local production complemented by global open-source knowledge and skill sharing. As discussed earlier it is likely unfeasible and undesirable to produce everything that our societies need at the one scale - that of the bioregion or otherwise (Lemos, 2020). A multiscalar approach could provide a sound foundation upon which to create thriving place-based communities that engage with ecological limits (White, 2021), necessitating political debates about what constitutes the local, including those facilitated by place-based regenerative initiatives . What can and cannot be produced at each of the household, community, city and bioregional scales? What (if any) global supply chains should exist as long as all social and environmental costs are accounted for? How do societies govern their economies at these different scales?

The questions posed are not theoretical, rather, they are framings for ongoing research and development that will help to define the balance and dynamics between the different scales. A cosmopolitan localist approach to economic localisation would aim to catalyse a globally-connected 'coming home to place' (Wahl, 2020a). To quote Kossoff once more,

We do not have to choose between our immediate, geographically proximate community and the larger community of humanity. Indeed, we cannot afford to make this choice: the fate of humanity and planetary ecosystems are inextricably intertwined at the local and global level (2019, p. 52).

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The diverse range of movements to create circular, regenerative societies can act synergistically despite their approaches varying from those that are focused on the socio-material, to those that are driven by economic and political change-making - with my field research aiming to interrogate these diverse manifestations. Figure 9 below attempts to capture the interplay of these differing approaches, and highlights a clear role for *participatory governance* in these systemic shifts - to be explored in the following section 2.4.

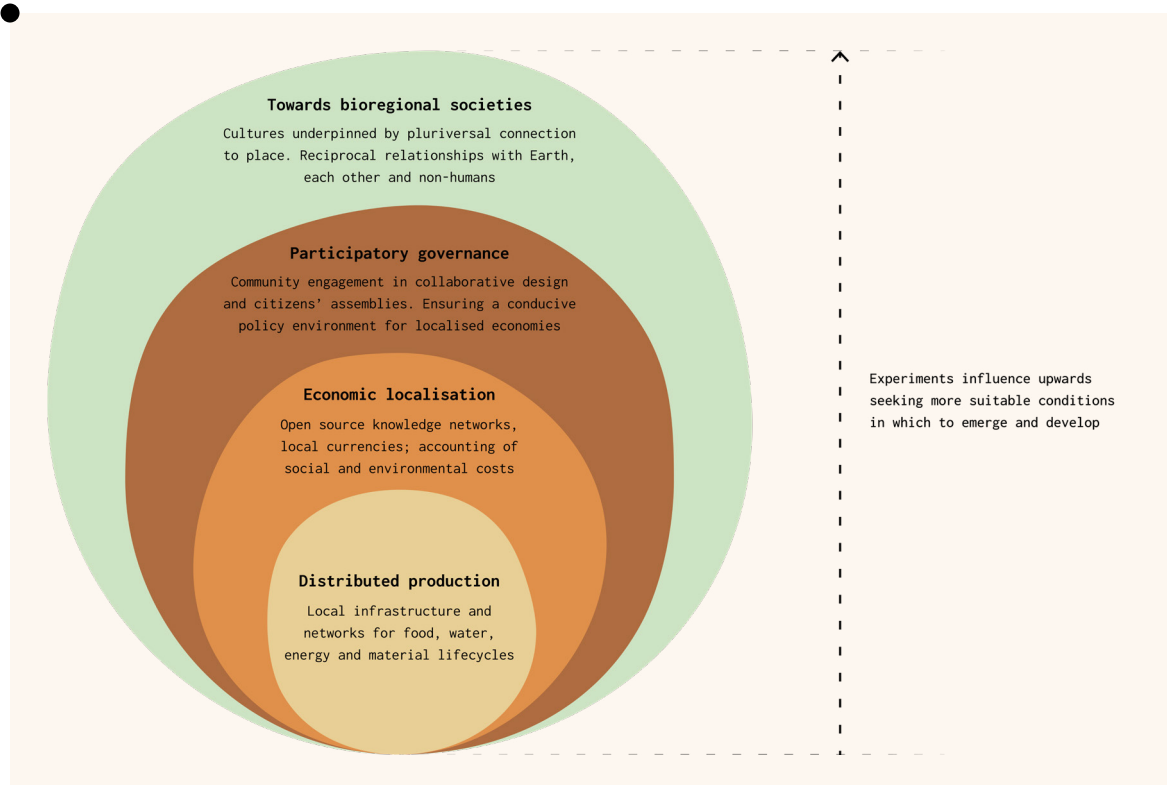


Figure 9. Hypothesis about dynamics in the move towards bioregional societies

2.4. (Participatory) governance for Earth Democracy

Earth Democracy is a living democracy

Living democracy is based on the democracy of all life and the democracy of everyday life. In living democracies people can influence the decisions over the food we eat, the water we drink, and the health care and education we have.

Living democracy grows like a tree, from the bottom up. Earth Democracy is based on local democracy, with local communities - organised on principles of inclusion, diversity, and ecological and social responsibility - having the highest authority on decisions related to the environment and natural resources and to the sustenance and livelihoods of people. Authority is delegated to more distant levels of governments on the principle of subsidiarity. Self-rule and self-governance is the foundation of Earth Democracy (Shiva, 2005, p. 10).

2.4.1. Distributed governance

Governance plays a key role in catalysing regenerative economics through its ability to shape both policy and socio-material interventions. Legislative and regulatory reform has the power to stifle or to catalyse the transition to regenerative economies. However governance should not be understood in limited terms and conflated with the word government; instead, governance can be broadly defined as both formal and informal mechanisms of self-determination (Dark Matter Labs, 2024). Distributed decision-making brings increased economic self-determination to citizens and communities, through processes that are guided by collectively-developed context-specific strategic visions (Carlisle & Gruby, 2017; Shiva, 2005). There is no one-size-fits-all model or blueprint for what a regenerative economy looks like in any given bioregion (Liaros, 2019). Rather, the opportunity lies in forming a deeper understanding of local bioregions in conjunction with the dynamics of meeting human needs.

This ongoing process of realigning the activities of a community to the qualities of its local bioregions requires the input of diverse perspectives from across traditional disciplinary silos - hence the necessity for participatory multi-stakeholder governance (Dietz, Ostrom & Stern, 2003). Multi-stakeholder governance taking place in a distributed manner would provide the means for a diversity citizens and experts to directly shape their local economies. The term *polycentricity* captures this notion of distributed governance that is characterised by multiple semiautonomous centres of decision-making⁵ (Carlisle & Gruby, 2017; Ostrom, 2009, 2017; Turnbull et al., 2023). Polycentric systems of governance are nested at various scales e.g., neighbourhood, local, bioregional and global in a way that is reminiscent of the cosmopolitan localist notion of nested scales of production (Turner & Wills, 2022). In drawing this comparison between cosmopolitan localism and polycentricity here I'd like to note that the development of one can and should feed into the other - a regenerative system of economics requires distributed decision-making complementary to a focus also on socio-material systems.

5

The decentralised decision-making espoused by polycentricity has parallels with the participatory citizenship of 'confederal municipalism' as described by Murray Bookchin (1986). Both argue for greater localisation of democratic processes, however Bookchin argues for greater autonomy from centralised state governance mechanisms.

2.4.1.1. Local-scale decision-making

The emergence of forums that facilitate greater citizen and community engagement is crucial for the development of a networked polycentric governance system. The neighbourhood scale and local councils are central to regenerative initiatives that are championing economic localisation or citizen-engagement (Mocca, 2019). However, community groups and local government often do not have the capacity or capability required to catalyse such projects, as they are severely under resourced (ten20, 2019). On the other hand, state and federal governments are much better funded, although in recent times the major political parties have been characterised by their disconnect from community needs, and an inability to act decisively on polarising issues such as the climate crisis and burgeoning wealth inequality (Maloney, 2017). There is also increasing evidence of *state capture*, with private interests such as “corporations, powerful families or religious sects” drastically redirecting the ambition of state and federal public institutions (Australian Democracy Network, 2022, p. 10). As a result, our larger public institutions are squandering resources appeasing private interests, when they could instead be creating conducive conditions for place-based regenerative initiatives through funding, policy reform and the implementation of participatory decision-making infrastructure.

Diverse citizen and stakeholder participation in the larger, centralised structures of government has so far been ineffective, difficult to facilitate, and piecemeal at best (Mocca, 2019). In contrast, local councils (despite some corruption and politicisation) often already have well established processes for community input into strategic visions, service provision and urban development proposals (Totten et al., 2021). While the opportunities for participation are not perfect, there are also plenty of local councils nationwide that are eager to experiment with emerging processes of co-design, deliberative democracy and community wealth building (Moore, 2019).

Whilst local councils do not have the same policy reach as the state and federal governments, they do have the ability to experiment with ideas emerging from the sub-local scale (Mocca, 2019; Totten et al., 2021). Ecovillages, Transition Towns and other similar experiments that prototype ecological economies offer a wealth of insights for exploration at the neighbourhood scale, and local governments are in a unique position to act as enablers for the scaling out of such regenerative initiatives. Local councils have the potential to actively support participatory self-determination towards a regenerative economy that harnesses this upswell from eco-communities - in a manner that includes a diverse range of local organisations, networks and sectors in the process (Jackson, 2015; Regen Melbourne, 2021).

2.4.2. Comparing design and deliberation

Collaborative design and deliberative engagements both offer forums in which governance of local economies can emerge. In this section I will explore these two evolving sets of distinct yet complementary approaches to community engagement. Both of these modes of facilitating participatory forums aim for the development of change strategies and pathways by synthesising and navigating diverse points of view. The two approaches are increasingly being used in response to the inaction of centralised power structures to address various wicked problems. This is evidenced by the countless collaborative design workshops held by Transition Towns communities as well as the establishment of numerous deliberative citizens' assemblies as championed by the demands of Extinction Rebellion (Extinction Rebellion, 2019a; Hollo, 2020; Hopkins, 2008). A better understanding of how the two approaches are similar yet different can help to highlight their complementary value. Aspects to explore include the historical evolution of each approach, their intents, processes and focus as well as the role of participants (Moore, 2019).

2.4.2.1. Historical evolution

The tradition from which deliberative engagements have emerged places an emphasis on the rights of diverse individuals to have their voices heard. Although earlier forms of deliberative engagement were motivated by educated political elites looking to protect their interests from the 'will of the masses', they have evolved into instead prioritising the broader common good of societies. Deliberative engagements aim for a truer representation of communities often by using *sortition* to better demographically represent communities in assembly processes - something seen as essential to avoid factionalism and the skewed representation seen in many federal political arenas, as well as their corruption by corporate financial interference (Carson & Elstub, 2019).

In contrast to this historical motivation for upholding individual rights in deliberative engagements, collaborative design has evolved quite differently from collectivist ideals. Varied manifestations including participatory design, human-centred design and service design have all sought to empower workers, end-users and disaffected communities in the face of top-down, expert-led design for social, technological and infrastructural interventions. These multi-disciplinary approaches have allowed for an increasing focus on meeting the needs of people through context-specific design interventions, but only when they are community-owned processes that are inclusive and confront implicit power structures (Costanza-Chock, 2020). "By involving workers in the design of workplace solutions, the roots of [collaborative design] are firmly embedded in a collectivist rather than an individualist orientation" (Moore, 2019, 17). As a result of their evolution, both collaborative design and

deliberative engagements can be oriented to be acutely aware of systemic power dynamics and strive towards inclusion and equality.

2.4.2.2. Intent, process and focus

Collaborative design methods often involve extended explorations into a community's problem context, the diverse needs of stakeholders and inherent tensions as part of "an ongoing project of socio-technical change" (Tonkinwise, 2016). Rather than jumping straight to 'solutioning', spending more time understanding the nature of a wicked social problem can lead communities (and design facilitators) to reframe the problem - in a way that captures its context-specific complexities and better allows a holistic and networked response (Dorst, 2015b; Fohim & Jolly, 2021). Methods such as multi-stakeholder journey mapping, persona building, collective visioning and iterative prototyping help to manifest a creative, empathetic and emergent process. A particular focus on the socio-material world means that this approach lends itself well to the design and implementation of services and systems (Moore, 2019). Not only this, but as design scholar Joanna Boehnert describes, a designer in such a role is not removed from the object and outcome, but is an active participant in the practices and systems being shaped (Boehnert, 2017).

Deliberative engagements by their structured format are more critical in exploring the details of preferences that exist within a group of participants. Deeply embedded in deliberative processes is an intent to enhance legitimacy and impartiality through reasoned exploration in order to be able to justify decisions made (Ercau & Dryzek, 2015; Moore, 2019). In response to certain questions or focus areas, a cross section of society participates together in studying the options available, including through directly questioning experts (Carson & Elstub, 2019). Deliberative engagements aim to reinvigorate trust in politics and governance systems at a time when prevailing modes of centralised representation are alienating and undemocratic (Renwick, 2017). Despite the impassioned and persuasive nature of discussions, deliberations are adept in dealing with otherwise highly divisive or highly politicised issues such as same-sex marriage and decarbonisation. The clearly framed and in-depth decision-making processes of deliberations have much potential to redirect policy, governance and politics, especially when their agenda and influence is only loosely circumscribed by existing political institutions (Patriquin, 2019).

2.4.2.3. The role of participants

Both collaborative design and deliberative engagement approaches are underpinned by an ideology of plurality and attempt to aim for the formation of plural agreements that accommodate a diverse range of sometimes conflicting needs and experiences (Moore, 2019). Ongoing

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movements for decoloniality are aligned with this need to acknowledge and value difference over homogeneity - as revolutionary design theorist Tony Fry puts it “while the planet is singular, world is plural - for it is formed and seen in difference - as are we” (2015, p. 21). More nascent forms of co-design such as Transition Design and regenerative design attempt to also give voice to non-human actors in order to transform design interventions from anthropocentric into ecocentric (as explored further in section [2.4.4.3.](#)). Compared to conventional multi-stakeholder needs analyses such processes work to further expand the circle of empathy through which participants reframe their collective understanding and take account of otherwise externalised impacts (Davis et al., 2023).

While collaborative design embraces participants as subjective community members with particular context-specific needs and experiences, deliberative engagements frame them as citizens with the capacity to reason, deliberate and have their minds changed through discussion. In a setting where participants largely reflect the demographics of the society that they are from, time is allocated for diverse viewpoints and offerings of reasoned dissent (Ercan & Dryzek, 2015; Patriquin, 2019). Deliberative engagements vary in duration, from a few hours to many days long, and participants have the opportunity to call for more information or demand clarification on various issues whenever needed. Participants are encouraged to critically deliberate on complex social issues, and it is often useful to include “an extensive learning phase prior to contemplation of collective decision” (Dryzek, 2011, p. 37). Although voting ensures that all participants’ views on a matter are valuable, invited expert witnesses do play a key role in broadening and shaping the opinions and viewpoints considered.

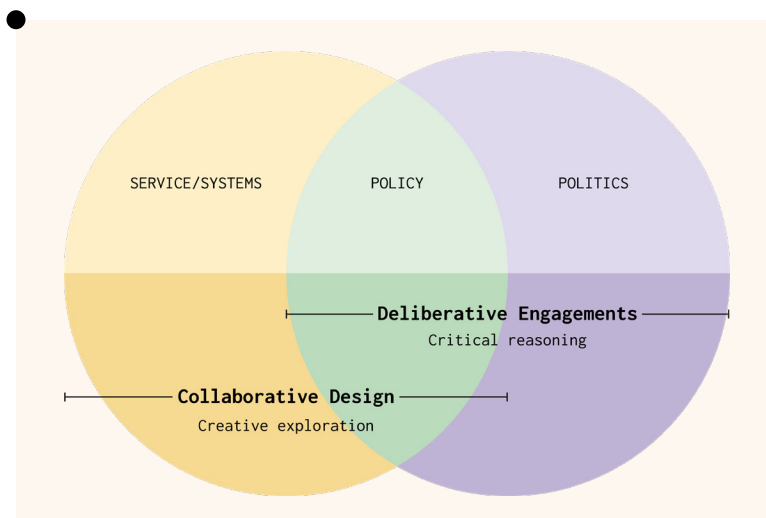


Figure 10. Defining spaces between collaborative design and deliberative engagements [adapted] (Moore, 2019, p. 2)

To challenge the inertia of prevailing structural power dynamics it does not suffice for these platforms to be facilitated through the guise of neutrality. Rather than seeing facilitators and participants as

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discrete entities capable of isolation, it is imperative to frame them as intersubjective beings who are a part of interconnected systems. Having a clear stance as a facilitator can help to support honest deliberation and further establish trust amongst participants whilst still guiding open, respectful and empathetic discussions.

2.4.2.4. The complementarity of the approaches

There is no one-size-fits-all model for the types of Earth Democracy that could manifest itself in any given place but rather communities need to be given the platforms necessary to manifest their preferred futures through both creative exploration and critical reasoning (Hammond, Dryzek & Pickering, 2019). Both approaches described above have a huge deal of commonality and complementarity as they seek social impact through differing socio-material and political avenues. Through my field research I seek to further explore the ways in they each can help to bring an Earth Democracy to life by harnessing the power of community voices in regenerative transitions (Hammond, Dryzek & Pickering, 2019; Hollo, 2020). A structural challenge that the approaches must rise up to is to continue ask *whose voices are not being heard*, whether that means marginalised peoples or non-human entities. The field research seeks to further explore the methods with which to develop structurally reciprocal relationships with the larger Earth Community (Escobar, 2018).

2.4.3. Engaging with ecological limits

In this section I will explore two specific organisations and their collaborative processes - the Australian Earth Laws Alliance (AELA) [Greenprints](#) model and the Doughnut Economics Action Lab (DEAL) [Doughnut Unrolled](#) methodology. These approaches have distinct methods with which they attempt to catalyse action for our societies to meet ecological limits, and have been important precedents for my field research.

2.4.3.1. AELA Greenprints

The AELA Greenprints approach intends to move society to an ecocentric underpinning and defines bioregionalism as a core objective in actively engaging with ecological limits. Lawyer and national convenor of AELA Michelle Maloney describes Greenprints as an alternative to an “anthropocentric, ‘top down’, pro-growth governance system [instead building] ecological governance approaches that are uniquely suitable for the Australian continent” (Maloney, 2020, p. 314). Laws and governance designed through this approach aim to redirect human activity towards localised economies that respect and contribute towards the regenerative capacity of the ecological world (AELA, 2016). Greenprints attempts to facilitate this by building community literacy of planetary boundaries and ecological limits, by analysing local human activity as well as by developing subsequent transition strategies and scenarios.

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- 2.4.3.1. AELA Greenprints

In developing pathways to regenerative economies, the approach draws from numerous established methods including but not limited to Ecological Footprint analysis, One Planet Living tools and Doughnut Economics. The approach has a clear intent to encourage practices of reduced production and consumption in line with Earth's regenerative capacity, as well as a centring of Aboriginal laws and knowledge systems in the development of governance for local community economies. The guiding framework of the eight Greenprints steps outlines the intent of each part of this community-owned process, with scenario development towards the end leading to recommendations for law reform (Maloney, 2020).

It would be valuable to more tangibly appreciate how the various steps manifest in context through the Greenprints framework. My literature research has uncovered no more detail to the approach than that presented above - the public release of project case studies would go some way to elicit further understanding. Despite the lack of further detail on the manner of application in community, the intent and conceptual framework of this approach provides fertile ground for further exploration. It should be noted that many collaborative processes are publicly available to be adapted, hacked and used as needed across contexts. Greenprints in this regard is confused - it is currently both a methodology and an organisational entity. So far, it is also a methodology to be used only under AELA's supervision and hence it becomes a proprietary approach that people in the commons cannot revise and improve upon.

2.4.3.2. DEAL Doughnut Unrolled

The Doughnut Economics Action Lab (DEAL) Doughnut Unrolled methodology takes a different approach which is not focused solely on local economies but also on the global implications of local human activity. The Doughnut Unrolled tools and methods do not explicitly argue for economic localisation or Earth-centred cultures but rather they strive to account for impacts across four domains: local-social, local-ecological, global-social and global-ecological. The two local domains place an emphasis on the creation of thriving and regenerative local economies which is very much aligned with a move towards bioregional economies. The two complementary global domains seek to address the impacts of global supply chains and the externalisation of costs associated with prevailing cultures of overconsumption. These aspects are crucial mechanisms to help create accountable global relations especially when considering that our economies might not be localised in their entirety. In this regard, a clearer articulation of the global impacts of our supply chains, for example, ecological devastation through raw material extraction or oppressive labour conditions, could itself drive a move towards cosmopolitan localism. The Doughnut Unrolled approach is broad and necessitates a diverse multi-stakeholder involvement to help ground

the process in place. Varied outcomes can develop from this methodology including socio-material interventions and the formation of circular networks along with proposals for reformed governance.

2.4.3.3. Situating the need for qualitative approaches

Quantitative approaches to measuring biodiversity and ecosystem services are crucial to developing regulatory and socio-material responses, however it is important to note that they only articulate a limited aspect of human impact on the non-human world. In striving for a holistic understanding of human impact, suitable *empirical qualitative* approaches must also be harnessed (Golias, 2019; Wahl, 2019a). It would help to identify which aspects of the environment and which marginalised voices have been left out of the conversation due to the narrow focus necessitated by quantifiable measurement. In the case of the climate crisis, a narrow focus on CO₂ emissions has betrayed any attention given to the plight of non-humans through global heating. Those voices left out of the conversation must not merely be brought into the mainstream frame of reference, but rather, we must ‘go to them’ to understand the situation from their perspectives (Dartington Trust, 2020). Shortening the distance of cognitive separation between humans and the non-human world is important in dismantling extractivist mindsets - processes that help to empower our sense of interconnection can catalyse more radical visions for human economic activity. These types of paradigm shifting activities are complementary catalysts to the quantitative redesign of our societal practices and infrastructures.

While a perspective that takes into account the rights and needs of individual species does not address the interdependencies of whole ecosystems, developing ethics and a sensitivity for individual members of other species could be one way to move beyond a human-centered perspective (Clarke et al., 2019, p. 61).

The DEAL Doughnut Unrolled collaborative model engages with the non-human world through numerous criteria articulated together as the ecological ceiling (DEAL, 2022; Thriving Cities Initiative, 2020). The ecological ceiling includes such aspects as climate change, biodiversity loss, land conversion and freshwater withdrawals which are based on planetary boundaries defined by Earth systems scientists as a framework for “estimating a safe operating space for humanity with respect to the functioning of the Earth System” (Rockström et al., 2009, p. 2). A key word in this definition is *estimating* which points to the dynamic and incomplete nature of setting (interconnected) planetary boundaries which are themselves based on “normative judgments of how societies choose to deal with risk and uncertainty” (Rockström et al., 2009, p. 3). The planetary boundaries should not be seen as a strict quantitative formula for managing human activity but rather as a useful tool with which to

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begin to estimate and reshape our intention and presence on the planet (Brockington, 2020; Cooke, West & Boonstra, 2016; Montoya et al., 2018).

The very premise of establishing a safe operating space based on the planetary boundaries is to avoid the catastrophic destabilisation of the identified parameters of Earth systems (Steffen et al., 2015). While this forms a *bare minimum* ceiling within which to reshape human activity, it calls for complementary processes that can help to develop regenerative strategies for *thriving Earth communities*. With this critique in mind, the Doughnut Economics model (in its original form) can be seen as a valuable but still partially anthropocentric framework that centres on thriving *human* communities and a bare minimum engagement with Earth systems impact. A deeper engagement with non-human needs is required if human activity is to be reshaped in such a way that the non-human world is not merely permitted to survive in the shadows of human societies but to actually regenerate and thrive in its own right. What would a Doughnut Unrolled model look like if it was de-centred from the human, and embraced explorations of non-human needs? Anthropologist and UX researcher Chris Golias calls for “multi-species ethnography” to help Doughnut Economics collaborations better “locate the features of human activity in the natural realm, not just the cultural one” (2019, p. 15). Engaging with the needs of the non-human world in both a quantitative and qualitative manner would provide a richer set of opportunities from which to build reciprocal relationships and a regenerative human presence.

2.4.4. Non-human representation

2.4.4.1. Learning from the Council of All Beings

“Deep ecology recognises that nothing short of a total revolution in consciousness will be of lasting use in preserving the life support systems of our planet” (Seed et al., 1988, p. 9). The Council of All Beings is a ritualistic manifestation of deep ecology ideologies into a forum that encourages collective understandings of ecological interconnectedness beyond only the cognitive. Participants take on personas from the non-human world - whether that is an animal, plant, mountain or otherwise - and channel their wants, needs and experiences. This powerful group approach can expand the way we empathise with the non-human world and can allow us to “hear within us the sounds of the Earth crying” as phrased beautifully by the Vietnamese Zen Master Thich Nhat Hanh - who coined the term *interbeing* to describe our interconnected, mutually dependent existence (Seed et al., 1988, p. 7). The Council of All Beings process leads each participant to an expanded recognition of non-human existence which is subsequently integrated into their own identity, beliefs and social belonging. Connecting deeply with the experiences of the non-human world is not to deny or delegitimise the experiences of humans but rather to re-situate humanity as one member

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amongst many in pluriversal Earth communities - a revolutionary act in this time, considering that our societies fundamentally embody a human-nature separation.

The Council of All Beings process could perhaps be considered an example of *ontological design* in the way that participants are actively encouraged in workshops to reshape their understanding of lived realities through an expanded Earth-consciousness (Escobar, 2018; Lopes, 2017; Willis, 2006). Design theorist Tony Fry describes ontological designing as a critical application of design (both material and immaterial) such that human “modes of being in the world” are in turn redesigned and the “character of the worlds themselves” are redirected (Fry, 2009, p. 252). This seems to capture the spirit of the Council of All Beings process which is very effectively focused on eliciting personal growth and inner transformations towards an ecocentric shift in participants’ worlds. The development of reciprocal relationships is co-dependent on the emergence of relational ontologies that place humans in dynamic concert with the web of life (Yunkaporta & Shillingsworth, 2020). There is a small amount of time allocated towards the end of the Council of All Beings workshop format in which participants reflect and discuss their intended “work for the planet”, though there are no formalised visioning exercises (Seed et al., 1988, p. 116). The collaboration between participants in crafting collective strategies might not be appropriate in the Council of All Beings setting, however I find it a worthy proposition to explore processes that could simultaneously help to manifest an Earth-consciousness as well as engage people in prototyping collective action.

2.4.4.2. Non-human perspectives in multi-stakeholder design

Multi-stakeholder design workshops act as crucibles within which participants can experiment with new forms of relations, social practices and worldviews. The iterative and emergent nature of facilitated design forums can help to foster both shifts in individual perspectives as well as the development of shared visions that might not otherwise have been articulated. The challenge is to form revelatory processes of engagement that draw from a strong bedrock of Earth-consciousness and shed the baggage of anthropocentrism. How might we better channel and connect with the experiences of non-human entities? Prototypes of collective visions that engage deeply with *non-human agency* could act as provocations that expand the sphere of progressive civic discourse to explore what it means to thrive symbiotically (Forlano, 2016). This acknowledgement of non-human agency is not to say that entities such as a river system have sentient free will, but rather that they have intrinsic value and patterns of existence outside of their usefulness to humans. This is akin to the intent of ‘reading the landscape’ - a practice through which permaculture designers carefully observe the processes of nature (both

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human and non-human) in order to live symbiotically (Holmgren, 2017). Rather than perpetuating the belief that non-humans are merely passive recipients of the consequences of human action, collaborative design processes can do much better to embody the spirit of non-human agency.

Veselova and Gaziulusoy are two design researchers at Aalto University, Finland who analyse how different types of non-human involvement could manifest in participatory design (Veselova & Gaziulusoy, 2019). These authors along with Michelle Westerlaken suggest that directly involving the non-human world in participatory design is difficult and only possible with certain members of the Earth Community such as mammals (Westerlaken, 2020). Rather, it might be preferable to indirectly involve non-human perspectives through proxy representation that is coupled with investigation and deep listening. “Non-humans are likely to have particular perspectives and experiences of the world that are unimaginable for humans or other non-humans” (Veselova and Gaziulusoy, 2019, p. 1579). Clearly one of the biggest hurdles for non-human representation whether direct or indirect is that of communication - a challenge that exemplifies that it is not only the actual input of non-human perspectives that can be valuable, but that even the very act of continually recognising non-human agency in participatory forums can be paradigm-shifting.

2.4.4.3. Non-human representation in Transition Design

The Transition Design process attempts to facilitate expansive systems thinking by engaging with the interaction between global and local dynamics (spatial), long time horizons (temporal) as well as diverse stakeholder perspectives including those of the non-human world (empathic). Non-human representation in the Transition Design process is primarily contained in the multi-stakeholder mapping step (Irwin & Kossoff, 2017). This step facilitates an exploration of the fears and hopes of non-human, non-living and human stakeholders in order to gain a greater understanding of the relationships between stakeholders and the problem context. Through this process the nature of both affinity and conflictual relations between stakeholders come to the fore. Listening to and channelling the perspectives of the non-human world in this way can help us to both expand our understanding of the impacts of business as usual (current state), as well as to open up opportunities for regenerative interventions (future state).

While this is a valiant nascent effort to bring a sense of agency to non-humans within the longer time horizons of Transition Design project contexts, it would be great to further integrate non-human perspectives throughout later steps in the collaborative process. Anthropologist Arturo Escobar suggests that Transition Design needs to more actively

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move away from “sheltering modernist commitments” to anthropocentrism, individuality and human-nature separation (2018, p. 208). Transition Design (and strategic design) projects have their problem framings largely directed according to any funding organisations involved, however this should not preclude a call to hasten the facilitation of engagement with intersubjective and interdependent Earth communities. There is room here to more deeply consider non-human perspectives during goal setting both before project commencement as well as whilst conducting problem reframing (Veselova & Gaziulusoy, 2019). It is vital that non-human perspectives are elicited not only such that shifts in worldview and discourse might take place but also to engage with the structural transformations needed to meet ecological limits.

In emphasising the interdependence of all beings, transition visions bring to the fore one of the crucial imperatives of our time: the need to reconnect with each other and with the nonhuman world. The localisation of food, energy, and the economy is seen as essential for the transitions (Escobar, 2018, p. 151).

2.4.4.4. (Radically) de-centring the human

We need tools and methods through which to *listen* to the non-human world – not only to measure non-human needs but to be receptive to non-human agency so that we may reshape human presence in co-existence with rest of the ecological world (Forlano, 2016). Design researcher and director of Critical Futures Lab, Laura Forlano makes the following incisive comment about the significance of de-centring the human – “non-anthropocentric design could radically shift our experience of the world and allow us to dramatically re-evaluate our ‘needs’ and, instead, find pathways toward asking the right questions of corporations, governments, and of ourselves as designers. Designers who consider the non-human might find themselves reorganising entire social and environmental systems” (Forlano, 2016, p. 50). I emphasise here that to de-centre the human does not act to diminish human potential but rather to resituate it in the context of intersubjectivity and interconnection with non-human worlds (Forlano, 2017; Smith, Bardzell, S. & Bardzell, J., 2017). To consider not only the agency of humans but also that of non-human worlds starts to blur the boundaries of separation and shape reciprocal relationships with the rest of the Earth Community (Escobar, 2019).

2.4.4.5. Tuning in to qualities of relationality

Exploring manifestations of radical interdependence by de-centring the human in design processes can not only be achieved by drawing out non-human perspectives, but also by tuning in to qualities of relationality that exists between co-emergent worlds in the many-world world (Escobar, 2019). Escobar postulates in his book the importance of considering “how the designers’ understanding of humans and worlds changes when all kinds of non-humans, and the heterogeneous assemblages of life they bring

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into existence, are brought into the picture” (2018, p. 125). Political ecologist Patrick Bresnihan articulates the concept of the ‘more-than-human commons’ as an entangled many-world world in which humans and non-humans are subjects who are tied together “within a mesh of reciprocal relations that must be negotiated” (2015, p. 13). David Bollier and Silke Helfrich, activist scholars in the commons call this a “differentiated relational ontology” and compare it to the way that the pluriverse is described by Escobar (2019). De-centring the human draws from these diverse discourses, allowing for an appreciation of our shared commons, and facilitates the cultivation of active custodianship of the quality of relationality that exists between humans and non-humans (de la Bellacasa, 2012; Duan, 2023; Weber, 2015; Yunkaporta & Shillingsworth, 2020).

It is important that human individuals, communities and systems are able to incorporate the needs of the non-human world into their being (Boehnert, 2017). Attempting to connect with non-human experience calls for a sensitivity to their agency, form and senses such that we may gain an understanding of their world-making practices (Forlano, 2016; Westerlaken, 2020). Feminist scholar Donna Haraway evocatively captures this need for relationality through her description of sympoiesis (making-with) - “sympoiesis is a carrier bag for ongoingness, a yoke for becoming-with, for staying with the trouble of inheriting the damages and achievements of colonial and postcolonial naturalcultural histories in telling the tale of still possible recuperation” (Haraway 2016, p. 125).

2.4.5. Systemic design

The processes described in the sections above - including multi-stakeholder collaboration, deliberative decision-making, navigating socio-ecological impacts, non-human representation, and relational engagement - can all very well be a valuable part of one’s systemic design practice, and even one’s strategic design practice; so the question arises, what *is* it that specifically entails and differentiates systemic design practice from other modes of fostering transitions toward Earth Democracy?

Leading design researchers Mieke van der Bijl-Brouwer and Bridget Malcolm, describe systemic design as combinations of systems thinking and design practice that seek to enable social innovation in the face of complex societal challenges (2020). With a similar framing of systemic design, the Design Council, UK further differentiates between (1) ‘system-conscious’ design that has an awareness of contextual interdependencies, and (2) ‘system-shifting’ design that is an expansive practice that not only merges, but transcends the combination of systems thinking and design practice (Drew et al., 2021). While these descriptions are somewhat theoretical and vague when taken in isolation, they find a mutual grounding in Richard Buchanan’s fourth order of design (1992). In

his framework, the fourth order of design is described as pertaining to complex systems and environments. As the diagram below depicts, systemic design actually overlaps and includes design practice across the other orders as well - i.e. visual, material, spatial, service, organisational, strategic etc. It is worth noting that *co-design does not feature as an order of design in the diagram; rather it might better be framed as an approach with valuable manifestations across all four orders* (Lähteenoja et al., 2023).

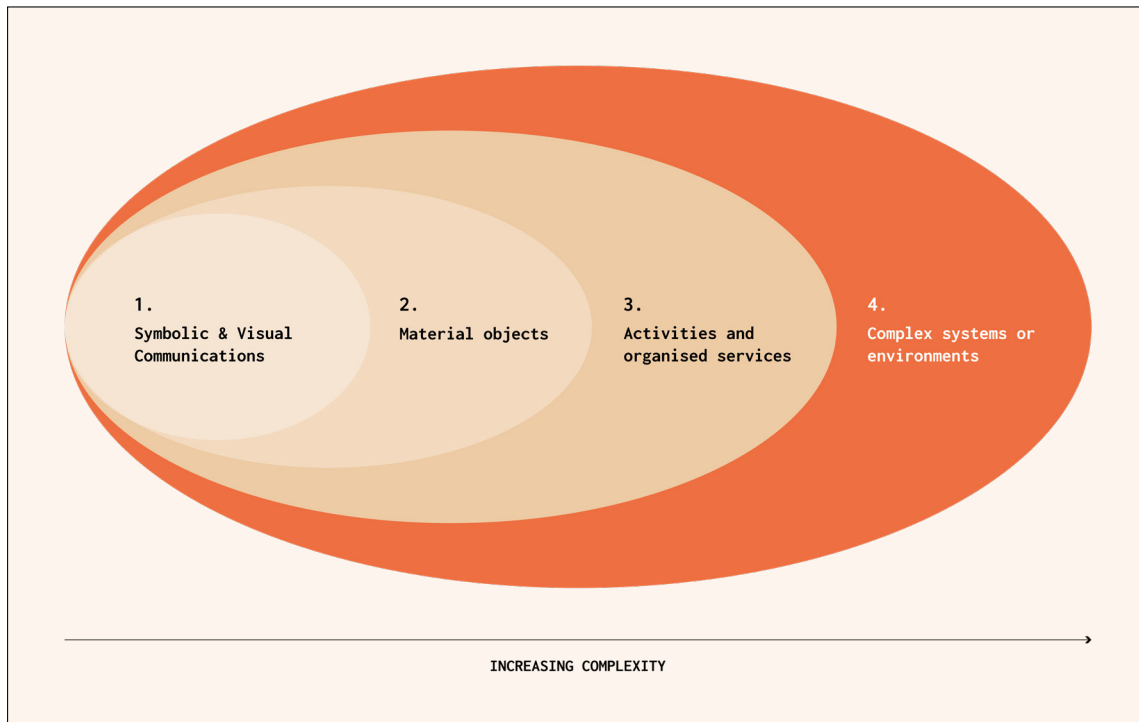


Figure 11. Buchanan's four orders of design [adapted] (Buchanan, 1992, p. 9)

The strategic design conducted at the UTS Design Innovation Research Centre (DIRC) was located between the third and fourth orders of design - focused on reforming existing systems through reframed approaches to wicked problems (Bijl-Brouwer, 2022). *Strategic design* is often characterised by projects with short-mid time frames, single organisations as clients/project owners, and a scope of focus on organisational and/or social innovation (Holston, 2011). *Systemic design*, in comparison, does not seek to only reform existing systems, but to fundamentally transform them through the convening of project portfolios that prefigure alternate socio-cultures with coalitions of multi-level, cross-sector actors over long time scales. With this background in place, it is worth revisiting the Design Council, UK for a definition of systemic design:

As well as designing 'parts' of a system and the way they interact, for example in the form of products, platforms and services, the objects of design include other things that shape system conditions and behaviours e.g. narratives that influence assumptions and beliefs about what a system is for, routines that shape social practices, structures that make different sets of relationships possible, operating models that change the way that authority, resources or

information flow, or framework conditions that encourage different system activities (Drew et al., 2021, p. 24).

While the field of systemic design is still emerging, there are ever increasing tangible examples of its practices - including those explored later as a part of my field research. It strives to be a holistic approach comfortable with emergent uncertainty, which design theorists Harold Nelson and Erik Stolterman characterise as requiring designers to “pay full attention to essential relationships and critical connections” in order to foster long-term sustainability (2003, p. 57). Nelson later writes that “systemic designers are skilled polymaths who have the ability to create assemblies of essential elements into *coherent* whole systems that serve and enhance human activity” (2022, para. 2). In practice, the need for systemic designers to employ long-term, relational approaches to multi-stakeholder coalitions finds expression through the convening of portfolios of projects (Bijl-Brouwer, 2022).

2.4.5.1. Systems convening

Systems convening is an integral practice to systemic design, whereby an individual or organisation facilitates the development of coalitions of multi-scale and cross-sector stakeholders, with a particular view to

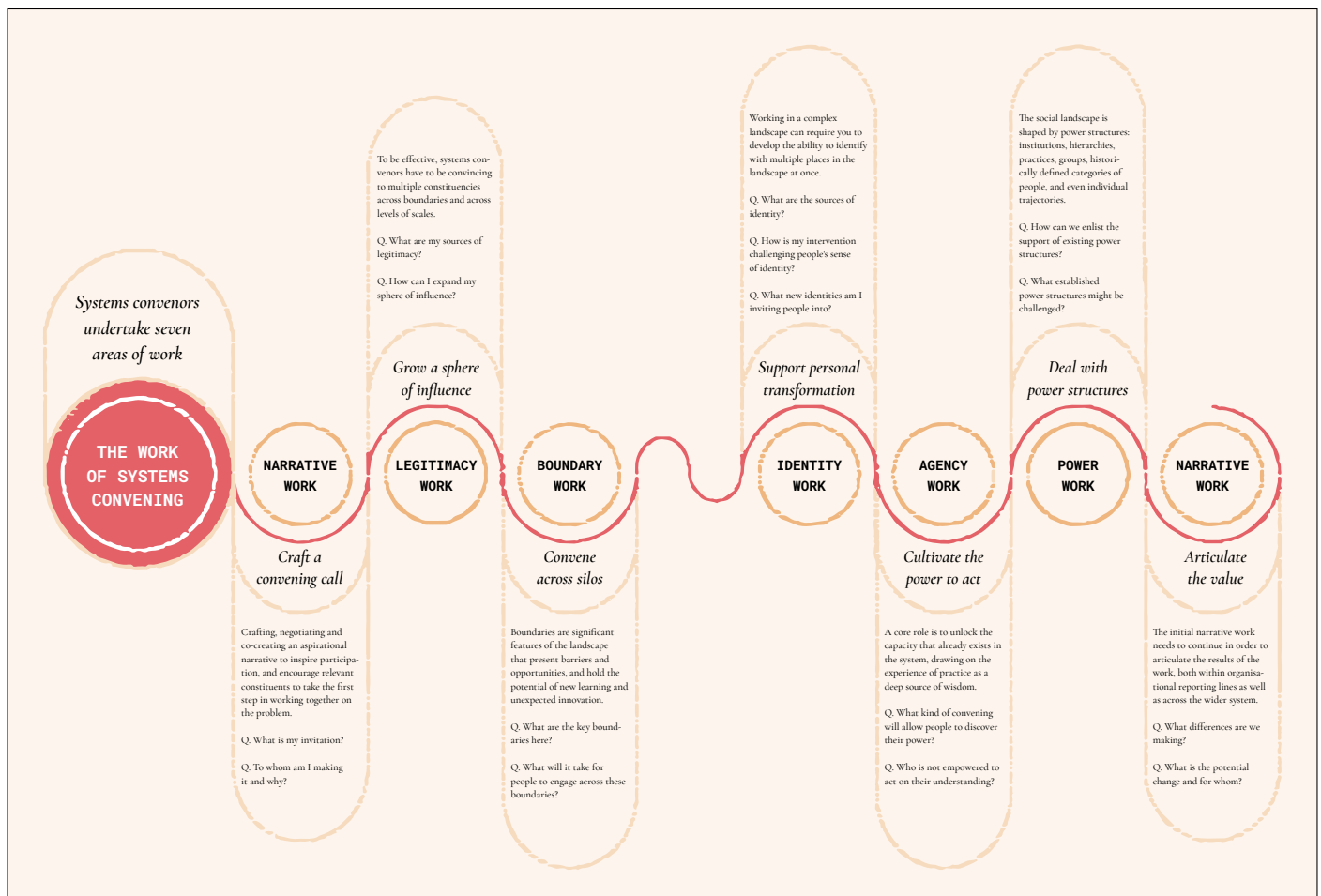


Figure 12. The work of systems convening [adapted] (Wenger-Trayner & Wenger-Trayner, 2021, p. 50)

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bring *coherence* to portfolios of linked projects, all emergently directed towards a shared agenda for change (Leadbeater & Winhall, 2020; Wenger-Trayner & Wenger-Trayner, 2021). In their book ‘Systems Convening: A crucial form of leadership for the 21st century’, internationally renowned *social learning* theorists Etienne and Beverly Wenger-Trayner thoroughly explore the practice, and through detailed interrogation of case studies, elicit a framework (seen above) that articulates its various areas of work.

With a view across the diverse areas of focus in systems convening - both implicit and explicit - the authors of the book outline the practice and its practitioners as follows:

For us, systems convenors are an instance of what we call social learning⁶ leaders. These are people who take leadership in developing the learning capability inherent in social configurations of various sorts: communities of practice, networks, organisations, cities. In this sense, we reserve the term systems convening for the work of enhancing social learning capability in a substantial, cross-boundary area of the social landscape (2021, p. 107).

Systems convenors develop social learning capability (Bijl-Brouwer et al., 2021) - facilitating people to make a difference “by interacting with each other, learning about each other’s perspectives, finding common ground or respecting differences. This social learning approach means that systems convenors work with people where they are and take them along on a joint learning journey” (Wenger-Trayner & Wenger-Trayner, 2021, p. 27). Systems convening enables the practice of systemic design to be expanded beyond its purview of systems-thinking-informed design processes, into a wider orientation of mission-oriented movement building. A relational and emergent formation of coherence across linked project areas is central to this approach. The convening of portfolios of linked projects finds itself an invaluable framework in Mariana Mazzucato’s mission-oriented innovation⁷ - which will be explored in greater detail in section [6.4.](#) with reference to its practical application in my sites of field research.

6
Etienne and Beverly Wenger-Trayner describe a social learning approach as one that attends to “a challenge or an aspiration by developing the ability of people to learn from and with each other how to make a difference that matters to them” (2021, p. 81).

7
Mariana Mazzucato’s ‘mission-oriented innovation’ advocates for portfolios of place-based and cross-sector projects to work in alignment towards a shared mission - a ‘North Star’ (Mazzucato, 2018).

2.4.5.2. Comparing systemic design with systems innovation

Adjacent to systemic design is the emerging field of *systems innovation*, which is increasingly gaining attention, with many reputable organisations and initiatives spurring on its development - including [Griffith Centre for Systems Innovation](#), the [System Innovation Initiative](#), and the [Systems Innovation Network](#). Systems innovation builds upon established fields of practice including social innovation, public sector innovation, civic innovation and strategic innovation; and (like systemic design) seeks to harness multi-stakeholder collaboration to create portfolios of integrated and co-ordinated interventions - which might include products, services, technologies, education services or financial instruments (Dorland, 2020; Kerr, 2023; McNeill, 2017).

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There is a great deal of overlap between both design and innovation approaches, not just in this context of enabling systems-level transitions, but also historically, especially with regards to design thinking and social innovation (Dorst et al., 2016). Whilst many use the word design and innovation interchangeably, there are some notable points of differentiation, first of all their disciplinary foundations:

- Systemic design is anchored in the other orders of design (as depicted in Figure 11), and with this comes a grounding in visual, material and spatial outcomes, along with traditions of co-design and participatory design (Drew et al., 2021). As described earlier, systemic design does not seek to shed these foundations, but rather to expand the scope of design to more deeply repattern societal structures, harnessing its propensity for holistic and relational engagement (Nelson, 2022). Systemic design, as well as other design disciplines have largely arisen and developed through on-the-ground practice rather than through academic or theoretical foundations - with disciplinary framings setting intentions for the scope of activities and impact.
- Systems innovation has grown as a field rooted in the earlier ‘innovation studies’, which was “predominantly focused on the introduction and diffusion of technological innovations” (Midgley & Lindhult, 2021, p. 638). However, the Griffith Centre for Systems Innovation underscores the need to go beyond this narrow framing with systems innovation: “many of these [approaches, processes] are not limited to new technologies nor subject to market-based entrepreneurship” (2023c, p. 17). Prominent innovation advisors Charles Leadbeater and Jennie Winhall similarly frame systems innovation as a broad practice “from the incremental to the radical, the disruptive to the sustaining, commercial to social, creating new products and processes, services and software” (2020, p. 8).

The second point of difference between systemic design and systems innovation lies in their tendencies to focus on realising impact through slightly divergent trajectories:

- Drawing upon Dan Hill’s characterisation of the context as ‘the meta’ and the artefact as ‘the matter’, systemic design practice (like strategic design) “swings from the meta to the matter and back again, oscillating between these two states in order to recalibrate each in response to the other” (2012, p. 45). In doing so, systemic design bridges top-down and bottom-up orientations, embodying a ‘middle-out’ navigation of potential outcomes that span socio-cultural and material interventions as much as organisational, infrastructural, economic and political strategy development. Further, the anchoring in material considerations and iterative processes leads systemic design practice to place great value on the realisation of living prototypes that create dialogue and momentum between ‘the matter’ and ‘the meta’.

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- Systems innovation has a greater focus on change outcomes for decision-making, policy, institutions and technology, which is not surprising considering its emergence from the public sector innovation and social innovation fields (Burkett et al., 2023a). Amongst systems innovation practitioners, there is less focus on ‘the matter’ - cultural and socio-material artefacts, and more emphasis on ‘the meta’ - institutional socio-technical contexts, along with measurement and evaluation (Midgley & Lindhult, 2021). The OECD describes systems innovation as such:

The concept of system innovation can be characterised as a horizontal approach to innovation policy directed at problems that are systemic in nature such as transitioning towards low carbon energy systems or low carbon transport systems. It is one that involves engaging a range of private and public sector actors and takes a longer-term view in policy (2016, p.1).

In real world practice, many systemic designers and systems innovators might indeed describe their approaches quite similarly, and indeed the two are certainly not mutually exclusive. When considering individuals, the labels they give themselves do not only reflect the points made in this section, but of course also how they might seek to position themselves in the field, or indeed a plethora of other reasons.

2.4.5.3. Situating Transition Design

Whilst some of the attributes of Transition Design practice have already been described (in sections [2.4.2.3.](#) and [2.4.4.3.](#)), I will now paint a more complete picture about the approach, and its characteristic differences with systemic design. Transition Design (like systemic design) is concerned with the fourth order of design - seeking to foster design-led societal transitions toward more sustainable futures; and has now been gaining momentum as an emerging approach for over a decade (Irwin, 2015, p.231; Tonkinwise, 2014). As a field of practice, Transition Design was founded upon the place-based economic localisation of the Transition Towns movement and the transition management discourse of sustainability transition research; other sources of formative influence include living systems theory and cosmopolitan localism (Irwin et al., 2016; Kossoff, 2019; Lähteenoja et al., 2023).

Recognising the transformative potential of design, in conjunction with a series of formative partnerships with [Schumacher College](#), the Transition Design approach has from its very beginning embodied an explicit radical political orientation (Hölscher et al., 2018).

Where transition design advocates a design-led social transition to more sustainable futures, it has sought to do so by developing inclusive theory to enable ethical and justice-oriented design as a means to address the reproduction of social injustices by design (Boehnert et al., 2019, p. 288).

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This explicitly stated positionality was at first relatively uncommon, given that many co-design and strategic design practitioners were positioning themselves as neutral, impartial facilitators who enable unbiased curation of multi-stakeholder forums, especially in the context of public sector innovation (Moore, 2019). Transition Design and in recent times co-design practitioners more generally, increasingly facilitate forums in an inclusive manner that does not absolve them of their subjective positionality. In the case of Transition Design, this includes a clearly stated aim to foster social and ecological transitions - a clear agenda, the type of which systemic design as a field does not hold, regardless of the orientations of individual systemic designers.

There is a greater focus in Transition Design than systemic design on systems-oriented analytical processes, theories of change and synthesis methods that draw from transition management discourse. The influence of transition management discourse on Transition Design includes the use of tools such as the Multi-Level Perspective (MLP) to aid processes of analysis, synthesis, and systems mapping, whilst there is also a reciprocal contribution of design thinking and co-design processes to transition management projects (Lähteenoja et al., 2023). Transition management research has pushed Transition Design to include in its core considerations the development of multi-level and multi-stage systemic interventions that evolve complementarily (Tonkinwise, 2014). The multi-level evocations of the MLP are crucial in uncovering vastly diverse leverage points for change - and are explored more deeply in section [6.4.2.1](#). Working across various levels of intervention in an integrated manner serves the aim of Transition Design in the ‘reconstitution of everyday life’ (Kossoff, 2015).

A transition designer would need to defend or restore the relationships between people, nature and artifacts at all levels of scale. For example, a transition designer is a multi-faceted, place-based activist who discusses, conceives and plans, for example, a compost heap at the household, a citizen assembly at the city or ecological education at the regional levels (Gaziulusoy & Erdogan Öztekin, 2019, p. 9).

Another pivotal influence from transition management on Transition Design is the development of theories of change, which are integral to the practice - both as a framing ontology that shapes design practice to be more ambitious, as well as a process to be undertaken in-situ in order to better align multi-stakeholder engagement (Clausen & Gunn, 2020). Tonkinwise reminds us that in this regard “the underlying warrants for Transition Design come from transition management accounts of how sociotechnical regimes have historically changed” (2023, p. 289).

It is not necessary to go into the details of application of the Transition Design framework and engagement process here, except to

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2.4.5.3. Situating Transition Design

note that in all its non-linearity, some aspects of its practice are essential: (1) creating a shared vision for a long-term future, including evocations of everyday life social practices, (2) identifying multi-level systemic leverage points through backcasting for interventions that meet multiple needs of stakeholders, (3) forming a theory of change that evolves and adapts with development of the collective, and (4) building living prototypes for ongoing iteration as a part of multi-stage transitions.

Systemic design literature acknowledges the formative role of Transition Design in helping to develop the field of systemic design (Drew et al., 2021). Highlighted attributes include its bottom-up approach to fostering transitions that “can provide a check on technocracy and constant sources of democratic innovation from below” (White, 2021, p. 215), and its commitment to shifting design education so that academia and design researchers may be better suited to designing in the context of societal transitions (Drew et al., 2021; Gaziulusoy & Erdoğan Öztekin, 2019). In saying this, systemic design itself has since grown as a discipline, with attributes that are not necessarily as developed in Transition Design - in particular including its engagement with systems convening and mission-oriented innovation. It is clear that the movement-building associated with systems convening and mission-oriented innovation - enabling coalitions of diverse stakeholders to coherently collaborate - is vital to fostering long-term systems change. ‘Staying with a problem’ (with a long-term outlook and commitment) as a part of Transition Design practice should indeed be framed as something to be fostered in the collective, not only in oneself as a Transition Designer:

Staying with a problem – because there is no stopping point to wicked problems – must be a trait of a higher order designer, especially one whose ambition is to be a change agent. Consequently, what is unique about the Transition Order is that designers have the methods and theories, but also the (psychological) disposition, to undertake multiple changes within a situation over time. Transition is multi-level and multi-stage. The designer always recognises that they will have to make many moves, many moves at the same time, but also many subsequent moves (Tonkinwise, 2014, p. 12).

2.4.6. Earth-centred economic governance

My practice as a Transition Designer seeks to harness systemic design to foster an Earth Democracy, and this research looks to surface the impact that such methods might have. The various approaches introduced and discussed in the literature review - deliberative engagements, systems innovation, Doughnut Unrolled and Greenprints etc. - each have their own mechanisms through which they strive to transform systems of economics and governance. To various extents, power can be shifted, coalitions formed, humans de-centred, and participants facilitated to engage with ecological limits and the needs of the Earth Community.

2. Literature review
2.4. (Participatory) governance for
Earth Democracy
2.4.6. Earth-centred economic governance

They each have diverse methods through which to unveil the needs and thresholds present in a community - the navigation of which is vital to articulate visions and strategies to shape a regenerative economy that meets those needs. It is a creative exploration of the nuanced interplay between *needs* and *thresholds* (both human and non-human) that is at the very core of designing for cosmopolitan localism and Earth Democracy. ‘Needs’ describe what entities require for their thriving; ‘thresholds’ are the bare minimum limits that might be impinged upon by interconnected needs (e.g., social foundations, ecological ceilings). The field research builds upon these understandings and looks to reveal the various forms of design practice that best contribute its participatory, vision-led and integrative characteristics.

These initial explorations have surfaced some of the ways in which regenerative economics and bioregional governance might be fostered, including by convening coalitions of cross-sector practitioners, enabling accountability in governance and de-centring the human in harnessing relational ontologies. The development of my field research approach has been guided by the need to understand the ways in which an Earth Democracy might be tangibly catalysed by novel forms of design practice.



Part 2: Field research foundations

In this section I detail the development of my research design, including through a valuable project at the Design Innovation Research Centre, which allowed me to draw from my literature review to develop my approach to field research through practice. I also explore the development and evolution of my engagement with Regen Sydney and Coalition of Everyone - my two sites of field research.

Part 2 has three chapters: (3) Generating hypotheses through practice, (4) Research design, and (5) Systemic design in two dynamic contexts.

3. Generating hypotheses through practice

3.1. Introduction

3.1.1. Co-designing at DIRC

My research hypotheses were developed through professional practice at the Design Innovation Research Centre (DIRC) UTS. In particular, this involved co-designing in a NSW Circular project concerning place-based circular economies. As a co-design practitioner, reflecting on this highly relevant DIRC project has helped me to develop and articulate a deeper understanding and critique of key multi-stakeholder approaches. Building upon my literature review, the experiences had in this project have also fostered me to refine my theoretical frameworks to be better aligned with the emergent properties of designing for systems-level transitions.

The processes and insights discussed do not pertain to my field research but are to be read as developments in my practice that helped to generatively evolve my field research approach. The project in question was not conducted under my doctoral ethics clearance, but rather within the purview of ongoing programs of work at DIRC. In the following section I demonstrate the ways in which I formed a deepened understanding of my professional design practice, paving the way for my subsequent field research. I detail the practice foundations upon which my collection of hypotheses, and my research design more broadly have been formed.

3.2. Co-designing an approach to place-based circularity

In this section⁸, I reflect on collaborative design research processes involving 46 diverse participants, including citizen, community, council and commercial representatives to co-design an alternative approach to ‘The Circular Economy’ in the settler-colonial Australian context (Kashyap et al., 2024). Through two workshops that drew on Transition Design and Frame Creation methodologies, participants explored how circular economies could be citizen-led, and envisioned a reframing of circularity as ‘Caring for Country’ - a reframing that may also allow ‘The Circular Economy’ to play a part in ongoing efforts at decolonisation. Input from participants was synthesised to design a co-creative approach and a series of community hub prototypes that support citizens and communities in becoming stewards of their bioregions, caretakers of each other and custodians of their material objects. The co-design process demonstrated the importance of involving the everyday lives and social practices of people in the emergence of pluriversal circular economies, and how a First Nations-led reframing of circularity around Caring for Country creates the potential for a profound contribution to *‘Relational Repair’*.

The growing worldwide movement to build circular economies - production and consumption that moves towards zero waste, by design - has great potential to not only reduce waste generation, but to also help with the *systemic repair* of our cultures, infrastructures, livelihoods and everyday practices so that they are socially and ecologically responsible. However, attempts to foster the emergence of circular economies around the world are often centred around instrumental, techno-centric and universalist approaches that encourage a continuation of neoliberal patterns of production and consumption (Hobson, 2021; Hobson et al., 2021). As such, there continues to be an imperative to explore - through citizen-led engagement in local contexts - the types of deeper socio-cultural transitions required in order to seed decentralised circular economies that are truly regenerative and oriented towards systemic repair (Hendriks, Ercan & Boswell, 2020; Wahl, 2016).

Through this project, repair manifested not only as a material-oriented practice, but also as a culture-oriented process for systemic transition. As co-design facilitators we asked ‘what is the nature of participation required in co-designing a systems transition towards repair-oriented, Care-full economies?’ (Lockrey et al., 2023). In the following sections, I will unpack the multi-stakeholder co-design project which led to conceptualisations of a citizen-led pluriversal circular economy and the emergence of a First Nations-led Country-centric reframing of circularity around the ethic of Care. I discuss (1) that the positionality of client, facilitators and participants is crucial, (2) the importance of grounding explorations of circular systems in physical object embodied interactions, (3) the centrality of reframing the circular economy towards an Earth-centred ethic of Care, (4) the need to not simply define

⁸
Please see Attachments 1 & 2 while reading this section. These attachments showcase the process and outcomes from the DIRC project with NSW Circular.

what is the circular, but rather to grapple with articulating *how* we transition towards desired versions of circularity.

3.2.1. Evolution of the project with NSW Circular

The co-design project itself was initiated by NSW Circular who funded DIRC to collaboratively explore the potential for community hubs to help activate circular economies. Along with the other strategic designers at DIRC, I worked on this project and conducted its preliminary research, workshop design, workshop facilitation, synthesis and reporting. The 46 workshop participants had diverse professional backgrounds across local and state government, commercial and community organizations, and academia, as well as those who were present as engaged citizens. The primary and secondary design research attempted to include as many perspectives as possible, in order to ensure the problem space was understood more comprehensively, and so that emerging solutions were equitable and robust.

3.2.1.1. Overview of the co-design

Two half-day co-design workshops were held, the first in-person and the second remotely due to COVID-19. Through these collaborative forums, stakeholders were engaged in the following key objectives, including to

1. Unpack the opportunities and challenges for circularity in the Australian context;
2. Explore community hubs and their connection to Place and Community;
3. Consider how diverse citizens might interact with community hubs; and
4. Test a co-creation process for how community hubs could be established in local contexts.

The workshops were made up of numerous individual and group activities followed by reflective plenary discussions, all of which aimed to encourage novel insights and patterns to emerge. There were two individual and four group activities that helped to achieve the above objectives, split over the two workshops.

1. The first workshop began with a short activity ‘**Introductory Definitions**’ where participants outlined the terms ‘circular economy’ and ‘community hub’ from their individual perspectives.
2. Secondly, groups mapped out an ‘**Object Ecosystem**’, wherein groups chose a simple physical object, and uncovered the complex interactions of social practices, material lifecycles and stakeholder relationships that exist by association.
3. Next, groups collaborated in ‘**Scaffolding Community Hubs**’ and articulated what a desirable community hub might look like, including its purpose, impact, the people involved and

- 3. Generating hypotheses through practice
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- 3.2.1.1. Overview of the co-design

functional aspects of the hub itself.

4. Commencing the second workshop was an introductory exercise, ‘Place and Care’ which asked participants to individually reflect on a place with which they feel connected and briefly describe the nature of Care in that context.
5. The ‘Mood Board Exploration’ activity saw groups situate themselves in one of their chosen contexts and grapple with the opportunities and challenges present in developing community hubs that are specific to their communities and ecologies.
6. Finally, the ‘Persona-Based Testing’ activity closed out the second workshop by using personas to draw out insights about how circularity could effectively meet the needs of diverse citizens and ways in which community hubs could have tangible impact.

3.2.1.2. The appetite for change

DIRC was empowered to collaboratively pursue the question of citizen participation by our client NSW Circular who certainly understood its value (NSW Circular et al., 2022). With this alignment in intent, DIRC was given great freedom to curate the workshops to place importance on emergent participatory activities, even if it meant the outcomes fundamentally challenged prevailing circular economy approaches. It likely goes without saying that this kind of co-design client relationship is rare for funded projects, with trust built upon a mutual acknowledgement of the need for design-led approaches to the circular economy. DIRC was engaged for its particular variety of co-design that tackled complex systems problems through a socio-cultural lens, drawing from Frame Creation and Transition Design approaches. The co-design strived to engage participants in an Earth-centred orientation as the workshops moved through explorations of ecological impacts, local materials, stakeholder engagement, policy reform and guiding values.

3.2.1.3. Positionality and participation

The experiences, worldviews and political orientations which we as designer facilitators held called us to shape the nature of project collaboration and participant engagement. It was imperative to consider this positionality - the identity, perspective, or stance of researchers in relation to the social and political context of the study - the community, organisation or participant groups (Coghlan & Brydon-Miller, 2014). Our positionality would have a significant influence on how research was conducted and synthesised whether or not we made this fact explicit (Schiffer, 2020). The convenors of this design research were non-Indigenous Australians of predominantly Tamil, Polish, Anglo-Celtic heritage. We were conscious of our positions as university-educated settlers (3 out of 4 of male sex), and as such, we engaged in this work with a certain degree of hesitance based on the privilege that we held.

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- 3.2.1.3. Positionality and participation

We engaged in reflective and reflexive practice throughout the research to consider how our privileged experiences were framing the research process and making sense of the data, and in research activities, we sought to draw attention to this positionality with participants in a transparent manner. Our ongoing practice attends to a decolonial, pluriversal approach to social and ecological design research, and we recognise the huge blind spots and gaps in knowledge that exist in this nascent field (Noel et al., 2023).

Social design research attempts to offset the influence of conscious and unconscious privileged positioning in studies, at least somewhat through the inclusion of a multitude of diverse voices collaborating in the act of framing, solving and implementing systemic problems. The role of the designer as facilitator does not feign a position of neutrality, and is crucial to enabling equitable and pluriversal narratives for the future, including both human and non-human actors in discussions and activities (Escobar, 2018; 2019; Noel et al., 2023; Schneider, 2013). In this work, we specifically drew attention to which actors were present in research activities (such as workshops) and importantly, with participants we reflected on whose voices were not present and heard. There was a large commercial and governmental representation in the two workshops, and a recognised need to engage with particular community members in further stages of research. It is also the role of the designer facilitator to act as an advocate for marginalised and underrepresented stakeholders outside of active research activities, when further important decisions are made. We reflected on the positionality of workshop participants and considered the impact they had on the research outputs. The predetermined focus of the research around developing ‘community hubs’ for a circular economy transition, and the prior affiliations of public and private sector stakeholders with such a term was potentially significant, and overlooked the potential for community-led and place-based solutions.

3.2.1.4. Learning to walk with First Nations

The project co-designers (Domenic Svejkar, Cameron Tonkinwise, Abby Mellick Lopes and myself) were privileged to have the participation of First Nations community leaders: David Beaumont, Ciaron Dunn and Danielle Stocks. Their workshop contributions proved pivotal, providing a way for all participants involved to deepen their understanding of the nature of citizen-led, place-based versions of the Circular Economy. I am sincerely grateful to David Beaumont for having made himself available to guide articulations of First Nations involvement in this project and my approach to speaking of First Nations concepts. David acknowledges the First Nations people before him, the sacrifices they made and the cultures they kept alive. Holding this in my mind and heart I attempt to walk together, in partnership.

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- 3.2.1.4. Learning to walk with First Nations

In the following discussions of Country, I try to avoid appropriation or misuse, with cognisance of the great risk of perpetuating further dispossession (Moran et al., 2018). When I speak of Country, I seek to meaningfully evoke the ongoing Aboriginal cultures of Care that we were invited into understanding by the Aboriginal collaborators involved in the workshops. During the workshops we sought to continuously reorient discussions with humility, taking lead from the First Nations participants on how to engage, with their contributions essential to the insights I present here.

The intent through this project was to identify ways of designing the transition to more circular economies that would result in societies that not only acknowledge but empower those Indigenous ways of living that have been regenerative for tens of thousands of years. As settlers from different immigrant heritages, we sought to change settler colonial society in Australia, something that at the moment continues to manifest as a Care-less linear economy that is degenerative, extractive and wasteful. In the following paragraphs, I will refer to the more Care-full community-centred versions of the Circular Economy that emerged through co-design as relational, Earth-centred efforts at repairing our social and ecological fabric. Accordingly, a ‘Relational Repair’ framing will be introduced as a valuable lens with which to understand the Circular Economy as interconnected webs of accountability, located in place. In the spirit of partnership, I hope that relational, Earth-centred approaches might signal an ethos for non-Indigenous Australians that can accompany the First Nations ethos of Caring for Country (Page & Memmott, 2021).

3.2.1.5. A novel mashup of methodological processes

The collaborative activities undertaken in the two workshops were designed to navigate participants through a journey of learning and sharing that would help to uncover hidden circular economy challenges and opportunities. Each activity built upon the discussions conducted prior, leading to increasing levels of trust between participants as well as to deeper articulations of systemic interconnections. The overall workshop design was anything but derived from a cookie-cutter co-design process, but rather it was a mashup suitable for the specific problem context, cohort of participants and the mediums of collaborative engagement. Many of the elements in the arc of collaboration were informed by the key foundational frameworks of Frame Creation and Transition Design - two co-design approaches for complex socio-ecological problem contexts. Over the last decade Frame Creation has emerged as a co-design methodology that responds to “open, complex, dynamic and networked problems” that span across organisations and sectors (Dorst, 2015a, p. 23). Central to Frame Creation are processes by which collaborators frame

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a problem, drawing from an expanded understanding of relevant historical dynamics, paradoxes and stakeholder needs. Frame Creation does not advocate for discrete problem exploration and solution ideation; rather it is characterised by the co-evolution of both problem and solution through generative and iterative processes. The core 9-step process of Frame Creation draws from research into the specific creative practices of designers, yet offers up a methodology for strategic thinking that is widely applicable across diverse problem contexts (Dorst, 2015a). Frame Creation is a highly validated process for co-designing interventions into a range of social innovation contexts, with examples of projects worldwide (Dorst et al., 2016).

As described in section [2.4.5.3.](#), Transition Design is a nascent approach to co-design and systemic design that has a significantly larger scale of focus as the context for its design interventions; it advocates for “design-led societal transition to sustainable futures” (Irwin, 2018). Transition Design is upfront about its drive to reconceive entire lifestyles and reimagine infrastructures; accordingly, projects have a focus on developing and leveraging an understanding of interconnected social, economic and ecological systems as they apply in their contexts. Transition Design uses systems mapping, stakeholder articulation of hopes and fears, future visioning and backcasting as well as the development of ecologies of interventions. The approach draws from cosmopolitan localist political underpinnings and transition management practice, positioning the methodology as a way to design for local contexts as situated within interconnected, nested multiscale systems, evolving over long time horizons (Irwin, Kossoff & Tonkinwise, 2016). The workshops introduced me to the practice of Transition Design - in particular as an approach worth exploring further in my own field research.

Both Frame Creation and Transition Design utilise multi-stakeholder co-design methods to explore problems and solutions, but there are distinct differences in their orientations and methods. The former utilises phenomenological methods to thematically explore and reframe problem spaces through the shared articulation of meanings, social values and experiences. Projects applying Frame Creation typically address a complex, but defined and bounded problem space, so although the design outcomes may include a reframing of the original problem, the outcomes can mostly be characterised as reforms within existing social systems. In contrast, Transition Design attempts to harness broader systemic explorations of complex problem spaces and aims for the co-design of regime shifts over long time horizons. With a greater focus on envisioning the future, projects employing Transition Design attempt to backcast strategic roadmaps for *ecologies of interventions*⁹ that respond to emerging systems dynamics. The following sections will describe salient elements of the workshop design that drew from and built upon these two approaches.

9
 ‘Ecologies of interventions’ as framed by Transition Design could otherwise be articulated as an assemblage of complementary pilots demonstrations. There is a notable synergy here with Mariana Mazzucato’s Mission-Oriented Innovation - which will be explored later in section [6.4.](#)

3.2.2. Methodological insights and learnings

3.2.2.1. Contextualising circularity in interconnected systems

It is valuable in systems-oriented co-design projects to enable participants to step into a nuanced and empathetic contextualisation of their area of focus early in the process of collaboration. Revealing hidden relationships and interactions between elements in the system can lead to an understanding of their complex, dynamic nature - which in turn forms a springboard for subsequent activities where the propositional value of design can come to the fore in collectively recognising and cultivating sites of systemic repair (Drew et al., 2021).

Accordingly, the first group activity in our project acted to create this manner of contextualisation, with discussions to be centred around an actual physical object. Participants were asked to select an object that would then act as a material lens into its enabling systems - similar to the function of speculative objects in exploring possible futures - albeit focused on unpacking and revealing current state dynamics. Figure 13 below shows participants deliberating before choosing between objects such as textile offcuts, a brick, PVC pipe, remote control, an old iPhone and takeaway food containers, amongst others.



Figure 13. Participants selecting objects with which to explore current state system dynamics

It was important to allow participants to be able to place themselves into the systems they were exploring in order to enable a deeper critique. The activity was framed in a way that allowed for participants to connect their own professional practice, knowledge and lived experience to their specific object's circular ecosystem. In discussing social practices and peeling back the layers of interconnected production and consumption systems, participants were encouraged to elicit the sometimes-conflicting

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values that were embodied throughout their object’s lifecycle. Clearly, different stakeholders throughout an object’s lifecycle had different priorities, yet the creation of any semblance of circular material flows and cultures of repair needed a holistic approach. Groups expressed the need for people to come together through shared values of cooperation and custodianship rather than consumerism and outsourcing.

Participants were encouraged to see circular economies not as static human-centred entities, but rather as dynamic Earth-centred processes. The form of the ‘Object Ecosystem’ activity template (see Figure 14 below) was intentionally ambiguous in its depiction of time as an arc. While linear economies might be depicted as a straight line and circular economies as a circle, the arc in the template acted as a cognitive bridge that facilitated insights about both linear and circular practices and processes.

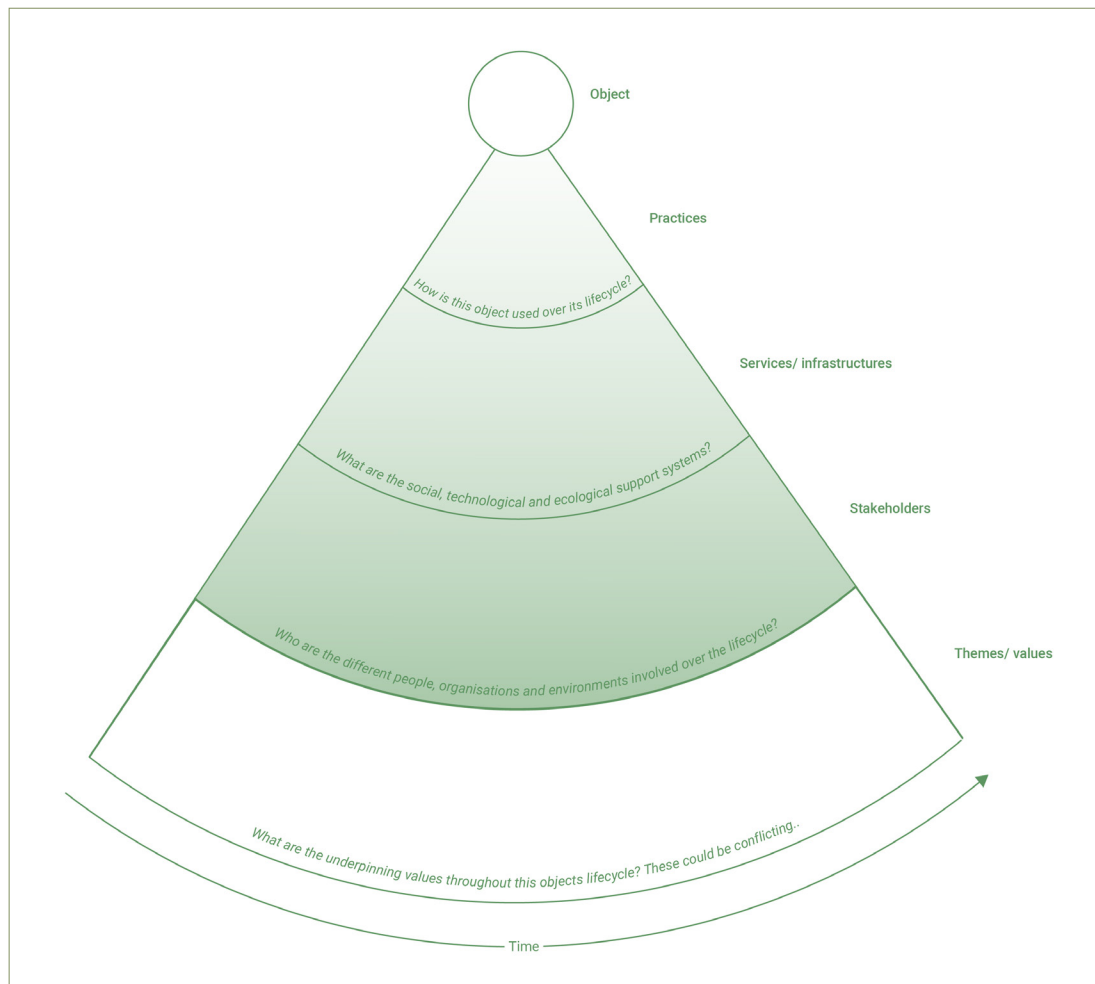


Figure 14. ‘Object Ecosystem’ activity template, Workshop #1

While reflecting on their objects, participants were encouraged to unpack and critique current production and consumption systems as well as to identify opportunities to create circularity and ‘close the loop’. There was also an explicitly stated prompt for participants to articulate ecological support systems and parts of the environment that

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are connected to their objects. With the goal of uncovering avenues for systemic repair it was imperative to articulate the ecological impacts and environmental inputs that are often made invisible in prevailing production and consumption systems, even those claiming circularity.

Through the Object Ecosystem activity, group discussions simultaneously fared in two different directions, namely (1) concerning a broadened awareness of the web of objects, services and infrastructures to which their object is inextricably connected, and (2) towards a deepened understanding of the sometimes-conflicting cultural drivers that underpin the life of their object. The insights uncovered through these two lines of inquiry are complementary and co-emergent, with further detail drawn out by reflecting one back to the other. An important outcome for participants was a tangible and collective agreement of the sheer ineffectiveness of siloed approaches to implementing circularity in their Object Ecosystems. As a result of the systems contextualisation undertaken, participants were more inclined to tend towards holistic and interconnected solutions for circularity that considered longer horizons of time. This was shown in the plenary discussion that immediately followed the group activity - which was framed by a seemingly simple question - “how could your system be more circular?”. Groups answered with cross-cutting answers such as: regulatory reform (including the right to repair), skill-sharing through a global digital commons, localised production and e-waste mining. These examples suggest that participants were able to take a step back from their specific object to notice broader patterns of interconnection and begin to consider possible sites of systemic repair (Bijl-Brouwer & Malcolm, 2020).

3.2.2.2. An underpinning ethic of care

Workshop participants highlighted that whilst identified examples of an emerging circular economy indicated positive shifts towards sustainable technologies, novel infrastructural processes and policy reform, the term was ambiguous, and did not capture the deeper socio-cultural shifts that would motivate both them and NSW citizens to be actively engaged in the circular transition. Participants highlighted the need to articulate a framing for circularity that more aptly resonated with their worldviews, collectively identifying the core values of a circular economy.

The theme of Care emerged from the Scaffolding Community Hubs workshop activity as an underpinning driver towards regenerative circularity. In this activity, participants grappled with the foundational need for a reframed understanding of the purpose of circular economy community hubs before jumping to ‘solutioning’ and designing their functional aspects. It was highlighted that Care and circularity have a long history through Aboriginal stewardship of land and culture, and that this should continue

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- 3.2.2.2. An underpinning ethic of care

to be embedded in the way forward. With pleasure, we were invited into an understanding of ‘Caring for Country’ by the First Nations workshop participants. One of them was David Beaumont - Senior Community Engagement Coordinator at City of Sydney council - who poignantly highlighted that Country is not something purely external to us, but in Caring for Country, it must be acknowledged that in fact “we are Country”. These discussions caused deep reflection on what a uniquely decolonial and place-based circular model might look like in the Australian context.

Collaborators were encouraged by First Nations participants to envision a reframing of circularity as ‘Caring for Country’ - a reframing that may also allow ‘The Circular Economy’ to play a part in ongoing efforts at decolonisation. They articulated that a circular economy that attends with Care to Country is one with a focus on the interconnections and relationships between people, places and things. Maria de la Bellacasa highlights a deep conceptual connection between caring and relating - “in worlds made of heterogeneous interdependent forms and processes of life and matter, to care about something, or for somebody, is inevitably to create relation” (2012, p. 198). To move our economies towards being Care-full we would need to not only attend to material lifecycles, but would need to be in sync with the needs of communities and the qualities of local bioregions, and bring a greater focus onto the nature of the inherent interconnections and relationships. Figure 15 below drew from these insights and depicts three elements - Care for Place, Each Other and Things - forming a deceptively simple framing.

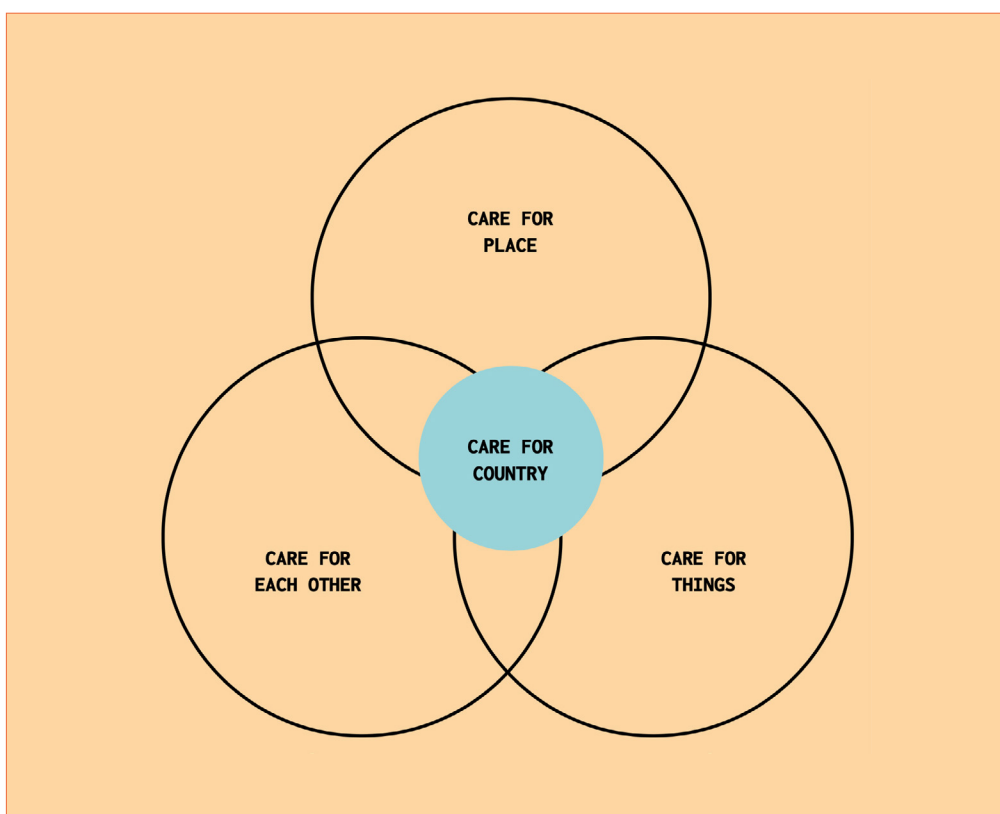


Figure 15. ‘Caring for Country’ as a foundational framing for the circular economy

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- 3.2.2. Methodological insights and learnings
- 3.2.2.2. An underpinning ethic of care

The diagram set a guiding framework for further co-design through this project; a framing corroborated by researchers Shepherd and Graham with their assertion that “core to Indigenous ontologies and epistemologies is a respect for relationships between people, places, and objects” (2020, p. 395)

3.2.2.3. The importance of a relational approach

For First Nations Peoples, Caring for Country embodies an ontological orientation of deep interconnection - an implicit understanding of the inseparable reciprocal relationships between land, animals (human and non-human), plants and spirits (GANSW, 2020; Redvers et al., 2022). Through this paradigm, the ethic of Care encompasses a holistic custodianship of the intertwined wellbeing of living ecologies and human communities. Fundamentally, humans are seen as caretakers and participants in the web of life, and Caring for Country can be seen to align with an ecocentric, or even kincentric worldview of relational interdependence (Kearney, 2020; 2021). Researchers Weir, Stacey and Youngetob (2011, p. 4) from the Australian Institute of Aboriginal and Torres Strait Islander Studies highlight this aspect by suggesting that “in Caring for Country, humans are part of nature, and this nature is alive with activity, including law, language, culture and ethics”. Similarly, an emphasis on repair and interdependency shows up in political scientist Joan Tronto’s definition of Care as

Everything that we do to maintain, continue and repair our world so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life sustaining web (Tronto, 1993, p. 103).

Decolonial designer Tristan Schultz, who describes himself as of Gamilaroi Aboriginal and European heritage posits that prior to the spread of modernity, “Care for repair had been inextricable with life affirming cosmologies and ontologies inculcating reciprocal exchange with the biosphere upon which they depend” (2017, p. 230). The events that have taken place since 1788 through ongoing colonisation of the Australian continent have profoundly disrupted this ethic of Care - dispossessing Aboriginal Peoples, decimating their cultures and destroying innumerable wildlife habitats (Schultz, 2017). These impacts are not isolated from one another, but rather they are part and parcel of the forces of ongoing industrialised extractivism and neoliberal globalisation. First Nation lands, waters and cultures have been damaged through these systems of exploitation and oppression whereby the health of individuals, communities and ecologies are sacrificed in the name of progress and modernity. Not only have these lands, waters and cultures been devalued and degraded, but crucially, the prevailing worldview is one of oppressive separation between humans and nature (Moran et al., 2018; Redvers et al., 2022).

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- 3.2.2.3. The importance of a relational approach

The dominant settler-colonial Australian culture is undoubtedly anthropocentric and largely, it sees the web of life as in service to humans rather than seeing ourselves as its participants and caretakers. Generations of Aboriginal communities have led efforts to not only survive these forces, but to reconcile huge cultural chasms by progressing the decolonisation movement. At the time of this project, the 2021 NAIDOC Week theme of ‘Heal Country!’ called upon all Australians to recognise, protect and maintain our lands, waters and Aboriginal cultural heritage with a view to resolving outstanding injustice.

It is imperative that attempts at ‘Relational Repair’ hold this orientation and work to mobilise the emerging circular economy as a vehicle for deeper cultural transformation in settler-colonial Australia. The Relational Repair framing highlights that design-led repair is valuable not only as a material-oriented practice, but also as a culture-oriented process that mends the interconnections making up our living ecologies and human communities, in search of an Earth Democracy.

3.2.2.4. Encouraging the emergence of pluriversal imaginaries

A circular economy that is framed by an intent to repair our social and ecological fabric as well as heterogeneously respond to the needs and qualities of a local community and ecology is the antithesis of one which is imposed by homogenising blueprints drawn without citizen participation. Pluriversal circular economies implicitly acknowledge that there is no universally ideal way to achieve circularity; rather they encourage diversity, decentralisation and complementarity across localised systems of Care (Barcham, 2022). This would mean “working toward re-embedding the economy in society and nature and calls for the reintegration of persons within the community, the human within the non-human, and knowledge within the inevitable coincidence of knowing, being, and doing” (Escobar, 2018, p. 147). Citizens play a vital role in attending with Care to local manifestations of circularity, by doing what is “needed to create, hold together and sustain life’s essential heterogeneity” (de la Bellacasa, 2012, p. 198).

With the aim of encouraging Earth-centred economies, the workshops evidenced that it was vital to underpin any creative explorations of human social practices in circular economies with simultaneous intention-setting for the ecological contexts of participants. Activities in the second co-design workshop created space for participants to creatively explore alternate models of circularity that are citizen-led and underpinned by a relational, Earth-centred ethos. Workshop participants entered into this frame of inquiry by the onboarding activity wherein they were guided by the First Nation participants’ framing of Caring for Country. Through this lens, they each described a local community

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or ecology of concern to them, eliciting tangible visions for how they would like to see better Care of that community and ecology manifested. The Care Venn diagram seen in Figure 15 was used as a framework with which to ground participants in an emergent understanding of contextual opportunities and challenges. Some common threads appeared - connection between neighbours, biophilic design, generational planning and life-long learning - which acted as guiding principles for subsequent deepening of insights through the following visioning activity.

The ‘Mood Board Exploration’ activity (see Figure 16 below) facilitated groups to each focus on one specific context from the previous activity and flesh out the ways in which a circular economy community hub could acutely respond to the qualities of their place. It was abundantly evident that factors such as geographical location in Greater Sydney, key waste streams, local subculture, socio-economic factors and other demographic dynamics played a crucial role in determining the form and function of any responsive community hub.

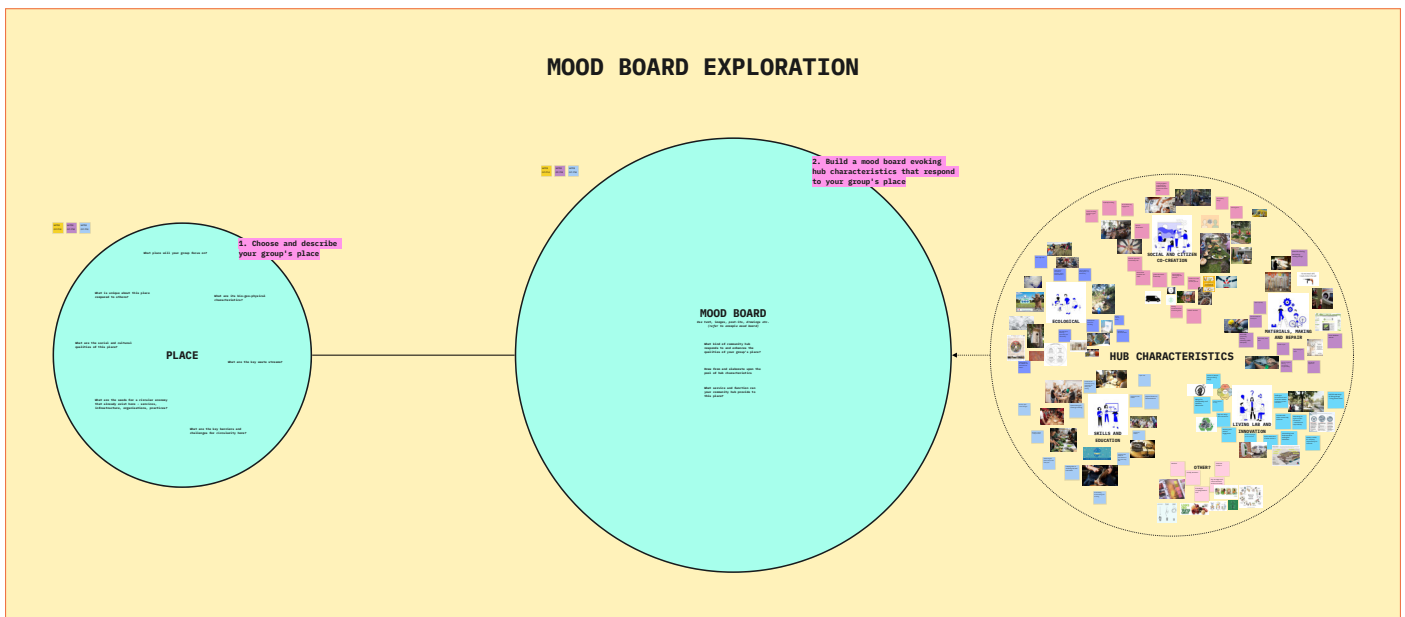


Figure 16. ‘Mood Board Exploration’ activity template, Workshop #2

Participants found it much easier to articulate the needs of humans in their community than to consider ecological perspectives, which posed a notable cognitive challenge. Translating the collective intent to Care for Place into potential avenues of action necessitated participants to step into an ecological frame of mind - asking the question ‘what does it mean for this ecology to thrive?’ and discussing the bio-geo-physical qualities of their bioregion (Thackara, 2019; Wahl, 2020a). These prompts encouraged participants to ‘de-centre the human’ in their discussions about community hubs in order to make space for greater consideration of the non-human world (Forlano, 2016).

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Insights from the workshops led to a fundamental validation of the need to centre local citizens during the entire process of implementing a circular economy community hub in any given context. DIRC used these insights to develop a guiding citizen-led co-creation process that holds a deep and active reverence for the web of life and the human relationships in community. See Figure 17 below as well as **Attachment 2** for more detail. This co-creation process attempts to not only capture the ethic of Care as a conceptual underpinning, but also as a driving force for how circular economies can be tangibly implemented in a regenerative manner (Lockrey et al., 2023). The framework includes examples of governance models, collaborative activities and stakeholder engagement guidelines, all of which are underpinned by a relational, Earth-centred ethos.

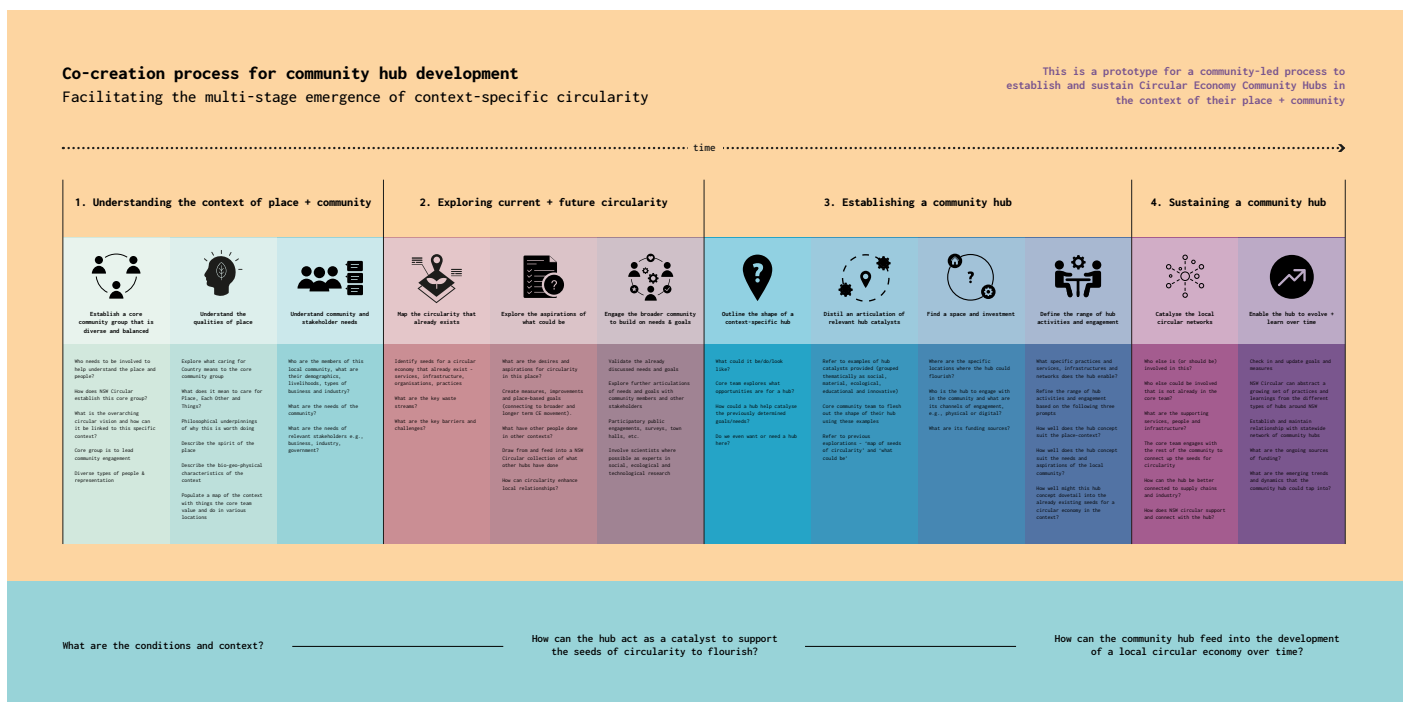


Figure 17. Citizen-led co-creation process for circular economy community hub development

Three guiding principles that came out of the workshops went on to underpin the citizen-led process for incepting a circular economy community hub that aims for Relational Repair; the community hub implementation must be:

1. **Co-creative**, with decentralized governance structures and collaborative activities to guide its direction and formation,
2. **Context-specific**, such that the hub is attuned to the needs and qualities of the local community and ecology, tapping into existing initiatives that align, and
3. **Multi-stage** in its development, so that the hub is sustained and evolves over time, responding to changing social and ecological dynamics.

It is clear through the development of the co-creation process that supporting the agency of diverse citizens and communities is pivotal in

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bringing greater focus onto the socio-cultural elements of a circular transition that aims to repair our social and ecological fabric (Chang & Johar, 2021; Fraser & Mande, 2022).

3.2.2.5. Healing through ontologically-oriented co-design

The workshops saw a collective reframing of circular economy transitions from the prevailing human-centred focus on material and technological innovation into a more relational, Earth-centred ethos. While the ingredients for such an approach to circularity already existed amongst the communities of workshop participants, it is crucial to consider the processes through which this diverse set of collaborators were brought together to cross-pollinate their various perspectives, experiences and worldviews (Huulgaard et al., 2020). The co-design project itself was a form of ontological design, which design theorist Anne-Marie Willis characterises as a process whereby “we design our world, while our world acts back on us and designs us” (2006, p. 70). This could be considered the case in our project as (1) there was an explicit intention through the workshop design to harness its role in facilitating participants to have their worldviews and actions towards circularity shaped by the designed workshop processes themselves, and (2) the reflective and iterative workshop activities encouraged participants to craft designs for circular economy community hubs in a manner that was cognisant of the ways in which the hubs themselves would reshape communities and places (Barcham, 2022; Willis, 2006).

Design facilitation in forums such as these plays an important role in subtly mediating the interactions between the sometimes-conflicting voices, who often have contrasting perspectives on priorities for circularity when considering systemic and generational implications. A process of healing differences was seen to be instigated by creatively confronting the tensions and invisible dynamics that existed between participants and their perspectives, whether personal, professional or otherwise. In our workshops this presented itself as a tangible opportunity to bridge the divide between Western and Aboriginal conceptions of circularity. The conversation deepened and led to assertions by First Nations participants that axiology ought to be considered more centrally than epistemology; that a bedrock of values - of Caring for Country - should serve as a foundation for the way we collectively make our way through our worlds and even conceive of circularity (Tobin, 2009). It is imperative in forums such as this to encourage participants with their diverse ideologies, worldviews and beliefs to be able to collectively navigate their axiological tensions so as to better highlight common guiding ethics and values (Hill, 1984). With this approach, knowledge generation through collaborative research becomes not an abstract pursuit, but rather an endeavor grounded in a

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moral framework that guides its resulting impact (Wilson, 2001). Megan Bang et al. characterise this type of collaboration as *axiological innovation*, and as crucial “in creating serious partnerships and intersubjectivities that can cultivate transformative agency” (2016, p. 30). First Nations Canadian researcher Shawn Wilson, who lives on Bundjalung Country (east coast Australia) describes Aboriginal axiology as “built upon the concept of relational accountability” (2008, p. 77). The turn in workshop discussions towards repairing rifts in axiological orientations presented an opening for participants to collectively articulate the relations to which they are fundamentally accountable, and ultimately how a circular economy community hub could help to strengthen these (Escobar, 2021). Anthropologist and human geographer Amanda Kearney suggests that this kind of meaningful engagement with Aboriginal systems of value could lead to an *axiological return*, “where kinship between people and place is found, and inspired” (2020, p. 206).

During the second workshop, participants engaged in a ‘Persona-Based Testing’ activity, where they harnessed personas with diverse characteristics to explore different entry points for people to connect with the relational commitments necessary for systemic repair. It became essential to take these articulations of broadened perspective and evoke them as visual assemblages depicting envisioned snapshots of everyday life as experienced by everyday people, with their embodied cultures and supporting infrastructures.

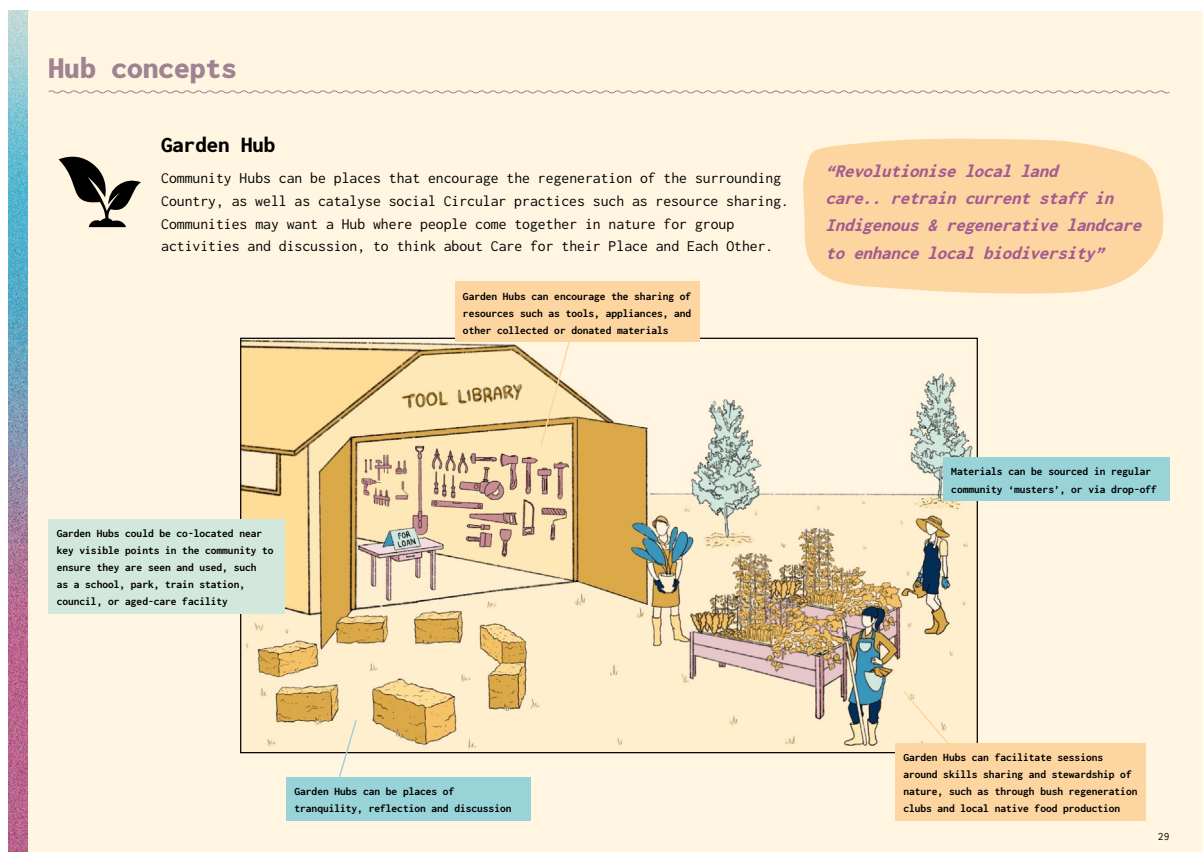


Figure 18. Circular communities: ‘Garden Hub’ concept

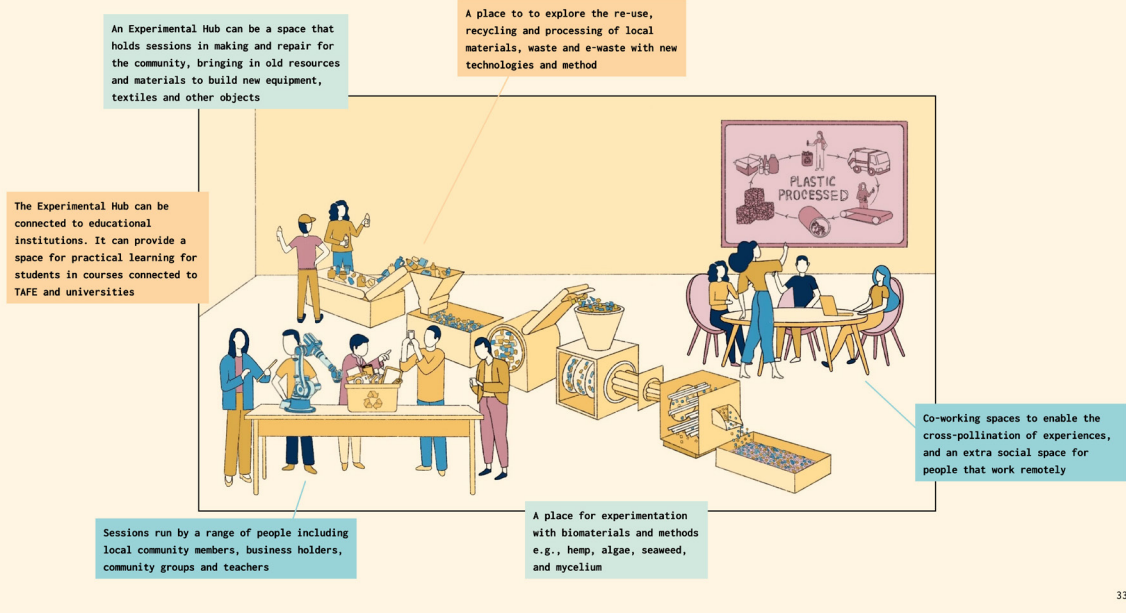
Hub concepts



Experimental Hub

A Community Hub can be a place of experimentation and learning. Communities may want a Hub for local citizens to build awareness and share practices in reuse, recycling and repair.

"A place that holds knowledge but is also still learning"



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Figure 19. Circular communities: 'Experimental Hub' concept

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A series of 6 diverse yet complementary community hub concepts was developed to picture how communities might become stewards of their bioregions, caretakers of each other and custodians of their material objects. Figures 18 and 19 above show two of these concepts (Garden Hub, Experimental Hub), each eliciting examples of ways in which relational accountability might manifest as social practices. Refer to **Attachment 1** to view the other concepts.

Understanding these workshop processes as ontologically-oriented co-design reveals their radical potential - Arturo Escobar states that such an approach "requires a profound relational sensibility that links materiality, visibility, and empathy (via practice) in the creation of novel assemblages of infrastructures and devices, skills and know-how, and meanings and identities" (2018, p. 132). The articulation of community hub functions, their physical forms and the countless creative (and mundane) ways in which citizens engage with circularity helps to paint a rich and tangible picture of transition; the concepts portray the repair of things and material lifecycles, the repair of community alliances through citizen agency, as well as the repair of ecologies with humans as participants and caretakers.

3.2.3. Towards citizen-led systemic repair

It would be foolish to suggest that any one co-design project could single-handedly oversee a circular economy transition or repair our social and ecological fabric. The nature of co-designing for systemic repair is that there must be a prolonged and evolving engagement such that various interconnected elements of the new system can be guided into place by willing coalitions of citizens, organisations and policymakers. Despite the size of this challenge, this co-design project acts as a pilot in revealing the energy for transformative action, and offers valuable methodological insights to further develop the role that co-design can play in aiding a circular economy transition, especially as they pertain to the Australian context.

I find that it is extremely important to harness the earlier activities of context setting and system mapping as an exercise in forming shared understandings where everyone feels able to reveal their grievances and aspirations. Centring First Nations voices as well as eliciting the broader collective experiences of participants through the curation of an open and receptive forum can help to build trust in the workshop setting as a foundation for meaningful and reconciliatory collaboration, as well as ongoing partnership. This is especially crucial considering the complexity surrounding the conflicting ontological orientations of participants in a settler-colonial context such as Australia. Creating opportunities for participants to connect on a human level whether they agree or not, means that the subsequent co-design activities will more likely be undertaken with mutual respect.

Enabling humans to connect with one another is one thing, but facilitating participants to connect with their local ecological places and the perspectives of non-human kin can be challenging, especially in the confines of an urban workshop setting or when conducting proceedings remotely through video conference. While it would certainly help to meet in local bushland, these workshops showed that bioregional explorations of the qualities of a context greatly encourage participants to place themselves into their immediate ecological relations. I find that this grounding can be a gateway for participants to creatively explore how the notion of a circular economy can be expanded to include the repair of their local ecologies, for example by reducing waste pollution, procuring sustainably, restoring wildlife habitat or by growing their spiritual connection to place.

As discussed earlier, the synthesis of workshop insights has allowed for the development of (1) the Relational Repair framing with its associated guiding principles, as well as (2) the citizen-led co-creation process and community hub conceptual snapshots with their suggested decentralised

- 3. Generating hypotheses through practice
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- 3.2.3. Towards citizen-led systemic repair

governance models and community engagement methods. Together, these elements form complementary outcomes that capture the multiscalar and multi-stage nature of a citizen-led circular transition. It has been important to evoke the co-design outcomes in an inclusive way such that they are not prescriptive blueprints that can be applied irrespective of context; rather they are a somewhat blurry and gap-ridden collage of an emerging NSW roadmap. If citizens, organisations and policymakers look at this collage, they will see some of the patterns and colours of systemic repair arising, and will find ways in which to harness their experience and add detail to the picture.

3.3. A maturing of my practice

3.3.1. Cultivating a revised focus for my field research

While this NSW Circular project helped participants to reframe and enlarge the scope of consideration in development of a Circular Economy, it also revealed reasons to me for which to preference the study of regenerative economics in my field research. It became increasingly apparent that the circular economy movement can lend itself towards regenerative economics, but it does not always do so, due to an often overwhelming focus on material and technological infrastructures (Burkett & McNeill, 2022). My research design was able to be clarified as a result, with a focus on collaborative approaches to systemic socio-cultural shifts - something better afforded by the holistic regenerative economics framing. Circular economics would not be the primary area of focus in my research, however I would still explore circularity in the context of emerging regenerative economics.

The NSW Circular project has shown that axiological shifts and relational movement building are central to building an economy that is founded upon an ethos of Caring for Country. In effect, the project was able to expand and contextualise the systemic shift towards circularity into an expanded field of regenerative action - that prioritises walking with First Nations people, a relational approach to movement building, deeper socio-cultural shifts in axiology, as well as holistic frameworks with which to articulate notions of progress (considering production- and consumption-side impacts). A circular economy that is place-based and citizen-led would have much greater chance of being regenerative in the ways just described, especially when compared to centralised and techno-centric versions of circularity.

Through this project I learnt first hand the need for long term partnerships to convene deep systems change as a Transition Designer, with the workshops calling on me to more thoroughly investigate citizen-led initiatives. Soon after completion of this project, funding for DIRC ended (due to university politics and hastened by COVID-induced financial stress) - concluding not only the NSW Circular partnership after this small body of work, but also all design practice at the research centre. Sadly this meant that projects, staff, partnerships and embodied ways of working together were put in limbo, and any intentions I had to continue my doctoral practice-based research through DIRC were dashed. Like many of my former DIRC colleagues I carried on our creative and relational ways of working - and in my case this was exemplified by budding relationships in Regen Sydney and Coalition of Everyone, which would ultimately form the sites of my field research. In these contexts, I would contribute to design-led approaches to convening systems for long-term structural shifts.

4. Research design

4.1. Research focus

4.1.1. Introduction

A significant insight that helped to shape the scope of my research came out of my literature research - an understanding that there is no single blueprint for how economic localisation or cosmopolitan localism could manifest in a place, but rather that it must emerge in context through citizen participation. I initially intended to find and apply in the Sydney context an appropriate model drawn from insights into the dynamics of small-scale pioneers such as Transition Towns and ecovillages. Attempting to move larger urban scales towards ecological economies cannot simply involve transposing these dynamics due to the greater complexity of their interdependencies as well as the need for context- and stakeholder-specific engagement. In light of this, it became imperative for my research to investigate the key potential of systems convening methods and collaborative processes in enabling the emergence of regenerative economies.

A second important shift in my research focus area pertains to the manner in which I explore design practice through field research. My earlier approach looked to analyse and test co-design processes in participatory forums that were entirely curated by me as a participatory action researcher. Whilst this would have given me greater control over the specific instances of co-design applied and tested, it ultimately would have proven to be an isolated exploration devoid of deep contextual relevance, as well as missing the vital influence of systems convening practices central to systemic design. The evolution of my research design in this regard situates the emergent contexts of **Regen Sydney** and **Coalition of Everyone** as two discrete sites within which to understand and analyse the nuanced manifestation of systemic design - as it serves the goals of regenerative economics and bioregional governance respectively.

The organising teams at both Regen Sydney and Coalition of Everyone continue to conduct various manifestations of systems convening and co-design, drawing from a range of precedent approaches. Through my research I aimed to harness my role as a team member in both of these organisations to study the methods being developed and used. I conducted this qualitative research (1) from a post-constructivist paradigm, (2) as an insider research, (3) using a critical design ethnography methodology, (4) with participant observation data collection methods, and (5) supplemented by subsequent expert interviews.

4.1.2. Research questions

I present my research questions here again to help contextualise discussion of my research design. Engaging with the three primary domains of exploration outlined earlier – systemic design, regenerative economics and Earth-centredness – my research seeks to investigate the following questions:

What kinds of design best foster systems-level transitions to bioregionally-adapted regenerative economies?

- What processes help to strategically convene collaborative activation of place-based visions and strategies?
- What processes encourage an emergent engagement with the interconnected needs and thresholds of the living world?

4.2. Research paradigm

I approached this research from a participatory, post-constructivist paradigm underpinned by a pluriversal relational ontology that assumes that there are numerous co-existing views of regenerative systems change that each arise from their unique contexts of interconnectedness (Knol, 2011). Exploring the nature of regenerative systems change through participatory processes was key to revealing marginal professional and lived experience perspectives, understanding power dynamics and navigating the social complexities present in this inherently transdisciplinary research context. Not all participatory research is transdisciplinary, but my investigations sought this orientation through holistic systems approaches that integrated the diverse views of individuals and citizens towards a social purpose (Bijl-Brouwer, 2018; Bijl-Brouwer & Malcolm, 2020). Daniel Christian Wahl captures this intent succinctly - “designers have to shift into the role of facilitators of social transformation by enabling transdisciplinary dialogue and widespread citizens participation in the co-visioning and co-design of our collective future” (2016, para. 20).

4.2.1. A post-constructivist philosophy

Harnessing a post-constructivist philosophy, I had the ability to move past the dichotomy between social constructivist and realism, as well as to recognise that the complex interconnections between social interactions and material reality were of interest in my study (Acreman, 2014; Knol, 2011). This philosophy holds that meaning is co-produced through social interactions that are situated in the context of a material reality (Knol, 2011). Through my research I studied both the objects, materials and artefacts of co-design as well as the patterns of meanings emerging through the social interactions involved in systems convening (Lippert et al., 2015). Various aspects of systemic design practice, including workshops, strategies, reports, diagrams, infographics, maps, roadmaps are all hybrid arrangements of both material reality and social interactions, and necessitated a holistic paradigm such as that offered by post-constructivism.

4.2.2. Positioning as an insider researcher

The post-constructivist, qualitative and participatory nature of my research called for a position other than that of positivist, objective data collection. As a co-design team member in both sites of field research (Regen Sydney & Coalition of Everyone), I embraced the position of insider researcher such that I could harness my unique position within the context of my professional practice (Costley et al., 2010). As an insider researcher I was able to continue to deeply engage with my colleagues on ongoing organisational operations, whilst seeking to harness research methods that suitably captured the complexity and messiness of my area of focus - the discursive and transdisciplinary

forums of systemic design (specifically those that enable transitions to bioregionally-adapted regenerative economies). As an insider researcher I was able to deeply engage with participant-colleagues, and hope that following the publication of this thesis I can critically inform our shared systemic design practices. This positioning was well suited for me to observe and analyse our design practices - which are notably place-specific and responsive to the professional expertise of participants.

A challenge to taking up this position of insider researcher has been in analysing and synthesising the research findings - with difficulty in separating my experiences from those of participants (Finefter-Rosenbluh 2017). Finefter-Rosenbluh suggests that an effective technique to avoid conflation is for the insider researcher to separately (1) anchor their own perspectives and (2) dissect the perspectives of others. In response to these suggestions, I have included quotes from participants in the discussions to follow in subsequent chapters - to highlight where views both converge and diverge. Other criticism about the insider researcher position includes its subjectivity, lack of impartiality and vested interest in the study (Costley et al., 2010). Instances of systemic design practice have therefore sought to be documented with transparency, through systematic notetaking and audio-visual recordings that have allowed for both emergent research potential as well as clearly definable insights. The messiness and sometimes conflictual nature of participatory design research can be delicate to facilitate, however these qualities can also be very fruitful when ethically navigated. Simultaneously holding and taking part in participatory spaces with critical reflexivity has meant that I have better been able to challenge my own assumptions and to nurture the conditions for an evolving research practice that stays accountable to the other participants involved.

4.2.3. A critical design ethnography methodology

Barab et al. (2004, p. 254) describe critical design ethnography (CDE) as “an ethnographic process involving participatory design work aimed at transforming a local context while producing an instructional design that can be used in multiple contexts”. Researchers employing this methodology could be seen as agents of change similar to those using participatory action research (PAR), however with a key difference that with CDE, researchers seek to provide insights for scaling out application into other contexts with local considerations (Reason, 2004). Systemic design practice with its multi-scale and cross-sector focus easily aligns with this research methodology; whilst the ethnographic process additionally brings an extended period of reflexive engagement that might not otherwise have taken place in the sites of research.

4. Research design
4.2. Research paradigm
4.2.3. A critical design ethnography
methodology

The participatory methods of CDE, primarily involving participant observation, workshops and interviews have been suitable to answer my research questions, as through these I have been able to make value judgements about the nature of systemic design, with the subjective methods involved revealing structural power imbalances, epistemological biases, unheard voices, and more (to be discussed later). Through my research at Regen Sydney and Coalition of Everyone, I have contributed to operational activities, whilst simultaneously observing the processes undertaken - and hope to now help co-evolve the impact of these organisations, whilst also reflexively articulating the nature of key systemic design methods in emergence. I hope that the findings from this research can be of value in other contexts where organisations look to convene systems-level transitions toward bioregionally-adapted regenerative economics.

4.3. Sites of research

My formative professional design research through DIRC was hugely influential in shaping my inquiry of systemic design practice at Regen Sydney and Coalition of Everyone. Early formative activities over the last couple of years acquainted me with relevant methods, project contexts and professional networks. I began a period of 9 months of participant observation in late 2022, which included a great deal of activity at both sites of research. Subsequent interviews helped to test and validate my findings. Figure 20 below shows key milestones through my research.

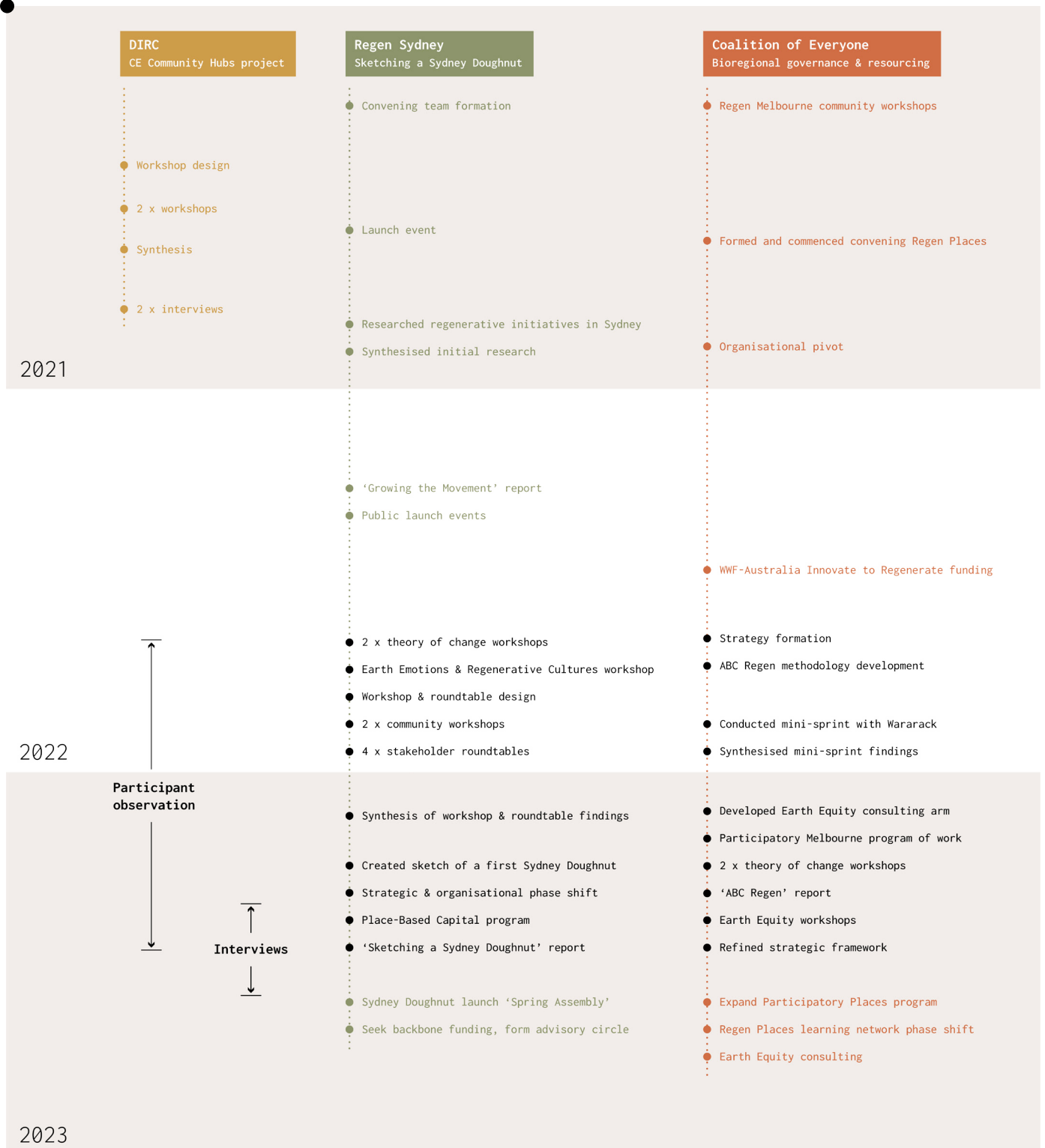


Figure 20. Key milestones across my two sites of doctoral research and preceding design research

Through my doctoral research I strove to study the novel forms that systemic design practice took in the work of Regen Sydney and Coalition of Everyone. Although the two organisations are aligned in the impact they seek, they are distinct in their professional practice.

- **Regen Sydney** focuses on activating regenerative economics in Sydney by harnessing Doughnut Economics through relational cross-sector processes to holistically ground socio-ecological wellbeing in place.
- **Coalition of Everyone** aims to facilitate the emergence of networked bioregional governance, participatory decision-making practices, bioregional funds and Earth-aligned companies.

4.3.1. Two complementary sites

There is a question about the suitability of the sample size - that is, whether or not two sites of research are sufficient to answer my research questions. I believe that any additional sites of research would have required an extended period of research that would not have been feasible, nor allowed for deeper ethnographic studies, considering the duration of my PhD. It is also worth mentioning that these two sites of research were included together due to their complementary contexts of operation that allows for examination of translocal processes part of a common regenerative movement. Regen Sydney is primarily focused on regenerative economics and the neighbourhood/city-scales, whilst Coalition of Everyone is largely interested in governance and the bioregional scale. With these complementary dynamics, the two sites of research in question have provided rich data for my critical design ethnography methodology - through which to articulate a synthesised 'instructional design' that could be valuable in other contexts altogether (Barab et al., 2004). It is not only 'what works' with systemic design that can be instructional however, as there are also many organisational challenges and structural blockers that could be valuable learnings for those in other contexts.

The two sites of research are without a doubt fostering novel assemblages of systems convening and collaborative design practices, the strategic underpinnings of which continue to coalesce. It has been valuable to analyse the theories of change across both sites of research with respect to their different scales of intervention - and in particular with regards to the systemic design approaches, practices and processes involved. Their attempts to convene system change are unique despite a common goal to *make visible our invisible relationality*. Principles of creative emergence are embodied by each in various manners, for example in convening unusual alliances and revealing areas for systemic funding as well as through collaborative activities such as interactive role-play and visual mapping. The ways in which such dynamics have manifested in context has revealed valuable insights about systemic design practice, especially when aided by my own reflective practice in analysis and synthesis across the sites.

4.4. Reflective practice

4.4.1 Participant observation

Participant observation research methods have been valuable in helping me to answer my research questions - as a researcher who is already deeply embedded in the co-design forums of Regen Sydney and Coalition of Everyone in an ongoing manner. This research method has been supportive of my efforts to contribute to co-designing change processes through these organisations, whilst simultaneously observing, analysing and reflecting on the processes undertaken. This dynamic - of both participating in the change making capacities of the organisations, whilst also observing and reflecting on the processes used - was highly suitable for me as an insider researcher interested in drawing out insights related to practice rather theory. Through this research method I hope to co-evolve the impact of the organisations in question whilst also reflexively observing the nature of emergent systems convening and discursive co-design forums.

Each instance of data collection through participant observation built upon the findings of the previous research such that there was an ongoing reframed understanding of systems-level design processes that catalyse bioregionally-adapted regenerative economics in Sydney. The use of this research method meant that in synthesis I could make judgements about the nature of systemic design - convening, emergent networking weaving and structural blockers, the qualities of collaborative design - revealing implicit power imbalances, unheard voices, axiological shifts, stakeholders tensions and many other aspects, as well as the role of a Transition Designer in these contexts.

4.4.1.1 Participation through this research method

Those who took part in the participant observation include the 7 other organising team members at Regen Sydney and 6 colleagues from Coalition of Everyone. These numbers are a coincidence of the number of staff that are involved in each of the teams. The participants were not expected to commit any additional time for the purposes of my participant observation research than they already intended to contribute towards the work of the organisations. I observed the activities that entailed the usual ongoing operations of these organisations over a 9 month period. The participant observation largely took place online - using Zoom for video conferencing and Miro for collaborative whiteboarding, though some in-person sessions were held in both sites of research.

4.4.2. Semi-structured interviews

Towards the end of the participant observation period I held a series of interviews to test and validate the emerging findings. These were conducted in a semi-structured format with 8 practitioners across the sites of research. The discussions covered the participants' expertise and roles, emerging opportunities for experimentation and improvement,

as well as context-specific questions about regenerative economics and bioregional governance at the two organisations. Through the interviews I aimed to draw out critique and comment on systemic design practice being conducted by Regen Sydney and Coalition of Everyone, as well as more broadly to highlight structural opportunities and challenges when working in this context. Specific references to ‘systemic design’ through the interviews were varied depending on the participant in question - for those unfamiliar with the discipline for example, there were more reflections on activities and practices through other framings of design-led systems-level transitions. For a list of questions that were drawn from see the interview guide in **Appendix B**.

The 1-hour interviews were largely held online for the sake of convenience, with only one held in-person. The interviews were recorded for transcription, and *with the permission of all participants, identifiable quotes have been used through this thesis*. For the most part, the synthesis process has served to find common themes and contradictory points across the interviews and to draw out reflective insights about systemic design practice.

4.4.3. Visual and material methods

As exemplified in the illustrations scattered through this report, visual and material methods play an important role in my design research practice. Their value for me is fundamentally about conceptual and relational sensemaking - it is two-fold: (1) as a personal process of cultivating conceptual understanding and (2) as a manifestation and synthesis of collaborative emergence.

The first could be described as a process of *thinking through making* whereby my understanding of ideas gathered through reading, analysis and reflection is aided by mutually clarifying processes of symbolising, mapping and illustrating (Ingold, 2013). These alternating processes of creation and reflection help to draw together personal processes of cognition and intuition (Wallace, 2020). The second aspect captures visual and material methods in participatory research as a way to synthesise ideas as well as provoke further discussion. Materialising concepts in illustrations, maps and mockups can help to form a cognitive bridge between the present and the future, as well as between worldviews and socio-material practices - this can help participants clarify and distil the tangible manifestation of their input. As such, they have been extremely valuable not only for tangible depiction but also as a tool for navigation through the tensions, contradictions, paradoxes and messiness that frequently arose through my field research.

4.4.4. Thematic analysis

I have kept a systematic record of Regen Sydney and Coalition of Everyone meetings in the form of written notes and diagrams, supplemented by recordings of key meetings and workshops. Subsequently I have transcribed the recorded data from both workshops and interviews - and sent copies of raw visual artefacts produced along with synthesised findings for participants to review and feedback on, forming a part of an iterative process. All data collection in the participant observation phase, including note-taking and diagramming has been de-identified of participants.

A thematic analysis of the transcripts, collaborative artefacts or observation notes and diagrams has been used to identify emerging themes. This form of inductive analysis sees themes emerge from raw data through steps of coding, theming, decontextualising, and recontextualising the data (Nowell et al., 2017). In order to ensure and communicate the rigour of this analytical process I have found it crucial to record, systematise and disclose the methods of analysis so that readers may determine the credibility of findings. To strengthen the validity of my interpretations, the emerging findings were tested and validated through the interview process.

The emerging themes - from synthesis of participant observation and interview data - have certainly helped to highlight aspects of organisational processes and structures that lent themselves most effectively to the impacts sought in my research questions. These aspects will be explored in-depth in subsequent chapters.

4.5. Research outcomes

I hope that the insights drawn through my research can help to clarify and guide the role of design-led systems-level transitions to bioregionally-adapted regenerative economies. Various facets of design practice that were investigated through the lenses of the aforementioned research questions include theories of change, workshop design, activity templates, working across scales, facilitator positionality, network weaving, stakeholder engagement, navigation of tensions and manner of emergent discussions. Specifically, these elements were analysed with regards to their ability to (1) help to collectively articulate place-based visions and strategies, and (2) encourage engagement with the interconnected needs and thresholds of all Earth citizens. Through this research I sought to seek out how consideration is, and could better be made of non-human needs and ecological limits along with regular consideration of diverse human needs when shaping place-based economic strategy. Participant observation has served well in addressing these questions, with the subsequent interviews helping to deepen findings and also allow for insights to also be drawn as to the limitations faced by practitioners in this context.

Additionally, I hope that the findings of this research will provide greater understanding of the ways in which the Transition Design, Doughnut Unrolled, mission-oriented innovation and various other approaches are complementary yet distinct. Practical experience with these methodologies through my field research has shown that they are each valuable for different reasons in the context of designing transitions towards bioregionally-adapted regenerative economies. The field research has also presented an opportunity to document, analyse and synthesise the insights gained as both Regen Sydney and Coalition of Everyone have drawn from various precedent methodologies in systems convening and curating co-design. Testing the varied elements of precedent processes through novel assemblages has helped to draw out the ways they are each practically valuable in context. None of the various precedent methodologies purport to provide perfect, conclusive processes through which to collaborate, and so this research has sought to highlight the benefits and drawbacks of each, whilst also providing methodological insights that could be applicable in building upon and improving the practise of each - especially when used to feed into long-term cross-sector action.

My thesis and its findings are to be presented to both Regen Sydney and Coalition of Everyone through reports, diagrams and presentations to convey relevant insights. Reflections on the research process will help to shed light on the internal operations of the organisations along with learnings about their respective systems-level design practices - the primary focus of my research.

4.6. Ethical considerations

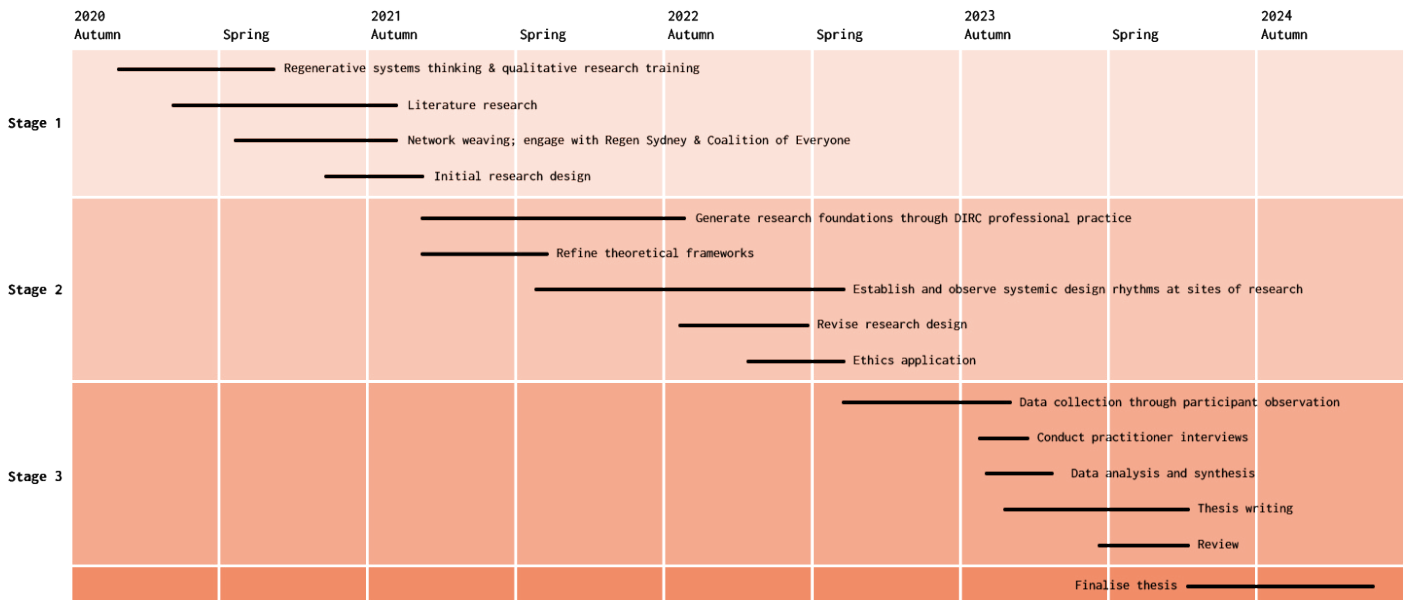
My approved ethics application can be found as a supplement to this document - **Attachment 3**. In this section I'll briefly outline some of the considerations made during my field research.

The study in question was fundamentally concerned with expanding the ethical foundations of ecological economies through long-term change-making processes. The intensive, discursive forums studied through this research were inherently entangled with issues of power and conflict. The social 'messiness' of unpacking and confronting tensions between various stakeholders has helped to reveal imbalances in their pre-existing relationships and hidden power dynamics. My role as facilitator, participant and insider researcher in these forums drew from previous experience and sought to manage these dynamics as best possible. It was a helpful technique to give all participants a voice - cultivating their agency in the process by collectively embedding their underlying values and motivations into the design process and outcomes (Akama, 2009).

Another ethical consideration was the nature of participation during both the participant observation and interviews. I had encouraged voluntary participation of colleagues who were incidental to the two sites of research and had an interest in the research focus area, as opposed to having a true sample representation through random selection of professional peers in systemic design or regenerative economics (Sandelowski, 2000). Whilst seeking a diversity of expertise in the participants, it was valuable to acknowledge upfront that systemic design processes are not neutral, and hence that there should be transparency about the inherent position of subjectivity that is present in many aspects of this study. Simultaneously, the pool of possible professional peers was quite small, and in this case, random selection would have likely created a false sense of objectivity in the emerging field.

4.7. Research timeline

Following the approval of my ethics application, the final year of research was primarily characterised by the facilitation and synthesis of participant observation and interviews, as well as by the writing of this thesis. Most milestones on the timeline have been fairly accurately followed - especially for the final period, which entailed a greater deal of focus and stability than the previous, more exploratory stages.



5. Systemic design in two dynamic contexts

5.1. Overview

As I neared the end of my literature review and the NSW Circular project I was encouraged by my supervisors to step away from the computer, and to start exploring communities of practices on the ground. With my engagement at DIRC coming to a close, there was a distinct professional vacuum in which to grow and deepen my doctoral area of focus. This included working (voluntarily) with [The Bower Reuse and Repair Centre](#), [Transition Inner West](#), and [Sydney Commons Lab](#). The work I conducted across these organisations varied from woodwork repair for a circular economy, to neighbourhood network activation, and to explorations of structural blockers faced in our neoliberal capitalist economy.

During this period, not only was I exposed to relational ways of working, but also I was able to grow my exposure to a broader network of professionals working to shift away from a linear, growth-obsessed economy. I found that across these organisations there was great potential to coalesce their intentions and initiatives - their strategic objectives were not explicitly aligned with one another, although implicitly this was apparent. Enabled with a growing network of aligned professional colleagues, and an increasingly articulate expression of the potential of systemic design to convene seemingly disparate actors in this context, I started forming partnerships that would lead to my contribution to both Regen Sydney and Coalition of Everyone. The diagram below shows key relationships in the ecosystem of practice that has evolved across the two sites of research - please refer back to this as needed.

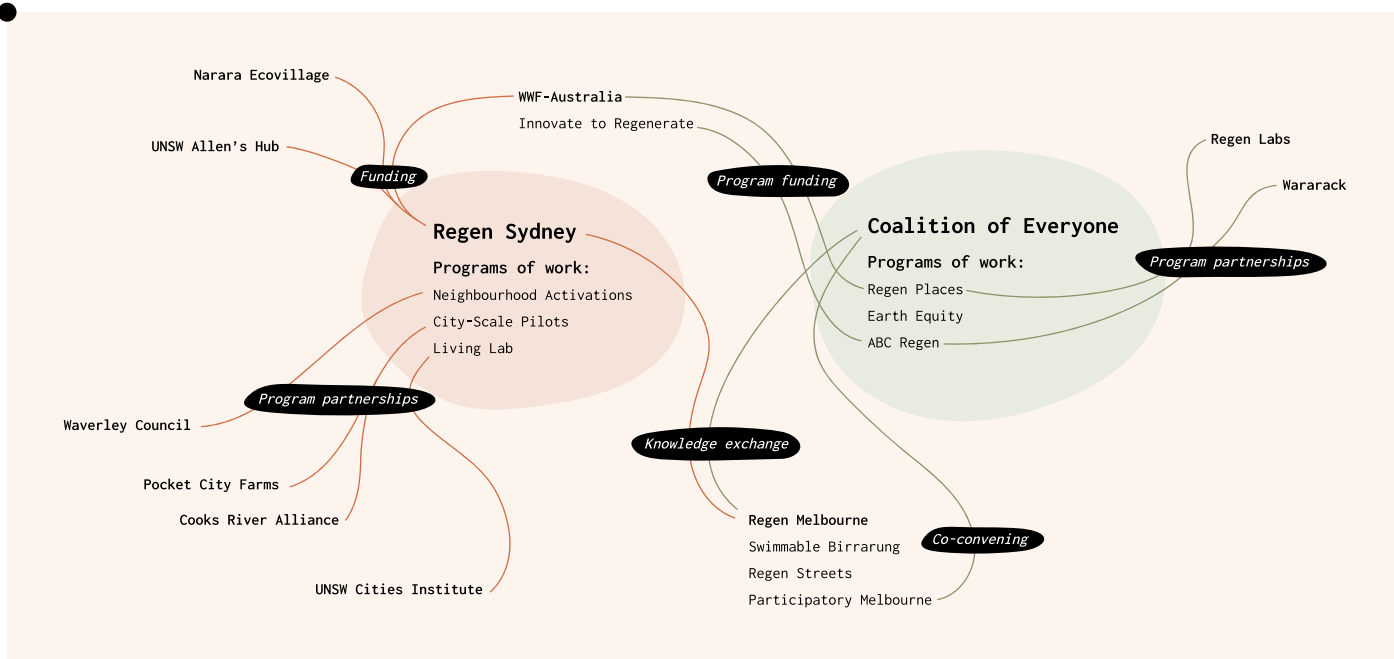


Figure 21. Ecosystem of key organisational relationships across the two sites of research

5.1.1. Formative experiences with systemic design

Initially, my contributions to Regen Sydney and Coalition of Everyone were not framed through the lens of systemic design or Transition Design, but rather as a professional with expertise in strategic design, and a growing experience in convening multi-stakeholder action in the field of ecological economics. However, as the mandates of these two organisations and the roles of other team members crystallised, it became increasingly evident that a concerted effort to change-making through systems-level design was valuable. The act of reshaping economies towards those that are participatory, place-based and oriented towards socio-ecological wellbeing demanded a deeply relational, yet strategically targeted and multi-stage approach to design. My understanding of the role of systemic design in Regen Sydney and Coalition of Everyone was informed by a need amongst the broader field of practice - for a convening function that brought coherence to the emerging field of regenerative initiatives.

While I saw systemic design as a means to an end - that is my primary drive to collaboratively and creatively foster regenerative economics - my interest in this practice was simultaneously piqued by questions of its potential impact, and its alignment with Transition Design.

5.2. Regen Sydney

Regen Sydney is a coalition of organisations and individuals collaborating across sectors to bring about a shift towards regenerative economics in Greater Sydney, starting by experimenting with Doughnut Economics. Regen Sydney is part of growing network of cities and regions across the globe, who are sharing learnings about ways to localise the Doughnut Economics model with the goal of implementing more holistic measures of progress. The role of Regen Sydney towards these ends, in the context of already existing regenerative initiatives across Greater Sydney, is primarily to convene unusual alliances across silos, and to creatively bring coherence to otherwise disparate efforts at shifting economics towards regenerative outcomes across the city's systems.

This growing coalition has been nurtured by the organising team through various forms of collaborative engagements, network weaving and focused discursive co-design forums - enriching articulations of regenerative visions and transition pathways, as well as thickening the relations through which individuals and organisations might find greater agency. The organising team itself is currently comprised of 8 convenors (of which I am one) with diverse professional backgrounds, working together to surface Regen's Sydney strategy and modes of operation in line with the goal to foster economic transformations - shifting Sydney into the safe space for all life - where social foundations are met and ecological ceilings are respected.

5.2.1. Context and emergence

5.2.1.1. The global grassroots Doughnut Economics movement

The emergence of Regen Sydney over the last few years has been energised by the growing momentum worldwide around the Doughnut Economics model. While Regen Sydney is not solely motivated by this framework, the visibility and legibility of Doughnut Economics has offered an opportunity to harness the energy present to grow the Regen Sydney network, and adapt the model to context with even greater ambition than the original iteration.

As discussed in the literature review, the Doughnut Economics Action Lab (DEAL) Doughnut Unrolled methodology is a downscaled adaptation of the model for collaboration at the neighbourhood, city and regional scales. This downscaled methodology has been in development over numerous years since the inception of Doughnut Economics, with the City of Amsterdam first to conduct a 'City Portrait', to qualitatively and quantitatively measure how well the city was doing with regards to its social foundations and ecological ceilings (DEAL, 2020; Thriving Cities Initiative, 2020). Since then, numerous cities around the world including Brussels, Melbourne and Berlin¹⁰ have harnessed the DEAL network and methodology to grow their own system-shifting movements.

10
Regen Sydney connected with these other movements early in its development. [See here](#) for a blog post comparing the cities' trajectories as of April 2021.

5. Systemic design in two dynamic contexts

5.2. Regen Sydney

5.2.1. Context and emergence

5.2.1.2. The formation and evolution of Regen Sydney

After some formative conversations in late 2020, a small organising team was first convened in February 2021 with the intention of piggybacking on the momentum created by other city-scale engagements using Doughnut Economics. Regen Melbourne, auspiced under Small Giants Academy, had just conducted a series of workshops, culminating in the launch of a ‘Melbourne Doughnut’, creating fertile ground for a similar movement to form in Sydney. Regen Sydney, similar to Regen Melbourne, framed the emerging network as one that sought to foster regenerative economics, without being beholden to only one economic model - that of Doughnut Economics. Part of this initial strategy was to recognise the potential for polarisation, dogmatism and myopic engagement that could arise with a sole focus on just Doughnut Economics. After all it was a means to an end - to facilitate the emergence of a regenerative economy in Sydney.

Firmly embedded in Regen Sydney’s ongoing approach is the need to ‘walk with First Peoples on the journey towards these economic transformations. Early and ongoing engagement with members of the First Nations community has helped to shape the relational culture and values of the network as well as to guide Regen Sydney’s approach to collaboratively hacking and contextualising the Doughnut Economic model to place. I discuss the ways in which this manifested in section [6.2.2](#). Similarly, the need to embody and practise regenerative organisational cultures was paramount from inception. As a largely voluntary endeavour so far, the prefiguring of its politics was afforded a fair amount of freedom, something which has helped to forge the foundational integrity of purpose that now characterises Regen Sydney (Howard-Vyse & Kashyap, 2023).

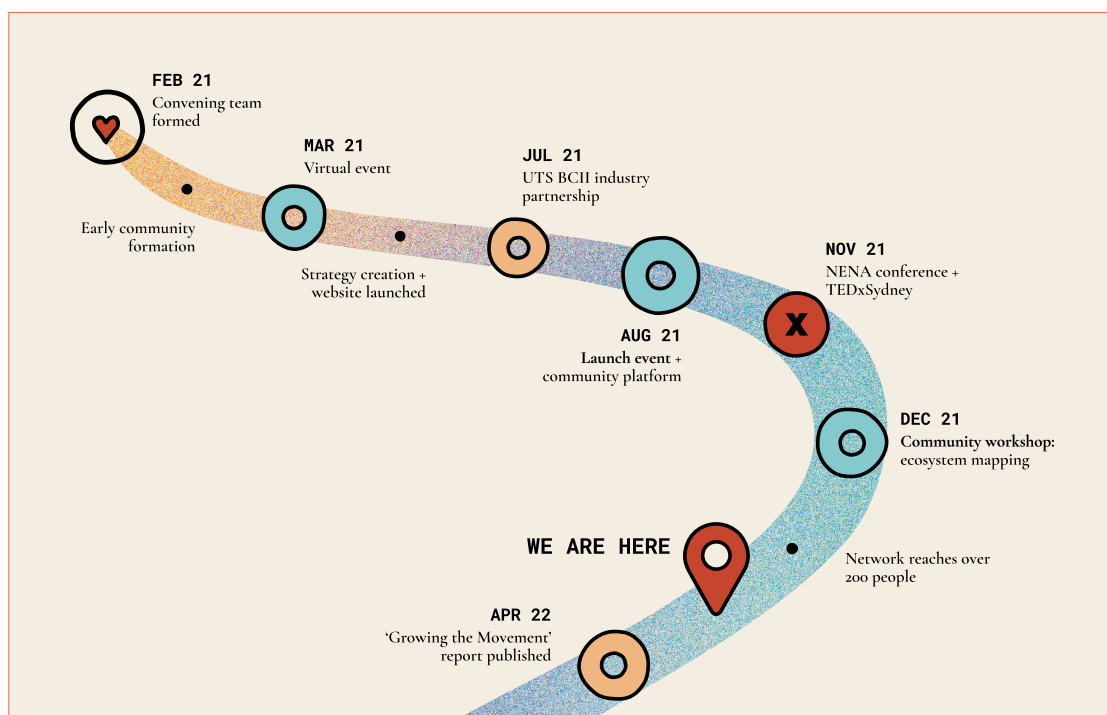


Figure 22. Formative Regen Sydney activities, 2021-2022

- 5. Systemic design in two dynamic contexts
- 5.2. Regen Sydney
- 5.2.1. Context and emergence
- 5.2.1.2. The formation and evolution of Regen Sydney

Figure 22 above shows the primary activities undertaken by Regen Sydney during its formative phase in 2021 and 2022. The focus during this time was to form a foundational organisational strategy, whilst building up a network of individuals and organisations through community engagement events. Alongside the creation of visibility around the regenerative economics movement was the need to also conduct background research into the types of aligned initiatives that already exist in the field (some of which are connected into the Regen Sydney network while others are not).

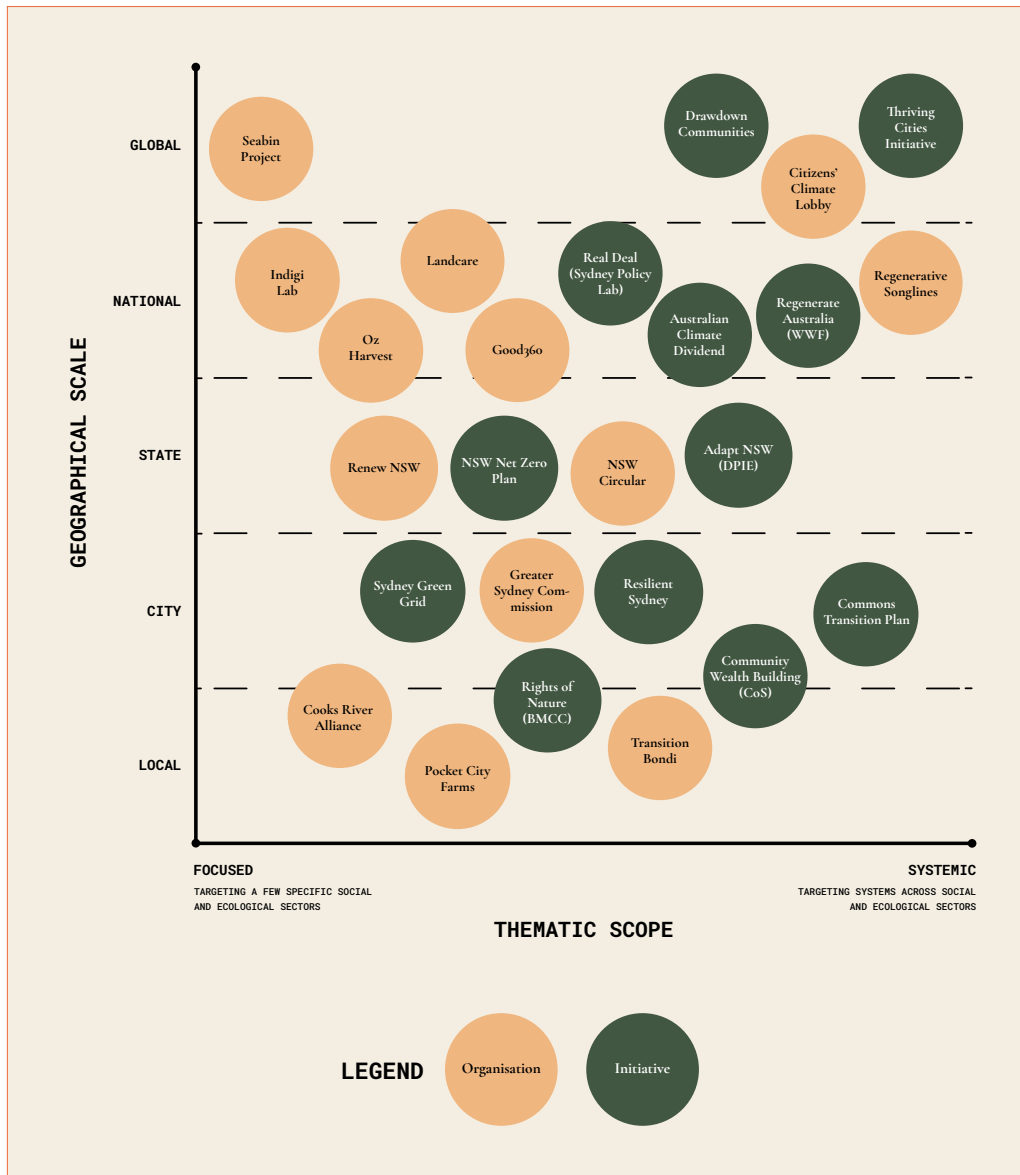


Figure 23. Mapping regenerative initiatives and organisations across scales

Seen above is a map of existing initiatives and organisations - which enabled Regen Sydney to better identify its scope and scale of operations. This piece of research highlighted a gap in Sydney at the local and city scales for systemic, cross-sector projects - albeit with the large challenge of securing funding for such work. This background research and the associated community engagement can be viewed in context in the 'Growing the Movement' report from 2022 - see **Attachment 4**.

- 5. Systemic design in two dynamic contexts
- 5.2. Regen Sydney
- 5.2.1. Context and emergence
- 5.2.1.2. The formation and evolution of Regen Sydney

The public launch of this first body of work succeeded in drawing more attention to the regenerative economics movement in Sydney, growing the alliance of members in Regen Sydney, as well as consolidating the core team with a total of 8 colleagues - including additional expertise in facilitation, funding and communications. The subsequent period of organising included the refinement and clarification of Regen Sydney’s strategy through an iterative co-design process to develop a theory of change. This theory of change, and the resulting identification of areas of action is explored in further detail in section [6.3.](#)

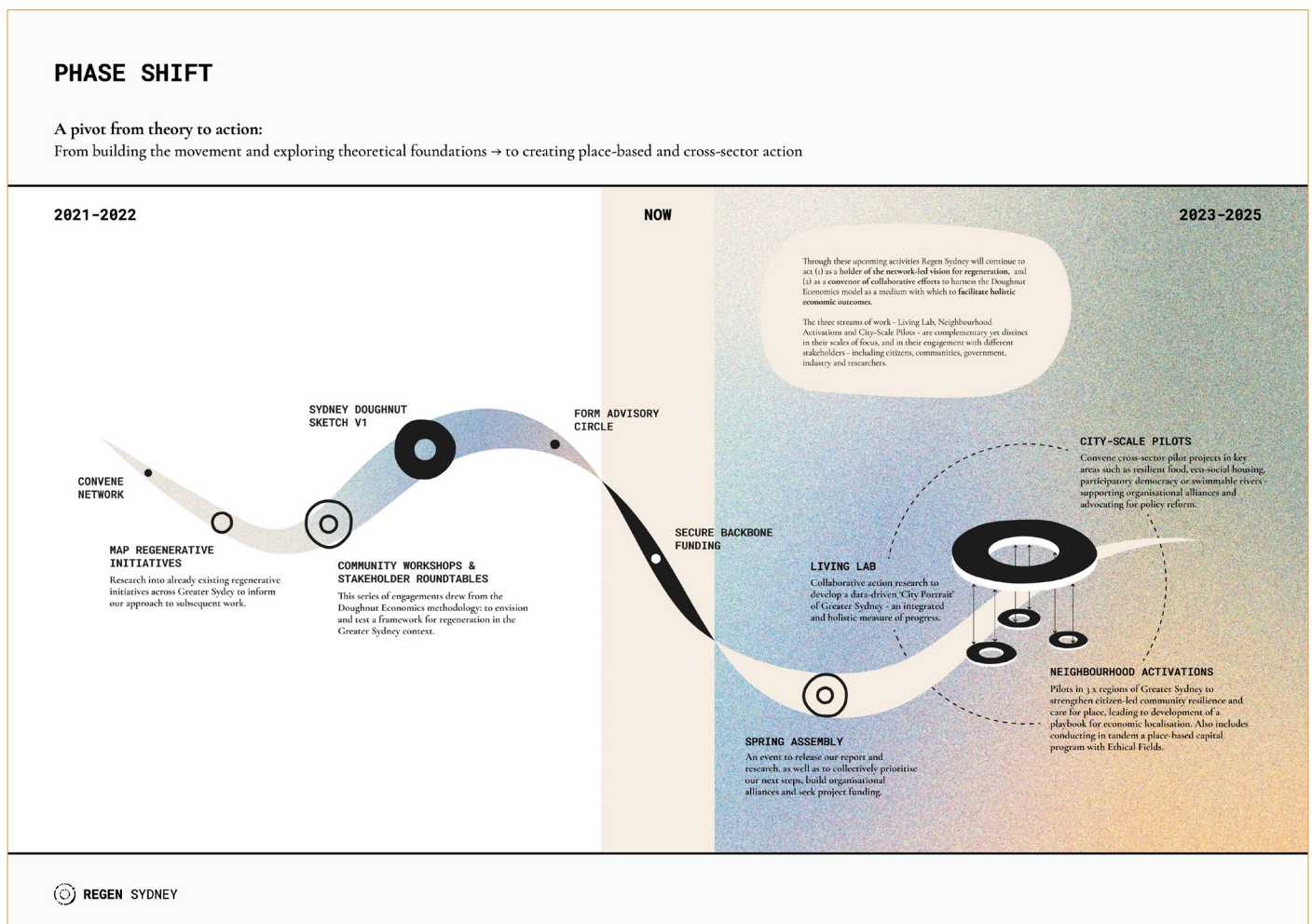


Figure 24. A phase shift for Regen Sydney from theory to action, 2022-2023

The core team, strengthened with a revised strategy, then went back out to engage the broader network through a series of community workshops and stakeholder roundtables. This was an extensive process of engagement that not only surfaced more nuanced descriptions of what a uniquely Sydney version of a regenerative economy might look like, but also revealed systemic blockers and opportunity areas for action. Synthesis of insights from the workshops and roundtables ultimately led to the development of a ‘first sketch’ of an adapted ‘Sydney Doughnut’, as well as calls to seek backbone funding for the three strategic areas of action - all detailed in a 2023 report (see **Attachment 5**), and to be discussed later.

- 5. Systemic design in two dynamic contexts
- 5.2. Regen Sydney
- 5.2.1. Context and emergence
- 5.2.1.2. The formation and evolution of Regen Sydney

At the time of completing my field research, Regen Sydney had grown to a network of greater than 600 individuals and organisations who were spread across the regions of Sydney, albeit with a greater concentration in the Inner West, Eastern Suburbs and City.

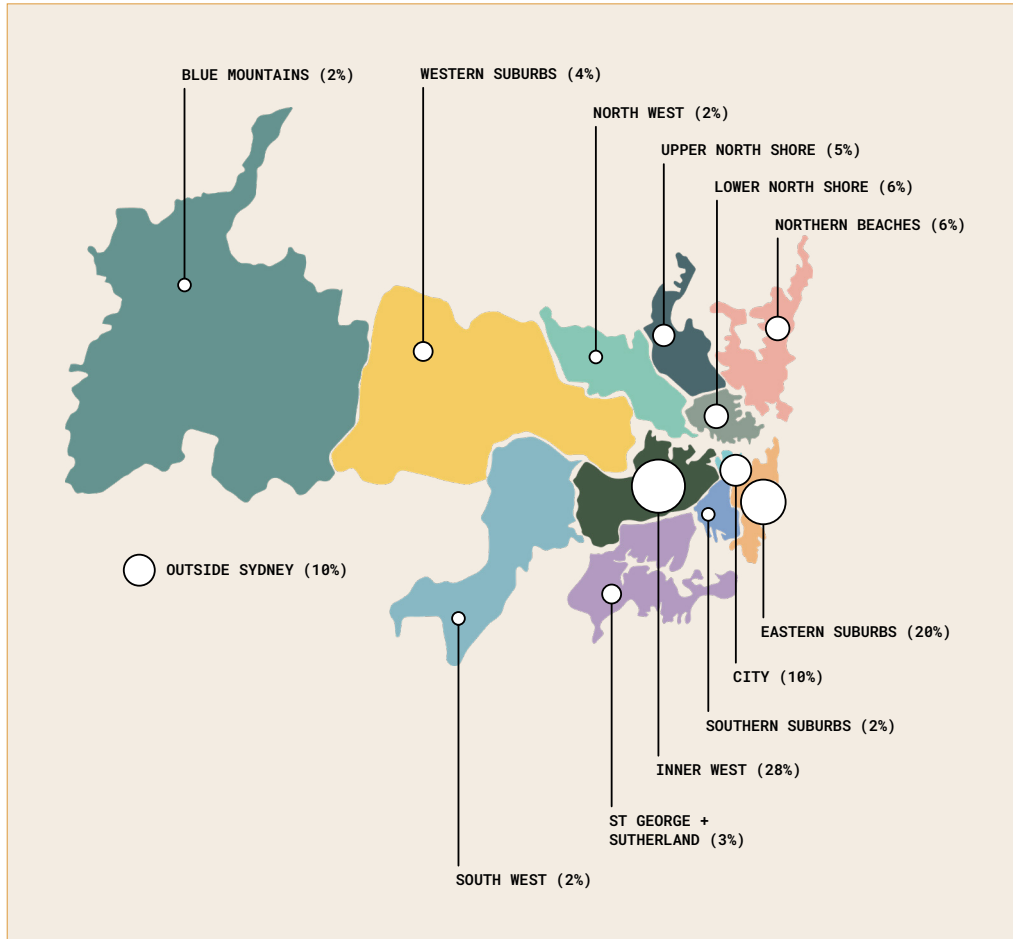


Figure 25. Geographical spread of Regen Sydney members

A diverse range of professional have participated in the growing network, and co-design forums - from law, built environment, circular economics, education, health, environmental management and many other areas of focus. Regen Sydney continues to convene across sectors with the aim of harnessing the three areas of action to work across Sydney's regions both at the neighbourhood scale as well as at the Greater Sydney city-scale.

5.2.2. Researching systems-level design in Regen Sydney

From the very beginning, Regen Sydney formed around the practices and processes of multi-stakeholder design, due to the areas of expertise that the organising team members held. Collaborative skillsets encompassing strategic design, facilitation, visual sensemaking, futuring and activist organising propelled Regen Sydney towards framing itself as a systems convenor in the regenerative economics context.

5. Systemic design in two dynamic contexts

5.2. Regen Sydney

5.2.2. Researching systemic design in Regen Sydney

5.2.2.1. Key milestones and dynamics of interest

My studies in this site of research were concerned with manifestations of systemic design practice in ongoing iterative processes, and also in discrete activities that provide unique lenses into the evolution of Regen Sydney’s approach to mission-oriented innovation. The chart below shows the key milestones at Regen Sydney, with the items in black occurring during my period of participant observation.

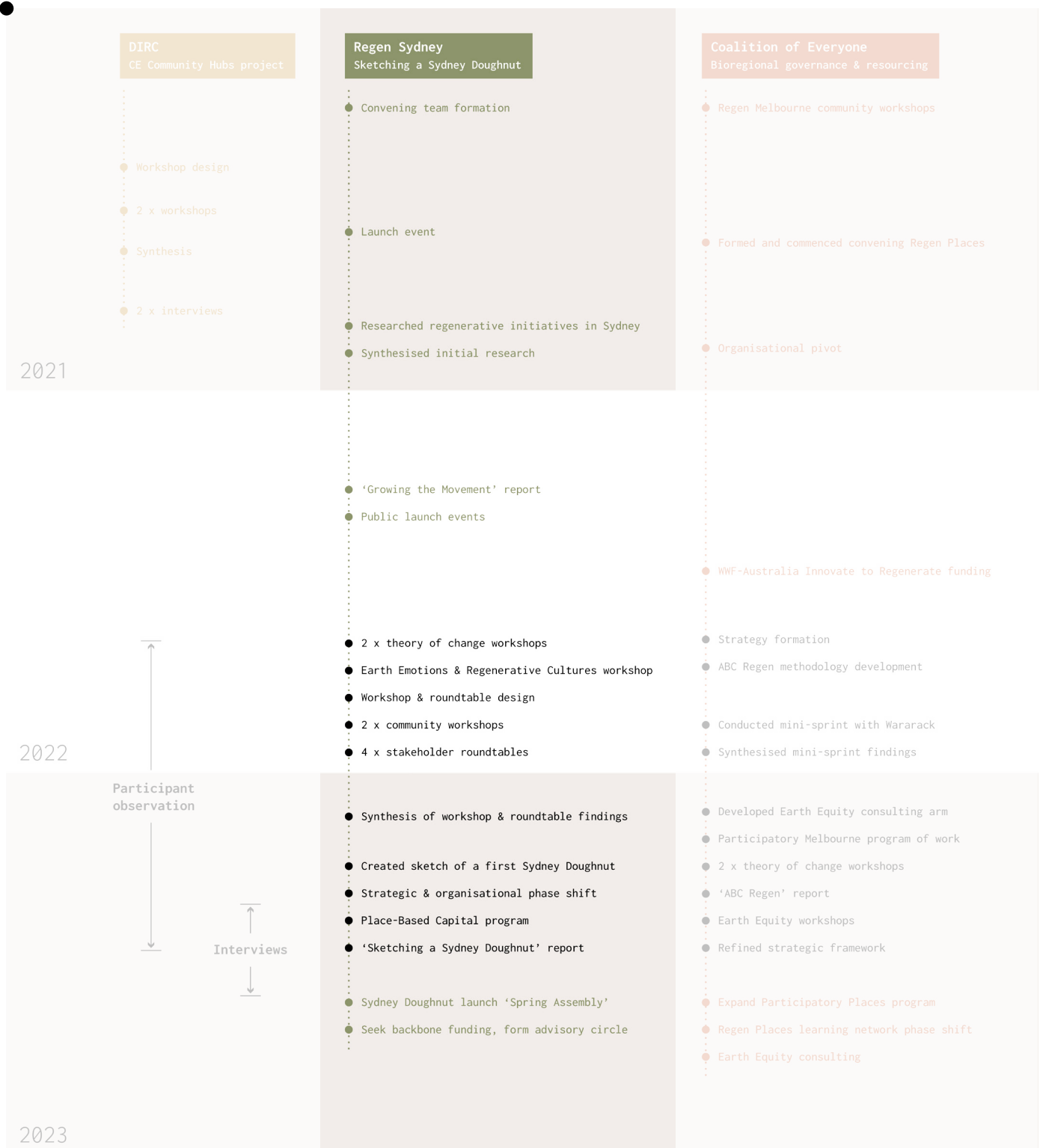


Figure 26. Key milestones at Regen Sydney

- 5. Systemic design in two dynamic contexts
- 5.2. Regen Sydney
- 5.2.2. Researching systemic design in Regen Sydney
- 5.2.2.1. Key milestones and dynamics of interest

In the following sections of the thesis I will explore the epistemological orientation of Regen Sydney such that certain approaches to convening were vital, including (1) underpinning relational processes of network building and walking with First Peoples, (2) a focus on surfacing place-based knowledge, that attempted to bring participants on the collective journey, (3) a cognisance of the simultaneous potential and limitations of the Doughnut Economics model, and (4) an engagement with not just the cognitive or socio-technical, but also the inner, emotional, physical and embodied aspects of regeneration that are necessary to shift socio-cultural paradigms.

While the above factors were evident in a manner that permeated through all activities, certain discrete types of engagement that Regen Sydney conducted will also be explored, including (1) specific instances of discursive co-design forums, workshops, roundtables and informal ‘Regen Cafes’ with the broader network, (2) internal co-design sessions to devise strategy and a theory of change, (3) explorations of systemic blockers (including funding) and structural power imbalances, (4) navigation of the Global North tendency to focus on local and social aspirations, so as to provoke better engagement with global and ecological responsibilities, as well as (5) attempts in the emerging areas of action to work both qualitatively and quantitatively, across the neighbourhood and city-scales.

5.2.2.2. Participants and data collection

There were 8 core team members (including myself) for the duration of the participant observation, who each participated in varying degrees through the activities described above. The roles that each team member played in Regen Sydney contributed to an overall transdisciplinary approach; and some skillsets were vital complements to the practise of systemic design even if they themselves would not be considered as such. The following outlines the roles, skillsets and functions of the core team members:

| | |
|--------------------------|---|
| Alice Howard-Vyse | <i>Lead convening, network weaving, systemic design and innovation, facilitation, mission-oriented strategy</i> |
| Bronwen Morgan | <i>Partnerships and strategy, academic research, funding opportunities, stakeholder facilitation</i> |
| Christie Wilson | <i>Inner regenerative work, cultural shifts, grounding mindfulness practice, internal governance</i> |
| Kiran Kashyap | <i>Convening, systemic design, co-design facilitation, mission-oriented strategy, visual sensemaking</i> |
| Madeleine Hill | <i>Funding opportunities, systemic capital, communications, community engagement</i> |

5. Systemic design in two dynamic contexts
5.2. Regen Sydney
5.2.2. Researching systemic design in Regen Sydney
5.2.2.2. Participants and data collection

MeI Rumble

Futuring and strategic foresight, academic partnerships, funding alliance building

Mylene Turban

Project management, network weaving, community engagement, facilitation, education

Pete Dowson

Audio-visual storytelling, strategic guidance, communications, shifting the narrative

The contributions of the team members to Regen Sydney's operations were systematically recorded and analysed. While in some cases, comments by individuals are of interest, it is more often the case that the form and function of collective efforts hold insights of value. Data collected for analysis and synthesis during the 9-month period of participant observation is as follows:

'Zoom' recordings

- Co-designing a theory of change
- Sketching a Sydney Doughnut community workshops
- Sketching a Sydney Doughnut stakeholder roundtables
- Spring Assembly 2023

'Miro' boards

- Making the magic happen: onboarding for new team members
- Communications strategy
- Phase shift 2023
- Co-designing a theory of change
- Workshop and roundtable planning
- Sketching a Sydney Doughnut community workshops
- Sketching a Sydney Doughnut stakeholder roundtables
- Synthesis board: Sketching a Sydney Doughnut
- Spring Assembly planning and debrief

Meeting notes

- Stand up meetings twice-weekly
- Notes for all 'Miro' collaborations above
- Strategy meetings with Regen Melbourne and other key advisors (including First Nations colleagues)
- Bellingen mini sprint, February 2023
- Ethical Fields 'Place-Based Capital Program'

The various artefacts of this data collection will be introduced and referred to as relevant through the subsequent discussions of the thesis.

5.2.2.3. The nature of my insider researcher position

As one of the founding team members, I continued to play a key operational role in Regen Sydney during my period of participant observation. While I approached my role within the team as a Transition Designer (and more broadly as a systemic designer), not all of my contributions, nor all those of other team members would be considered as manifestations of systemic design practice. Various other framings of skillsets (including those described above as participant roles, skillsets and functions) came together to complement systemic design - which did nevertheless have a recognised importance amongst team members - to convene the network and conduct operations.

In light of these dynamics, my role as insider researcher has been to qualify and code the observations accordingly so as to credibly answer my research questions without conflating all activities, methods and processes as examples of systemic design practice.

5.2.3. Key practice artefacts from Regen Sydney

Alongside the list of data collection artefacts presented earlier, there are also a number of key outputs from the work of Regen Sydney that offer opportunities for analysis of systems-level design practice. Primarily, these include reports and diagrams that were disseminated by Regen Sydney into the public sphere so as to grow active interest in the movement (presented chronologically).

Reports

- ‘Growing the Movement’ 2022 report
- ‘Sketching a Sydney Doughnut’ 2023 report

Diagrams

- Mapping Sydney’s regenerative initiative ecosystem
- Geographical map
- Organisational vision
- Guiding principles
- Key organisations on the journey
- Theory of change
- Workshop and roundtable phases of engagement
- Workshops and roundtable graphic scribes
- Community vision for a regenerative Sydney
- Sydney Doughnut
- Rolling the Doughnut at multiple scales
- Mapping the system transition
- Phase shift 2023
- Convening three streams of action
- Mission 2023-2025
- A coalition to mobilise action

5.3. Coalition of Everyone

Coalition of Everyone is an organisation working to enable citizen-led bioregional governance and the resourcing needed to support place-based collaboration. These are the two primary areas of focus for the organisation, which while originally focused on (1) fostering participatory forums for deliberation, subsequently aimed to also (2) surface networked funding through engagement of the private sector and community organisations - as a crucial enabler for the former objective. As a champion of participatory processes, Coalition of Everyone has helped to create visibility and momentum for the nationwide 'Regen' movement by convening a group called *Regen Places* - which sees representatives from Regen Sydney, Regen Melbourne and many other places across Australia come together to share learnings, and create opportunities for broadening the scope of work on the ground.

Spanning across local and national scales, Coalition of Everyone continues to act as a conduit through which other organisations have been able to develop and grow, especially with regards to their leveraging of participatory governance processes and development of preferable place-based resourcing mechanisms. Skillsets amongst the team members include systems convening, co-design facilitation, regenerative finance, rights of nature, organisational development, storytelling and communications - all of which serve to strengthen the participatory movement to re-embed our economies in our bioregional places. At the commencement of my period of participant observation there were 7 team members, which grew to later comprise 9 colleagues (of which I am one) with the additional focus on place-based resourcing¹¹.

5.3.1. Context and emergence

5.3.1.1. A movement of bioregional governance initiatives

Fostering participatory processes of governance that better embed communities in their interconnectedness with bioregions has been the primary motivator for Coalition of Everyone during much of the time that I have been involved as a team member. The Greenprints approach (as conducted by AELA) was a vital formative precedent in helping to form the practices and processes that Coalition of Everyone developed in this area of focus. Greenprints, as discussed in the literature review, embodies an impetus to engage with the needs of ecological places first and foremost in any process of participatory deliberation¹². The process explicitly seeks alignment with Indigenous First Laws, which base all elements of human society, culture and law in symbiosis with ecological rhythms. Greenprints in this manner, has been attempting to shift human governance practices to prioritise consideration of ecological dynamics (including ecological limits and non-human needs) and build upon partnerships with First Nations groups, primarily in the context of south-east Queensland.

11

The stream of work encompassing place-based resourcing through engagement of the private sector and community organisations is framed by Coalition of Everyone as 'Earth Equity'.

12

More information on the Greenprints initiative and methodology can be found [here](#).

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
- 5.3.1. Context and emergence
- 5.3.1.1. A movement of bioregional governance initiatives

At the same time, numerous notable organisations and initiatives with similar ambitions have been taking root across the globe, with a small selection outlined below:

- [The Bioregional Learning Centre](#) situated in South Devon UK, who are working with a bespoke ‘bioregioning’ process, which includes co-creation of the Devon Doughnut¹³.
- [Bioregional Weaving Labs](#) who are a collective of organisations establishing 10 Labs across Europe, harnessing an adapted version of the ‘Theory U’ process¹⁴.
- [Regenerate Cascadia](#) which is a program for on-the-ground activations as a part of the broad ranging organisation ‘Cascadia Department of Bioregion’ on the west coast of North America.
- [South Asia Bioregionalism Working Group](#) who are a voluntary network conducting action research case studies across numerous bioregions of India, and are housed in the organisation ‘Vikalp Sangam’.

Each of the precedents above have their own unique collaborative processes to catalyse bioregionally-adapted governance that are suited to the (cultural, social, economic and political) dynamics of their contexts.

5.3.1.2. The formation and evolution of Coalition of Everyone

When I first joined Coalition of Everyone in late 2020, the organisation had already been active for almost two years, conducting projects focusing on enabling greater participatory governance through a variety of citizens’ assemblies with local councils, schools and communities. The deliberative forums held during this period were not explicitly framed to encourage regenerative economics; rather they were more broadly tasked with shifting the locus of agency and power in governance to citizens and local communities. Most team members were located in Melbourne while a couple were in Sydney, with a total of 23 assemblies held primarily in Melbourne and the Hunter Valley (see Figure 26 on next page).

With the flexibility that came with being primarily voluntary, and having a geographically decentralised team, Coalition of Everyone experimented with an equally decentralised internal organisational structure - in the form of a holacratic model¹⁵. Leadership and working groups formed around the interests and skill sets of each team member; and though while there was alignment in seeking to empower communities through participatory processes, a thorough organisational mission for systemic change would not crystallise until later. The onset of the COVID-19 pandemic and associated lockdowns greatly impeded the activation of in-person assemblies, with work instead shifting to online capability-building and new avenues of community engagement.

13
The Devon Doughnut is another context-specific adaptation of the Doughnut Economics model. More information [can be found here](#).

14
Theory U is an awareness-based methodology for systems change developed by Otto Scharmer, founder of Presencing Institute. This model integrates action research, design thinking, mindfulness and civil mobilisation (Scharmer, 2007).

15
Holacracy is a version of sociocracy that contains some predefined parameters that intend to make its learning curve a little shallower.

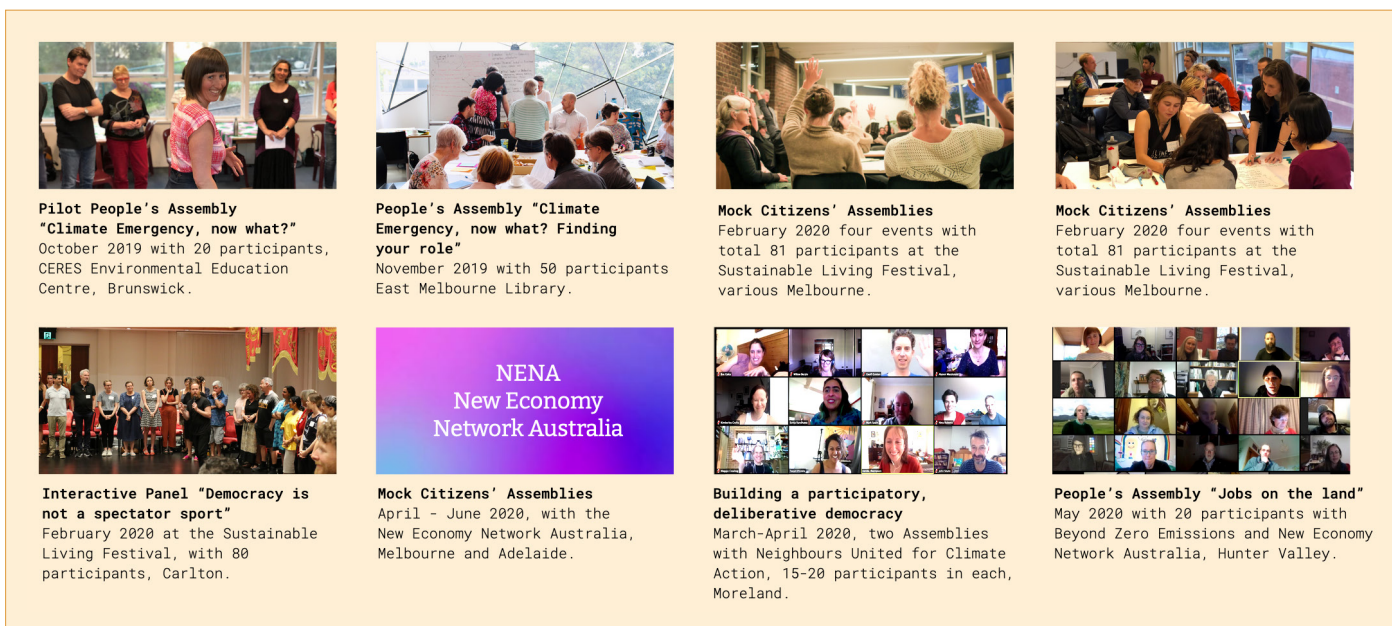


Figure 27. Formative Coalition of Everyone activities, 2019-2020

The activist orientation of the organisation during the early period was complemented by attempts to leverage the power of storytelling to uplift voices of the community to create visibility around the potential of shifting narratives. In this regard, the [FutureNow Project](#) was co-created as an educational toolkit, and as a ‘storybank’ to inspire and activate hope amongst people to be able to live their desired futures into being. The people and the stories represented in this initiative helped to grow the participatory ecosystem in which Coalition of Everyone was operating - depicted in the ‘Assembly Framework’ below (Arnstein, 1969).

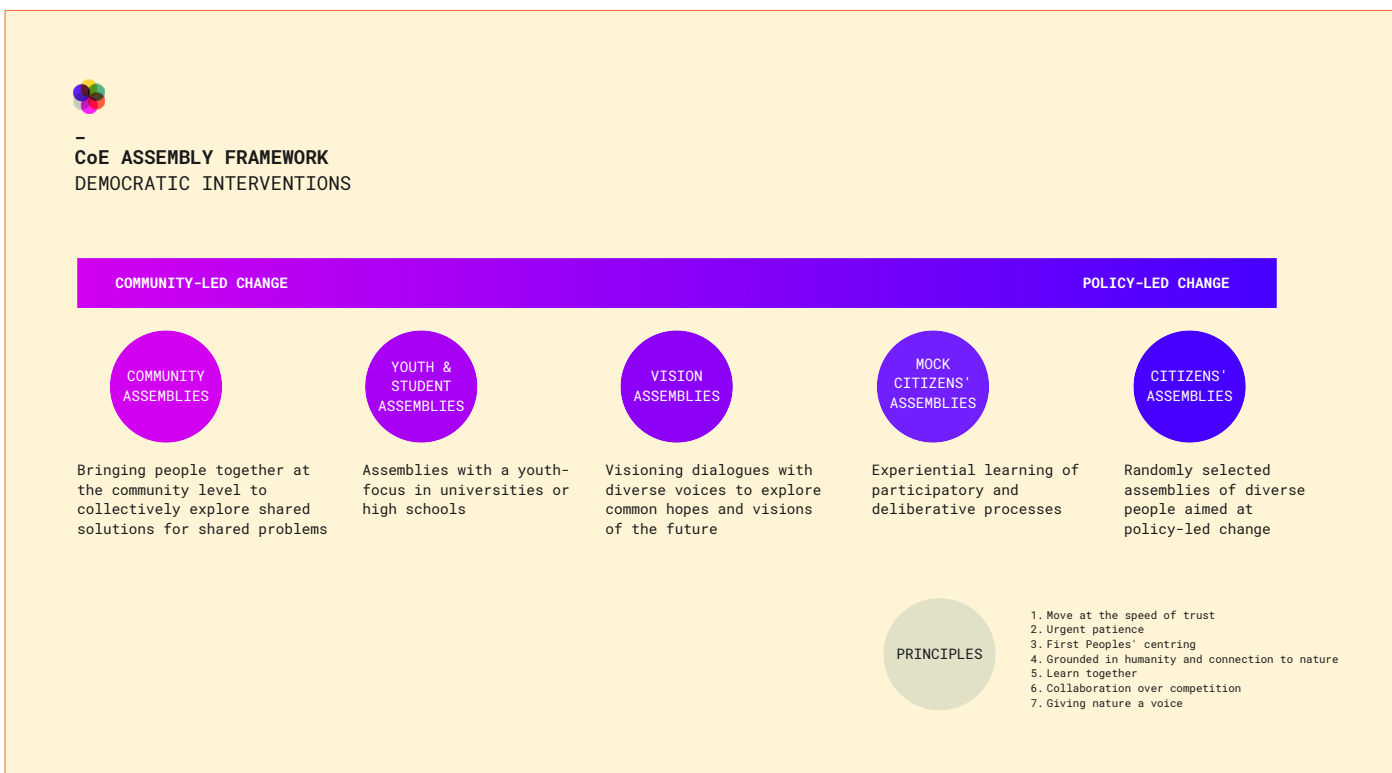


Figure 28. Assembly Framework for democratic interventions

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
- 5.3.1. Context and emergence
- 5.3.1.2. The formation and evolution of Coalition of Everyone

As a founding partner of Regen Melbourne, Coalition of Everyone was heavily involved in the facilitation, synthesis and delivery of a series of 5 community workshops in February 2021 that helped to develop a 'Melbourne Doughnut' and the associated report 'Towards a regenerative Melbourne'. I myself was involved as a graphic scribe through these sessions, with the aim of coherently and evocatively conveying the opportunities and visions being raised in the sessions. See Figure 29 below for an example, and refer to **Attachment 6** to view all 5 graphic recordings in detail. By helping to curate the online participatory forums and the visual sensemaking of the Regen Melbourne outcomes, Coalition of Everyone was drawn into the possibility of more specifically directing subsequent efforts to facilitate participatory governance towards the context of regenerative economics.

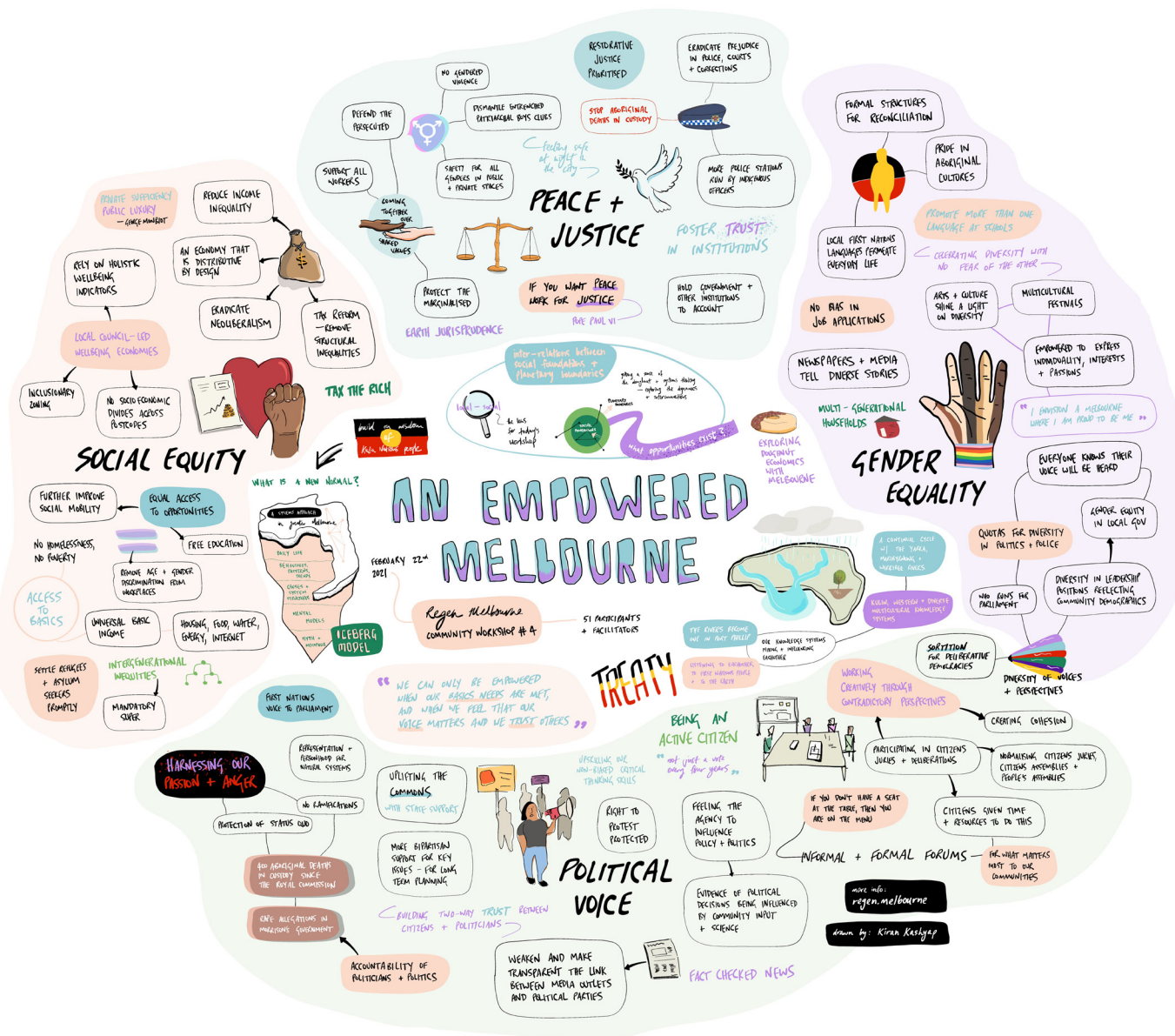


Figure 29. Graphic scribe of Regen Melbourne workshop #4, February 2021

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
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- 5.3.1.2. The formation and evolution of Coalition of Everyone

This move towards a focus on regenerative economics and bioregional governance was made all the more concrete through the strategy development that took place in the months subsequent to the Regen Melbourne workshops. Through an extensive series of co-design sessions held amongst the organising team of 7 colleagues, Coalition of Everyone embarked on an organisational reimagining to help make more explicit its vision, mission and purpose. The organisation underwent a shift from not-for-profit to social enterprise, with the aim of increasing its capacity to conduct pilot projects prototyping place-based deliberation and alternative mechanisms of networked funding. As ‘CoE 1.0’ became ‘CoE 2.0’, its new guiding purpose was to *surface collective wisdom within bioregions for healing and regeneration*. Detailed discussion about these strategy development processes can be found in section [6.3](#).

A growing professional network with a focus on bioregional governance led to a relationship with WWF-Australia, and subsequent funding for Coalition of Everyone through the Innovate to Regenerate (i2R) program. This funding was awarded for Coalition of Everyone to develop and test a methodology for bioregional governance, including through engagement of Wararack - a community organisation in Castlemaine, Victoria. The body of work, called Assembling Bioregional Community-led Regeneration (ABC Regen), included a series of co-design forums to develop and refine a methodology to guide place-based governance. The resulting report (see **Attachment 7**) details the ABC Regen methodology, along with an engagement pathway for Coalition of Everyone, as seen in the Figure below.

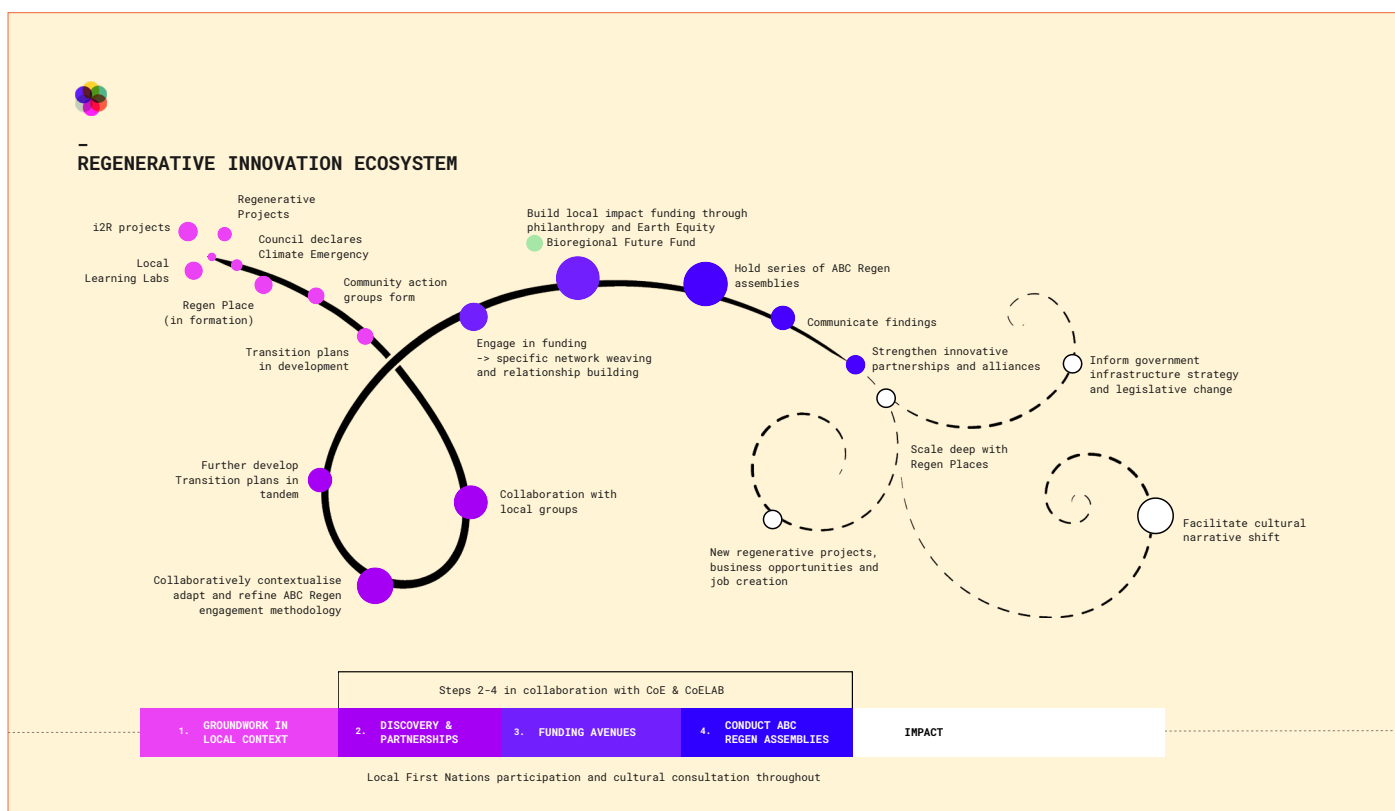


Figure 30. Community engagement pathway for Coalition of Everyone, 2022

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
- 5.3.1. Context and emergence
- 5.3.1.2. The formation and evolution of Coalition of Everyone

A key observation that came out of this body of work was the *recognition of funding as an almost ubiquitously present systemic blocker for the viability of local-scale regenerative initiatives*. Discussions with Wararack, WWF-Australia and collaborators from the numerous initiatives that make up Regen Places encouraged Coalition of Everyone to further develop a new area of work focused on Earth Equity. Aiming to build this area of work to surface place-based resourcing and engage private enterprise, the organising team drew in additional members with experience in this area. This was accompanied by a further organisational evolution at Coalition of Everyone to redirect its strategy and efforts to better serve this new focus on place-based funding. Figure 31 below depicts the manner in which resourcing from companies is sought to support locally-managed pooled funds for bioregional governance. **Attachment 8** is the full pitch deck which contains this diagram - and is to be examined later.

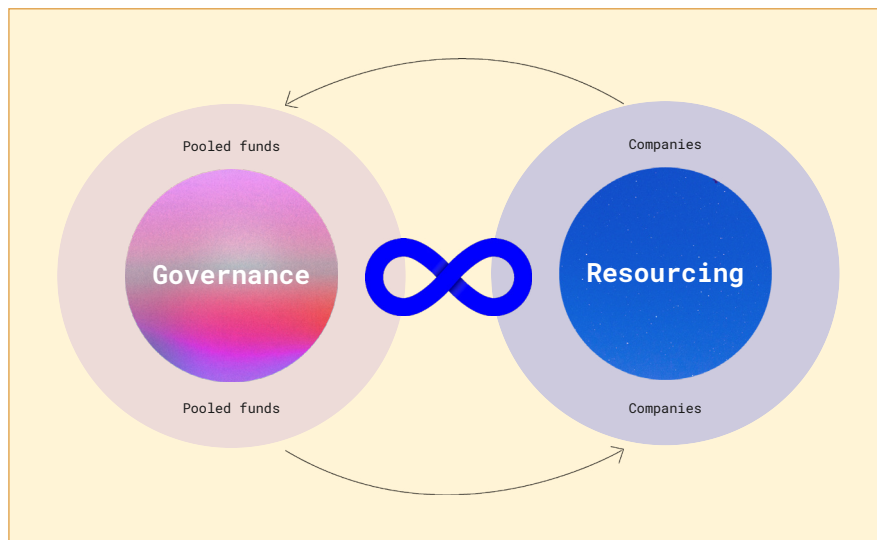


Figure 31. Earth Equity innovation engine

A number of organisations have participated in the co-design and development of the Earth Equity body of work. As I finished up my period of participant observation with Coalition of Everyone, there was an increasing focus in implementing Earth Equity, with the goal of structurally fostering the viability of bioregional governance.

5.3.2. Researching systems-level design in Coalition of Everyone

Fundamental to the work of Coalition of Everyone is to systemically shift power and agency back to local communities and their ecologies through deliberation an alternate financing mechanisms. There has been a rich opportunity for me to study the ways in which opportunities and barriers arise differently across the various contexts and multiple nested scales in which Coalition of Everyone conducts its work. Convening across sectors has been characteristic of its strategy and engagement, especially in ways that are in alive to the emergent potential of collaborators.

5. Systemic design in two dynamic contexts

5.3. Coalition of Everyone

5.3.2. Researching systemic design in Coalition of Everyone

5.3.2.1. Key milestones and dynamics of interest

The studies I conducted in this site of research were concerned with ways in which systemic design manifested in ongoing processes through which to convene across nested scales, as well as discrete activities of interest that exemplify the organisational ‘innovation engine’ outlined above. The chart below shows the key milestones at Coalition of Everyone, with the items in black occurring during my period of participant observation.

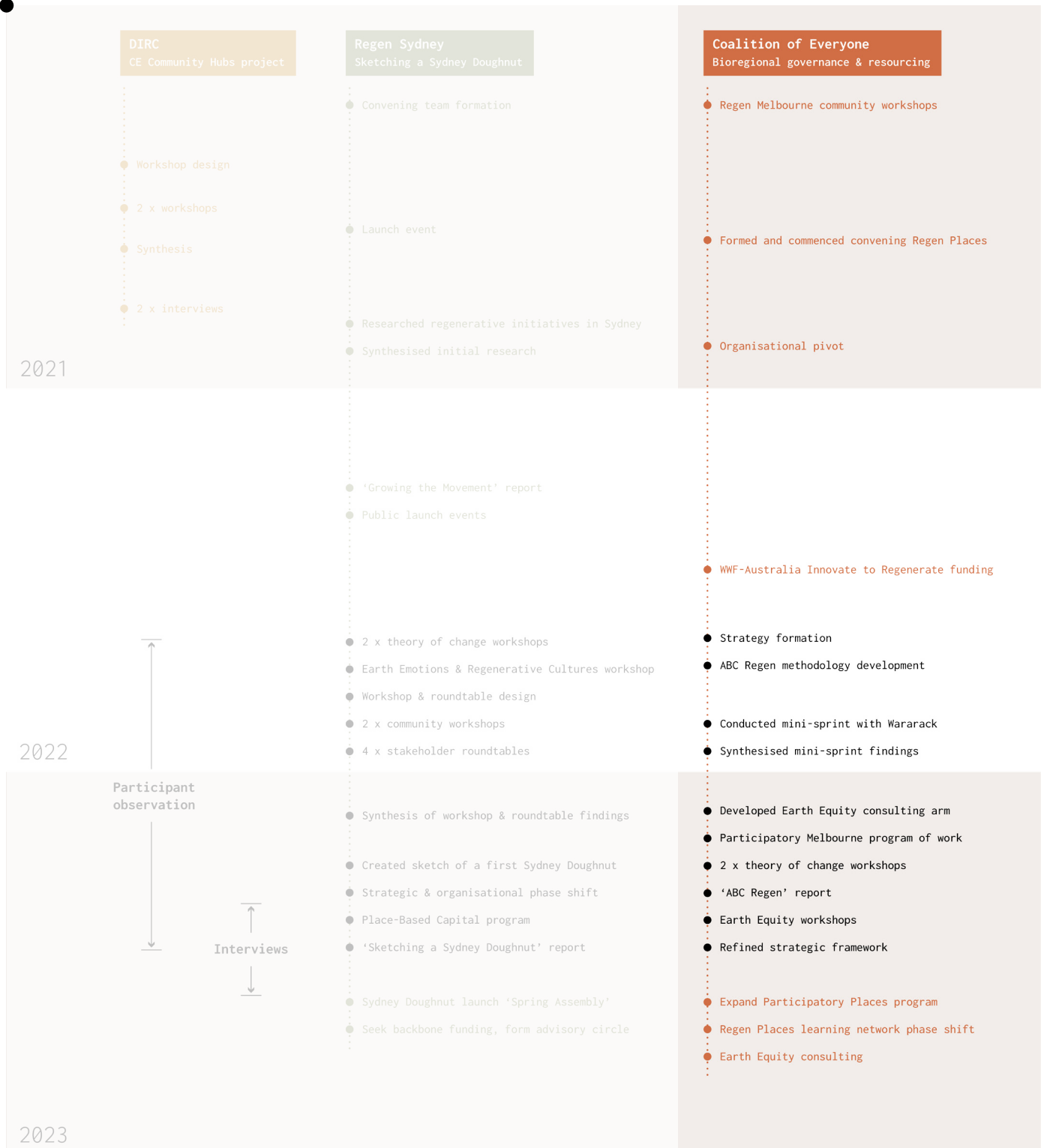


Figure 32. Key milestones at Coalition of Everyone

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
- 5.3.2. Researching systemic design in Coalition of Everyone
- 5.3.2.1. Key milestones and dynamics of interest

In the following discussions of the thesis I will explore numerous ongoing processes of systemic design in Coalition of Everyone, including (1) an epistemological and methodological orientation towards designing for emergence, through both its networks and projects, (2) attempts to prototype pilot networks, methodologies and processes that can be scaled deep and scaled out, (3) its convening of a portfolio of projects across contexts, whilst building interdependencies between them and encouraging place-based bioregional-adaptation, (4) experimental models it has co-created for alternative funding landscapes that help to unlock key financial blockages to bioregional governance, and (5) relationally weaving a narrative reframing that builds upon a network of perspectives and holds the whole complex potential for long term socio-cultural paradigm shifts.

Alongside the ongoing processes mentioned above, with the intent of shifting our socio-political landscape, Coalition of Everyone engaged in numerous instances of systemic design that were of interest during my research, including (1) the iterative development of an organisational vision, strategy and theory of change, (2) internal board meetings and external co-design workshops where non-human entities were represented in discussions, (3) the facilitation and synthesis of discursive multi-stakeholder co-design forums with external partners and clients across its streams of work, as well as (4) a series of ontologically-oriented co-design sessions to develop a methodology through which to empower communities to creatively govern for the health of their bioregions.

5.3.2.2. Participants and data collection

There were 7 organising team members (including myself) for the bulk of the participant observation, who each participated in varying degrees through the activities described above. The additional team members who joined towards the end of my period of participant observation were not included in my research. The roles that each team member played in Coalition of Everyone contributed to an overall transdisciplinary approach (similar to Regen Sydney); and some skillsets were vital complements to the practise of systems-level design even if they themselves would not be considered as such. The following outlines the roles, skillsets and functions of the organising team members:

- Kiran Kashyap** *Convening, systemic design, co-design facilitation, bioregional strategy, visual sensemaking*
- Laurent de Schoutheete** *Multiscalar strategy, organisational development, regenerative frameworks, co-design facilitation*
- Paula Kensington** *Business model expertise, private sector engagement, partnerships and funding, metrics and accountability*

- 5. Systemic design in two dynamic contexts
- 5.3. Coalition of Everyone
- 5.3.2. Researching systemic design in Coalition of Everyone
- 5.3.2.2. Participants and data collection

| | |
|--------------------------|---|
| Reggie Luedtke | <i>Earth Equity development, systemic capital, bioregional strategy, worldview shifts</i> |
| Selar Henderson | <i>Strategy development, partnerships, co-design facilitation, participatory governance</i> |
| Stephanie Ziersch | <i>Project management, funding opportunities, community advocacy, participatory governance</i> |
| Willow Berzin | <i>Lead convening, design for emergence, bioregional strategy, partnerships and funding, communications</i> |

The contributions of the team members to Coalition of Everyone’s operations were systematically recorded and analysed. While in some cases, comments by individuals are of interest, it is more often the case that the form and function of collective efforts hold insights of value. Data collected for analysis and synthesis during the 9-month period of participant observation is as follows:

- ‘Zoom’ recordings**
 - Co-designing a theory of change
 - Strategic framework workshops
 - Regen Places meetings
 - Nature on the Board webinar, July 2023
- ‘Miro’ boards**
 - CoE from 1.0 to 2.0
 - Regen Places public
 - WIP bioregional community governance pilot
 - ABC Regen methodology WIP
 - Wararack working board
 - ABC Regen community engagement strategy
 - Earth Equity x Uncommon Folk
 - ABC Regen next steps and revisions
 - CoE theory of change
 - Regen Places strategy
 - Building CoE - funding deck
 - Story of Impact WIP
- Meeting notes**
 - Weekly stand up team meetings
 - Notes for all ‘Miro’ collaborations above
 - Weekly Castlemaine ‘Transition Working Group’ meetings Oct 2022 - Jan 2023
 - ABC Regen mini sprint with Wararack, November 2022
 - Strategy meetings with key advisors

The various artefacts of this data collection will be introduced and referred to as relevant through the subsequent discussions of the thesis.

5.3.2.3. The nature of my insider researcher position

Although I was not one of the founding team members of Coalition of Everyone, I had become an integral part of organisational and strategic operations by the time I began my period of participant observation. The 9-month period of my research provided a snapshot into the agile and dynamic nature of attempts by Coalition of Everyone to foster systems change. There were major shifts in organisational strategy and changes to the organising team (not only during my research, but also before and after) that were driven by new network partnerships and attempts to complement (rather than compete with) already existing initiatives for place-based governance.

Conducting my studies as an insider researcher through these events required me to speed up my reflexive practice - quickly and iteratively interpreting events, so as to be better able to contribute to subsequent activities as a team member. In synthesising the interpretations made through this hastened process, my role as insider researcher is to seek coherence across the evolution of attempts at systems innovation.

5.3.3. Key practice artefacts from Coalition of Everyone

Alongside the list of data collection artefacts presented earlier, there are also a number of key outputs from the work of Coalition of Everyone that offer opportunities for analysis of systems-level design practice. Primarily, these include reports and diagrams that were disseminated by Coalition of Everyone into the public sphere so as to grow active interest in the organisation (presented chronologically).

Reports

- ‘Democratising Regeneration: ABC Regen’ report
- ‘Prototyping an Innovation Engine to Accelerate Regeneration’ pitch deck

Diagrams

- Assembly framework
- Regen Melbourne workshop graphic scribes
- ABC Regen methodology overview
- Regenerative innovation ecosystem
- Regen Places network
- Earth Equity model
- Theory of change
- Strategic trajectory: three horizons
- Governance + resourcing innovation engine
- Programs of work
- Earth Equity transition landscape
- Earth Equity x Uncommon Folk

5.4. Practitioner interviews

5.4.1. Deepening observations across the two sites

It was clear to me during the period of participant observation that there were various emerging threads of similarity and difference between the two sites of research. The practitioner interviews that I held towards the end of the participant observation acted to further interrogate these aspects of systemic design practice, as well as to paint a richer picture of the dynamic positionality that each team member brings to their contexts of engagement. Their unique perspectives on the role of each organisation in fostering systemic shifts, and the successes and challenges faced in their missions have been invaluable for me as an insider researcher to be able to deepen my subjective findings.

The interviews served as a tool with which to sense-check and validate the insights that were forming through participant observation - with some corroborated and others negated. *With permission from interviewees, identifiable quotes collated through thematic analysis of the interviews will be included to highlight points of convergence and deviation through the following arguments of this thesis.* Some topics during discussions with interviewees included (1) their role in the organisation and in system change, (2) the structural opportunities and barriers present in their context of work, (3) the nested scale(s) at which they find greatest potential for leverage, (4) specific questions about designed deliverables such as the theories of change, Sydney Doughnut and ABC Regen methodology, as well as (5) strategies for tangible activation of projects in the two sites of research, going forward.

5.4.1.1. Participants and data collection

The 8 practitioners that I interviewed are primarily colleagues from my two sites of field research, although one participant was from DIRC and also works as a social designer in the regenerative context. This spread of interviewees was effective for the further development of my participant observation synthesis. Organised by affiliation, these were my interview participants:

DIRC

- Tasman Munro

Regen Sydney

- Alice Howard-Vyse
- Bronwen Morgan
- Pete Dowson

Coalition of Everyone

- Laurent de'Schoutheete
- Paula Kensington
- Reggie Luedtke
- Willow Berzin



Part 3: Designing as systems, in systems

The deep dive that I present here includes a multitude of observations, interpretations and interrogations of the practices, processes and orientations found in Regen Sydney and Coalition of Everyone. The two organisations take different approaches to designing for shifts in complex interdependent systems - and through this analysis insights are drawn about designing for bioregionally-adapted regenerative economics in the broader field of practice.

Part 3 has two chapters: (6) Designing for co-emergence in complexity, and (7) Designing for radical interdependence.

6. Designing for co-emergence in complexity

6.1. Orienting towards change

6.1.1. Composting the old vs. seeding the new: a false dichotomy

Both Regen Sydney and Coalition of Everyone have formed in a time of great social inequity and ecological destruction, along with resulting economic and cultural transformations. It is in this context that some of the founding relationships that led to the emergence of these organisations were forged in the environments of Extinction Rebellion activism and the Transition Towns movement. Two of the Regen Sydney core team originally met at Transition Bondi, while another was convening Transition Inner West, along with two colleagues who were involved with Extinction Rebellion. Similarly, Coalition of Everyone was specifically born out of the third demand¹⁶ of Extinction Rebellion for citizens' assemblies to be an integral part of the drive towards climate and ecological justice (Extinction Rebellion, 2019a).

Whilst movements that seek to 'compost the old system' and 'seed the new' are both needed concurrently, they are seldom considered together for alignment in their radical goals for societal transformation. Extinction Rebellion, Blockade Australia and other climate justice movements on the one hand are focused on dismantling the status quo, largely looking to use the disruption of everyday life and 'business as usual' (in prevailing neocolonial capitalist economies) to catalyse political action (Read & Alexander, 2020). On the other hand, the Transition Towns movement, ecovillages and permaculturalists are focused on building experimental models for communities, livelihoods and local economies that are socially and ecologically just, offering themselves as visionary prototypes for alternative socio-economic structures (Hopkins, 2008). Despite their different areas of focus, both approaches look to also instill shifts in the cultural paradigms that underpin our communities.

Regen Sydney and Coalition of Everyone attempt to convene stakeholders and networks in such a way that people looking to 'compost the old', or 'seed the new' are both able to find agency through transformative participatory action. The two organisations primarily frame their intended outcomes as a *radical transformation* rather than as a *revolution* of our political and economic systems, however, the latter term is also relevant in part (Loorbach, 2022). American sociologist Jack Goldstone describes revolutions as having three primary elements at their core:

16

Extinction Rebellion has three demands, of which the third one is a call to move beyond politics to address climate and ecological justice. [See here](#) for more information.

(a) efforts to change the political regime that draw on a competing vision (or visions) of a just order, (b) a notable degree of informal or formal mass mobilisation, and (c) efforts to force change through non-institutionalised actions such as mass demonstrations, protests, strikes, or violence (2001, p. 142).

- 6. Designing for co-emergence in complexity
- 6.1. Orienting towards change
- 6.1.1. Composting the old vs. seeding the new: a false dichotomy

Regen Sydney and Coalition of Everyone have a focus on points (a) and (b) in the quote above, and indirect links to point (c) through alignment with activist organisations as evident in the formation of the teams. Kate Raworth (who developed the Doughnut Economics model) has even contributed a chapter called ‘A New Economics’ to the book ‘This is Not a Drill’ edited by Extinction Rebellion, helping to crystallise this alignment (Extinction Rebellion, 2019b). Regardless of the framing, a notable challenge across the two sites has been to allow for multiple entry points and diverse forms of agency - Laurent highlights this point.

“If you want to revolutionise people.. it’s a matter of going where people are first and joining them where they are. And then lifting their gaze, slowly but surely, continuing to do that.”

Laurent de Schoutheete, Coalition of Everyone
Practitioner Interview

It seems highly likely that our communities will face increasingly significant systemic shocks (due to ecological and geopolitical factors) that force our economies to radically transform towards those that are locally-oriented and resilient, regardless of whether or not they are actually globally responsible. Regen Sydney and Coalition of Everyone exemplify organised responses that build upon the merits of Extinction Rebellion and Transition Towns and attempt to foster a complementary *vision-led (rather than deficit-focused)* movement for bioregionally-adapted regenerative economics.

“I’m sure that Extinction Rebellion would argue that the relationality that supports blocking roads, which is scary and will result in arrest and all sorts of things.. the internal relationality of the group is prefigurative. So maybe they’re both imagining another world.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

In this way, Regen Sydney and Coalition of Everyone are primarily oriented towards prefiguring a new (regenerative) politics and catalysing alternative socio-economic systems - whilst acknowledging that organising to disrupt prevailing structures is also absolutely necessary.

6.1.2. Nurturing a prefigurative politics

As described earlier, even before my involvement with Regen Sydney and Coalition of Everyone, my journey as a Transition Designer who sought to find a suitable community of practice led me to volunteer at The Bower,

Transition Inner West and Sydney Commons Lab. Volunteering with these organisations revealed to me the importance of cultivating professional relationships and environments that were founded upon principles of care and reciprocity, as well as showing me practices that manifested these values into reality. Alongside this, my personal life has included my involvement in a co-housing entity known as the ‘Peach Palace’, where I continue to live. Here, a community of residents in the urban suburb of Marrickville in Sydney attempt to conduct their personal lives with the same principles mentioned above, sharing food, support, knowledge and skills to exist in a socio-ecologically connected manner - which sociologist Anton Törnberg calls ‘constructive resistance’ (2021).

“We can see new patterns and new ways of being and doing. And our job is to bring those back into the system to help shift it and evolve the system. It’s like when Neo went back into the Matrix, you can change the code from within.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

The personal, professional and collective manifestations of ‘being the change you wish to see in the world’ are of course not a solution in and of themselves to the systemic crises we face, however they do offer a tangible alternative paradigm for collaboration (Wallace, 2019), and act as a barrier to organisational co-option by the socio-cultural forces of dominant institutions (Raekstad & Gradin, 2020; Törnberg, 2021). The processes through which Regen Sydney and Coalition of Everyone nurtured a prefigurative politics (both internally and externally) sought to keep the two organisations true to their revolutionary intentions, whilst remaining strategically engaged with the prevailing socio-economic system. Regen Sydney and Coalition of Everyone are not seeking to create utopian prototypes that exist in isolation from the challenges of prevailing political and economic structures, but rather they seek to tangibly shift current systems. To prefigure a new politics that could serve as a viable transition between socio-economic systems has required members of the teams to straddle both the old and the new system.

*“We want something to exist in the world and therefore define what that something is. And so being asked to describe its end state is the art of design for me. It’s actually to **provide strategic intent**. To that end state.. to describe what is the intent of that end state, but not in any prescriptive manner. And to describe a process of developing that strategic intent. That’s for me the the art of my design practice.”*

Laurent de Schoutheete, Coalition of Everyone
Practitioner Interview

- 6. Designing for co-emergence in complexity
- 6.1. Orienting towards change
- 6.1.2. Nurturing a prefigurative politics

Design practice at Regen Sydney has situated all collaborative forums upon earlier developments of shared organisational visions. In this way the process of developing strategic intent is one of emergence rather than one of top-down prescriptiveness, and instead attempts to embody a politics of participatory self-determination. The organisational vision and guiding principles shown below are public declarations of the strategic intent of Regen Sydney - and exemplify the designerly skill of communicating the multiplicities of questions and intentions to be navigated on the organisational journey ahead.

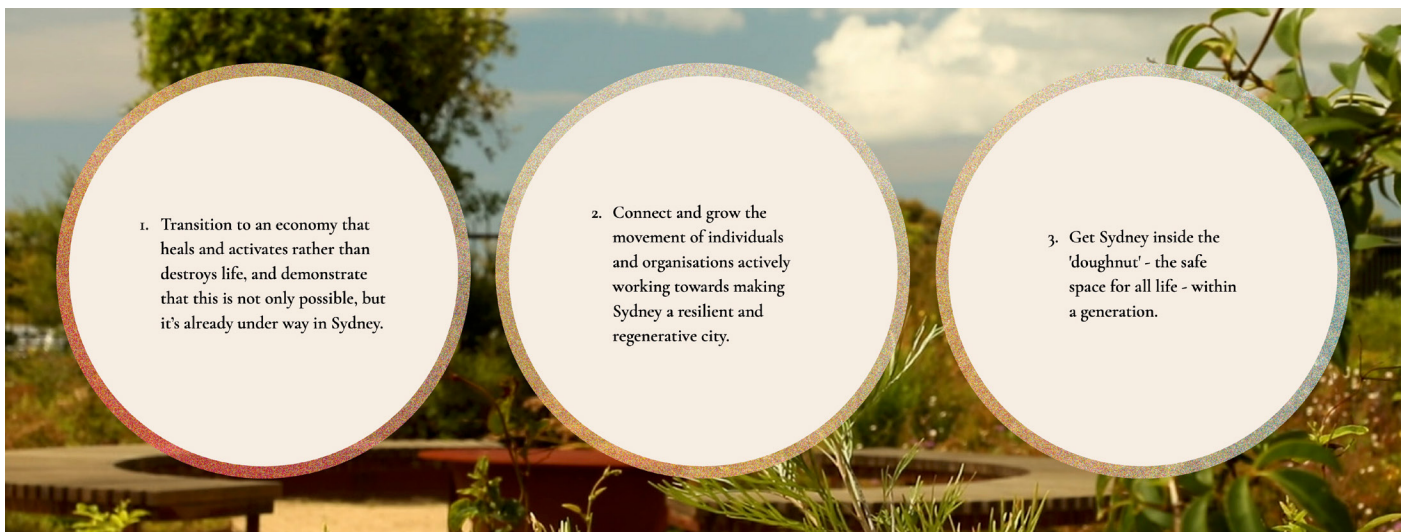


Figure 33. The three pillars of Regen Sydney's organisational vision

1 Think global, act local

We will equip communities with the ability to respond appropriately to the challenges ahead at their local (suburbs) and city scale (Sydney), while offering them a global context for collaboration in the transition toward a regenerative Sydney. Everything we do is grounded in place-based tangible action.

2 Nature and Indigenous wisdom are our guides

We look to nature and Indigenous wisdom as our guide. We exist to nurture and support systems that are in tune with - and work in harmony with - nature.

3 Allyship with First Nations

We recognise Aboriginal and Torres Strait Islander peoples as the original custodians of these lands. We honour their care, wisdom and deep connection. We commit to decolonising our minds, reverse and remedy dispossession through direct action and listening to the voices of First Nations people.

4 Humility

We act with humility while co-initiating bold action in the face of an unpredictable future. At all times, we are committed to acting with integrity and curiosity in new and unfamiliar spaces. We acknowledge that we don't know what we don't know. We are ready to listen and to let go of what we do know in order to re-learn and collectively weave another story.

5 Compassion

We foster a culture of compassion and deep care for the Earth. In doing so, we develop care for self and care for others. Embodying empathy generates a ripple of wellbeing that changes the world around us, for us.

6 Co-creation with playfulness and joy

We hold lightness and humour even while navigating the big challenges. We collaborate with positivity, enthusiasm and energy. In doing so, we offer a fun, valuable and exciting experience for ourselves and elicit the many gifts of our community.

7 Dance with complexity

We encourage creativity and holistic approaches as we iterate regenerative ways of doing and being. We stay tuned to emergence and remain open to shifting our approaches and strategies as we learn and contribute to a thriving, inclusive, nature-positive and as yet, unwritten, future for Greater Sydney (and beyond).

THE INNER WORK

Transformative self-development work helps us grow a greater sense of awareness and reach the deeper levels of empathy required to truly embrace and harness multiple perspectives for the collective good.

Regenerative practice is based on the premise that we cannot make the outer transformations required to create a truly sustainable world without making inner transformations in how we think, how we work, and who we are. Our understanding of what's required of ourselves as practitioners and as human beings deepens as this inner work unfolds (see *Regenesis*).

Whole system health and outer vitality depends on strong and nourished roots growing in healthy soils - i.e. caring for the inner is necessary.

The Inner Development Goals project works to identify, popularise and support the development of relevant abilities, skills and qualities for inner growth, through consciously supportive organisations, companies and institutions, to better address the global challenges (see *Inner Development Goals*).

Regen Sydney has built our foundations using this approach, and will continue to practise inner regeneration to meaningfully and wholeheartedly undertake our work going forward.

Figure 34. Regen Sydney's guiding principles

Guiding principles 6 and 7 in Figure 33 above capture the collaborative essence of a new regenerative politics. As Alice corroborates, systemic design practice and the co-design forums that it entails advocates for the distribution of power to meet the social and ecological needs of all.

“It’s more ‘power with’ [rather than ‘power over’] with the regenerative movement - it’s power with other species and abundance. It sounds quite idealistic, but I’d much rather create that kind of future and show that we can all play a part in that, rather than saying well, ‘that’s never gonna happen’.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

Coalition of Everyone has sought to find ways to share power with non-human entities specifically in the context of board meetings and co-design sessions with external clients. Representation by participants of entities such as a local river or bird act to not only model a regenerative culture, but to also alter the outcomes of meetings to better align with ecological needs. Having non-human representation in such meetings in an ongoing manner has enabled Coalition of Everyone team members to more easily find access to ecological interconnectedness and to work through an ecological lens. The implications of these processes for place-based governance will be explored further in section [7.4.3.2.](#)

6.1.2.1. Prefiguring regenerative cultures

The conscious radical prefigurative politics of Regen Sydney and Coalition of Everyone face challenges from the socio-political regime that likely would not be encountered by technologically-oriented endeavours, and as such require protected spaces “from physical repression and the hegemonic ideologies of mainstream society, and where individuals may experiment with alternative world views, lifestyles, radical ideas, and social practices” (Törnberg, 2021, p. 90). The early phases of organisational development and network formation have thus far allowed the two organisations to be safe in this manner, whilst external projects have been framed as *experimental prototypes or pilots* which also serves to create protected spaces for prefigurative innovation. Törnberg eloquently summarises the value of prefiguration in meaningfully engaging both old and new systems:

Experiences from transition studies strongly suggest that radical change does not happen by simply fighting the old, but through building the new. Thus, actors advocating radical societal change must confront the old forms and simultaneously articulate concrete alternatives. This conclusion dramatically repositions the role of prefiguration in social change by dislodging it from a relatively peripheral activity and centres it as a vital component in many cases of radical societal transitions (2021, p. 102)

- 6. Designing for co-emergence in complexity
- 6.1. Orienting towards change
- 6.1.2. Nurturing a prefigurative politics
- 6.1.2.1. Prefiguring regenerative cultures

Notably, prefiguring regenerative cultures in Regen Sydney and Coalition of Everyone has included a relational ontological orientation through which partners, clients and networks have been engaged. The process of growing the network, partnerships and the movement through these two organisations has entailed a slow and steady formation of trusted alliances that continue to foster the safe and protected experimental spaces required. This relational orientation means that Regen Sydney and Coalition of Everyone have taken a considered and intentional epistemological approach in their work, specifically in the context of prevailing instrumental and transactional professional relationships. In the quote below, Bronwen speaks to the challenge of upholding a commitment to relationality, when also grappling with the urgency of responding to the emergencies we face.

*“This is not so much the Speed of Trust, it’s just the speed of what’s possible. I mean, it could not have gone any faster. And given that, the affordances of time and resources.. well, all except I would add the **commitment to relationality as central**, so it could go faster if it was kind of instrumental and functionalist, but if the strategy is premised on the importance of a worldview shift, then I suppose it’s connected to the **commitments of prefigurative practice [which are inherently relational and slower].”***

Bronwen Morgan, Regen Sydney
Practitioner Interview

University of Melbourne geographers Craig Jeffrey and Jane Dyson write that prefigurative politics “highlights ways of *knowing, acting, and occupying space and social networks* that are not lived in the shadow of the temporal strategies of dominant powers” (2021, p. 653). Both Regen Sydney and Coalition of Everyone have thus far taken the time to cultivate a relational prefigurative praxis focused on viable pathways for long-term systemic shifts, rather than compromising their organisational visions in order to more immediately gain funding (Dark Matter Labs, 2024).

“There’s no point watering this [mission] down, we need to go all the way because we’re actually trying to meet the need. It’s one blessing of not working with money, is we’re not trying to solve a thing for somebody else’s money.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

6.2. Relational network weaving practice

6.2.1. The formation of long term partnerships

The evolution of Regen Sydney over its formative years is a prime example of the importance to a regenerative transitions of inclusive and staged network building that brings in the engagement of diverse citizen, organisational and governmental stakeholders. Challenges faced in this context include (1) the generally short-term nature of stakeholder engagement when projects are limited in time-scale or funding, and (2) the tensions inherent to emergent (and insurgent) associations such as Regen Sydney collaborating with established political institutions. Although Regen Sydney has been nurtured by volunteers for its first two years, the sustained momentum demands an approach that is far-sighted and will also likely lead to funding opportunities as the network continues to grow. Alice underscores the pivotal value of the network:

“Peter Senge, saying that changing systems is more about changing relationships between the people who shape the systems - that quote has guided my work for years since I first heard it because it just makes so much sense.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

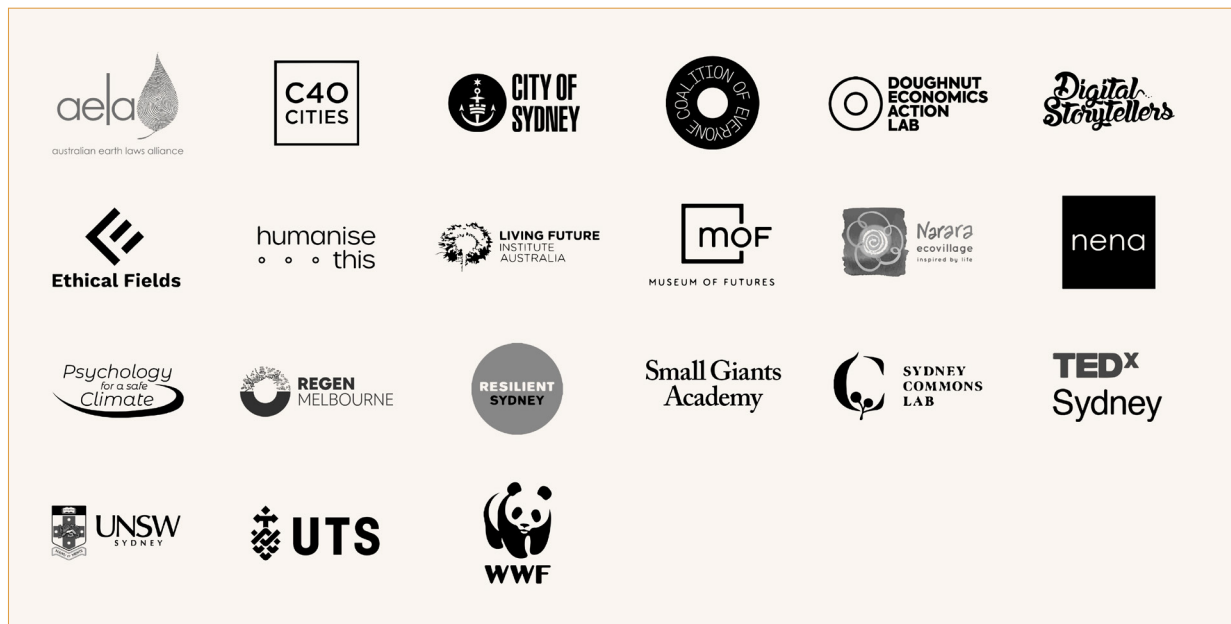


Figure 35. Key organisations on the Regen Sydney journey

Figure 35 above shows some of the key organisations that have been involved with Regen Sydney, through personal relationships, small funding partnerships and advisory roles to help grow the network. The network of individuals and organisations that has emerged through ongoing public engagement spans across public, private and civic institutions, including departments of state government, local councils, academics, community organisations and advocacy groups amongst many others. These

- 6. Designing for co-emergence in complexity
- 6.2. Relational network weaving practice
- 6.2.1. The formation of long term partnerships

initiatives have not only contributed to the development of the movement, but they have in varying capacities signalled intent to collaborate on upcoming areas of work that build upon and activate the Sydney Doughnut. There is a sense of shared ownership amongst the network for the work conducted so far, due at least in part to the manner in which Regen Sydney has convened engagements and synthesised findings. While Narara Ecovillage, UNSW Allens Hub and WWF-Australia have donated small amounts of funding for discrete pieces of work, the coalition of organisations that form the Regen Sydney network generally do not have the capacity to provide backbone funding for core team functions. In light of this, the partnerships outlined here would be most valuable in the context of project work, with separate philanthropic funding or auspicing better suited for backbone funding. The dynamics around funding will be more specifically detailed in section [7.4.2.](#)

Across both Regen Sydney and Coalition of Everyone, the professional networks have been grown through organic collaborative processes that encourage potential partners to join discussions with no obligation to commit. The organisations and individuals that continue to participate in network events and funded projects are those that see strong alignment in organisational purpose - a process which has generated greater momentum over the period of my research. In the shift to focus more specifically on bioregional governance, the partnerships that Coalition of Everyone had with civic organisations in previous work have served to complement the emerging network of Regen Places. Figure 36 shows the influence of the networks over time in fostering this focus on bioregional governance.

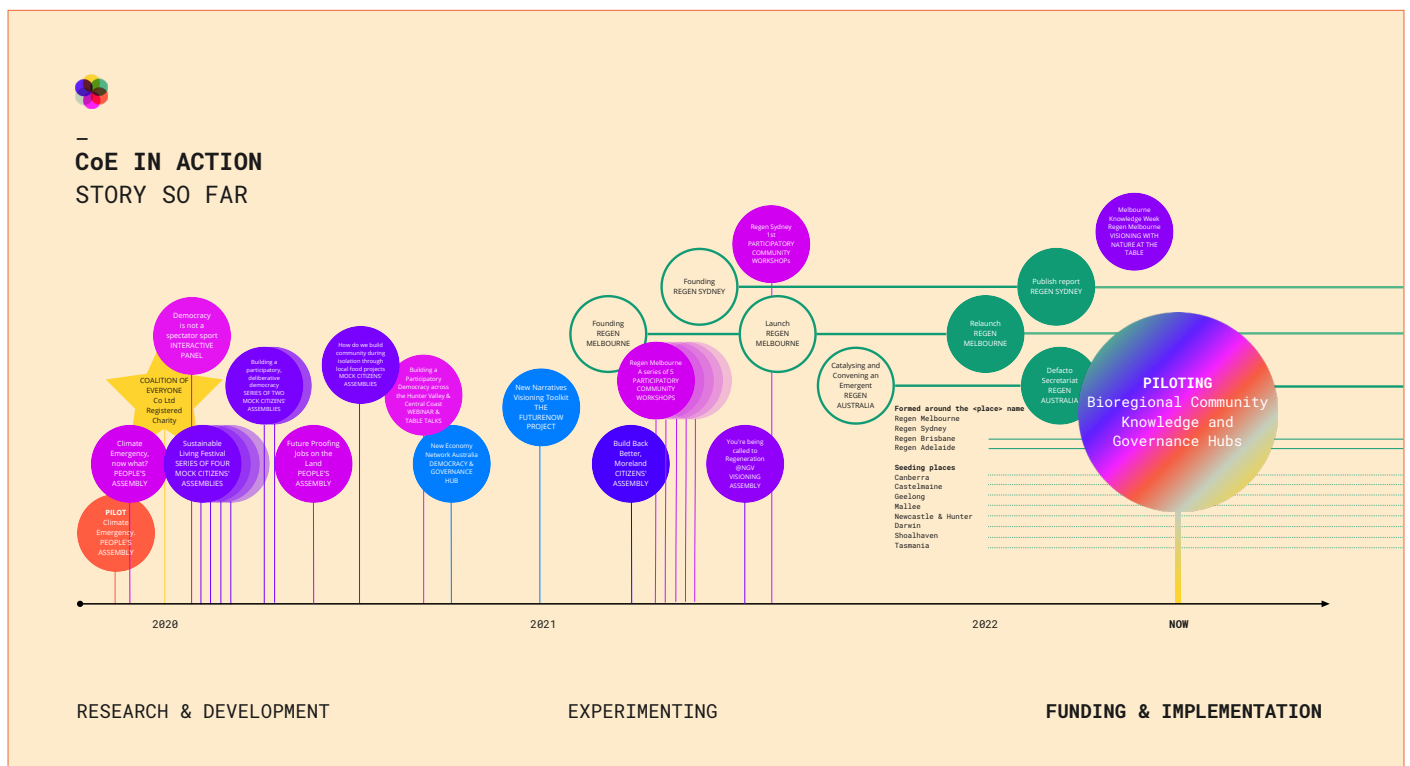


Figure 36. Coalition of Everyone in action: story so far

“None of this works if you’re not in relationship. So there’s like a shift away from you know, mechanistic, siloed, box-ticking thinking, to lived bodily experience, shifting change towards understanding how living systems actually work, and what makes us alive, what lights us up, which is [central] to help co-create the next economy because it’s a really different paradigm.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

6.2.2. Building communities of practice

The formation and development of the Regen Places network has been central to Coalition of Everyone. Regen Places (as introduced in section 5.3.) is a community of practice that fosters knowledge-sharing across a diverse range of 19 regenerative initiatives across Australia, including Regen Sydney and Regen Melbourne. Coalition of Everyone has taken up the role of convening this ‘living knowledge network’, including by hosting remote working sessions as well as by facilitating the development of an online database of network partnerships and operational resources. There has been great value in this community of practice in enabling cross-pollination of methods and processes for the participating initiatives - which are greatly varied in their contextual needs and in their navigation of resourcing requirements. Apart from regular monthly discussions, thematically focused sessions have also been held, including with Regen Melbourne who shared their approach to shaping funding mechanisms, as well as yarning circles with film-maker Damon Gameau (known for ‘2040’ and ‘Regenerating Australia’) which have helped to connect the initiatives in Regen Places with the broader movement.

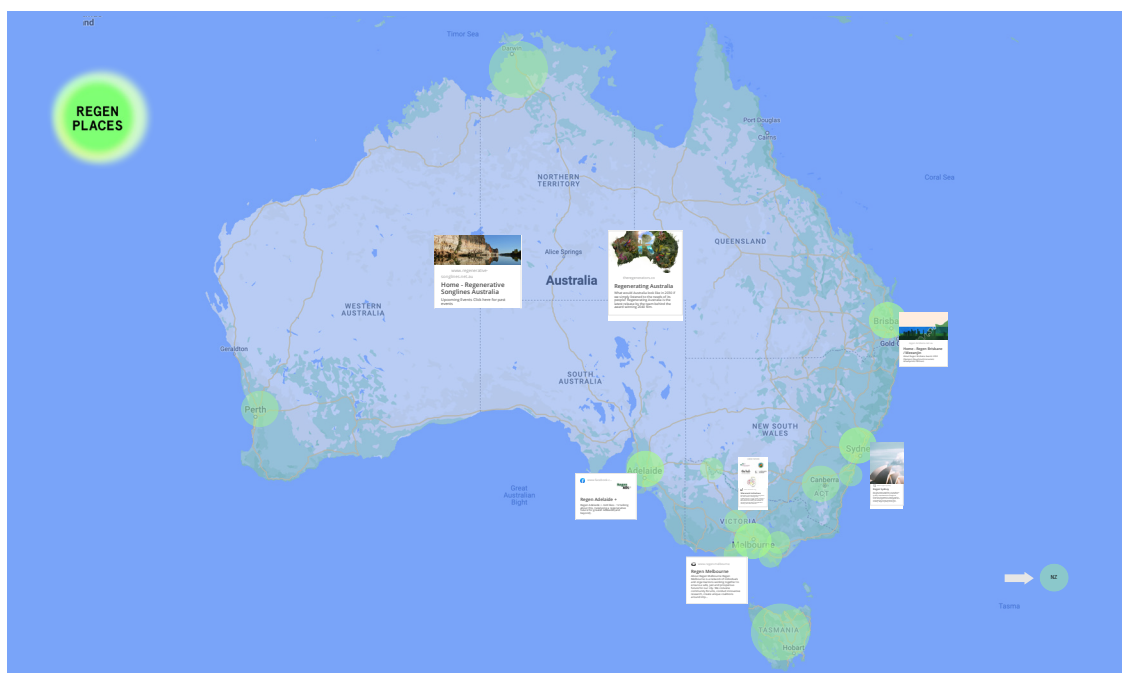


Figure 37. The Regen Places network

Regen Places as a community of practice has most definitely been valued by participants from initiatives nationwide, especially for those that are in the early stages of formation to be able to learn from those further along on the journey (Wenger et al., 2002). Working at this scale as an informal network has provided much freedom and flexibility; finding funding however, has been challenging, and apart from a small amount of funding from WWF-Australia, other potential granting partners have not seemed to understand the potency of this community of practice.

Similar to Coalition of Everyone, the systemic design practice in Regen Sydney cannot be reduced to just the design, facilitation and synthesis of community workshops and stakeholder roundtables. Of vital importance are the numerous informal gatherings known as 'Regen Cafes' where cross-sector connections have been made between individuals in the network, and representatives of various organisations. Through this community of practice over the last few years, members of the network have helped to shape not only the theoretical and conceptual foundations of action research to be conducted, but through discussions also have helped to guide strategy development at Regen Sydney. These forums were intentionally framed as online versions of cafe meetings, where participants felt welcome to step in to provide comment and critique on thematic areas of focus, as well as to attempt to elicit how they might partner with Regen Sydney in an ongoing manner. Regen Sydney has been positioning itself as a platform through which to guide the transition to regenerative economics in Greater Sydney, and the network of practitioners itself has been central to working towards this goal.

"I mean, the trust building happens before the work happens, it's like connecting as people before connecting as collaborators or practitioners. This is sort of stuff that I first was like, we're all humans, we know how to build a relationship and build trust with someone and so lean on that, you know, and don't try to create too many tools around it. Sitting down with people having cups of tea, and being honest about who you are and your intentions and not wanting to extract from people. Genuinely connect and create an exchange and a dialogue. And so it involves sharing parts of your life and genuinely taking the interest in parts of their lives."

Tasman Munro, DIRC
Practitioner Interview

The communities of practice described above play a vital role in helping to foster a regenerative culture across the networks - and to nurture ways of working together that are underpinned by care and reciprocity. They also allow for broader discussions outside the scope of formal areas of project work that can help to realign organisational thinking in line with emerging system dynamics - including unlikely actors or events.

However, there are some challenges to convening these communities of practice - which are not insurmountable, but they do suggest areas for improvement. Firstly, all gatherings for Regen Cafes (Regen Sydney) and Regen Places (Coalition of Everyone) have been held online, which during COVID-19 lockdowns was a beautiful alternative that allowed people to come together in a time of adversity. While this could not be avoided for the national-scale Regen Places, unfortunately for the Sydney-based Regen Cafes this started a trend that sought to include as many people as possible online, to the detriment of forming in-person connections, albeit with smaller numbers.

This leads to a second challenge, namely that of Regen Sydney initially working at the city scale, and informal Regen Cafes by their very nature of informal relationship-building being more suited to local-scale activations where the members of a community might better connect with one another. During many of the Regen Cafes that were held, participants stated that they would love to (or already do) meet in their neighbourhoods to further the discussions, and to take action towards regenerative economics. While Regen Sydney is yet to meaningfully guide such forums, an upcoming stream of work at this scale holds ample opportunity to include sessions that draw from the Regen Cafe model.

It has been difficult to sustain momentum in these informal communities of practice, especially when considering that other formalised project areas are also largely unfunded - at both Regen Sydney and Coalition of Everyone. Despite this, there has still been great value in nurturing the networks formed through Regen Cafes and Regen Places to create a supportive ecosystem of practitioners that can help guide each other to navigate challenging power dynamics in the work.

*“Reshaping the system and saying, ‘okay, we’re going to pass power to you’ can also set people up to fail, you know, if they’re actually not supported to say, ‘well, how do I now use this power or take agency that I haven’t had before’. So doing that happens by **gradual relationship to create winds and a supportive ecosystem around them to support them to do the work, and explore and test and fail safely.**”*

Tasman Munro, DIRC
Practitioner Interview

6.2.3. Walking with First Peoples

With a view to embody a relational approach in the formation of the network and its explorations of regenerative transitions, the Regen Sydney core team realised early on the need to centre First Nations perspectives. To walk in partnership with Aboriginal people rightly required Regen Sydney to build relationships with members of the First

Nations community and let work emerge from there. Regen Sydney has found it especially appropriate to work in partnership with First Nations people in Greater Sydney, considering the history of the place as the origin of colonisation on the Australian continent. To create a regenerative economy more broadly, it is necessary for First Nations people to be empowered; and to build mutual trust and walk together, it is absolutely necessary to embody a relational approach. First Nations scholar Prof. Anne Poelina (a Nyikina Warrwa woman from the Kimberley region of Western Australia) and her colleagues describe that “from a relational standpoint we recognise ourselves as embedded and situated where we are co-becoming with place, reducing the boundary between human and non-human, and object and subject” (Poelina et al., 2022, p. 4). Sharing in this epistemological orientation of ‘co-becoming with place’, and learning from First Nations wisdom can only be developed through emergent and relational processes (Moran et al., 2018).

“So when you talk about relationality, I mean, it’s ancient wisdom to sit with Elders, and everything is about relationship. There’s no one or I, it’s a we, and we as in ‘me in relationship to you’ or ‘we in relationship to us’. I think that’s where the elements of regenerative design and systemic design come together.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

Thus far, Regen Sydney has attempted to centre First Nations voices in high-level forums for strategy development and Sketching a Sydney Doughnut as well as in informal Regen Cafes, but the real work begins in the next phase of projects. The call to action for Regen Sydney in this upcoming phase will be to dedicate paid roles for First Nations collaboration that have the agency and capability to tangibly shape project objectives and outcomes on the ground. The need to formally create space for Aboriginal voices when conducting projects has been reiterated by First Nations advisors [David Beaumont](#) and [Uncle Phil Bligh](#), who have both contributed greatly to Regen Sydney since its inception. In guiding the the public engagements that Regen Sydney has held, David and Phil have consistently encouraged participants to not only shift socio-economic systems, but to also respond to the continuity of problems that have existed for over two centuries in order to repair our nested relationships.

The next phase of work seeks to strengthen this relational foundation, using the protected and experimental spaces of Regen Sydney projects to facilitate First Nations collaboration through three streams of work (to be detailed in section [6.4.](#)). The contributions of spatial designer Daniele Hromek (a First Nations Budawang/Yuin woman) to the ‘Designing with Country’ discussion paper contain valuable guidance for these

upcoming endeavours, with a particular focus on the built environment (GANSW, 2020). The guiding frameworks and provocations contained therein, as well as in her other writing refer to participatory processes of engagement that meaningfully include First Nations knowledge holders through co-design (Hromek, 2020). While the objective of Regen Sydney to harness the Doughnut Economics model to better govern the economy of Sydney is implicitly aligned with seeking justice for First Peoples, an explicit commitment to the types of engagement that Hromek describes would most definitely serve to mobilise more impactful outcomes through its project areas.

At Coalition of Everyone, engagement with First Peoples has primarily included ongoing advisory discussions between Willow (lead convenor) and [Professor Yin Paradies](#) (who describes himself as an Aboriginal-Asian-Anglo Australian of the Wakaya people from the Gulf of Carpentaria). Yin has helped to guide the preparation of various grant applications and pitch decks, with his input allowing for Coalition of Everyone to better frame their intended outcomes. Alongside this, the Regen Places community of practice has drawn inspiration from the First Nations-led initiative '[Regenerative Songlines](#)' in its drive to connect regenerative organisations across the various regions of Australia. Regenerative Songlines has not only allowed for the emergence of vital relationships with First Peoples to form across regions, but has also educated the Regen Places network with inspirational examples of regenerative initiatives. Additionally, while the ABC Regen stream of work has included input from First Nations participants in Castlemaine (explored further in section [7.1.2.](#)), the Earth Equity area of focus is still developing concrete methods with which to engage Aboriginal folk through its projects.

6.3. Co-designed theories of change as guiding beacons

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A theory of change, simply put, is an articulation of “how and why change happens in a specific context and as a result of certain actions” (TIPC, 2022, p. 23). It contains the ways in which an organisation or collective seeks to enact systemic impact through strategically targeted activities (Tonkinwise, 2023). A theory of change is not a static entity, but something that evolves dynamically over time.

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Design researchers Elisa Giaccardi and Gerhard Fischer define metadesigning as an approach “concerned with opening up solution spaces rather than complete solutions (hence the prefix meta-), and aimed at creating social and technical infrastructures in which new forms of collaborative design can take place” (2008, p. 19)

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This handbook was created by TIPC (Transformative Innovation Policy Consortium) and the Utrecht University Centre for Global Challenges with support from EIT Climate-KIC, Ingenio-UPV and the Austrian Institute of Technology.

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As described in section 2.4.5.1., systems convening is the ongoing process of creating a shared agenda for change, whilst commanding the credibility to bring together actors from across scales and sectors of the system - from the grassroots to senior politicians (Leadbeater & Winhall, 2020, p. 40).

A well crafted organisational strategy is indispensable for the purposes of meaningfully effecting change, especially when considering a nuanced *theory of change*¹⁷ that adequately engages with system dynamics (Tonkinwise, 2023). In this section of the thesis I will (1) outline the approaches taken by Regen Sydney and Coalition of Everyone to develop their strategies and theories of change, (2) analyse the systemic design methods used, (3) describe and reflect upon the resulting theories of change, (4) discuss the implications for ongoing organisational operations at the two sites, and (5) surface insights for the future co-design of theories of change. Through these analyses I will continue to interrogate my role as a Transition Design practitioner and insider researcher, as well as reveal the implicit value of theories of change.

6.3.1. Navigating complex metadesigning processes

The process of metadesigning¹⁸ that developing a theory of change entails can help to surface coherent framings of a paradigmatic shifts in the prevailing system that can act as a North Star for an organisation (Wood, 2022). The clear statement of this driving motivation - *the why* - (1) manifests as an alloy of the values and principles held by each colleague, and (2) helps to guide the activities and intentions of the collective, including in responding to systemic leverage points.

“We’re in an ecosystem, whilst we’ve [also] been helping build the ecosystem - we’re active in the ecosystem and a part of it, and can help direct it. So when we have a sense of shared values and principles - North Stars - something happens in there, (which I’m finding quite fascinating), around responding to the call that’s bigger than all of us. We can actually create a completely new world.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

The formative strategy development undertaken by the teams at both Regen Sydney and Coalition of Everyone created conducive organisational conditions, for subsequent, systemically broader and tactically deeper explorations as a part of theory of change co-design. The processes of co-designing theories of change at both organisations drew heavily from the ‘MOTION Handbook: Developing a Transformative Theory of Change’¹⁹ which guided the teams through various interconnected considerations that I will detail in the upcoming sections (TIPC, 2022). As a Transition Designer, I was tasked with leading the design, facilitation and synthesis of these co-design sessions; my experience with *systems convening*²⁰ and visual sensemaking aiding in distilling multi-pronged calls to action. As shall be described, the co-design processes and strategic outcomes were notably distinct across the two sites of research.

- 6. Designing for co-emergence in complexity
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 - 6.3.2. Regen Sydney's approach
 - 6.3.2.1. Strategic foundations

The first body of work to grow the network, create visibility for the regenerative economics movement, and surface background research on already existing initiatives was conducted by Regen Sydney based on the foundation of this strategic development. The importance of even these rudimentary articulations was pointedly proven when opportunities were granted to Regen Sydney to undertake consulting work in a manner that would have jeopardised an orientation towards civic-good and systemic leadership. The collectively-formed organisational values helped Regen Sydney to navigate away from co-option by large corporate entities - which would have sacrificed its integrity of purpose in return for short-term funding. The co-creation of a theory of change was to build upon these experiences, to crystallise more clearly a collectively held vision and strategic pathway for the operational scope of Regen Sydney such that it may stay true to its guiding intent, as well as to create legitimacy for the subsequent body of work - sketching a Sydney Doughnut.

6.3.2.2. The co-design process

The co-creation of a theory of change at Regen Sydney was conducted through three consecutive co-design sessions that went through a broad arc of (1) surfacing the components of a theory of change, (2) interrogating calls to action through a transformative outcomes framework, as well as (3) refining the contributions and reflecting on the process. My personal contributions to this process included curating the Miro board and runsheet in the lead up to the sessions, as well as in synthesis and visual sensemaking after the conclusion of the co-creation workshops.

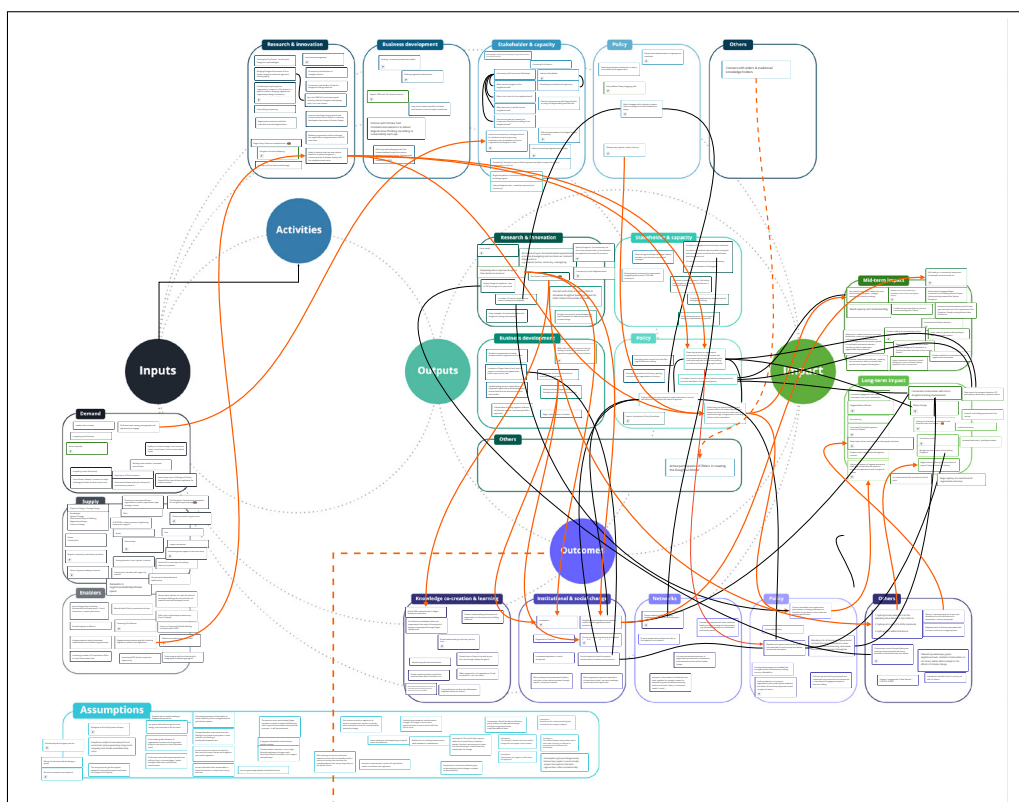


Figure 39. Co-creating Regen Sydney's theory of change [adapted] (TIPC, 2022)

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- 6.3.2. Regen Sydney's approach
- 6.3.2.2. The co-design process

The messy discursive nature of the discussions conducted can be seen in the intersecting lines and complex thematic linkages expressed in Figure 38 above. The first co-creation workshop saw the Regen Sydney core team commence with a review of previous strategies so as to have a shared common ground during subsequent activities. Following an exploration of key precedent theories of change and a refresher about the basics of theories of change, the team delved deep into the complex metadesigning process. Individual reflections were alternated with group discussions as everyone moved through the various prompts on the template using a *backcasting* approach as shown in the diagram below - starting with articulating a shared vision then surfacing organisational pathways that could help to realise the intended impact.

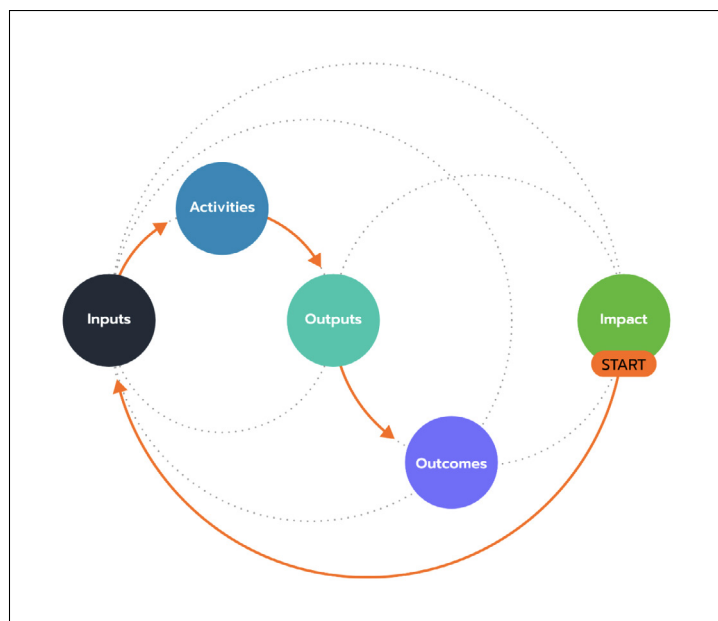


Figure 40. Building a theory of change based on a shared vision [Miro] (TIPC, 2022, p. 46)

The discussions of the first session led the Regen Sydney team to better articulate the skillsets held by team members, and those areas in which it would be valuable to develop greater capacity to serve intended outcomes. The questions and prompts contained on the template helped to guide the team into a level of granular consideration of organisational orientation and operational objectives that had not previously been collectively considered. The insights surfaced in this first workshop contained the seeds for what would eventuate as a refined theory of change through synthesis.

Overall my colleagues who took part in this first co-creation workshop stated on reflection at the end of the session that they found it a greatly enlightening and clarifying process. Another comment was that the introductory section was perhaps a little dense and complicated for those who had never previously come across theories of change of transition theory - something that could be remedied by having a separate

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- 6.3.2.2. The co-design process

introductory session or by sharing a recorded video. As the facilitator, I encouraged my colleagues to include both tangible expressions of current state practice, as well as aspirational framings of future state potential. Navigating this tension between current state and future state was an inherent part of the co-creation process for participants, as the theory of change itself acts as an organisational bridge from one to the other. Here, my facilitation attempted to be phenomenologically-aware in surfacing individual meaning-making processes and collective motivations.

6.3.2.3. Integrating embodiment practices

Principles and values were apparent throughout all activities in the workshop as the visions described in the impact section permeated subsequent explorations. Despite this level of engagement there was consensus amongst all colleagues that it would be valuable for the subsequent sessions to include mindfulness and movement exercises to help everyone engage with the processes in not only a cognitive, but also in emotive and embodied physical capacities.

I designed and facilitated the second session in response to these suggestions - spacing out the activities and not rushing through them as I did in the first session meant that colleagues felt less like 'they were in an exam'. Additionally, coupling workshop activities with grounding exercises (conducted by colleague Christie Wilson) meant that people were able to leave their anxieties at the door and be present in the session with their whole selves (Wilson, 2020). Shorter two-minute centring exercises at key junctures in the workshop when transitioning from one activity to another similarly allowed participants to reset and more smoothly ease into the subsequent activity. It was powerful to be able to bring not only our heads, but also our hearts and hands into the session. This is inspired in part by the Inner Development Goals which seek to "identify, popularise and support the development of relevant abilities, skills and qualities for inner growth" (IDG, 2021, p. 3). Creating space for everyone involved to meaningfully engage with their whole selves, also allowed for everyone to respectfully surface their own individual theories of change, implicitly carried by each participant into the collaborative discussions. Bronwen calls this a theory of good:

"You really have to start talking about a theory of good. And I think that's maybe the tension in my expertise - I prefer to frame it as about process and designing of institutions rather than necessarily as here's my theory of the good life. But of course, I have a theory. You need to come back to process and institutions because institutions stabilise the process."

Bronwen Morgan, Regen Sydney
Practitioner Interview

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- 6.3.2.3. Integrating embodiment practices

In addressing our personal orientations in this context, each participant was encouraged to address their assumptions inherently contained in points of discussion. Co-creating a theory of change “obliges us to constantly and repeatedly review the assumptions we use for interpreting reality so to better qualify our argumentation” (Eguran, 2011, p. 24). Team members found this step somewhat confronting as it brought up issues that are existentially challenging, however, *the fact that we were acknowledging our vulnerability in the face of colossally under-addressed interconnected crises brought us all together*, and in appreciation of our allegiance in doing this work together.

“I feel one of the opportunities with Regen Sydney and the regenerative movement is [the] opportunity in a collective moment that can feel hopeless and immobilising... so shifting that to say, well, hope is something that’s made through action. It’s not something you’re inherently born with.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

6.3.2.4. Interrogating and refining insights

The second co-design workshop had participants further unpack and add detail to data from the first workshop through a ‘transformative outcomes’ activity - which facilitated the creation of refined reframings of organisational outcomes through an ‘X-Curve’ (see Figure 41 below). This entailed the interrogation of the initial articulation of outcomes through specific questions provided by the Motion Handbook canvas, to map organisational focus areas onto a diverse set of roles in the discontinuing old system, or the rising new system.

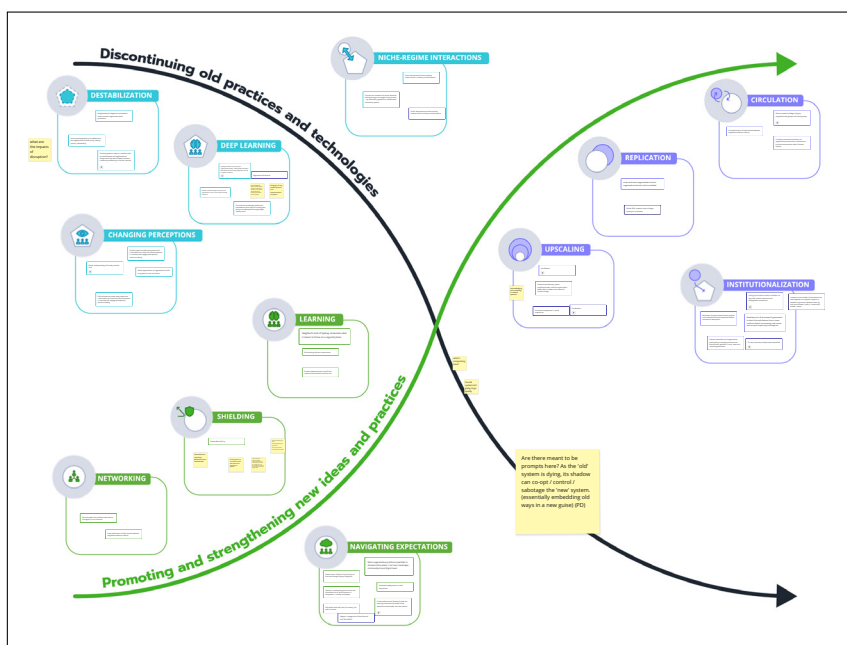


Figure 41. Drawing out Regen Sydney's transformative outcomes [adapted] (TIPC, 2022)

- 6. Designing for co-emergence in complexity
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 - 6.3.2.4. Interrogating and refining insights

The twelve transformative outcomes questions on the canvas allowed for a great deepening of the draft outcomes, including a few that were deemed not transformative and left off the X-Curve altogether. As with previous aspects of the theory of change co-design process, greater detail on the activity depicted in the screenshot above can be found in **Attachment 9**. The X-Curve activity prompted the team to explore the difference between general organisational outcomes and those that might actually be transformational to the field - the results of streams of work that have a better chance at eventuating the systemic shifts highlighted as intended long-term impacts. This exercise forced careful yet imaginative articulations of outcomes so that their role in catalysing systemic shifts was crystal clear.

While most of the team initially felt that Regen Sydney primarily played a role in strengthening niche initiatives from a groundswell of community interest (bottom-left of the X-Curve), the emergent reframings that this activity surfaced, showed that in fact, Regen Sydney as an organisation has an interest in all three areas of the X-Curve - including to transform established institutions, shift prevailing socio-cultural narratives, and scale across the neighbourhoods of Sydney. The X-Curve was seen as a valuable tool because of the simple way in which it visualises the dying and emerging systems. A valuable conversation about the limitations of the X-Curve highlighted that perhaps there should be some input to the bottom right of the diagram. The argument was that no system fully dies, and most definitely will not completely perish or perish easily. As the old system dies, some practices and structures will likely manifest into other forms, without falling neatly into desirable paradigms.

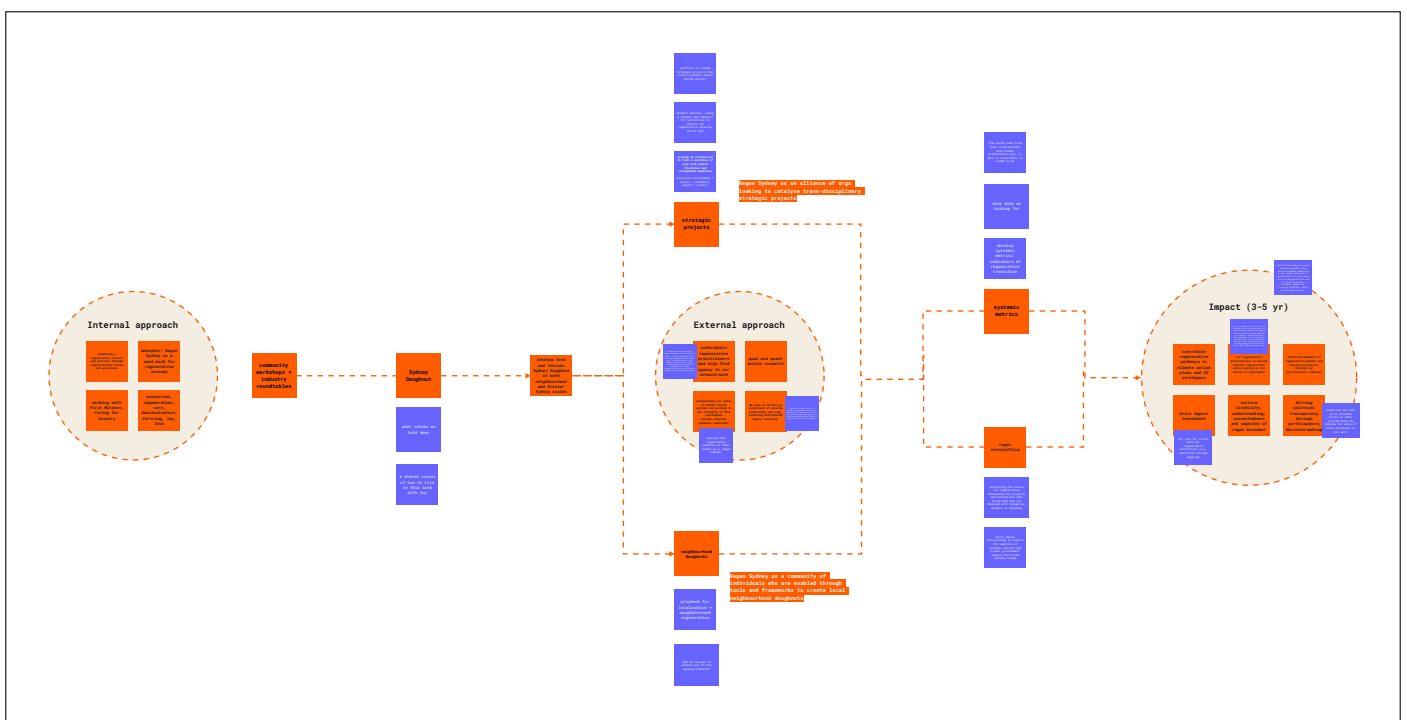


Figure 42. Draft synthesis of Regen Sydney's theory of change for team review

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- 6.3. Co-designed theories of change as guiding beacons
 - 6.3.2. Regen Sydney's approach
 - 6.3.2.4. Interrogating and refining insights

While the X-Curve itself was seen by some colleagues to represent a theory of change for Regen Sydney, this would be an incomplete representation, as it only depicts the systemic outcomes - omitting crucial aspects of organisational orientation, capability and the tangible areas of project activation. Through these discussions, there was a renewed recognition of the fact that the transformative outcomes outlined here specifically relate to Regen Sydney as an organisation; simultaneously, the team became clearer of the need to be cognisant of qualities of the broader regenerative transitions taking place to be able to better situate and focus Regen Sydney's scope.

The third and final theory of change co-design session involved the team refining the theory of change canvas based on the transformative outcomes activity, and subsequently reflecting on the emergent connecting themes. At this stage there were some clearly rising lanes of work - e.g. creating a Sydney Doughnut, storytelling, conducting neighbourhood-scale pilot projects and developing systemic metrics. These surfacing lanes of work were recognised by the team as vital for Regen Sydney to be able to prioritise areas of intention and action for the organisation. Further synthesis that I conducted after this third session served to reveal more pathways, as well as to add more detail to the interconnections between elements. Figure 41 on the previous page shows an early attempt to visually code themes in order to make sense of the insights surfaced, as well as to curate a nuanced depiction that captures both the *interconnected complexity and the iterative viability* of the strategy. All the colleagues subsequently left comment and critique on this artefact, helping to further progress the draft towards a final diagram.

Overall, my colleagues were grateful for the process that we went through during the three co-design sessions; reflecting on the process, participants found Miro to be efficient and effective for the creation of a theory of change. What was initially daunting became smooth and accessible after the three sessions; especially when considering that the engagement with large pools of data and forms of analysis afforded by Miro would likely not have been possible using non-digital tools.

6.3.2.5. Regen Sydney's theory of change

In the period of synthesis that followed the co-design sessions, I sought to use my expertise in visual sensemaking as a vital systemic design practice with which to mirror the regenerative economic ecosystem in Sydney, and to portray the strategic position that Regen Sydney looks to harness in its upcoming engagements. In order to do this multiple co-emerging layers of organisational strategy are presented in the theory of change²¹ - including guiding principles, overarching objectives, specific streams of work, along with intended outcomes and long-term impacts.

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Please see Attachment 10 for a detailed representation of Regen Sydney's theory of change.

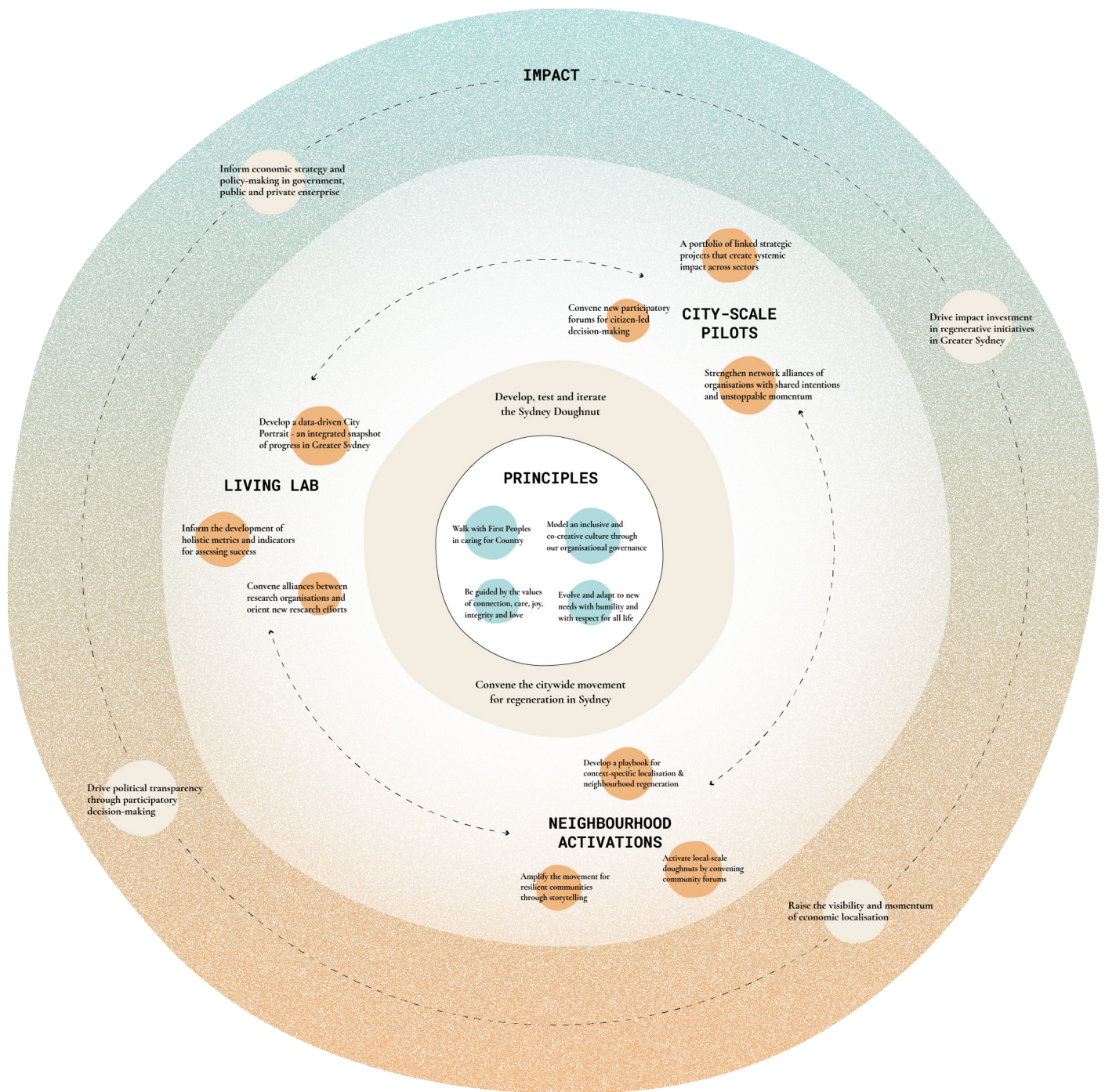


Figure 43. Regen Sydney's theory of change

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- 6.3. Co-designed theories of change as guiding beacons
- 6.3.2. Regen Sydney's approach
- 6.3.2.5. Regen Sydney's theory of change

To complement the doughnut-shaped visual depiction of the theory of change (seen in Figure 43 above and in **Attachment 10**), Regen Sydney has also included the following description of its raison d'être that helps to contextualise the three emerging lanes of work - *Neighbourhood Activations*, *City-Scale Pilots*, *Living Lab*:

Actions
[What we do]

If we develop, test and iterate a Sydney Doughnut as a collective vision for regeneration;

Activities
[How we do it]

By creating a portfolio of ambitious, linked, cross-sector, City-Scale Pilots, defining

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place-based and holistic measures of thriving through a Living Lab, and developing hyper-local Neighbourhood Activations;

Outputs
[Tangible results]

It will demonstrate what localised, thriving economies look and feel like, catalyse novel public-private partnerships and alliances, and amplify Sydney's role in the movement for resilient, responsible cities;

Outcomes
[System shifting pathways]

And consequently, raise the collective ambition of Sydney, inform economic strategy and policy-making in government, public and private enterprise, as well as raise the visibility and momentum of economic localisation and participatory decision-making;

Impact
[Long term]

In order to move Greater Sydney and all its diverse regions into the safe and just space for all life, where social foundations and ecological responsibilities are both met.

This theory of change has attempted to clarify the external strategic communications of Regen Sydney, whilst also crystallising internal alignment amongst the core team in the contributions of each colleague. In particular, the identification of three emerging streams of work (Neighbourhood Activations, City-Scale Pilots, Living Lab) was absolutely catalysed by the theory of change co-design process, and led to meaningful discussions in subsequent network collaborations to seek strategic validation and identify avenues for activation. Colleagues acknowledged that the theory of change showcases the breadth of Regen Sydney's work, rather than the depth; with subsequent strategy development attempting to answer the question 'how do the seemingly disparate streams of work and energy align towards our collective mission?'. This would form the basis for further development of an organisational mission to convene the three streams of work across the scales of Sydney.

In practice, the collaborative processes used here have been invaluable in surfacing a collectively held sense of ownership over the ongoing development of Regen Sydney as a decentralised convening body. There is no doubt that future revisions will have to be made as both the team and the context of work evolve, however, at the present moment, this theory of change is a coherent representation of the organisational role of Regen Sydney in effecting systemic change. See section [6.3.4.](#) for further analysis of Regen Sydney's approach to co-designing its theory of change, including comparisons with that of Coalition of Everyone.

6. Designing for co-emergence in complexity

6.3. Co-designed theories of change as guiding beacons

6.3.3. Coalition of Everyone's approach

6.3.3.1. Strategic foundations

A great deal of strategy development took place at Coalition of Everyone from the time of its organisational pivot towards bioregional governance. The newly minted organising team during this shift (as described in section 5.3.1.2.) benefitted greatly in aligning its purpose through a variety of activities, including defining 'Big Hairy Audacious Goals' (BHAG) and an organisational flywheel. The messy, emergent process of strategy development is captured in **Attachment 11**, which shows both earlier strategy development as well as the co-creation process colleagues went through to surface a theory of change - please refer to this document throughout section 6.3.3. The Figure below depicts one of these formative strategic activities - **The Hedgehog Concept** - which helped to surface a more nuanced framing of bioregional governance with respect to the systemic enablers and blockers present (Collins, 2009).

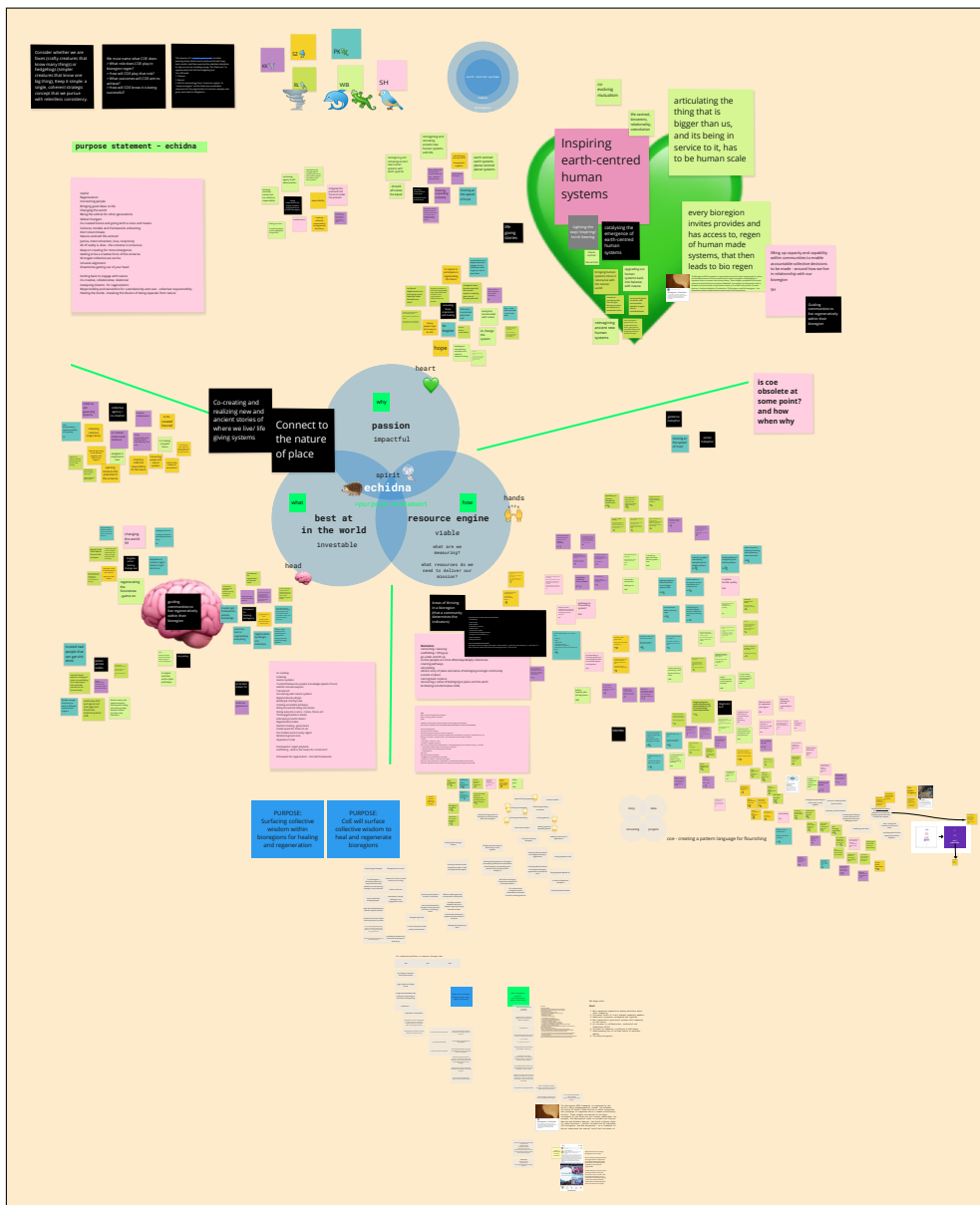


Figure 44. Strategy development at Coalition of Everyone using 'The Hedgehog Concept'

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.3. Coalition of Everyone's approach
- 6.3.3.1. Strategic foundations

There were many instances of collaborative strategy development such as the one shown in Figure 44 above, which sought to draw out a rudimentary purpose statement. At this stage, the Hedgehog activity helped to better articulate a *why* statement for Coalition of Everyone, all the while interrogating the instability and operational viability of the organisational offering. This particular activity went to demonstrate some key aspects about Coalition of Everyone, namely (1) that it was fundamentally oriented towards emergent systemic engagement, not only in specific client-facing sessions, but also more deeply in its objectives, network weaving and intended impact, (2) that the funding blockages foregrounded here, when discussing the viability of bioregional governance would come to represent a significant aspect of subsequent exploration, and ultimately core business, and (3) that the sometimes divergent views of the geographically decentralised team would inherently require further analysis of its guiding purpose through future strategy development sessions, including through the co-creation of a theory of change. Figure 45 is an expression of this framing of emergence - in effect depicting a systems convening framework for Coalition of Everyone.

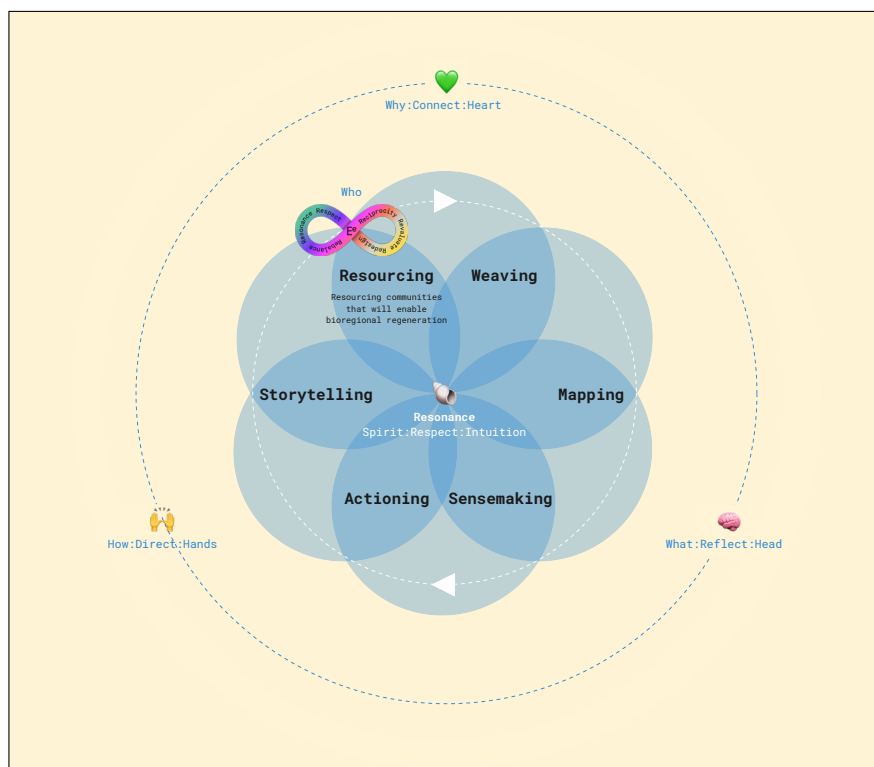


Figure 45. Coalition of Everyone's flywheel - a systems convening framework

The orientation towards co-evolving emergence in both strategy and practice was clearly acknowledged at this point, and in some ways lent itself towards a continuous, iterative reshaping of the organisational purpose. The flywheel seen above is a culmination of this ethos, framing the offerings of Coalition of Everyone in a way that in its broad brush language hoped to be applicable to diverse ways of engaging in actual project contexts.

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- 6.3.3.1. Strategic foundations

“It’s not just about defining and analysing what the system is. It’s also about understanding that the dynamic within a system is one of co-evolution - between the different constituents. [In] particular regenerative development is about the co-evolution of the human species, with the other species or the other stakeholders of the web of life.”

Laurent de Schoutheete, Coalition of Everyone
Practitioner Interview

As a systemic design practitioner I recognised the importance of developing a clear statement of purpose, however I also sought to ground such extensive, abstract discussions in tangible articulations of team skillsets, project activities and operational outcomes. The theory of change co-creation process conveniently offered itself up as a forum through which to further this intent.

6.3.3.2. The co-design process

Similar to the theory of change co-design sessions I facilitated with Regen Sydney, the process with Coalition of Everyone covered the following broad arc (albeit in one session rather than three): (1) surfacing the components of a theory of change, (2) interrogating calls to action through a transformative outcomes framework, as well as (3) refining the contributions and reflecting on the process. My personal contributions to this process included curating the Miro board and runsheet in the lead up to the sessions, as well as in synthesis and visual sensemaking after the conclusion of the co-creation workshops.

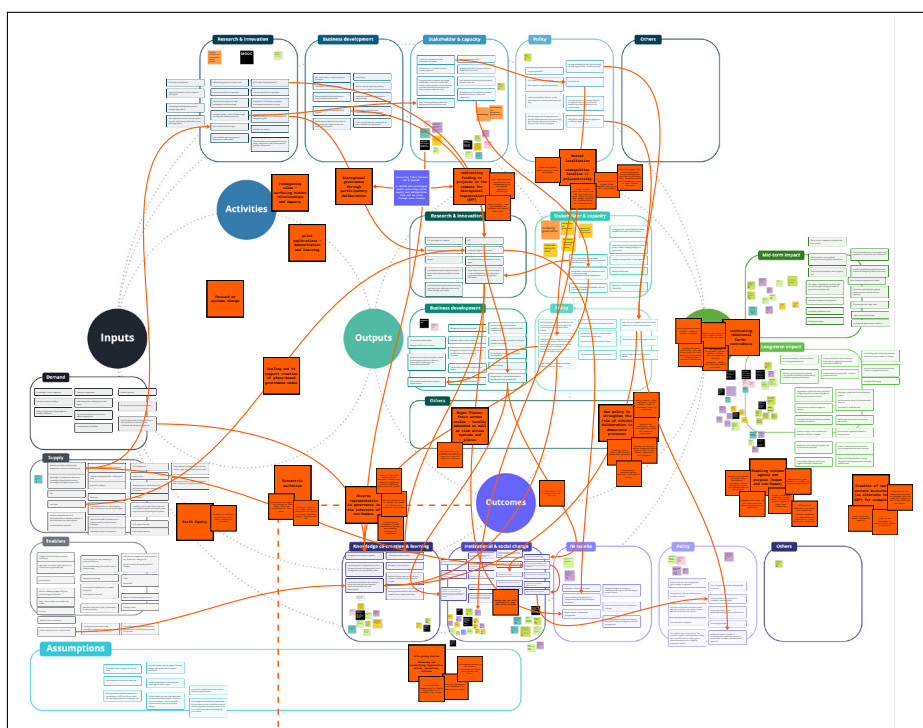


Figure 46. Co-creating Coalition of Everyone's theory of change [adapted] (TIPC, 2022)

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.3. Coalition of Everyone's approach
- 6.3.3.2. The co-design process

After an introduction to the basics of theories of change, a backcasting approach was used to progress through the co-design (as with Regen Sydney - see Figure 40). Despite the constraints of the co-design being limited to one workshop only, my previous experiences from conducting the Regen Sydney sessions prepared me to facilitate in a relational manner in this context. I used the same canvas as with Regen Sydney, shifting my prompts to better suit the professional backgrounds of my Coalition of Everyone colleagues. The time limitations also meant that the transformative outcomes exercise was omitted, although this allowed for a slower pace with the primary theory of change activity - detailing intended impacts, organisational inputs, activities, outputs and outcomes.

My colleagues were encouraged to hold lightly the organisational pivot towards place-based resourcing, and other related concerns about organisational governance across two distinct areas of work. This included the prospect of Coalition of Everyone (CoE) housing the body of Earth Equity work under a separate for-profit organisation given the working name of CoELAB. In the lead up to this theory of change co-design session, CoELAB had been a key aspect of discussions - in particular with regards to how the varied strategy and areas of focus would be divided up between the two primary bodies of work (and potentially two complementary organisations). For the theory of change workshop however, I foregrounded this organisational tension, and encouraged participants to consider aspects across all areas of focus, with divisions between CoE and CoELAB to occur subsequently during synthesis and refinement. With this overarching scope for the session, participants were able to easily engage with the first visioning activity, and collective articulations were coherently stated.

The diversity of skillsets on the team, as well as the breadth and depth of our networks were brought to the fore by colleagues' contributions - highlighting areas such as business and finance, regenerative design, community engagement, and Earth Equity. The deeply multidisciplinary approach of the team became clear, along with the call to harness trusted network relationships in order to work across scales. A nuanced framing of the intent to work across systems, places and scales emerged in enabling localisation and citizen agency. Team members sought to find a balance in the work that straddles deep engagement with local councils through deliberative engagements, whilst also engaging at other scales - to shift funds from global to local projects, and share knowledge across regions. These tensions were leant into during the session, with a collective acknowledgement that blockers themselves are often equally powerful enablers when considering paradigmatic shifts - the challenges exemplified by centralised structures of funding and governance could in fact help to catalyse localised, decentralised forms of decision-making and resourcing - albeit hastened by systemic shocks (Johar, 2023).

- 6. Designing for co-emergence in complexity
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“One of the big things is feedback loops. How can you create a system with the right kind of feedback loops, where the behaviours that you want to see within individuals or organisations within that ecosystem are rewarded, and that those behaviours will lead to a healthier overall ecosystem?”

Reggie Luedtke, Coalition of Everyone
Practitioner Interview

In the spirit of Reggie's comment, the need for Coalition of Everyone to work emergently was raised again in its drive to *sense and respond to feedback loops in the system*. Not only was systemic funding noted as a negative feedback loop for the development of many regenerative initiatives, but also in attempting to shift social practices, the team acknowledged that disruptive positive feedback loops could also be cultural. The organisational outcomes articulated by the team reflected this dynamic, primarily defined by the decentralised social infrastructure that Coalition of Everyone sought to strengthen and develop.

At the end of the workshop, colleagues mentioned how free flowing the distillation of insights was throughout this process, especially as we progressed through the canvas. Even those who had never previously participated in co-designing a theory of change commented that they were easily onboarded, and that Miro was a very effective tool for these ends. There was a sense of overwhelming accomplishment amongst my colleagues when reflecting on the amount of progress that was made in such a short time - the trust that was instilled in me as the facilitator certainly enabled me to ease their cognitive load whilst attempting to guide the strategy to a greater level of detail.

6.3.3.3. Refining and synthesising contributions

Working with the insights noted on the Miro canvas, I proceeded to thematically analyse the data, forming interconnecting threads through the various lenses of exploration, as well as interrogating the outcomes through the 'transformative outcomes' X-Curve activity in lieu of doing it collaboratively with my colleagues. The strategic outcomes were satisfactorily vetted and refined during my solo efforts, however it was regrettable that colleagues were not able to participate in the activity themselves. Consequently, there was a greater chance of the synthesised outcomes, as well as of the final theory of change artefact itself not have a sense of shared ownership amongst the whole team. Figure 47 on the following page shows the X-Curve canvas (please also see **Attachment 11** for greater detail), in which it is clear that the outcomes Coalition of Everyone seeks to realise are largely in the bottom left corner - strengthening niche ideas, practices and networks. The visionary orientation of the organisation is inherent in these propositions.

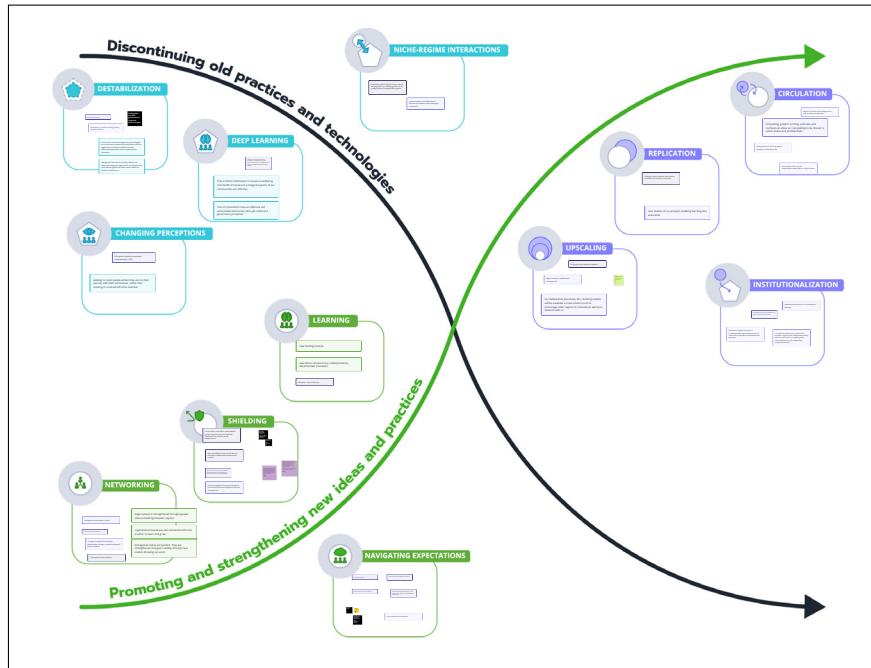


Figure 47. Drawing out Coalition of Everyone’s transformative outcomes [adapted] (TIPC, 2022)

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.3. Coalition of Everyone’s approach
- 6.3.3.3. Refining and synthesising contributions

The themes that arose in synthesising the messy interconnected theory of change canvas aligned with three broad streams of engagement (outlined below, and explored in greater detail later in the thesis):

Participatory governance

- Local government engagement and the strengthening of citizen agency through deliberative forums such as citizens’ assemblies
- Advocating for and influencing policy, regulatory and law reform so as to better serve distributed decision-making

Network weaving

- Connecting regenerative initiatives across places and scales, so as to strengthen the wider movement (as in Regen Places)
- Sharing knowledge and skills so that the system of practitioners can better see itself

Earth Equity

- Shifting funding to locally pooled funds known as ‘Earth’s Bank Account’ so communities might better resource their own regenerative initiatives
- Supporting companies to reimagine value by putting nature on their boards

Complementing these primary themes of organisational intent, activity and outcomes, the synthesis also revealed that inherent to all of this work was (1) a need to represent non-human perspectives and interests

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 - 6.3.3. Coalition of Everyone's approach
 - 6.3.3.3. Refining and synthesising contributions

throughout, (2) an acknowledgement of the importance of storytelling to normalise regenerative values, worldviews and cultures, and (3) the intent to seek the development of pilot projects that demonstrate the value of each stream of work. Further crystallisation of these focus areas was very advantageous to the team, especially when trying to characterise the dynamic that exists between the two entities - CoE and CoELAB - as they engage in these areas of work. Sessions to synthesise the theory of change with some colleagues led to the framing of CoE and CoELAB together as an *innovation engine* - that can test and prototype innovative models for both governance and resourcing. This process of codifying the streams of work as coming under the remit of CoE or CoELAB fed into the first draft of a theory of change, as seen below.

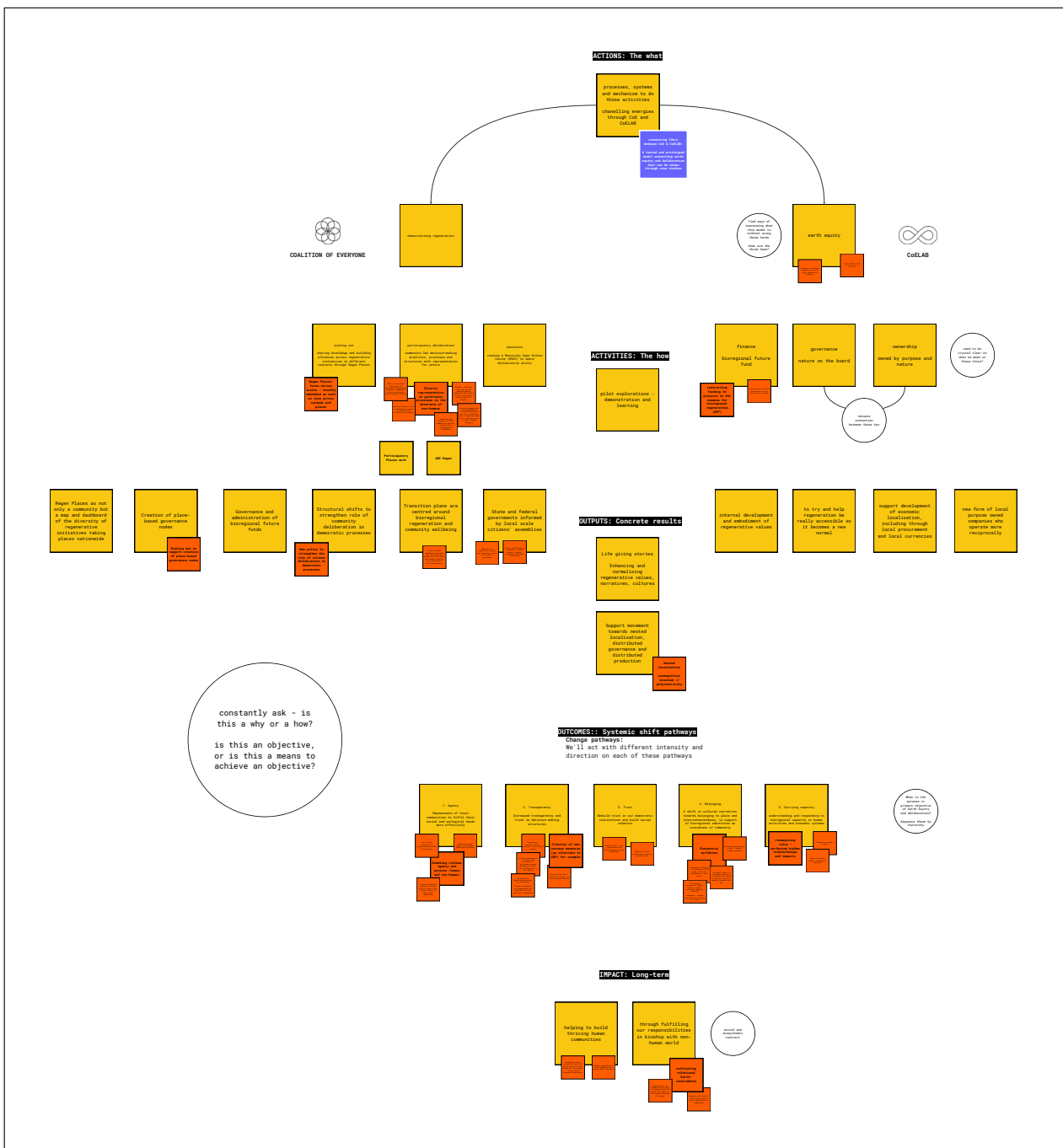


Figure 48. Draft synthesis of Coalition of Everyone's theory of change for team review

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.3. Coalition of Everyone's approach

6.3.3.4. Coalition of Everyone's theory of change

The next few iterations of synthesising the theory of change sought to continue to clarify the different offerings of CoE and CoELAB. It was important to attempt to strike a balance between providing ample detail on each stream of work, whilst also providing concise articulations of the overarching strategy, without being inaccessibly overwhelming. My visual sensemaking efforts were once again put to use to create the final draft of the theory of change - seen below in Figure 49, as well as in Attachment 12 with greater detail.

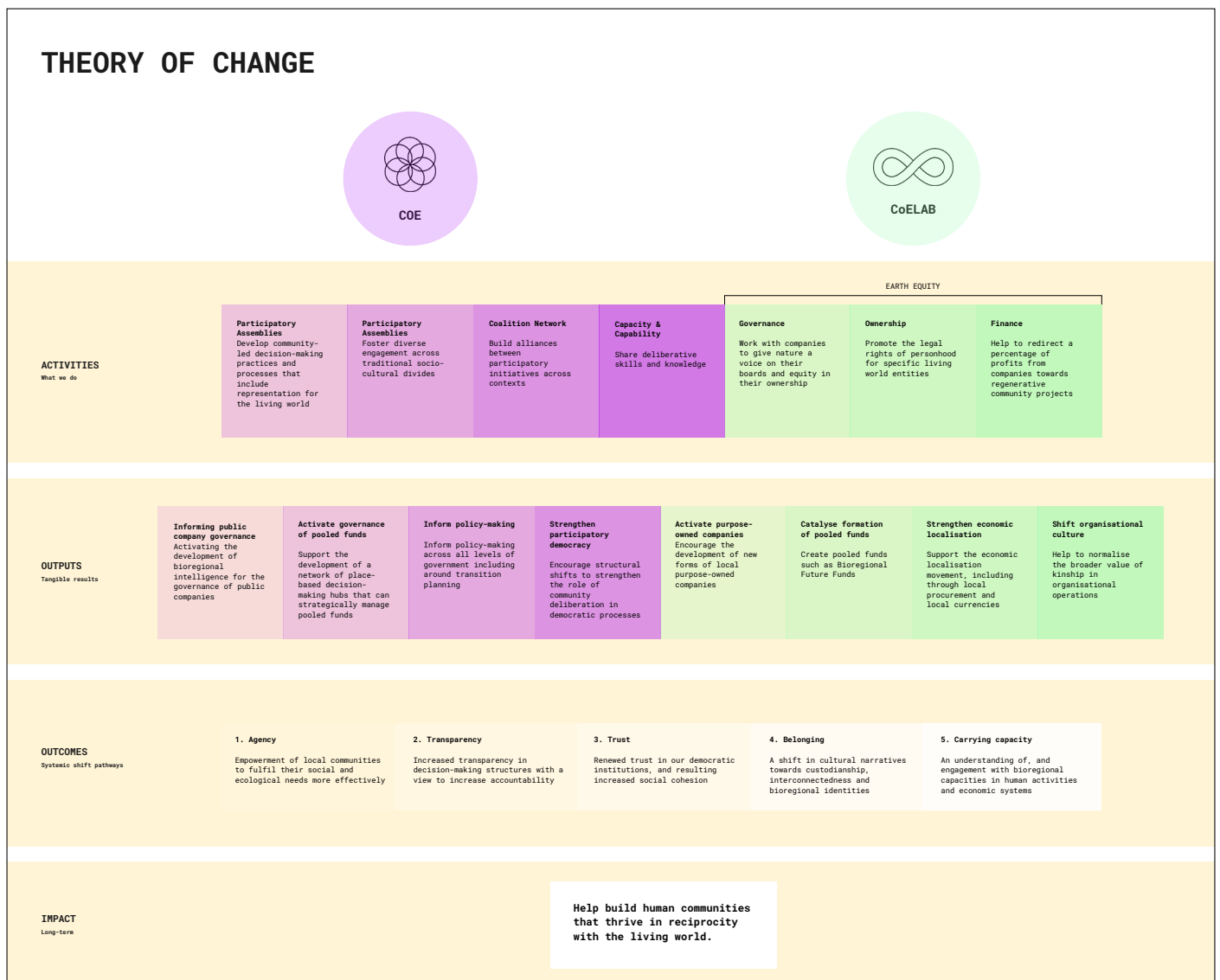


Figure 49. Coalition of Everyone's theory of change

My role as a systemic design practitioner on the team, compelled me to classify this theory of change as a working draft, as it does not yet have the level of resolution required to elegantly communicate the organisational orientation and strategy, nor a visual language that captures the essence of Coalition of Everyone. This artefact does indeed contain a foundational outline of organisational operations, albeit presented in a linear fashion. Whilst the intent was there amongst myself

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 - 6.3.3. Coalition of Everyone's approach
 - 6.3.3.4. Coalition of Everyone's theory of change

and some colleagues to continue to refine and develop this theory of change artefact there were competing interests arising in the form of a desire to refine streams of work, further clarify the relationship between CoE and CoELAB, as well as to again explore the organisational purpose through other approaches. Consequently, final refinement of the theory of change was put on hold, so that other avenues of strategic exploration might be undertaken.

6.3.3.5. Revisiting organisational purpose

It seemed as though the level of detail required by the theory of change co-design process was somewhat challenging to the team, as it brought up deeper questions of organisational alignment, especially when considering that some colleagues had only been involved with Coalition of Everyone for a relatively short time, thus feeling the need to more deeply contribute their own personal change-making praxis to the cause. This resulted in the team revisiting philosophical considerations of the organisational purpose through subsequent collaborative workshops. Streams of work, as well as the relationship between CoE and CoELAB were included in these discussions; Figure 50 below depicts my contribution, which was unpacked along with diagrammatic articulations from other colleagues.

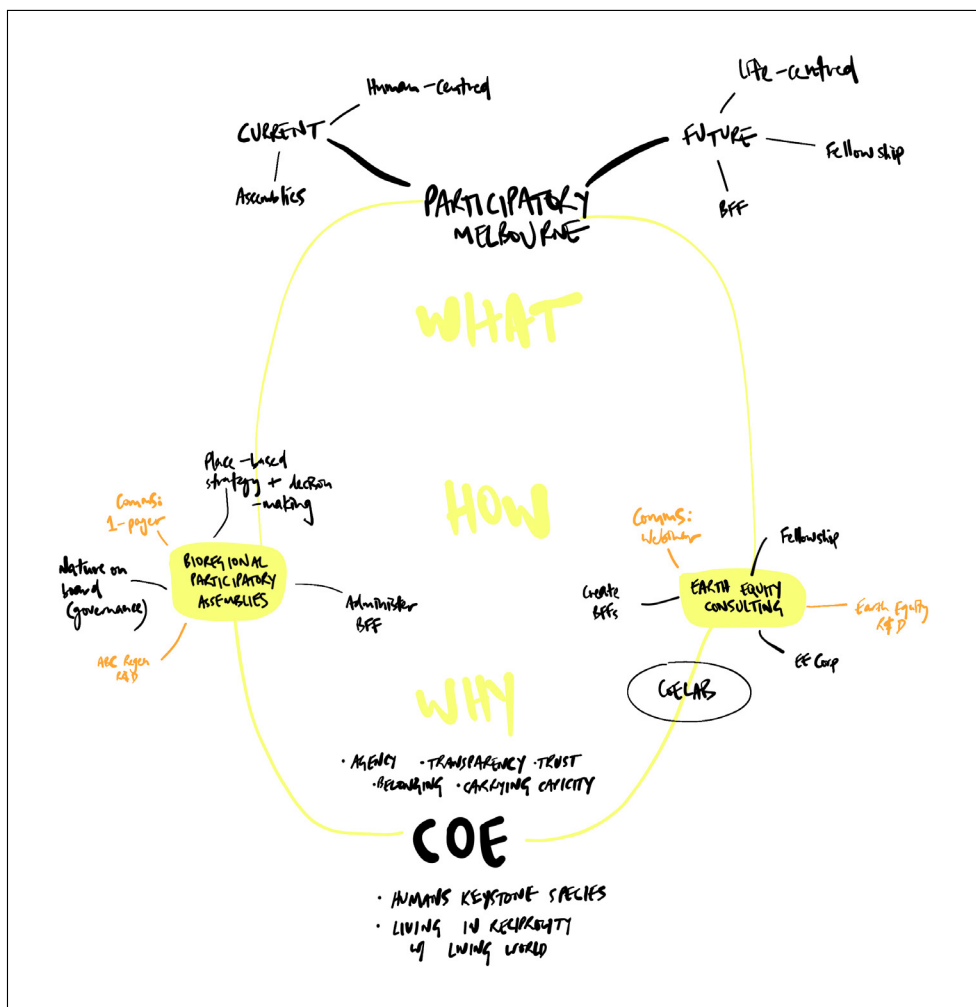


Figure 50. Revisiting the question of Coalition of Everyone's organisational purpose

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.3. Coalition of Everyone's approach
- 6.3.3.5. Revisiting organisational purpose

It was somewhat frustrating to me to return again into interrogations of the *why*, as more of the collective energy was spent on abstract conversations rather than in progressing a detailed articulation of our operational strategy and mission. These explorations led to the development of a program logic that organised the organisational strategy in a slightly different hierarchy to the draft theory of change.

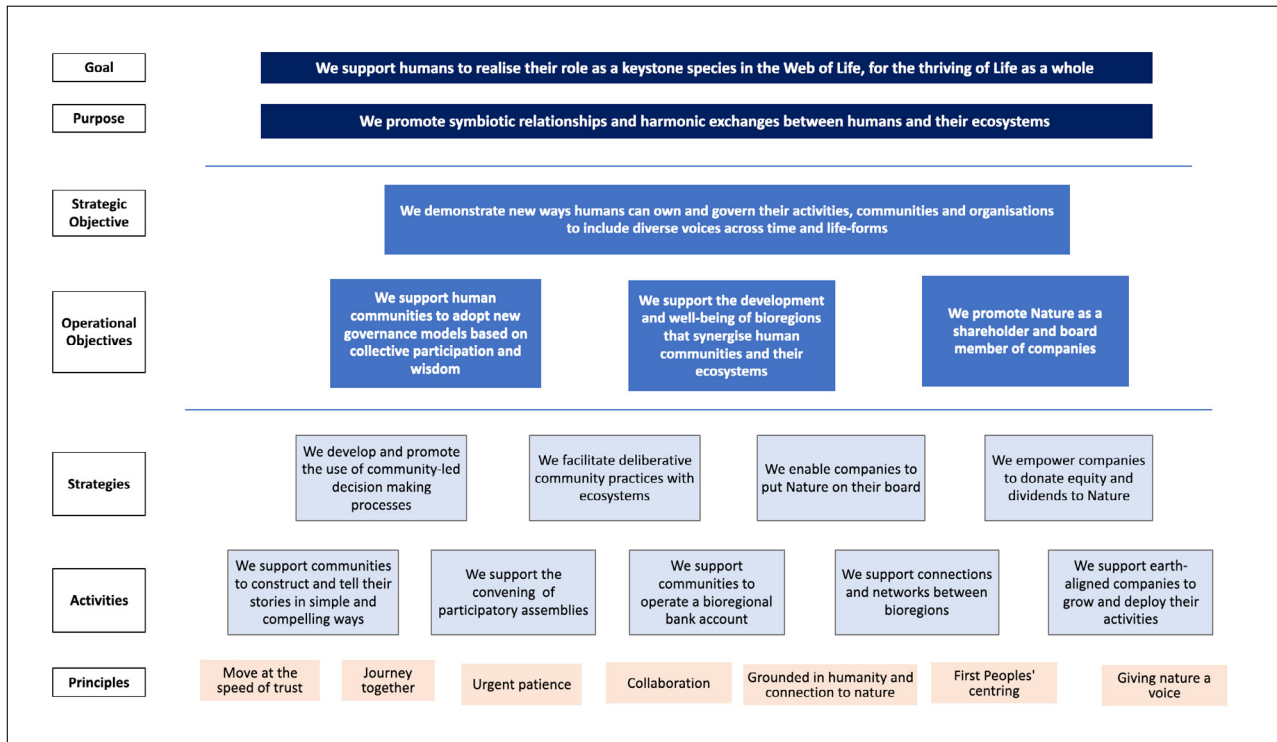


Figure 51. Coalition of Everyone's program logic

Whilst this program logic contains a revised organisational purpose statement²², it also highlights the continued challenge of delineating the specific offerings of CoE and CoELAB, and the conflation of systemic leverage points across the participatory governance, network weaving and Earth Equity focus areas. Consequently, this resulting program logic is diffuse and not pointed towards specific fields of expertise, nor particular contexts in which activities are to take place.

6.3.4. Lessons and insights

Reflecting upon the theory of change co-design workshops in my two sites of research has shown me that to the layperson, a theory of change might be thought of as a form of organisational strategy. However, this framing does not adequately capture the value of theories of change in systems-level transitions, for there are some key qualities and distinctions that make them uniquely important, including (1) their articulation of long term impacts, that are systemic in scope and outside of the sole jurisdiction of the collective in question, (2) a clarified expression of team skillsets and fields of expertise that can be leveraged towards areas of action, (3) an understanding of the transformative potential of

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 “We support humans to realise their role as a keystone species in the web of life, for the thriving of life as a whole.”

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the proposed work, and its role amongst an ecosystem of initiatives in realising the identified long-term impacts, (4) a framing of short-mid term deliverables that complementarily feed into an articulation of multi-stage organisational engagements, and (5) an evocative representation of the values and culture of the collective in question, through the visual language of the artefact (Reeler & van Blerk, 2017; Tonkinwise, 2023).

Theories of change that successfully embody the above characteristics, will have inherently acknowledged that systemic shifts are by their very nature complex, messy and interconnected - not linear processes that can be neatly categorised. In this vein, theories of change - including their narrative text, and visual representations - should strive for holistic and relational qualities, rather than the reductive structures seen in some strategic frameworks and program logics.

6.3.4.1. Finding strategic coherence whilst enabling emergence

At Coalition of Everyone, the pivot towards Regen Places and Earth Equity was strategically justified, especially considering the ubiquitous nature of systemic funding blockages faced by regenerative initiatives nationwide. Whilst the subsequent development of programs of work focused on Earth Equity pertained a valuable shift in organisational operations, the specific period of strategy development and theory of change formulation described here in section 6.3. was uncertain for me both as a team member and systemic design practitioner. The fragmented and diffuse spread of organisational purpose seemed to exacerbate the conflation of the two entities, CoE and CoELAB, as well as stifling the development of strategic coherence, in pursuit of emergent qualities - especially with regards to network weaving.

Emergent partnership-building led to shifts in both the organising team and the strategic purpose of Coalition of Everyone during this period. The emergent and dynamic organisational strategy in this context was a double-edged sword - whilst it allowed for sound articulation of a response to systemic funding blockages, there was a distinct lack of team resources devoted in an ongoing manner to fully realise the potential of operations in the participatory governance focus area (despite continued interest). Coalition of Everyone, in this manner, was fundamentally characterised by emergent practices and outcomes, through the ongoing co-evolution of strategic intent, as well as in the shifting areas of operational focus, and in the changing members of the organising team itself during this period.

Although funding was validly identified as a systemic blocker, and Earth Equity offered great potential in response, the skillsets and capacities of the team (at the time of co-designing this theory of change) were not

- 6. Designing for co-emergence in complexity
- 6.3. Co-designed theories of change as guiding beacons
- 6.3.4. Lessons and insights
- 6.3.4.1. Finding strategic coherence whilst enabling emergence

commensurate to meeting this objective - in particular with regards to the need for legal and organisational governance expertise on the team. On reflection, I find that co-designing a theory of change could perhaps be more organisationally meaningful after a period in which colleagues have already been working together on projects as a team. The practical hands on experience in the context of project-work would help to ground the strategy in viable systemic opportunities and the individual skillsets of colleagues, helping to take theory of change co-design processes outside of abstract considerations²³.

At this point it is worth revisiting the Regen Sydney context, where the strategy development and theory of change co-design processes were anchored in a stable core team, and an organisational purpose guided (at least in part) by the Doughnut Economics framework. Since its inception, Regen Sydney has gone through an iterative journey of emergent development, characterised by both inward strategic and cultural formation, as well as outward project-based community and network engagement. This ongoing cycle of focusing inwards then outwards included building collaborative engagement upon revised strategy, and continuing the process to actively evolve organisational direction through reflective practice. A rough summary of this journey is as follows:

Early strategy + vision → background collaborative research + public events → theory of change → community workshops + stakeholder roundtables → operational mission with three streams of action → ?

This sort of iterative (inward + outward) process is likely more suited to the formative stages of systems convening rather than project-based consulting. Regardless, through the stages outlined above, Regen Sydney maintained a solid connection to its vision for regenerative economics in Sydney, whilst also nurturing a flexibility to have its emergent form shaped by broader network engagements. It is in finding this balance that systemic design practitioners can grapple with the role of emergence in strategy development and theory of change co-design - processes that are otherwise primarily geared towards developing greater clarity and coherence in collective orientation and operations.

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As I write this, many months after my period of participant observation, I find that the three areas of focus for Coalition of Everyone have further crystallised, and while emergence is sought out through partnerships and network weaving, the stable organising team has afforded a much greater strategic coherence.

6.3.4.2. Impact through both data and story

Across the sites of research there was a notable desire to surface both qualitative and quantitative approaches in emerging programs of work - expressed as 'activities' in the theory of change artefacts. Through the theory of change co-design, colleagues at Regen Sydney and Coalition of Everyone highlighted the value of leveraging (qualitative and quantitative) data along with storytelling to effect greater impact through the work. In this section I unpack the strategic importance of this multi-pronged approach in the regenerative economic context.

- 6. Designing for co-emergence in complexity
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- 6.3.4.2. Impact through both data and story

The fieldwork highlighted a pre-existing bias towards quantitative data in modernist economies, due to its perceived objectivity, which when combined with geopolitical concerns, explains (at least in part) the worship of STEM fields and the political denunciation of the social sciences, which are heavily qualitative. Quantitative data gathered through indicators to measure the success with which social needs and ecological thresholds are being met can indeed be valuable in providing an analytical lens through which to respond effectively. Rightly so, both Regen Sydney and Coalition of Everyone seek to incorporate such methods into their programs of work, so as to shift towards more suitable metrics than the self-annihilating GDP, as well as to draw in attention from key institutional actors from the prevailing socio-economic system.

The focus on qualitative data and storytelling seems more natural for the two organisations, especially as convenors of diverse sets of collaborators who have varying lived experiences, and levels of literacy with quantitative data. Empirical qualitative approaches to collaborative research continue to be invaluable at both Regen Sydney and Coalition of Everyone, as a way to surface and highlight the quality of relationships between various human and non-human actors in the networks (Golias, 2019). Alongside this, there is an innate relevance of narrative mediums that guides the behaviours of everyday citizens and professionals alike, that is not shared by the cold analytical opportunities offered by quantitative data. Willow evokes the multitude of expressions through which to conduct storytelling, in shifting to alternate underpinning societal narratives.

“The closest thing between us is story. And so [we’re] trying to tell the story of this alternative narrative that is so much more enticing and so much more beautiful, and trying to open it up so more people can see it, understand it, experience it, touch it, feel it and sense it. And good design is here to help us manifest a different reality [through storytelling and visualising and sharing.]”

Willow Berzin, Coalition of Everyone
Practitioner Interview

The embodiment and communication of regenerative cultural frames through storytelling continues to be central to both organisations, in particular to draw in new partnerships and to grow networks of influence. Engaging with (qualitative and quantitative) data can be complementary to this dynamic, through its potential to encourage greater participation from collaborators in government, corporate and research institutions, as well as to provide legitimacy to work streams through metrics for evaluation and impact. My two sites of research seek to catalyse this intention through different approaches: Regen Sydney’s Living Lab with

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its collaborative research to develop holistic indicators for progress using the Sydney Doughnut (see section [7.3.3.2.](#)), and Coalition of Everyone’s Earth Equity with its Earth’s Bank Accounts to quantify and share value at local, city and bioregional scales (see section [7.4.2.2.](#)).

There is a clear role for harnessing both qualitative and quantitative data in the regenerative economic transition, which can be further elevated through creative means of communication. By finding a rich expression of quantitative data with qualitative characterisations and narrative mediums, there can be a communion of means that has the vitality and relevance of storytelling, the accessibility and nuance of qualitative data, as well as the legitimacy and accountability of quantitative data. Esteemed biologist Brian Goodwin similarly advocated for a multi-pronged approach, calling for a “science both of quantities and of qualities” (Goodwin et al., 2001, para. 27). As the theories of change have surfaced, it is essential to connect with these varied means of engagement in service of the systemic shifts that Regen Sydney and Coalition of Everyone are attempting to foster - towards a profound reshaping of the relationship between humans and the non-human world - and the expressions of that in economics and governance.

In the following section [6.4.](#), I will explore how the theory of change processes led to subsequent development of programs of work - with a view to enable multi-stage transitions. The strategies contained across both sites of research reveal the potential of multiple interventions of pilots and prototypes that act together to catalyse broader missions.

6.4. Mission-oriented portfolios of linked projects

Conventionally, co-design and strategic design have been concerned with wicked problems, ultimately looking to reframe and reform existing structures and social practices through multi-stakeholder engagement. Moving beyond reformism, systemic design practice at Regen Sydney and Coalition of Everyone, as well as my role as a Transition Designer more broadly, work towards a systemic order of shifts - including through convening alliances of organisations and initiatives across wide-ranging cross-sector objectives (Fastenrath et al., 2023). Engaging in this space, one cannot ‘solve a system’ in the same way that they can ‘solve a problem’, rather collaborators come together through a long-term vision-led approaches to forge novel coalitions, build new pathways and nurture cultures of care to shift systemic paradigms (Ricigliano, 2021).

6.4.1. Key foundational approaches

6.4.1.1. The mission-oriented innovation model

This vision-led approach to systems convening at Regen Sydney and Coalition of Everyone has included the collaborative articulation of guiding North Stars - which could also be framed as *grand challenges* in the language of leading economist Mariana Mazzucato (2017). With a focus primarily on integrated (rather than fragmented) policy innovation, Mazzucato describes grand challenges as strategic focus areas that can be targeted with *missions* that tackle specific objectives harnessing multiples *sectors* through a diverse range of *mission projects* (2018a; Fastenrath et al., 2023).

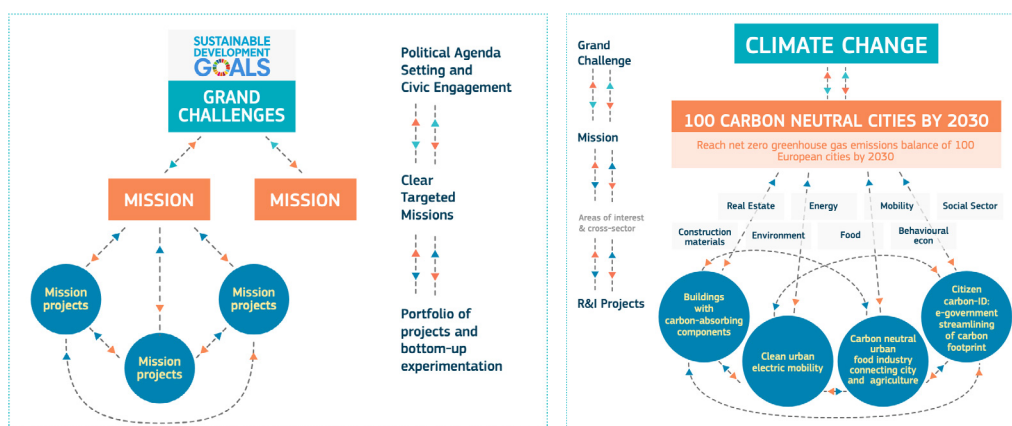


Figure 52. Mariana Mazzucato’s mission-oriented innovation model, with an example (2018b, p. 11 & 22)

Mazzucato suggests that her framework for mission-oriented innovation should seek to meld top-down policy with bottom-up experimentation through cross-sector collaborative relationships: “missions may require consensus building in civil society, combining the need to set directions from above with processes of bottom-up experimentation from below” (Mazzucato, 2017, p. 6). In her writings, mission projects are said to embrace this stated combination of top-down and bottom-up approaches, however, the act of defining missions in the first place is purported to be something

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- 6.4.1.1. The mission-oriented innovation model

carried out by governments and public policy agencies, rather than through participatory processes as has been conducted by Regen Sydney and Coalition of Everyone with a diverse range of citizens and stakeholders. Regardless, the mission-oriented approach that she has developed since 2013 continues to be hugely influential in helping practitioners to shape bold yet feasible portfolios of projects, including those working in the field of systemic design practice (Kattel & Mazzucato, 2023).

6.4.1.2. Participatory mission-oriented approaches

Dan Hill, Professor of Design at The University of Melbourne, has built upon Mazzucato’s model in his book ‘Designing Missions’, showcasing methods for, and case studies of its participatory application, as well as drawing synergies with systemic design practice (2022). Similarly, the ‘challenge-led innovation’ model developed by Griffith Centre for Systems Innovation surfaces the micro processes and practices that underpin systems innovation (Burkett et al., 2023a). These participatory reframings of Mazzucato’s mission-oriented innovation model resonate deeply with the processes undertaken by Regen Sydney and Coalition of Everyone, especially with regards to ‘identifying relevant innovators’ who have collaboratively articulated North Stars for the organisations.

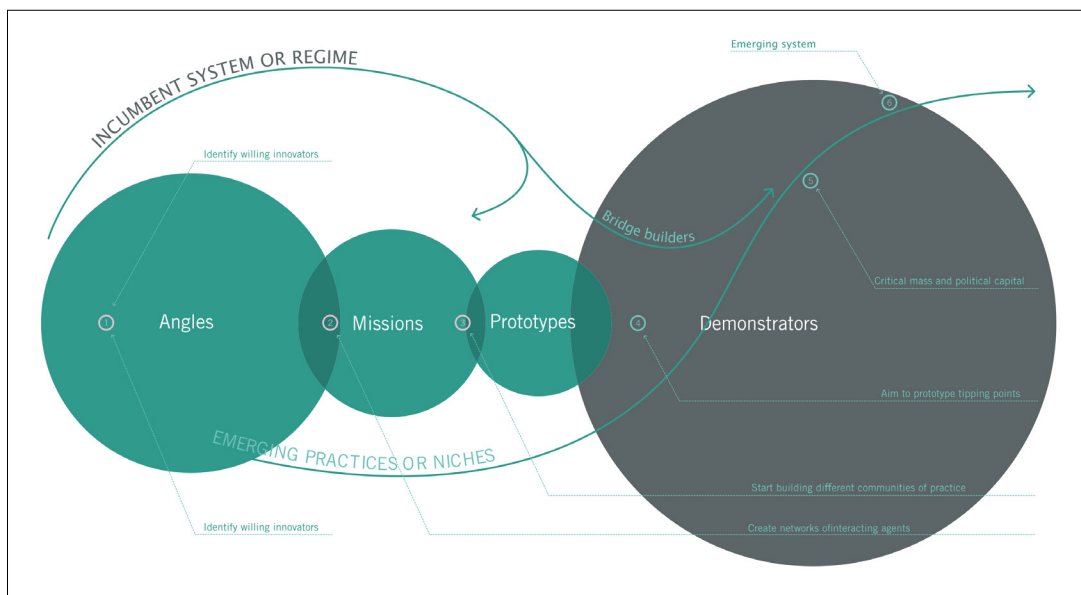


Figure 53. Dan Hill’s adapted mission-oriented innovation model (Hill, 2022, p. 142)

Developing missions and portfolios of projects around a guiding North Star has required my two sites of research to carefully consider place-based opportunities that might lead to transformative outcomes. In bringing the potent lens of systemic design practice to Mazzucato’s model, Hill similarly indicates that grounding a mission in the specific context of a place is an absolutely central aspect of developing portfolios of projects. With this sort of grounding, and the iterative approach of systemic design practice, such projects can lead to tangible outcomes at the street level, rather than only conceptual abstractions.

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6.4.1.3. Ecologies of projects

The descriptions of ‘portfolios of projects’ by both Mazzucato and Hill find a remarkably similar framing in Transition Design literature - called *ecologies of projects* (Irwin, 2019). Co-originator of Transition Design, Terry Irwin describes these ecologies as “linked projects [that] serve as both systems interventions and steps along transition pathways toward co-envisioned futures” (2019, p. 172). Ecologies of projects are collaboratively articulated in the Transition Design process (as seen below), through backcasting from previously generated visions and stakeholder analyses. This process is adept at surfacing multi-stage iterations of projects over time, including through the use of transition theory tools such as the Multi-Level Perspective (MLP) - to be explored in section [6.4.2.1](#). The Transition Design approach employs a thoroughly place-based and participatory approach similar to Dan Hill’s version of mission-oriented innovation - both having scope to influence policymaking, as well as to shape socio-material infrastructures.

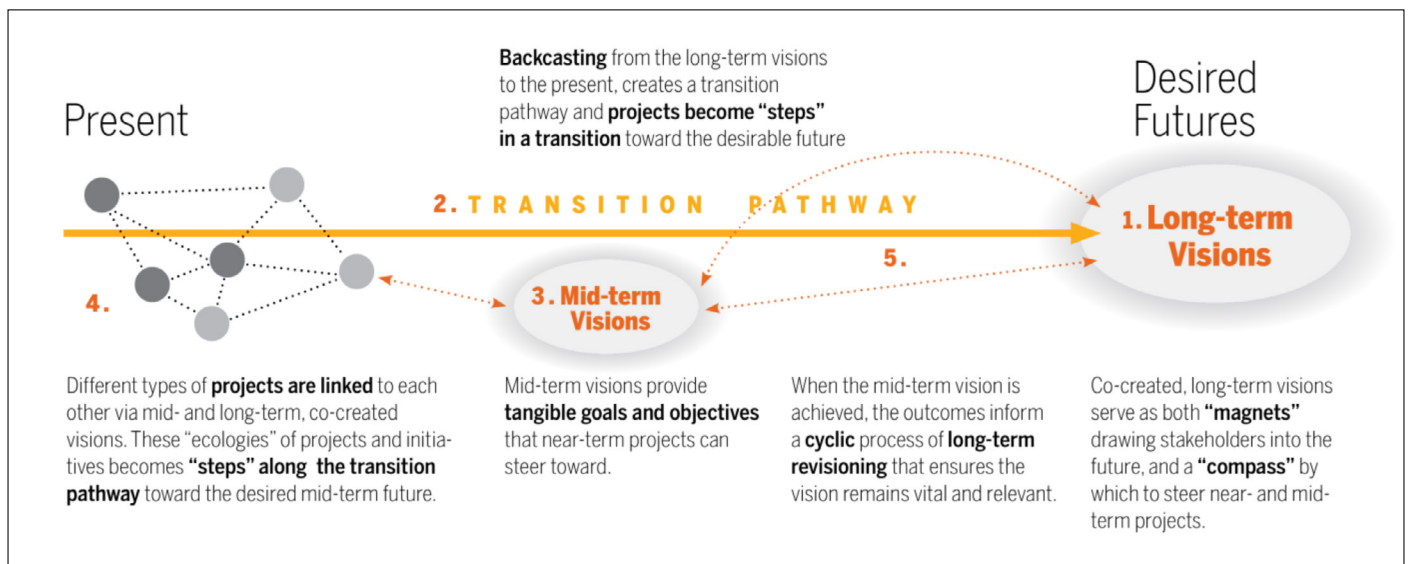


Figure 54. Developing ecologies of projects with Transition Design (Irwin, 2018, p. 12; source: Irwin, Kossoff & Tonkinwise)

Transition Design’s ecologies of intervention are inherently mission-oriented because of their vision-led co-design process - which starts with the co-creation of what is effectively a North Star for collaborators. However, there are some differences of note between mission-oriented innovation and ecologies of intervention - including that the former is more explicitly aimed towards the long-term systemic convening of collaborators, working within the paradigm of existing power structures, and that the latter through its deeply participatory process is better equipped to detail the qualities of a portfolio of projects, with its orientation to transform incumbent power structures. This is not to say that one approach is better than the other, but actually to call for appropriate use of all these qualities in systemic design practice.

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6.4.1.4. Application in practice

In summary, despite their slight variations, the approaches described above could all be said to advocate for an ambitious ‘North Star’ strategic vision to guide the iterative development of a cluster of complementary projects that coalesce otherwise disparate actors and sectors towards collaboratively realising a shared mission. Bold yet feasible mission-oriented portfolios of projects can catalyse collaborators to work coherently across sectors, particularly with the help of well articulated directional goals (Goulden & Kattel, 2024; Griffith Centre for Systems Innovation, 2021; Olsen-Boyd et al., 2023).

In the contexts of Regen Sydney and Coalition of Everyone the development of mission-oriented programs of work took place after the theory of change co-design processes. From my experiences in the two sites of research, I find that the theories of change acted as a precursory statements of purpose about change-making, whilst the mission-oriented approach acted as a bridge with which to further articulate programmatic areas of engagement - in a multi-stage and multi-scalar manner, and with consideration of their multi-stakeholder and cross-sectoral attributes. In this way, the mission-oriented approach is more focused on action, as well as in surfacing the strategic intent of specific programs of work and their interconnected linkages (Østergaard, 2024).

6.4.2. Surfacing linked project areas

Interrogating findings from community engagement can often lead to identification of opportunities for subsequent project development, as did indeed happen through a series of stakeholder roundtables held by Regen Sydney. The stakeholder roundtables were held as a series of four thematic sessions to deepen articulations of structural enablers and blockers²⁴ in realising the vision for regeneration surfaced by the Regen Sydney network through a series of preceding community workshops. Participants

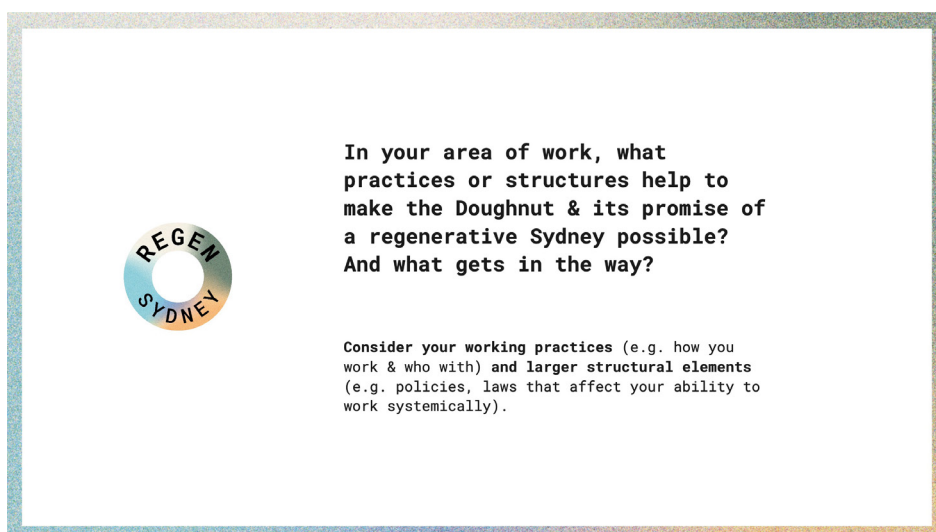


Figure 55. Regen Sydney’s stakeholder roundtable discussion prompts

- 6. Designing for co-emergence in complexity
- 6.4. Mission-oriented portfolios of linked projects
- 6.4.2. Surfacing linked project areas

took part through the lenses of (1) social equity & wellbeing, (2) shaping the environment, (3) public policy, government & law, as well as (4) finance & economics; and responded in groups to the prompts shown in the Figure above. The insights that were obtained through these sessions were synthesised with a view to draw out key opportunities for action - both for Regen Sydney as well as for the development of a regenerative economy in Greater Sydney more broadly. This process sought to build upon the theory of change and crystallise areas of bold experimentation - to tangibly activate emerging organisational mission, with work at different scales and with complementary cross-sector alliances. The statement from Bronwen below highlights a tendency amongst some network collaborators to continue to preference incremental reform, which Regen Sydney seeks to transform with an ambitious mission.

“Within the legal academy and the legal profession, there is such a strong preference for incremental reform on the whole, but my natural inclination is to push back against that and say, let’s be more bold, with more macro experimentation.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

24 (previous page)

The framing propositions to test and deepen insights from the preceding community workshops were guided by the article [‘Everyday Patterns for Shifting Systems’](#) by The Yunus Centre Griffith University and Auckland Co-Design Lab. The framework they present in ‘Figure 2: The organic patterns of systems’ was invaluable for Regen Sydney, with which to foreground the exploration of deeper patterns - in this case the (below ground) structures and practices that could help to manifest the (above ground) vision statements (YCGU & ACL, 2022; p. 4).

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Building on Geels’ Transition Theory, the Power Shift Framework adds a ‘Deep Roots System’, where we can locate grass roots movements, healing and personal change as strategies for systems change. [See here](#) for more information.

6.4.2.1. Synthesising data using the MLP

The Multi Level Perspective (MLP) is an analytical framework to understand the dynamics of transformational change, originally developed with particular regard to socio-technical systems (Geels et al., 2017). Adaptations of the model, including by Systems Sanctuary, better afford consideration of cultural and personal factors - this model, called the ‘Powershift Framework’ by Systems Sactuary²⁵ is what Regen Sydney used to analyse structural enablers and blockers across various sites of leverage, and to make sense of emerging gaps and opportunities. With this model, Regen Sydney conducted deep thematic and abductive sensemaking of data from the stakeholder roundtables to help form systemic opportunity areas, as well as to consolidate and detail the emerging areas of action.

The Powershift Framework draws heavily from Geels et al. (2017), in its inclusion of the landscape, regime and niche lenses, whilst adding a layer called the deep roots system. An outline of the model follows, along with a diagrammatic depiction seen in Figure 56:

| | |
|------------------|--|
| Landscape | The intangible context of social values, political beliefs, cultural narratives and worldviews |
| Regime | The dominant structures of economics, politics, governance, institutions and technologies |

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Niches

Local and small-scale initiatives, experimental models, innovative projects and collaborations

Deep roots system

A focus on lived experience and community, including personal healing, empowerment, and holistic understanding of the intersectionality of issues.

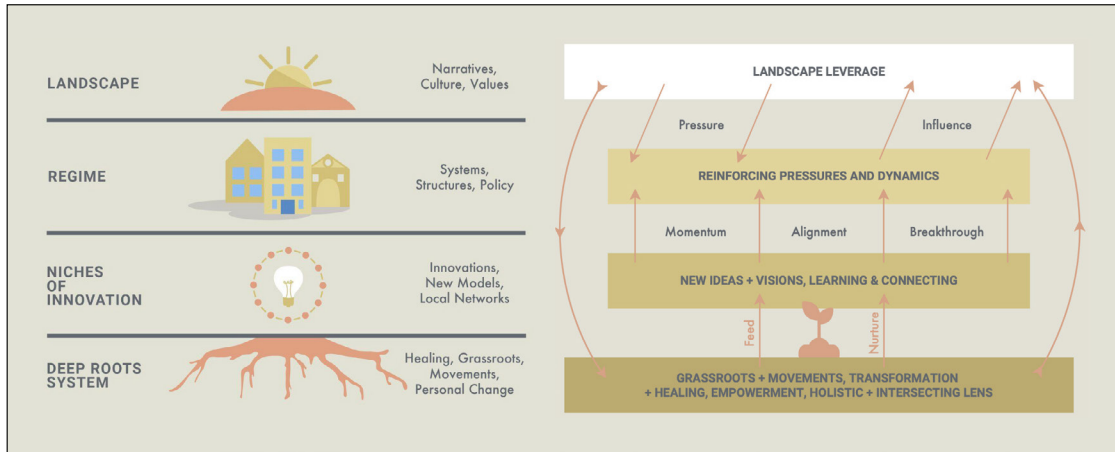


Figure 56. The Powershift Framework adaptation of the MLP (Systems Sanctuary, 2023)

By plotting the stakeholder roundtable insights on this framework, the Regen Sydney team surfaced key areas for action around six themes - (1) citizen participation, local scale initiatives; (2) food, housing, infrastructure; (3) markets, business, industry; (3) funding, investment; (4) government, law, policy, regulation; and (6) working across silos. Please see the Figure below and **Attachment 13** for greater detail.

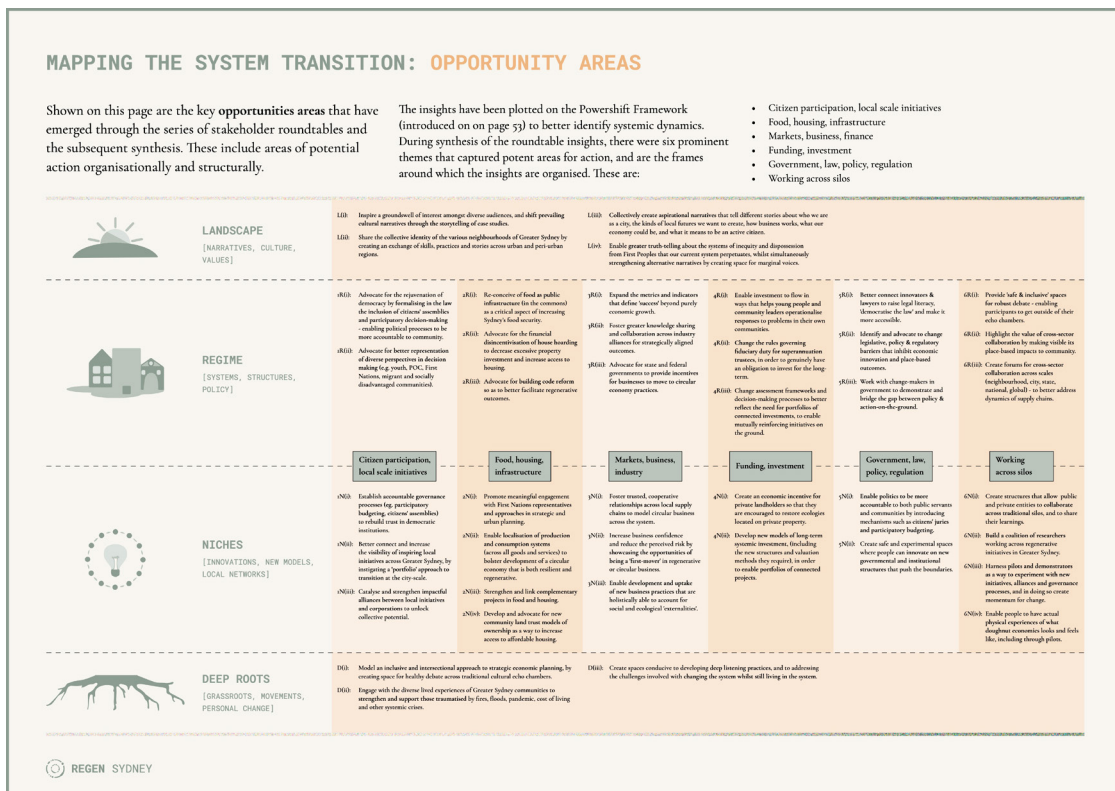


Figure 57. Mapping the regenerative economic system transition in Sydney

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In further development of the emerging mission of linked projects (built upon the theory of change), the team looked to interrogate this detailed view of the transformation ecosystem and the countless cross-sectoral entanglements that were articulated. The Powershift Framework and MLP allowed the team to not only identify priority areas of action, but to make distinctions regarding the viability for tangible impact at different systemic leverage points with the skillsets at hand (Gottschamer & Walters, 2023; Wallace, 2021). Essentially, this meant that some opportunity areas across cultural, institutional, experimental and behavioural domains, and the stakeholder networks in question were deemed as more feasible sites of intervention for the organisation.

Although the framework was initially daunting to some team members, the process of synthesis and the further strategic definition of activities that followed were found to be extremely valuable. Such a process would not have been worth undertaking for the vision-oriented community workshops - on the contrary the structural enablers and blockers explored in the stakeholder roundtables included rich sets of insights that allowed for a nuanced analysis. The framework offers itself as a valuable systems-level design tool, which I initially found lacking due to its omission of explicit consideration of ecological system dynamics (Wallace, 2021), however the regenerative orientation of Regen Sydney meant that these qualities were inherent through all layers of analysis.

6.4.2.2. Regen Sydney's mission

Guided by the findings drawn out through the MLP synthesis process, Regen Sydney proceeded to further develop the three areas of action with sufficient detail in order to better articulate their specific project-based outcomes and the ways in which the programs might complement one another. An underpinning framing to these emerging programs of work was to view them as experimental prototypes that may be tested and iterated through practice (akin to participatory action research). Dan Hill supports this approach to developing experimental interventions in complex systems as characteristic of mission-oriented innovation:

As mission-oriented innovation engages with unpredictable complex systems, and with an emphasis on participative decision-making and ambitious risk-taking, there is a preference for prototypes over investigations... It is a form of thinking through making, policymaking through design (Hill, 2022, p. 386).

The project areas at Regen Sydney have been developed in a way such that they are distinct in stakeholder engagement and scale of intervention, whilst complementary in their targeted outcomes building momentum towards a shared North Star vision. The three streams of action are outlined in Figure 58, while an artefact further detailing the mission can be seen in Figure 59 as well as in **Attachment 14**.

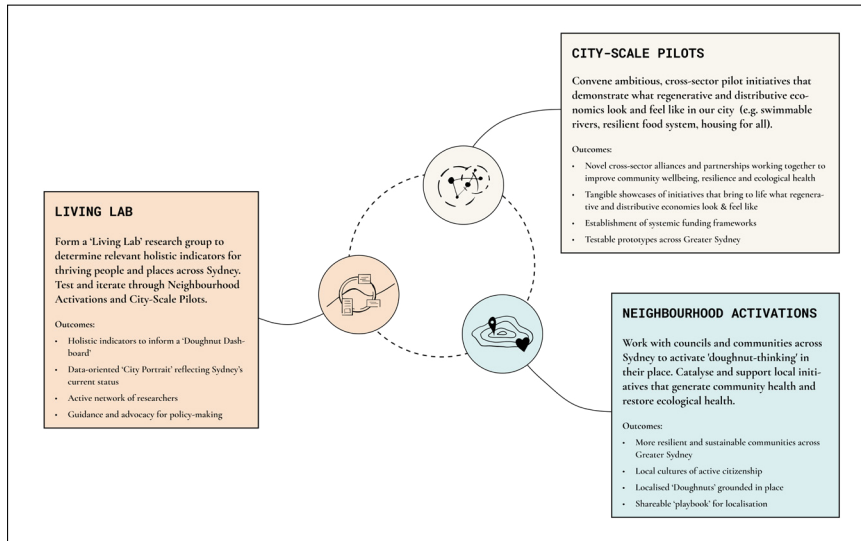


Figure 58. Regen Sydney's three streams of action

| OUR MISSION | | | |
|---------------------|---|---|--|
| | NEIGHBOURHOOD ACTIVATIONS | CITY-SCALE PILOTS | LIVING LAB |
| POTENTIAL | Thriving neighbourhoods with active citizens and localised economies working together to generate community wealth and restore ecological health. | Connected, well-funded clusters of ambitious, cross-sector pilot initiatives that tangibly shift the city's perception of what's possible. | Integrated, comprehensive, place-centred indicators that can be used to assess progress to guide policy-making in resilient city planning. |
| SYSTEM LEVEL | NICHES, ROOTS | LANDSCAPE, REGIME, NICHES | LANDSCAPE, REGIME |
| ACTIVITIES | <p>Recruit at least 5 councils to champion the activation of community wealth and ecological health within municipalities across Sydney.</p> <p>Activate 5 neighbourhoods across Sydney to adapt the Sydney Doughnut in their neighbourhood, drawing from DEIA's methodology and toolkits, and supported by Regen Sydney.</p> <p>Develop and trial place-based funding frameworks to finance community leadership in economic localisation.</p> <p>Foster the development of creative and participatory community forums. Nurture capacity for residents, business and council to collaborate on shared vision and action.</p> <p>Develop a playbook for localisation to inspire and support other areas of Greater Sydney - and beyond - to trial their own.</p> <p>Share learnings. Build the capacity of neighbourhoods to tell and share their stories of regeneration, to create a grassroots of local ambition.</p> | <p>Collectively define and prioritise challenge areas with the greatest potential to give Sydney inside the 'safe & just space'.</p> <p>Define an initial 'demonstrator' initiative that makes the promise of a Sydney Doughnut tangible through key prioritised areas of action, e.g. food, participation, housing, waterways.</p> <p>Foster the collaborative courage of Sydney. Nurture bold alliances (public-private) & enhance the collaborative capacity and aspiration of the city's changemakers.</p> <p>Develop and trial collaborative funding frameworks to finance portfolios of initiatives with a shared mission (systemic funding). Work together to create traction and raise ambition for other initiatives.</p> <p>Share learnings. Build the capacity of the city to tell and share stories of regeneration to shift the narrative of what's possible for Sydney.</p> | <p>Form a 'Living Lab' research space to conduct data-oriented collaborative research.</p> <p>Foster the development of holistic indicators to measure progress at the city scale - helping to form a 'Doughnut Dashboard'. Test and iterate through Neighbourhood Activations and City-Scale Pilots.</p> <p>Develop a detailed City Portrait of Greater Sydney. Use holistic indicators to create a snapshot of Sydney's progress and identify areas of action.</p> <p>Grow an alliance of organisations who are engaged in collaborating through the Regen Sydney network.</p> <p>Share learnings. Build the capacity of the researchers to tell and share stories of regeneration to catalyse holistic policy-making responses.</p> |
| OUTCOMES | <ul style="list-style-type: none"> More resilient and sustainable communities across Greater Sydney Local cultures of active citizenship Localised 'Doughnuts' grounded in place Shareable 'playbook' for localisation | <ul style="list-style-type: none"> Novel cross-sector alliances and partnerships working together to improve community wellbeing, resilience and ecological health Tangible showcases of initiatives that bring to life what regenerative and distributive economies look & feel like Establishment of systemic funding frameworks Testable prototypes across Greater Sydney | <ul style="list-style-type: none"> Holistic indicators to inform a 'Doughnut Dashboard' Data-oriented 'City Portrait' reflecting Sydney's current status Active network of researchers Guidance and advocacy for policy-making |
| TIMELINE | 0-12 MONTHS | 6-24 MONTHS | 0-24 MONTHS |
| ACTORS | <ul style="list-style-type: none"> Community leaders & changemakers Local businesses Local governments | <ul style="list-style-type: none"> Corporates, NGOs, start-ups & social enterprises Local and state governments Subject matter experts | <ul style="list-style-type: none"> Ecological economics researchers Policy-makers and subject matter experts Neighbourhood Activation and City-Scale Pilot participants |
| EXAMPLES | Chick Square, Birmingham Neighbourhood Doughnut, Village Zero | Regen Melbourne, Swimmable Birrarung, Participatory Melbourne | City of Amsterdam, City Portrait, Regen Melbourne, Measuring What Matters |

Figure 59. Regen Sydney's Mission 2023-2025

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- 6.4.2. Surfacing linked project areas
- 6.4.2.2. Regen Sydney's mission

The diagrams above speak to three areas of action: (1) Neighbourhood Activations, looking to strengthen community resilience, (2) City-Scale Pilots, seeking to build cross-sector demonstrators, and a (3) Living Lab, focused on research and data. These streams of action, the portfolio of projects they make up, as well as the overarching mission that they serve were all informed by Regen Melbourne's approach. Strategic conversations with the convenors at Regen Melbourne helped to guide the framings created by Regen Sydney, as well as to acknowledge the particular demographic fragmentations created by the unique geography of Greater Sydney - including the numerous waterways that promote relatively isolated socio-cultural regions, especially when compared to Melbourne. In consideration of this, as well as calls from the broader Regen Sydney network during various community events, the Neighbourhood Activations are a notably important stream of work in the Sydney context. Regen

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- 6.4.2.2. Regen Sydney's mission

Sydney continues to actively seek partnerships with local councils for this program of work, with varied levels of engagement developing with Waverley, Inner West, Randwick, Northern Beaches and Western Sydney Parklands Councils.

The City-Scale Pilots, in seeking to catalyse bold and unusual cross-sector alliances in specific thematic areas, also draw from the strategic orientation of Regen Melbourne - in particular with reference to their [Swimmable Birrarung](#) and [Participatory Melbourne](#) projects. This program of work seeks to convene stakeholders from already existing regenerative initiatives, and across the regions of the greater city, with a view to directionally align collaborators towards shared aims. Through thematic focus areas, public and private sector actors who are otherwise siloed can have a platform through which to innovate together in their operational processes and networks of engagement, as well as in their strategic orientation. Regen Sydney looks to strengthen already existing partnerships with the [Cooks River Alliance](#) and the [UNSW Cities Institute](#) to enable this program of work to flourish.

The third stream of work at Regen Sydney is the Living Lab, that aims to harness the Sydney Doughnut as a framework through which a detailed set of indicators can be surfaced to adequately measure the socio-ecological wellbeing of the city in a holistic manner. This program of work, like the other two, will convene stakeholders from across disciplines through collaborative research so that the indicators and Doughnut Dashboard are empirically sound, and so that the program of work has direction from the broader network. The focus on surfacing empirical data with the Sydney Doughnut framework will likely create robust momentum for the other programs of work, by providing a more detailed guiding compass with which collaborators can orient themselves. Regen Melbourne has recently publicised their [City Portrait](#), which showcases the potential for a similar data-oriented approach in Greater Sydney.

6.4.2.3. Trojan horses

The portfolio of pilot projects that Regen Sydney's 2023 mission includes might be characterised as *trojan horses*. This is a reference to the description by Dan Hill, of strategic design projects and artefacts that contain "the seeds of multiple strategic outcomes", some of them hidden (Hill, 2012, p. 78). The framing of trojan horses in this way highlights types of interventions that can lead to deeper cultural shifts and unexpected systemic outcomes. While I believe that there are numerous potential hidden outcomes of Regen Sydney's programs of work, Alice feels as though the trojan horse framing is not relevant:

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- 6.4.2.3. Trojan horses

“You are a Trojan horse when you dress something up as something else. And then you insert it back into the system - and I don’t think that’s what we’re trying to do. I don’t think we’re trying to dress it up, or disguise it as something else. And so it doesn’t feel like a Trojan horse, it actually feels like something that has the capacity to coalesce or cohere things that are already happening, just bring coherence.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

Attempting to reflect on the nuances inherent in our differing analyses reveals that while in fact Regen Sydney does not explicitly ‘dress up’ or disguise its strategic intent or its participatory engagements, it is crucial to note that aspects are indeed *left out* in certain instances - including expressions of radical Earth-centred ontologies or bioregional politics - depending on the collaborators and context in question. This is a matter of tempering external engagement, whilst still safeguarding internal organisational integrity, so as to more effectively build partnerships with diverse stakeholders who are at varying points in their regenerative economics journeys. Overall, I find that the prefigurative politics of Regen Sydney speak more honestly to the scope of change sought, however in addition, the trojan horse framing can help the organisation to be tactical in its operational strategy.

6.4.3. Working across multi-scale nested systems

6.4.3.1. Strategising with the Three Horizons model

Similar to the role of the MLP framework in clarifying Regen Sydney’s programs of work, the Three Horizons model has been very useful at Coalition of Everyone. In particular the Three Horizons framework proved to be a valuable analytical tool with which to interrogate the nascent programs of work. Coalition of Everyone was faced with the task of grappling with structural blockers in trying to expand the focus of participatory governance processes to more meaningfully include consideration of bioregional dynamics. This was quite a radical proposition to many potential funders, and however much they supported such a mission, perhaps unsurprisingly, their financial capital was still wedded to centralised and techno-centric solutions.

With a clear view of funding as a critical systemic blocker, Coalition of Everyone subsequently harnessed the Earth Equity model as a bridging mechanism. As a part of this stream of work, Earth’s Bank Accounts seek to create locally pooled funds with contributions from local businesses and corporate donors. The proposition is to avoid dependence on centralised sources of funding - whether governmental or philanthropic, and to decentralise the resourcing needed for place-based governance.

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- 6.4.3. Working across multi-scale nested systems
- 6.4.3.1. Strategising with the Three Horizons model

Depicted in blue as ‘Horizon 2’ in Figure 60 below, the Earth Equity model is being explored by Coalition of Everyone as a systemic enabler for subsequent place-based governance initiatives (Horizon 3). While the Three Horizons model is not geared (like the MLP) towards highly detailed articulations of multi-stage transitions, the framework has been highly valuable in collectively surfacing a coherent organisational strategy.

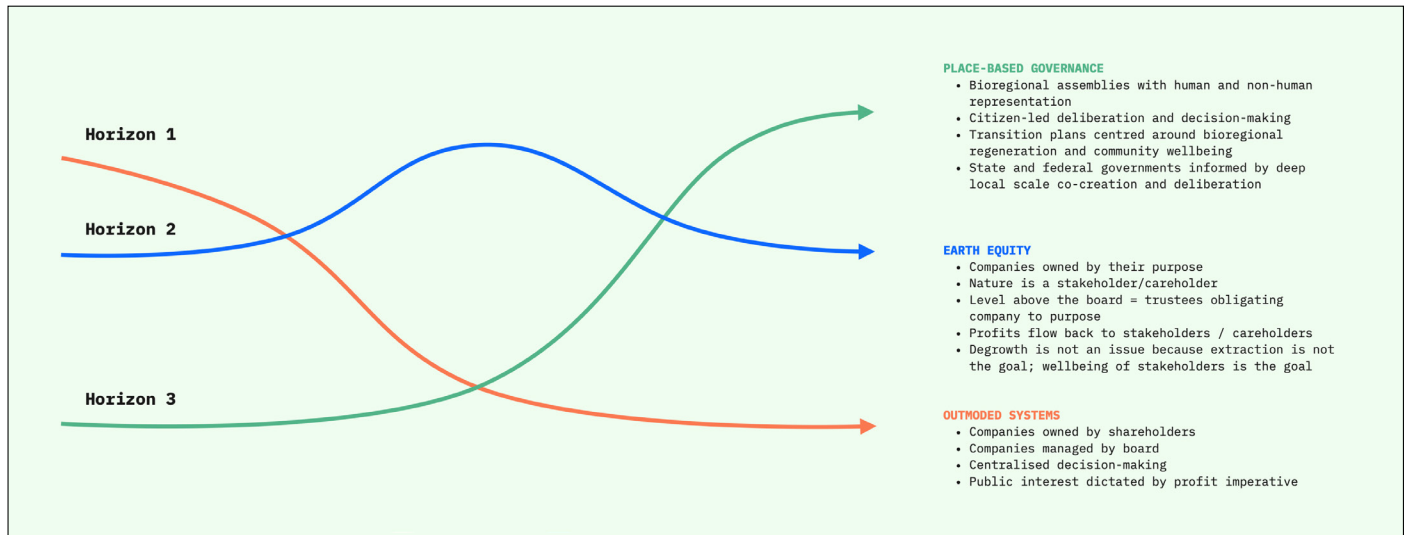


Figure 60. Strategically incorporating Earth Equity using the Three Horizons model

The framework was particularly suited to helping Coalition of Everyone navigate the interrelations between its programs of work, and their feasibility over time. The Figure above shows a synthesised version of insights, which was formed through numerous iterations amongst team members, as well as through deeper explorations of each of the three horizons with allies at WWF-Australia and Wararack.

6.4.3.2. Coalition of Everyone’s programs of work

Building upon earlier strategy development and the Three Horizons analysis, Coalition of Everyone proceeded to more clearly surface a portfolio of projects. Similar to Regen Sydney, Coalition of Everyone framed these nascent programs of work as vehicles for experimentation, testing and iteration. Reggie refers to these experiments as partial expressions of the next system.

“Let’s build the system that is the next system, or is part of the next system... so that either when the old system dies, or shifts, or when enough people want to do things differently, then we’ll have some experiments. Maybe some small experiments, we can say ‘this actually this works better than the old one, how about this, maybe we could try this out’.”

Reggie Luedtke, Coalition of Everyone
Practitioner Interview

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- 6.4.3.2. Coalition of Everyone's programs of work

The consolidated set of interrelated project areas for Coalition of Everyone at this time included (1) Participatory Assemblies aiming to foster (bioregionally-adapted) place-based governance, (2) Regen Places which looks to living knowledge network between nationwide regenerative initiatives, and (3) Earth Equity, which seeks to build distributed capacity for financial resourcing. These three primary programs of work are outlined in Figure 61 below, and can also be seen in greater detail in **Attachment 15**.

| THERES | PARTICIPATORY ASSEMBLIES | COALITION NETWORK | EARTH EQUITY |
|----------------------|--|---|---|
| PROGRAMS OF WORK | PARTICIPATORY MELBOURNE | ABC REGEN | REGEN PLACES |
| ACTIVITIES 2023-2025 | <ul style="list-style-type: none"> • Map and enrol existing actors in community activation and participation • Scope potential scalable experiments • Create a baseline piece of research on the state of democracy and collaborative governance in Greater Melbourne | <ul style="list-style-type: none"> • Develop mapping templates for Assembling Bioregional Community-led Regeneration (ABC Regen) methodology to tangibly evoke engagement activities • Harness R&D to inform participatory forums across other programs of work • Create conditions to test the full ABC Regen methodology on the ground in a pilot location | <ul style="list-style-type: none"> • Convene the Regen Places network to connect and grow participatory regenerative initiatives • Support development of the Planet App (Global scale out) by facilitating collaboration with the Regen Places network |
| OUTCOMES | <ul style="list-style-type: none"> • Answer the key question of how we can build a culture of participation, agency and greater trust in Melbourne • Inform the further development of Participatory Melbourne project • Coalesce a body of evidence for development of other Participatory Places e.g. Sydney, Castlemaine | <ul style="list-style-type: none"> • Inform participatory processes across our programs of work that better engage with living systems • Create the groundwork for participatory administration of pooled funds | <ul style="list-style-type: none"> • Have built and strengthened knowledge-sharing between regenerative initiatives across varied contexts • Increase access to diverse participatory practices and skillsets |

Figure 61. Coalition of Everyone's programs of work

Each of these programs of work are united in their alignment towards fostering decentralised systems of governance, and yet they are distinct in their scales of intervention. Whilst Coalition of Everyone did not explicitly use the mission-oriented innovation model in surfacing this portfolio, in retrospect there are obvious parallels. There is a clear directionality amongst the project areas towards a shared North Star vision - bioregionally-adapted decentralised systems of governance - and the programs of work afford complementary angles that are mutually beneficial to the realisation of one another. Additionally, it has been desirable in some cases to encourage an overlapping of stakeholders and partners across the multi-scale programs of work, building capacity throughout the nested systems of initiatives.

The Participatory Assemblies area of work is comprised of two subsets - the Participatory Melbourne project and the ABC Regen body of work. The former is a city-wide initiative being conducted in partnership with Regen Melbourne - that continues to convene a diverse range of public and private sector actors in service of strengthening trust and agency in decision-making processes across Greater Melbourne. The ABC Regen program of work has in contrast, and up until now, been characterised by collaborative research and development into more radical processes suited to engaging with bioregional dynamics and non-human perspectives

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in decision making. ABC Regen has a comparatively revolutionary agenda when considering Participatory Melbourne, however, notably, it would be strategically well-served to harness and build upon the momentum of the latter in decentralised decision-making. Both these program of work will be discussed in greater detail in chapter 7.

The Regen Places living knowledge network deserves a special mention for its role as convenor of regenerative initiatives across diverse disciplines and places nationwide. As discussed in section 6.2., Regen Places is specifically concerned with connecting regenerative initiatives across contexts and scales. The network, whilst in its simplest description is the connecting fibre between numerous existing regenerative initiatives nationwide, Regen Places does indeed have a change-making agenda of its own. Through the co-emergence that Regen Places facilitates amongst member organisations, there is a marriage of grassroots approaches with top-down policy-reform orientations amongst participants - which allows for greater coherence in unlocking opportunities for bioregional regeneration. Regen Places seeks to reveal and share practical approaches that might better enable partner organisations to resource themselves in their own place-based engagements. This living knowledge network has been incredibly valuable in the operations of even Regen Sydney, by facilitating an understanding of the potential avenues available to more effectively undertake its work. In these ways, Regen Places is a key social infrastructure that seeks to influence policy, governance, narrative and resourcing.

The third program of work at Coalition of Everyone is Earth Equity, which (as described earlier), is primarily focused on enabling alternate resourcing mechanisms for place-based regenerative initiatives, including by engaging the private sector.

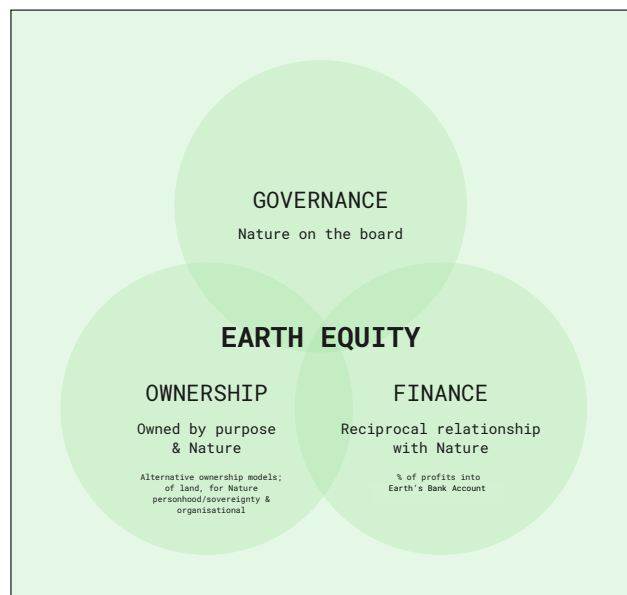


Figure 62. The Earth Equity model

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- 6.4. Mission-oriented portfolios of linked projects
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- 6.4.3.2. Coalition of Everyone's programs of work

The many initiatives that make up Regen Places have stated resoundingly that their work in the commons and public arenas is greatly hamstrung by a lack of funding - with reference to grants, philanthropy and other centralised sources of financing. Earth Equity looks to circumvent this dynamic by creating the capacity for decentralised funding mechanisms at the local scale, by enlisting diverse actors of local businesses and corporate donors - to create pooled funds for regenerative initiatives that can be administered and managed by the community itself. The provocation carried by the Earth Equity model is to 'imagine if Nature had a voice, a bank account and legal rights'. Two primary areas of focus in this program of work are (1) to foster Earth's Bank Accounts, and (2) to work with private sector organisations to represent nature on their boards.

6.4.3.3. Funding: the missing link

The shift in Coalition of Everyone to explicitly respond to funding as a systemic blocker to regenerative initiatives is deeply validated by the experiences of partners and collaborators in Regen Places nationwide - including by those of Regen Sydney, Regen Melbourne, and WWF-Australia. These actors acknowledge the deeply entrenched nature of funding as a centralised resource that is tied up in large-scale, techno-centric solutions with a myopic focus on carbon dioxide emissions. Regardless of their promise, regenerative initiatives that have a place-based focus and a view to address social and ecological dynamics in a holistic manner, are generally viewed by centralised funding institutions as too radical, and outside of their purview. In the face of societal collapse, the priorities of large financiers will likely change - however this could mean a focus on increased protectionism of centralised structures, rather than a systemic shift towards place-based regeneration. Clearly, the dynamics of funding as a systemic blocker in the context of this work are hugely complex, and cannot be understated. Paula echoes this sentiment:

"As you know, everything's so entrenched in the financial system, that it's almost like we're coming to a precipice where you can't just keep printing money. Everything actually has to collapse for something new to emerge. And it kind of feels like we're almost there."

Paula Kensington, Coalition of Everyone
Practitioner Interview

The underlying capital in question is currently geared towards short-term gains rather than long-term considerations of socio-ecological wellbeing, and manifest through individual and organisational actors, financial instruments, mechanisms and levers, as well as financial markets and institutions (Forum for the Future, 2023). These seemingly invisible

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dynamics characterise the pivotal role of capital in our societal structures, especially in their prevailing centralisation, despite profuse claims to democratic ideals in the Global North. Degrowth scholar Jason Hickel pointedly underscores this point:

Capital wields the power to mobilise our collective labour and our planet's resources for whatever it wants, determining what we produce, under what conditions, and how the surplus we generate shall be used and distributed. And let us be clear: for capital, the primary purpose of production is not to meet specific human needs or to achieve social progress, much less to achieve any concrete ecological goals. Rather, the overriding objective is to maximise and accumulate profit (Hickel, 2023, para. 7).

Capital in its current forms of accumulation and distribution are profoundly unable to meet the needs of the rising regenerative economics movement, which requires a deep democratisation of both finance and capital. New approaches to decentralised financial accounting and valuation are required, that can better guide capital allocation towards long-term investments. This necessary shift in **systemic capital** does have some allies in existing financial institutions - Paula comments on leveraging their interest in long-term payback:

“There are investors and philanthropists who have bought into that long term payback, but the problem is that some investors continue to follow the money. The indirect investors, the pension funds, they’re the people that need constant returns on a now basis, not 10-20 years, because they’ve got all the retirees who are mums and dads who are looking for their pension.”

Paula Kensington, Coalition of Everyone
Practitioner Interview

Despite small amounts of finance moving towards impact investment, a systemic capital approach advocates for a much more integrated and comprehensive approach to capital allocation for portfolios of regenerative initiatives. Systemic capital approaches seek to move beyond current mechanisms of allocation, focusing on portfolios of investment that harness collective efforts and diverse value flows, rather supporting isolated projects and siloed pipelines of intervention. Hannant et al. (a consortium of practitioners from Griffith University and Hatched) outline a systemic capital approach as such:

The objective of a systems capital approach, therefore, is to use its investment portfolio as a flywheel - deploying a discrete set of resource allocations to anticipate, stimulate, influence, amplify, and sustain larger and more diverse value flows at the systems-level (Hannant et al., 2022, p. 19).

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- 6.4.3.3. Funding: the missing link

The redeployment of capital from centralised mechanisms (not to mention fossil fuel ventures) towards distributed initiatives and diverse value flows is a great and urgent challenge yet to be traversed.

“We currently globally spend something like \$7 trillion a year on fossil fuel subsidies. Subsidies are probably the biggest bank that could be redeployed. Redeploying capital is probably the thing.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

Systemic capital and place-based impact funds - including the approach described by Hannant et al. - will be explored further in section [7.4.2.](#)

6.4.4. Systems convening in practice

While institutions deploying prevailing financial instruments might find them quite a departure from the norm, the development of portfolios of linked projects with coherent strategic purposes is a central approach to realising regenerative systems change at the breadth and depth required to meet the polycrisis head on. As this chapter has described, missions are pivotal vehicles for systemic shifts, seeking to harness wide-ranging collaboration - Dan Hill reiterates this point:

Missions are bold, inspirational, with wide societal relevance. They indicate a clear direction, ideally targeted and measurable, with ambitious innovation actions. They are delivered through multiple top-down and bottom-up activities, and co-created via cross-disciplinary, cross-sectoral and multi-level relationships (Hill, 2022, p. 29).

Crucially, the mission-oriented approach underscores a clear role for **systems convenors** in guiding the realisation of a portfolio of projects - including by fostering cross-sector alliances, encouraging participatory experimentation, and holding the integrity of the North Star vision for long-term engagement. Tasman elaborates on this point:

“Work needs to happen to crystallise community, mobilise them [and] strengthen their capabilities to push against the broader system. But then there’s a role within the broader system to also shift people’s mindsets and create safe spaces, to allow community to step into those bigger rooms where systems change [happens]. And then there’s a role of bridging the two - that’s the role I see of design - moving between those levels; working locally, to strengthen capabilities, shift mindsets and build momentum to work within the system to do the same.”

Tasman Munro, DIRC
Practitioner Interview

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6.4. Mission-oriented portfolios of linked projects
6.4.4. Systems convening in practice

Colleagues across both Regen Sydney and Coalition of Everyone have found that their ability to hold a complex and emergent network of collaborative change-making is important to their conduct as systems convenors. Both my sites of research see the value of systems convening in realising their respective project portfolios, and in doing so, continue to grapple with their own embeddedness in the systems they seek to shift - as systems innovator Mikael Seppälä suggests, “we need to change ourselves and the structures we are embedded in” (2021, p. 29). The practise of systems convening at both Regen Sydney and Coalition of Everyone has manifested not only at the level of holding the linked projects as a whole portfolio, but also within each of the project areas themselves. Christian Bason, CEO of the Danish Design Center states

The role of the mission manager will be varied but will undoubtedly include the following: (1) a focus on sustaining the mission, (2) establish a legitimate governance structure, (3) ensure a competent management team and strategic project staffing (Bason, 2023, para. 18).

Systems convenors require unique capabilities that are not taught in traditional siloed disciplines, and I have witnessed the development of such skillsets in my two sites of research (Wenger-Trayner & Wenger-Trayner, 2021). Convening alliances of stakeholders both *within and across* the various project streams is an integral part of the work at both Regen Sydney and Coalition of Everyone. With recognition of the distinct project portfolios that each organisation holds, I believe it would be valuable to compare and contrast key attributes that inform their approaches to convening. Figure 63 on the next page depicts the project portfolios of both organisations - mapped across their different scales of intervention on the Y-axis, with the X-axis showing their iterative development in fostering their respective multi-stage transitions. It is important to visualise not only the spread of their project portfolios, but also their staging over time, with particular reference to their nascent and unresourced status.

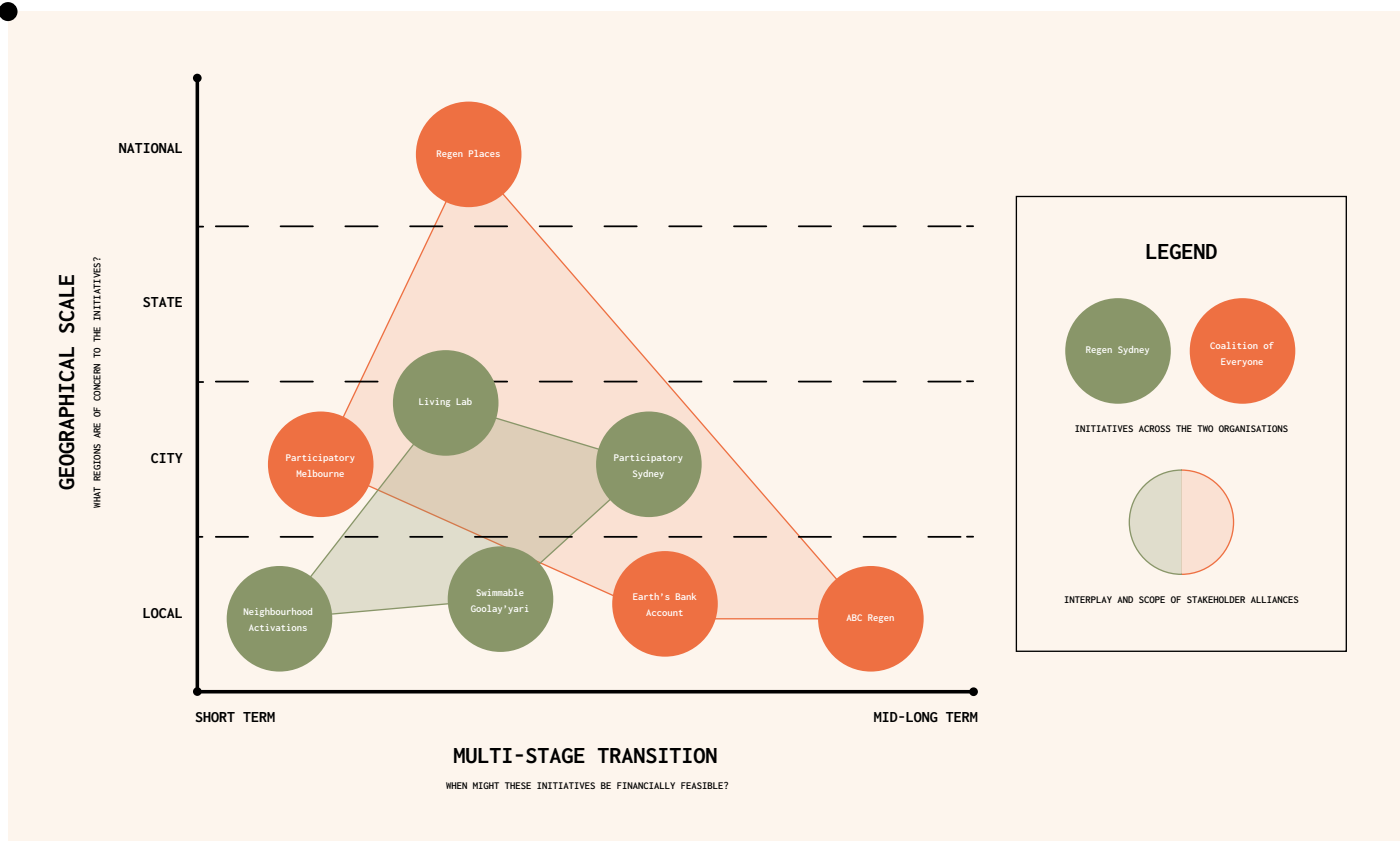


Figure 63. Convening multi-scale portfolios of linked initiatives

- 6. Designing for co-emergence in complexity
- 6.4. Mission-oriented portfolios of linked projects
- 6.4.4. Systems convening in practice

With this view, the project portfolios are plotted according to *when they might be financially feasible*, with more radical programs of work plotted further to the right. The synthesis of program financial feasibility derives from (1) ongoing discussions with colleagues, (2) observations of emerging partnership areas, and (3) feedback received from their trusted advisors. The shaded areas refer to the diverse range of partnerships and stakeholder alliances to be convened across the portfolios, with some overlap between the two organisations. As depicted in this diagram, the ambitious yet complementary scope championed by the linked projects makes it clear that the framing of systems convenor is crucial to bringing coherence across the linked initiatives for each of the two organisations.

As the organisations conduct this work, they must continue to ask how they might best partner with public and private institutions for each program of work, across acting as the connecting fibre between initiatives and scales (Dark Matter Labs, 2024). In broad alignment with the approaches to systems convening at Regen Sydney and Coalition of Everyone, Charles Leadbeater and Jennie Winhall provide this description:

Convenors bring together insiders, outsiders and other collaborators to create a shared agenda for change. Organisations that seek to play this role must be committed to changing a system and also command the credibility to bring together actors from every level of the system, from the grassroots to senior politicians (Leadbeater & Winhall, 2020, p. 40).

- 6. Designing for co-emergence in complexity
- 6.4. Mission-oriented portfolios of linked projects
- 6.4.4. Systems convening in practice

Regen Sydney in particular has dedicated a large amount of resources to developing its strategy to ‘convene courageous collaborations’ - through which to foster validity and viability for its role as a systems convenor. Part of this has been to explicitly call out systems convening as essential - albeit often under-resourced and invisible - to consciously develop ‘relational infrastructure’, spark novel alliances, raise collective ambition and unlock the creative potential needed to make systemic shifts possible (Rye, 2023). Additionally, its emerging team structure seeks to serve this systems convening role.

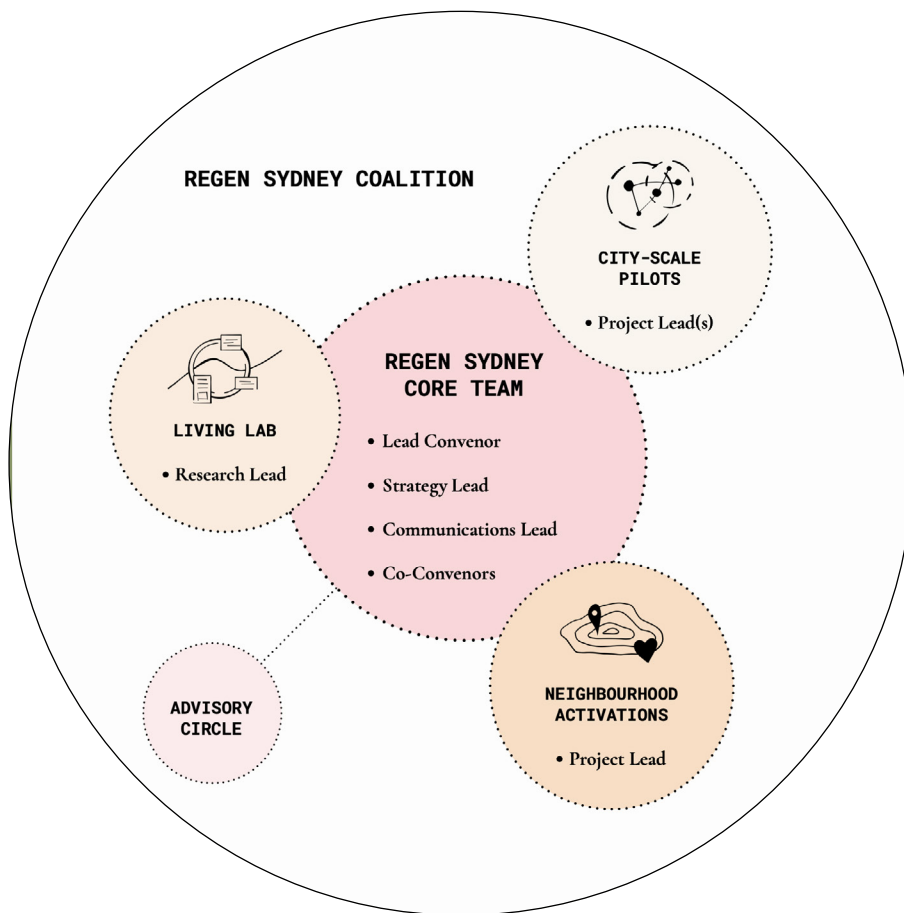


Figure 64. Regen Sydney - a team structure for systems convening

7. Designing for radical interdependence

7.1. Living prototypes from the field

In section 7.1. I present two key artefacts from my sites of research, (1) Regen Sydney’s Sydney Doughnut, and (2) Coalition of Everyone’s Assembling Bioregional Community-Led Regeneration (ABC Regen) process. Along with presenting the artefacts themselves, and their potential for fostering systemic shifts, I also discuss the collaborative processes undertaken in their development, as well as the role these living prototypes play in enabling greater experimentation amongst the networks of collaborators that they emerge within (Raven et al., 2019).

7.1.1. Sketching a Sydney Doughnut

In late 2022 and early 2023 Regen Sydney conducted an extensive process through which to localise and adapt the Doughnut Economics model according to the needs and attributes of Greater Sydney. With the original Doughnut Economics model being developed in the Northern European context, it offers itself up to be reimagined and downscaled as suitable to other places. The Regen Sydney team drew from the Doughnut Unrolled methodology in designing a series of community workshops and stakeholder roundtables, after which an extended period of synthesis led to the creation of the Sydney Doughnut.

7.1.1.1. Community workshops & stakeholder roundtables

A series of 2 x community workshops and 4 x stakeholder roundtables were held by Regen Sydney, which respectively sought (1) to surface a vision for regeneration in Sydney, and (2) to highlight structural enablers and blockers in realising this vision. The Figure below depicts the flow of these sessions.

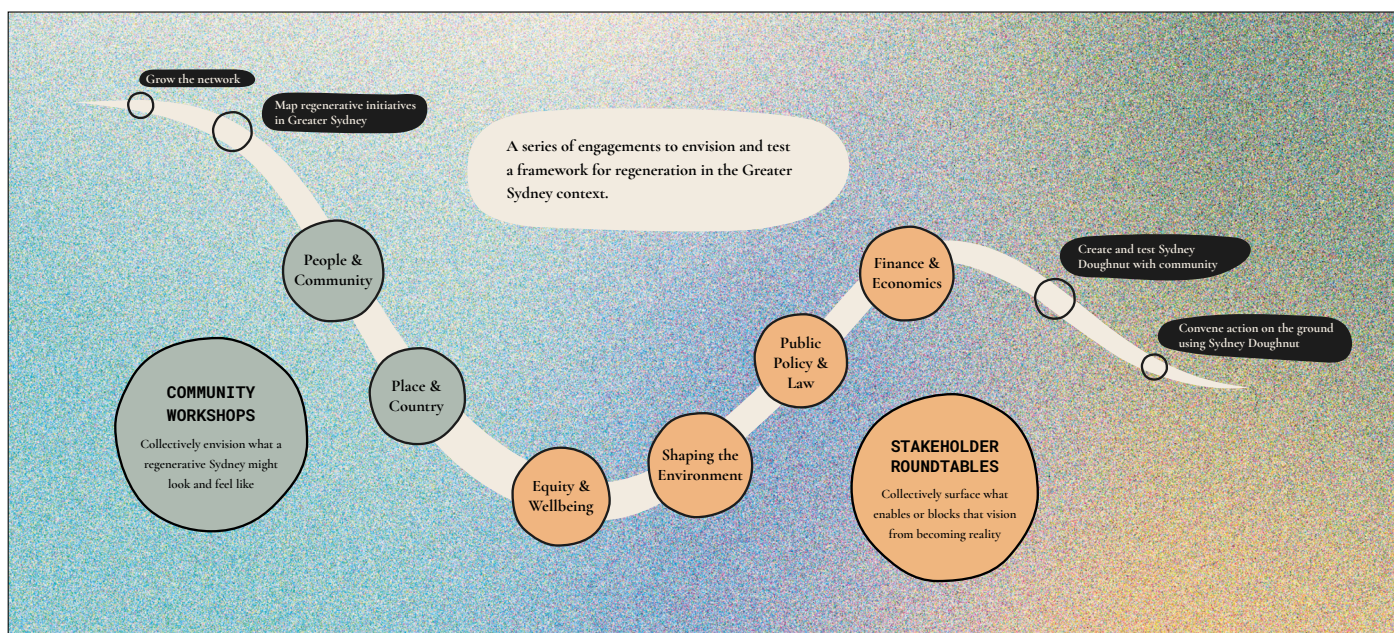


Figure 65. Regen Sydney’s phases of engagement in sketching a Sydney Doughnut

- 7. Designing for radical interdependence
- 7.1. Living prototypes from the field
- 7.1.1. Sketching a Sydney Doughnut
- 7.1.1.1. Community workshops & stakeholder roundtables

The two workshops were framed so as to roughly delineate between social and ecological considerations, with the first workshop focusing on ‘People & Community’, and second on ‘Place and Country’. The workshops were largely focused on exploring questions of local regeneration, and although there was only some explicit discussion of global responsibilities, the vision statements written by participants implicitly afforded consideration of impacts on regions outside of Sydney. It was also quite evident from participant reflections and through the synthesis process that the separation of social and ecological dimensions across the two workshops did not impede upon evocations of the interconnectedness of these domains. Participants stated rightly so that the social and ecological are fundamentally inseparable, and at the same time seemed to understand the sequential scaffolding of conversations enabled by the workshops being framed in such a manner.

Co-designing the workshops was an extremely messy process in itself, as the core team members came together to distill the essence of the workshop purpose and strategic objectives, whilst grappling with the trade-offs that came with time constraints and contradictory precedents. It was imperative to go through this process, discussing and debating the merits of various assemblages that would go on to shape the workshops, so that they may not only be engaging for individual participants, but also so they they could better catalyse the Regen Sydney network and the broader of system of regenerative practitioners in Sydney. The Figure below is a screenshot of the Miro board in which the workshop design took place - it shows an emerging outline of activities for the workshops, built upon previous sessions exploring a field of possible activities, and later leading to refined runsheets and Miro templates.

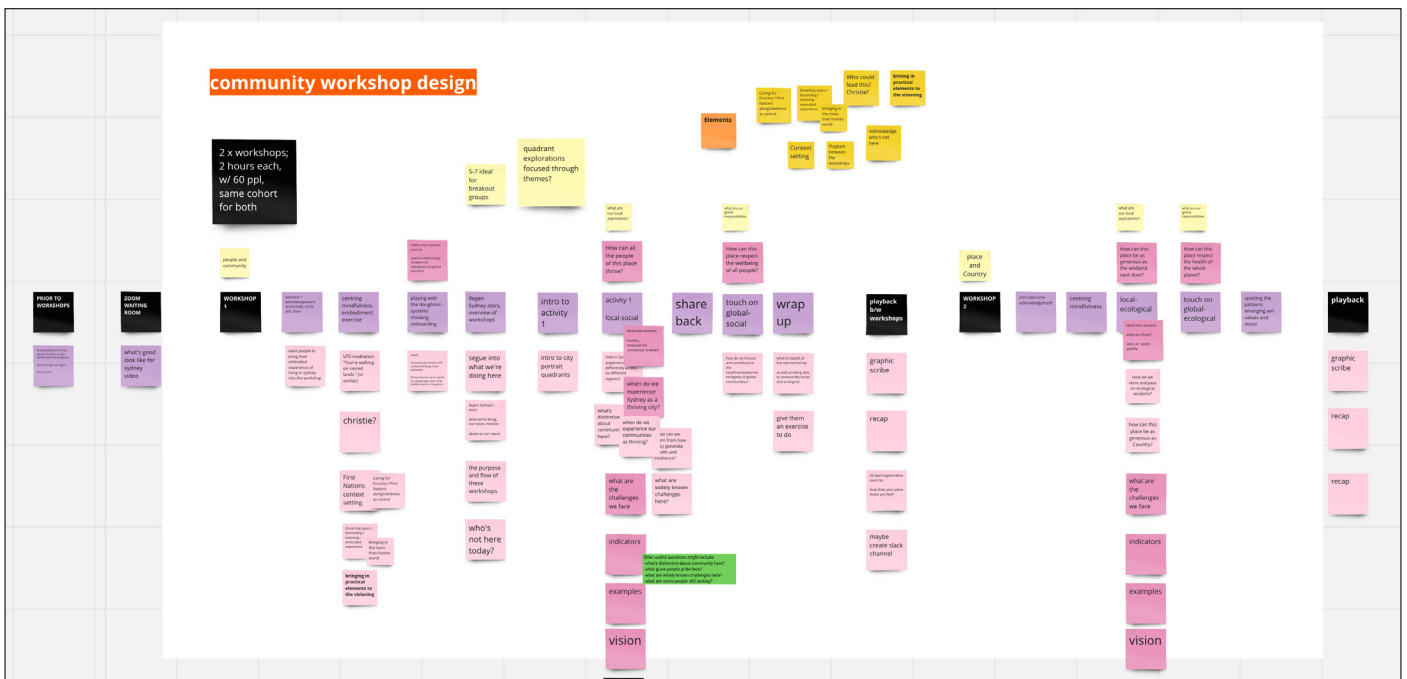



Figure 66. Designing the Regen Sydney community workshops on Miro

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- 7.1.1. Sketching a Sydney Doughnut
- 7.1.1.1. Community workshops & stakeholder roundtables


Overall, the workshops introduced participants to the Doughnut model, encouraged them to grapple with interconnections when considering specific dimensions of the Doughnut, and with this contextual understanding, asked them to articulate their aspirations and visions for a regenerative Sydney. Each participant made these explorations in a breakout group, in which a certain allocation of dimensions were given to discuss. Synthesis of the workshops showed many insights, in particular the visions statements made by participants allowed Regen Sydney to highlight areas of the Doughnut that were especially important, as well as those areas that were not previously represented by the original Doughnut framework. Graphic scribes made during the workshops were valuable in communicating the proceedings, and the Figure below shows a synthesised ‘vision for a regenerative Sydney’ that was an important foundation for the subsequent stakeholder roundtables. This vision intentionally draws together participant contributions in a manner that cuts across silos, values and actions, so that people from all professions and walks of life may find it easier to step into its statements.

A REGENERATIVE SYDNEY:




Means no one is left behind.

In this city of great diversity, many geographies, histories and cultures, no one should be left behind. Participants acknowledged that many parts of our society are falling through the cracks when it comes to food and housing. There was a lot of support for building networks of care and support as well as for bridging our huge disparities. Civic infrastructure and services play an increased role in supporting increased accessibility and equity.




Actively collaborates together.

Sydney values living cultures, living democracy and participation; fostering accessibility, whilst putting sovereignty and care into practice. Flipping a culture of passive consumerism on its head, there is a call for citizen and community empowerment. By harnessing the collective in community-led governance, residents of Sydney can find greater agency and decision-making power. Neighbourhood scale initiatives and economic localisation help to create greater resilience.



Walks with First Peoples.

A truly regenerative Sydney centres First Nations wisdom and an understanding of Natural Law. There is an emphatically strong desire to walk with First Nations people in this work, and a regenerative economy is impossible to create in Sydney without doing so. In doing this work, we can learn from First Nations wisdom and First Laws; whilst addressing urgent calls to end black deaths in custody and progress the development of a long overdue Treaty.



Is connected with our ecosystems.

The ecological & social spheres are deeply intertwined, and cannot be considered separately from each other. Our city needs to be ecologically integrated, for example through green corridors, community gardens and water sensitive urban design. Meaningful connection to nearby wild green spaces, bush, beaches and rivers is of utmost importance for its role in supporting the wellbeing of humans and non-humans alike.

Figure 67. A vision for a regenerative Sydney, informed by community workshops

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- 7.1.1.1. Community workshops & stakeholder roundtables

These vision statements acted as a guiding compass for the stakeholder roundtables that followed, in which participants dug deeper to interrogate what it would mean for such visions to be brought to life - what are the structural enablers and blockers, and how might these aspirations be tangibly manifested? While the workshops were aimed at all participants of all demographics - ordinary citizens - the roundtables looked to specifically draw in professionals who were already familiar with regenerative economics. As outlined in section [6.4.2.](#), participants took part in the stakeholder roundtables through the lenses of (1) social equity & wellbeing, (2) shaping the environment, (3) public policy, government & law, as well as (4) finance & economics. Not only did the stakeholder roundtables help to clarify Regen Sydney's strategy and opportunities for action, but they tested, consolidated and affirmed the vision statements from the community workshops.

Before going on to discuss the synthesis process that led to the creation of the Sydney Doughnut, it is worth noting a couple of learnings from this series of workshops and roundtables. Most importantly, the Regen Sydney team noticed what might be called 'Zoom fatigue' amongst participants, whereby the online nature of discussions was tiring. This was not to say that the sessions were not engaging, but rather that people yearn to collaborate in person, especially in the potentially energising context of regenerative economics. Related to this point, is that engaging with ordinary citizens might best be conducted at the street level - in a neighbourhood context that they are familiar with and passionate about. Being able to ground their collaboration in place would better enable their investment of energy, and their scope for contribution. In contrast, working at the Greater Sydney scale, across vastly different subregions of the city might better be leveraged in concert with professional stakeholders who represent organisations and institutions with existing regenerative economics literacy and greater agency to enact change-making initiatives.

7.1.1.2 Synthesising relevant insights

The extended period of synthesis that followed this series of workshops and roundtables looked to interrogate the insights surfaced, evoke a deepened articulation of the regenerative economics transition landscape in Greater Sydney and recalibrate Regen Sydney's strategic orientation with greater clarity so as to catalyse subsequent funded projects. One outcome that formed a major component of these objectives was the formation of an adapted and localised Sydney Doughnut.

The synthesis process sought to understand and surface the value of the Doughnut Economics model in the Sydney context and the various interconnected social and ecological dimensions that are unique and/or

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7.1.1. Sketching a Sydney Doughnut

7.1.1.2. Synthesising relevant insights

valuable to Sydneysiders. During this process of analysis and integration, consideration was made of (1) precedents where the model had been adapted in other places, including those that are in settler-colonial contexts like in Sydney, and (2) the prevailing socio-cultural and political zeitgeist - to identify strategic leverage points. Alongside in-depth thematic analysis conducted in spreadsheets, the Regen Sydney team also worked in Miro, to repattern the plethora of text, diagrams, sticky notes and charts into coherent forms - the Figure below offers a glimpse.

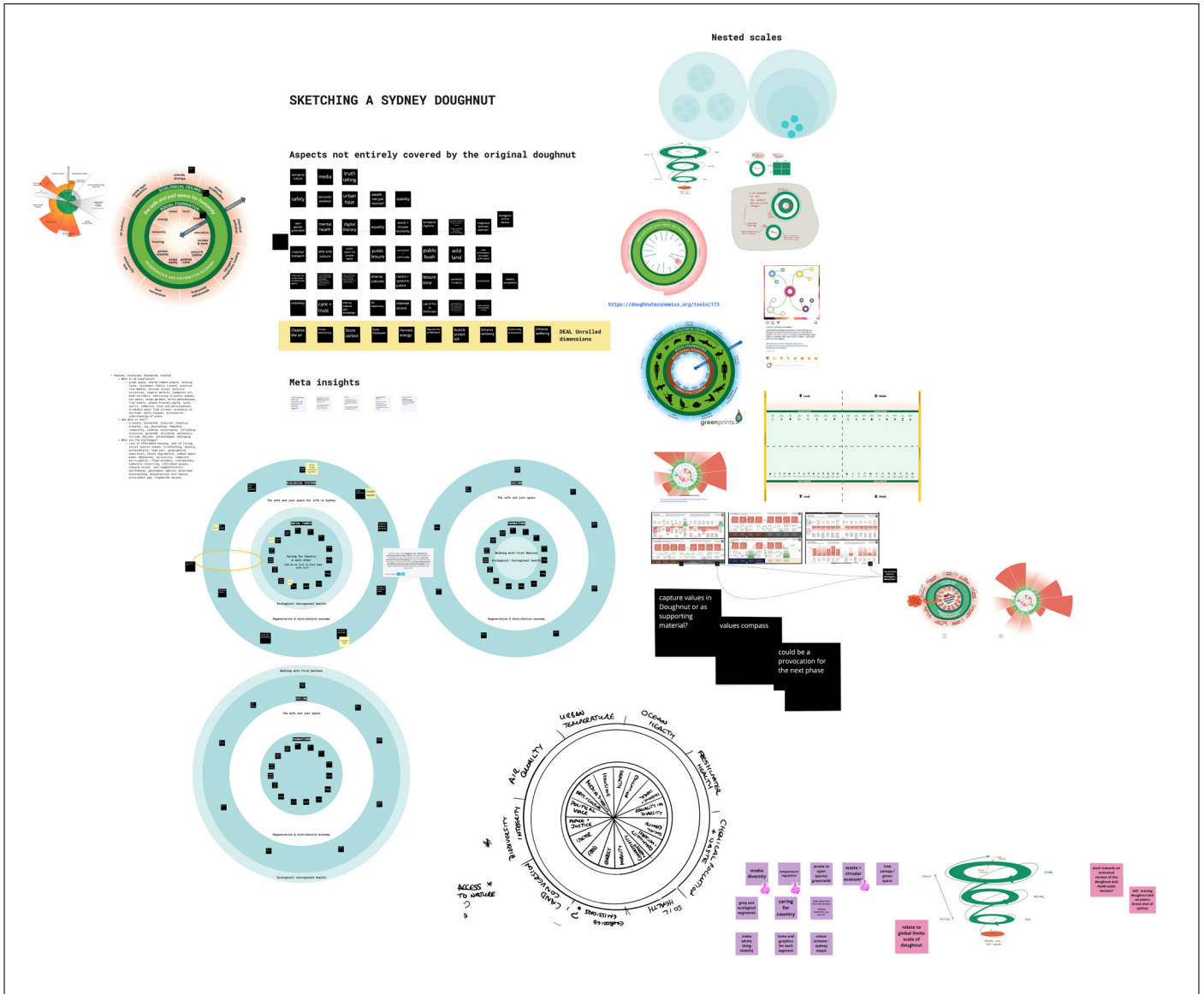


Figure 68. Synthesising workshop insights to localise the Doughnut Economics model

7.1.1.3 The Sydney Doughnut

Based on the insights drawn through the synthesis process, a rudimentary framework was drawn up for an adapted version of the Doughnut. This included social and ecological dimensions that were to be amended or added, along with ideas for the stylistic form, colour palette and language that might most suitably and evocatively represent Sydney. Josephine Ford, an illustrator and friend of Regen Sydney, took this

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brief and through many iterations beautifully sketched the Sydney Doughnut to capture these elements, with all of the magic required of such an artefact that aims to act as a visionary North Star and compass for bold and ambitious action. The Sydney Doughnut is shown in the Figure below, and can also be viewed in higher resolution in **Attachment 16**.



Figure 69. The Sydney Doughnut

The Sydney Doughnut is framed as a ‘first sketch’ so as to emphasise the emergent, participatory and iterative framing through which Regen Sydney seeks to foster the transition to regenerative economics in Sydney. The community workshops played an important role in informing this adaptation, and as future collaboration with community members and professional stakeholders will likely dictate, further evolutions of this artefact will be developed to better guide the mission, potentially with additional downscaled adaptations at the neighbourhood level. In this way, the Sydney Doughnut is a living prototype that can now be taken by individuals and organisations to apply in projects on the ground, with guidance from Regen Sydney.

In attempting to embody a thoroughly place-based compass for regenerative economics, of course this artefact was not beholden to build upon the

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Doughnut Economics model at all. Regen Sydney is not wedded to the this model - characterising social foundations as an inner circle and ecological thresholds as an outer circle - however the decision to harness this form for the first iteration of a regenerative economics compass for Sydney was informed by the great deal of community energy around the Doughnut model as a leading regenerative economics framework. It made strategic sense to follow this energy, and work with this model to harness its conceptual legibility and visual impact, as well as its flexibility to be used in various manners - e.g., storytelling, communications, quantitative data gathering and in developing progress indicators. Overall, the Sydney Doughnut aims to ground engagement in holistic rather than reductive approaches.

Bringing the Sydney Doughnut to life, the dimensions include iconography that represents the qualities of place, including wildlife, landmarks and culture. Other notable elements visually portrayed in the Sydney Doughnut are: (1) Caring for Country depicted in the core of the Doughnut for its role as a central value system for custodianship of all life in the city, and for walking with First Peoples, (2) threads between the social and ecological layers represent the inseparability and interconnectedness of humans and the living world, (3) a de-centring of the human, with a reframed focus on ‘the safe a just space for all life’, and (4) the starry sky behind and around the Doughnut, with the emu and southern cross symbolising the spiritual aspects of regeneration, and our place in deep time. Additional significant amendments that the Sydney Doughnut introduces include a revised set of social and ecological dimensions that comprise the inner and outer rings - which reframe the lenses through which needs and thresholds can be addressed in the Sydney context - and will be explored in greater detail in section [7.3.1.1.](#)

7.1.2. The Assembling Bioregional Community-led Regeneration process

The Assembling Bioregional Community-Led Regeneration (ABC Regen) process was co-created by Coalition of Everyone in late 2022 and early 2023, through research and development supported by the WWF-Australia Innovate to Regenerate (i2R) program. The ABC Regen process, informed by ongoing engagement with Wararack (a community organisation in Castlemaine, Victoria) and a number of co-design forums, proposes a methodological template for a series of place-based participatory assemblies that look to foster bioregionally-adapted governance. Please refer to the ABC Regen report (**Attachment 7**) throughout this section as relevant.

7.1.2.1. Methodological foundations

The preliminary development of the ABC Regen process included exploration and interrogation of key precedents, including Greenprints, Frame

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Creation, Transition Design, the [Now-Future-How](#) model developed by TACSI (The Australian Centre for Social Innovation) and Doughnut Unrolled. Coalition of Everyone looked to these various forms of collaborative design as decentralised decision-making processes to help identify gaps and opportunities that might help to form ABC Regen as a thorough and focused approach to bioregional governance that could subsequently be tested and iterated through project application.

Considering *relevance to the intention of fostering bioregional governance*, each of these precedents has a diverse set of methodological characteristics, benefits and drawbacks as outlined below:

Greenprints

An intention to first and foremost surface the ecological qualities of place, carrying capacities and human ecological impacts (through tools such as the Ecological Footprint Analysis) underpin this process. Informed by the First Law²⁶ of Aboriginal governance (through partners and advisors), this model seeks to readjust and localise human economies to be suitable to the conditions of place. Although it seeks to draw from many various existing engagement approaches, there is a distinct lack of detail (or case studies) about the specific collaborative methods employed through the process.

Frame Creation

The hermeneutic analysis and collective meaning-making that underpin the problem re-framing and stakeholder analysis of this process are invaluable to navigating complex social dynamics. However, ecological considerations are not explicitly made due to a primary focus on public sector innovation which lends itself to reforming existing governance and organisational practices rather than seeding transformational decentralised decision-making.

Transition Design

Place-based stakeholder engagement, systems mapping and vision-led backcasting methods are characteristics of this approach that lend themselves well to exploring social and ecological dynamics in an integrated manner. The multi-level and multi-stage explorations inherent are more suited towards engaging professional stakeholders rather than ordinary citizens. Whilst the methods encourage emergent and ecologically-oriented engagement, they are not specifically targeted

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Indigenous First Law is described by Redvers et al. (a collective of First Nations scholars) as such: “First Law is the guiding principle of First Peoples and it has been generated over eons to govern the diverse range of bioregions within the land mass currently known as Australia. It is the body of laws responsible for maintaining respectful and reciprocal relations between and within First Nations and between the human and non-human family” (2020, p. 3).

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Now-Future-How

towards decentralised decision-making or the surfacing of bio-geo-physical dynamics.

A co-design methodology that aims to foster regenerative communities and disaster resilience in the face of bushfires, floods and other threats, this process models deeply relational engagement methods (TACSI, 2022). The focus on cultural safety, storywork and capability building allows for effective community ownership. Whilst this model is primarily focused on climate adaptation and resilience, rather than mitigation or regenerative economics pre-emptive bioregional governance, the participatory granting that takes place at the end of the process is great example of community decision-making processes shaping visions and strategies into action on the ground.

Doughnut Unrolled

With a framework that aims to facilitate broad-ranging consideration of not only locally important social and ecological dynamics but also dependencies and impacts at the global scale, this is a thorough approach for fostering regenerative economics. Although Doughnut Unrolled does not explicitly ground collaborations in explorations of bioregional carrying capacity or economic localisation, it is well placed to help shape bioregional governance towards an ethos of global responsibility rather than isolationism.

As explored in the literature review, there is a great synergy between collaborative design and deliberative engagements, which was again highlighted in this analysis with the three design-based methodologies - Frame Creation, Transition Design and Now-Future-How - providing great detail on methods of engagement that surface creative navigation of complex context-specific system dynamics. Even though these approaches to co-design do not explicitly frame their offerings as 'governance', their relational forms of multi-stakeholder engagement are greatly relevant to the objectives of bioregional governance. Where they are most lacking is in the way that strategic outcomes can be catalysed into tangible outcomes - which is where deliberative engagements, including citizens' assemblies such as those run by Coalition of Everyone, are well placed to prioritise opportunities for funding and advocate for policy reform with broad-based citizen support through participatory decision-making processes. Learning from these precedents, Coalition of Everyone proceeded to develop the ABC Regen process through iterative co-design and testing with Wararack.

7.1.2.2. Shaping ABC Regen with Wararack

Looking to collaboratively detail specific activities for a series of assemblies, Coalition of Everyone began by evolving a clear purpose for the ABC Regen methodology. The following *objectives and outcomes for ABC Regen* helped to guide discussions with Wararack.

- Objectives**
- Giving voice to all Earth citizens - located in place, connected globally - and allowing them to creatively and critically inform governance.
 - Bioregional governance requires communities to make visible the relationality that exists between human and non-human systems.
 - Bioregional governance must be informed by the bio-geo-physical conditions of a place, the needs of all stakeholders (human and non-human), and the deeper myths and metaphors that create meaning and culture.
 - The process aims to provide a framework through which a coalition of community members may model their own version of place-based governance.
 - The suggested activities seek to deepen participants' engagement with social and ecological dynamics in a holistic and interconnected manner.
- Outcomes**
- Building a shared understanding of ecological dynamics, stakeholder tensions and aspirations so that a community may collectively articulate guidelines that meaningfully inform policy reform, infrastructure strategy, government and business strategy
 - A resulting report and guidelines may also help to tell the story of the place in seeking ongoing funding
 - The collaborative process will lead to data, guidelines and action plans that the community will retain ownership over; the process will enable both the designing and the doing of bioregional governance
 - Working through the methodology with local government, so that a final citizens' assembly might result in legislative suggestions

Wararack helped Coalition of Everyone to interrogate these intentions through the context of their Community Climate Transition Plan, developed for the Mount Alexandershire Council based in Castlemaine. Wararack's Community Climate Transition Plan aimed to bolster the Council's 10 year community strategy to be better aligned with resilience outcomes - with three particular focus areas - on net zero emissions, adaptation and culture. Through these engagements Coalition of Everyone gained a greater understanding of a range of opportunities and challenges for the

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implementation of bioregional governance, including (1) the need for nuanced forms of consideration of ecological data that are contextualised where relevant in human trends of bioregional ecosystem mismanagement, (2) a hesitation to exclusively use the term ‘bioregional’ to describe place-based forms of governance that can also be organised around other frames of reference such as watersheds and First Nations language groups, (3) with reference to the second point, the need to identify and navigate the tensions and power dynamics inherent in different frames used to map a given region (who made the map and why?), and (4) the potential for explorations of land use to provide a mechanism through which to bridge analysis of social and ecological dynamics as co-emergent systems.

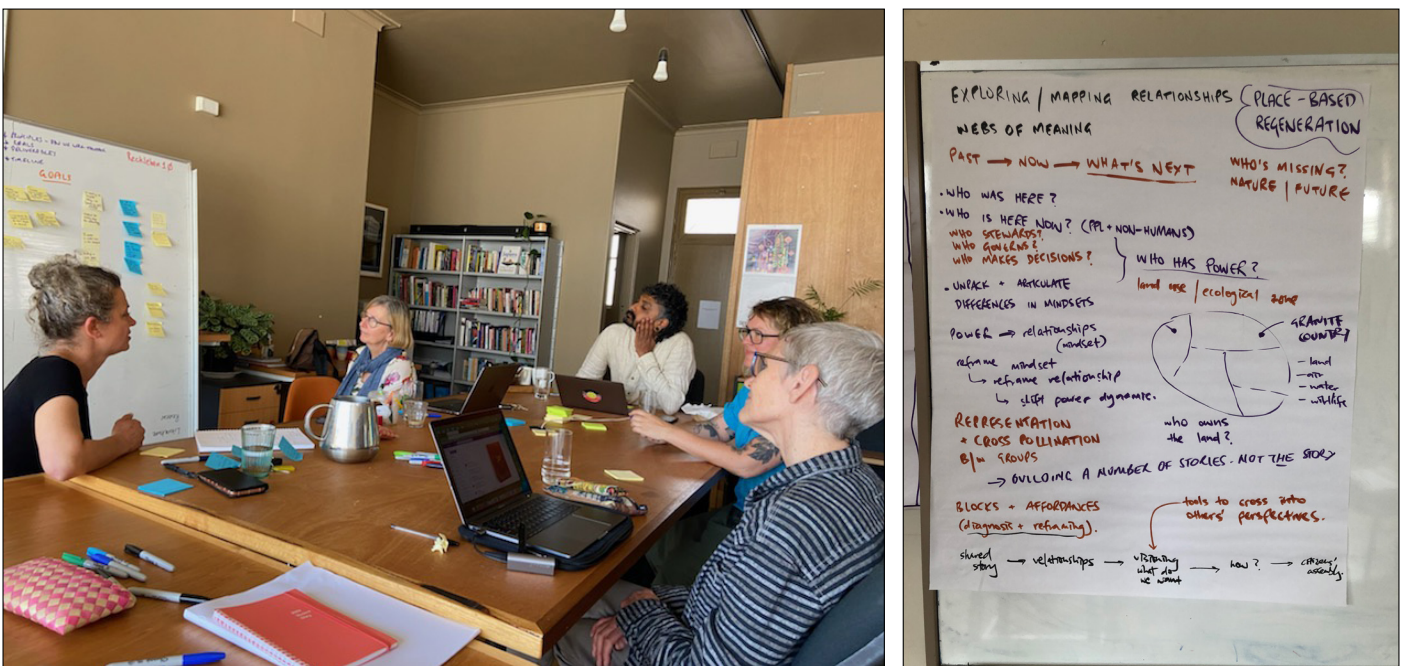


Figure 70. Iterating the ABC Regen process with Wararack in Castlemaine

The emerging ABC Regen methodological framework was further refined when Coalition of Everyone visited Wararack in Castlemaine for a two-day intensive. As the Figure above depicts, the teams worked together to further interrogate opportunities and challenges for bioregional governance. With a deepened understanding of context-specific analytical lenses with which to better integrate social and ecological considerations into co-design and decision-making processes, Coalition of Everyone proceeded to articulate the ABC Regen process as a six-part series of participatory assemblies with all the requisite details of included steps and activities.

7.1.2.3. A six-part series of assemblies

The ABC Regen process (as described on the following page) is made up of six parts, that at their heart aim to take participants through deliberations to deepen opportunities for community-led governance for social and ecological custodianship. Given the detail for each of the

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specific activities, the methodology can be adapted as needed to suit the context, to create collective coherence and action towards place-based governance. The diagram below depicts an outline of the six parts to the process, with descriptions following. Greater detail on the objectives, steps and activities for each of the parts can be found in the ABC Regen report (pages 19-28 of Attachment 7).

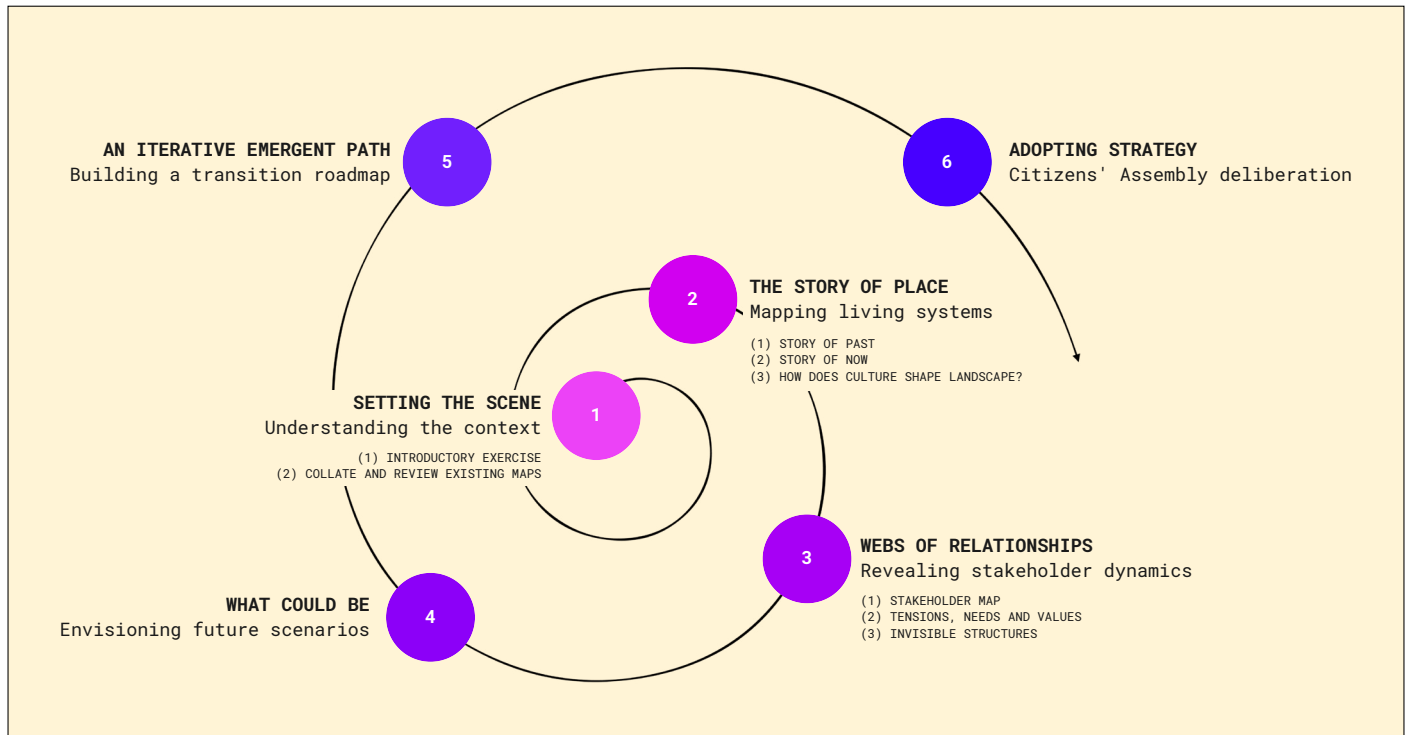


Figure 71. Overview of the ABC Regen six-part series of participatory assemblies

(1) Setting the scene: understanding the context

The process seeks to guide participants through the complexities of bioregional governance by first enabling a grounding in a shared understanding of the meta-context in *Part 1* - the systemic landscape that precipitates and shapes the emergence of efforts to foster place-based governance, whether framed as bioregional, based on Aboriginal language groups or otherwise.

(2) The story of place: mapping living systems

This is followed in *Part 2* by a narrowing of focus into the specific context of place, in order to surface the historical evolution of ecological zones and bio-geo-physical dynamics, including with regard to human land use impacts; mapping activities help to surface the complex relationships between humans, non-human actors and ecologies.

(3) Webs of relationships: revealing stakeholder dynamics

With an emergent context-specific understanding of how culture shapes the ecological landscape of the given place, participants are then guided in *Part 3* to conduct a stakeholder analysis, revealing underlying

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axiological orientations and tensions, as well as structural enablers and blockers; ultimately looking to navigate participants towards finding common ground.

(4) What could be: envisioning future scenarios

In *Part 4*, the group harnesses their deep contextual and systemic explorations to inform visions of everyday lifestyles and social infrastructures that embody cultures of place-based self-determination (including through non-human perspectives).

(5) An iterative emergent path: building a transition roadmap

Based on these aspirational articulations, in *Part 5*, participants are facilitated to backcast a series of incremental milestones between the present and the future scenarios, ultimately exploring the role of a local action group to seed distributed governance practices.

(6) Adopting strategy: citizens' assembly deliberation

The opportunities for action identified are to then be interrogated in *Part 6* through a citizens' assembly process with the wider community, for the purposes of agenda-setting for funding allocation, to build legitimacy and broad-based engagement, as well as to guide prioritisation of areas of focus.

Of note, are the second and third parts of the process and their interrogation of social and ecological aspects as co-emergent dynamics. Whilst previous drafts of the methodology workshoped these aspects separately, delving into these dynamics together could better model the need to consider human and ecological systems in an interconnected manner. The activities in Parts 2 & 3 look to precipitate a co-evolution of bio-geo-physical and cultural priorities, in line with Indigenous conceptions of nature-culture interconnectedness.

In the worldviews of many IPLCs [Indigenous peoples and local Communities], biological and cultural diversity are uniquely linked. Their identities, cultures, and ways of life have most often been deeply embedded in their relationships with the environments upon which they depend (Zanjani et al., 2023, p. 2).

This approach to exploring the co-evolution of bio-geo-physical and cultural dynamics was also a convenient solution to a tension in the development of the process - deducing how best to frame early parts of the methodology. It was initially unclear whether to first consider the bio-geo-physical and ecological qualities of place (as does Greenprints), or to conduct an analysis of the wicked problem context (as does Frame Creation, Transition Design and Now-Future-How). Through the refinement of the ABC Regen process, Coalition of Everyone found that this was a false dichotomy, and moved towards the co-emergence model described.

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Experimental deliberative techniques to represent the voices of non-humans and future generations (particularly in Part 4) are to be trialled, with the intention of piloting the ABC Regen process as a living prototype. See section [7.2.1.1.](#) for more about listening to non-human perspectives.

7.1.3. Comparative analysis of key approaches

The co-design methods inherent in both Regen Sydney’s Sketching the Sydney Doughnut body of work and Coalition of Everyone’s ABC Regen process are adaptations and assemblages of practices drawn from diverse precedent methodologies. With the goal of enabling regenerative economics and bioregional governance respectively, they seek to facilitate multi-stakeholder engagement at different geographical scales, and look to have impact in varied areas of focus - especially when compared with other co-design processes of interest. See the Figure below for a comparative analysis of key co-design approaches.

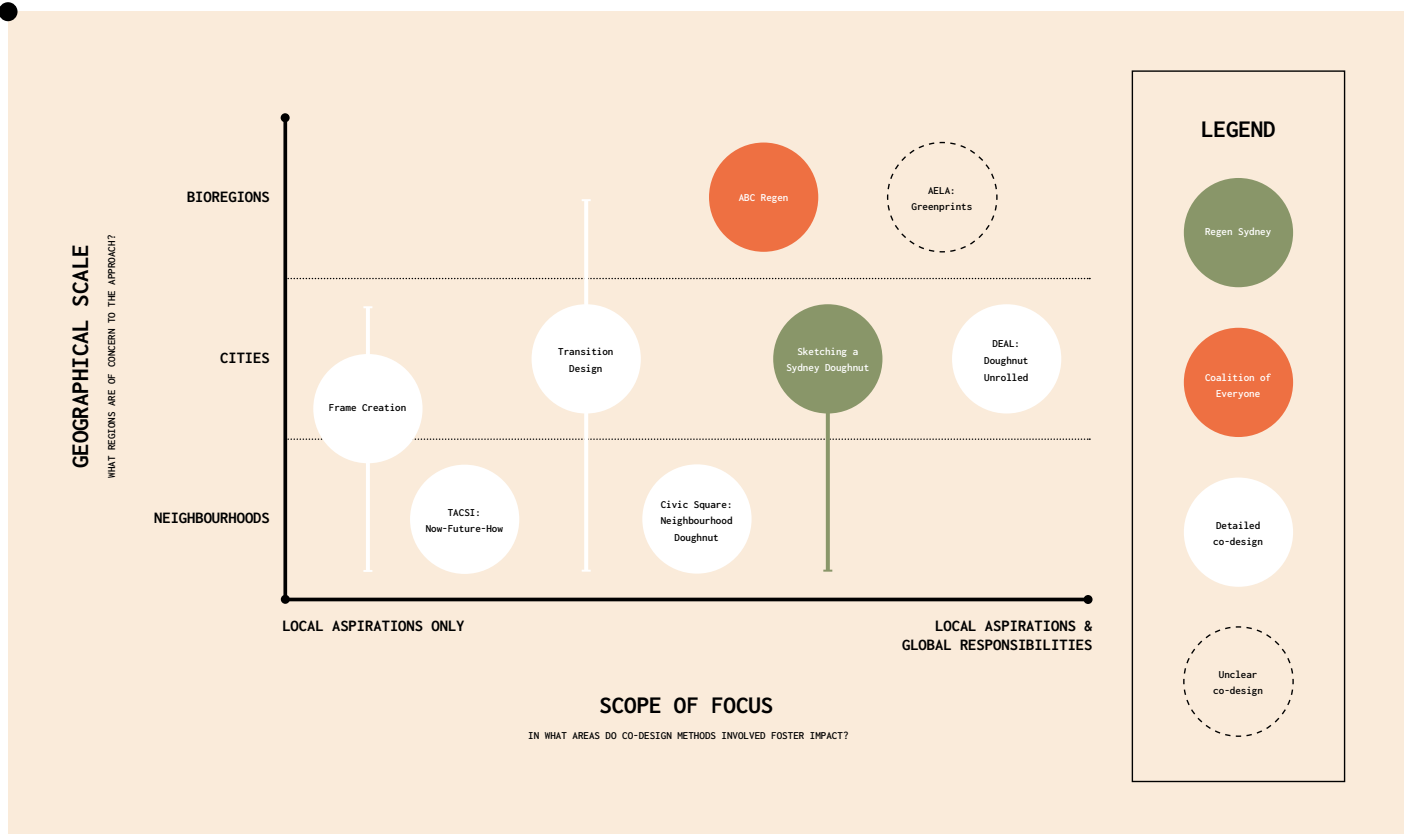


Figure 72. Comparative analysis of key co-design approaches for regenerative economics and bioregional governance

While all of the approaches depicted in the diagram above do make explicit consideration of ecological dynamics, most of them begin the process with local and social questions for discursive exploration - as a place of comfort and accessibility for participants. The exceptions to this trend are (1) the Greenprints methodology, which as mentioned earlier in section [7.1.2.1.](#), begins with an exploration of ecological qualities of place and bio-geo-physical carrying capacities, and (2) the ABC Regen process, which is the only process that embodies a co-emergent

approach to exploring social and ecological dynamics. Similarly, all of the approaches included are oriented toward seeking First Nations advice early in their engagements, however, it should be noted that the Now-Future-How, Sketching a Sydney Doughnut, ABC Regen and Greenprints processes make this an explicit priority.

It is also worth considering that Regen Sydney's Sketching a Sydney Doughnut approach refers to the co-design methods used in late 2022 and early 2023, and does not necessarily reflect the engagements to be orchestrated in upcoming programs of work. Regen Sydney has thus far only introduced bioregional characterisations informally, rather than through co-design project briefs, so as to strategically surface what might be perceived as a radical economic proposition, when the systemic conditions are fertile and funding bodies are receptive to such a framing. The way that Regen Sydney has adapted the Doughnut Unrolled to context included significant moments of centring and mindfulness practice, that helped participants to situate themselves in an ecological, global and temporal awareness - and in doing so broadened the scope of impact in ways that might not be measurable.

On reflection, perhaps explorations of the specific bio-geo-physical qualities of a place are more feasible when conducting projects at a local geographical scale, where participants in co-design forums are attuned to relevant aspects in a granular manner. When working with at such scales, participants might be better able to surface key opportunities and challenges drawing upon their intimate knowledge and lived experiences and familiarity with the communities and ecologies in question (Gibson-Graham et al., 2019).

A focus on local and social dynamics early in a co-design process could help to garner greater interest in participation during the formation of a network, and to drive engagement. Strategically, this could be a valuable approach, however the ecocentric motivation to collaborate must still be emphasised and embodied. Regardless, it is clear that there are numerous different approaches to start from an understanding of place in co-designing regenerative economics and bioregional governance. The Sydney Doughnut and ABC Regen, as well as the other precedents analysed here are all diversely contributing as living prototypes to the development of polycentric structures of decentralised decision-making, albeit with different scales of focus (Turbull et al., 2023).

7.2. Embodying kinship in practice

7.2.1. Re-learning to engage with non-human agency

Anthropologist Anna Lowenhaupt Tsing writes about non-humans: “their voices silent, we imagine well-being without them. We trample over them for our advancement; we forget that collaborative survival requires cross-species coordinations. To enlarge what is possible, we need other kinds of stories—including adventures of landscapes” (2015, p. 155). Along with other regenerative economics and bioregional governance initiatives, Regen Sydney and Coalition of Everyone strive to engage with non-human perspectives, and to embody an ethos of ecocentrism and pluriversalism in their activities. There is no right way to do this, and so the organisations continue to trial different ways to model human-nature interconnectedness and non-human agency through their strategy development, network convening and project-based co-design forums, as well as through the language used and ways in which progress is measured. Such ontological reframings were certainly witnessed in the DIRC circular economy project, albeit in a contained fashion limited by project scope.

“Shifting from, sustainability lexicon, which is about, how do we measure and collect’ [Instead asking] how do we be in harmony with? And how do we see the world as inherently alive, and life as something that happens through us? How [do] we accept our own agency within all of that, rather than it being handed to us?”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

There are of course the underlying worldviews that implicitly inform the prefigurative politics of the two organisations that make up my sites of research, however the agency of non-humans can also be more explicitly and tangibly manifested in co-design practices and processes during project work. Botanist and research Matthew Hall writes that “dialogical engagement helps form the social relationships which are the root of moral consideration and moral action... to bring about dialogue, the autonomous, communicative presence of non-humans needs to be recognised and affirmed” (Hall, 2011, p. 161). This begs interrogation of the *various forms of non-human actors* with which we can engage in the context of regenerative economics and bioregional governance.

7.2.1.1. Listening to non-human needs

Veselova and Gaziulosoy describe a compelling framework that contains numerous categories for non-human actors and processes, with which to better consider their needs in design practice - these are (1) individual organisms, (2) single-species collectives, (3) multi-species collectives, (4) life processes, (5) living systems, (6) biogeochemical cycles, and (7) processes of the atmosphere (2021, p. 6). In their evocation of this framework, they emphasise the possibility for additional categories

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to exist, and also that a single organism such as a tree actually sits across numerous categories - in this example a tree is an individual organism but it also contains multi-species bacterial organisms, enables life processes such as decomposition and contributes to the carbon cycle. These categories can afford a great deal of complexity with which non-human actors can be engaged in design processes (Müller et al., 2022).

So far Regen Sydney and Coalition of Everyone have not explicitly created space in their design forums for each of the categories of non-humans outlined above to be included in a systematic manner, however many of them have still been represented in an ad-hoc fashion. Across many of the external multi-stakeholder co-design forums, as well as in internal organisational governance and strategy development, non-human representation has been fostered for actors ranging from birds, mycelium, pollinators, trees, forests, soil, rivers, mangroves and many more. In most cases, the key motivating factor that shaped the selection of particular non-human actors was the affinity felt by participants towards them - which was crucial for the purpose of surfacing context-specific knowledge and experiences into the dialogue. An embodied relational approach to engaging with non-human kin is championed by Poelina et al.:

Here [the Martuwarra Fitzroy River Valley], people recognise persons of all species such as plants, birds, and animals together with rocks and living waters, as extended ecological family members – kin – with shared ancestries and origins. Everyone and everything exist as relations. All relationships and behaviours within this kincentric ecosystem support Indigenous people's worldview, values, and an ethic of care, through which all human interactions preserve and enhance the ecosystem (2023, p. 2).

Indigenous people the world over are living examples of a profound reciprocity that exists between them and their non-human kin, with their embodied relational cultural landscapes of interconnected custodianship able to reveal a nuanced and complex tapestry of non-human needs. The role of design in fostering non-human agency in regenerative economics and bioregional governance, should accordingly seek to highlight and enhance the complex relationships (whether visible or invisible) between human participants and non-human kin, with particular reference to their place-contexts - the plants, birds and lands with which they are already in communion (Chang & Johar, 2021).

*“If you go into regenerative systems theory, it's a holistic network of actors and relationships and human and non-human beings. And focusing on I guess, the deeper essence of what makes all of those things tick. **What makes them engage in relationship with each other? That's the real deep systems change.**”*

Tasman Munro, DIRC
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A relational approach to enabling non-human agency in design processes suggests that it is not enough to simply include non-human actors, perspectives and representation, but that the connecting fibre must also be surfaced. The relationships and dependencies that exist between human and non-human actors are key to forming a holistic understanding of human impact, as well as to highlighting opportunities to rebalance human activity. I find that the term *assemblage* appropriately captures the simultaneous consideration of both *non-human actors and relationality* - bringing together the categories for non-human actors introduced by Veselova & Gaziulusoy, with the complex relationships that make up an embodied understanding of place. Engaging with assemblages of non-humans can allow for a more active and dynamic representation of their agency in multi-stakeholder design forums.

Patterns of unintentional coordination develop in assemblages. To notice such patterns means watching the interplay of temporal rhythms and scales in the divergent lifeways that gather. Surprisingly, this turns out to be a method that might revitalise political economy as well as environmental studies. Assemblages drag political economy inside them, and not just for humans (Tsing, 2015, p. 23).

Whilst participants might be adept at considering and responding to the perspectives of non-human assemblages, it is a completely different ask to have processes of collective governance engage with the same intent. Dominant settler-colonial institutional (legal, economic and political) processes in their current forms do not imbue non-humans with agency, except for some examples of legal personhood.

*“My passion is to explore what **institutional imagination** means, especially around issues which are not usually labeled as imaginative or creative - the economy would be a classic one, the state would be another one. To think about something like the economy, or the state as a malleable thing. It’s a process, it’s a set of processes that have somehow become institutionalised. What does it mean to actually design those institutions, and in such a way that you can redesign them when they’re not working? And you need imagination to do that.”*

Bronwen Morgan, Regen Sydney
Practitioner Interview

The prevailing manner of interacting with non-human actors is to impose regulatory thresholds on human activity so as to limit adverse impacts. As introduced in the literature review in section [2.4.6.](#), mechanisms by which to harness non-human agency by which to consider both *needs and thresholds* are vital. Whilst a thorough relational and robust engagement with the needs of non-humans would indeed precipitate the realignment of human activity to a state of equilibrium with living systems, the extreme externalisation of social and ecological costs that characterises current

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institutional paradigms, also requires the imposition of limits. Checks and balances might be more feasible to implement in the short-term; whilst projects of institutional re-imagination to better consider non-human needs can be conducted concurrently with a longer-term view.

Community engagement by councils and deliberative forums such as citizens assemblies have a very strong intention to increase community participation and agency, which is fantastic, however, they are still very much focused on human wellbeing and economic development rather than also experimenting with ways to listen to the needs of non-humans (whether specific species or ecosystems). Such holistic approaches to economics and wellbeing do indeed face cultural barriers to their acceptance as valuable processes of engagement; Reggie highlights the crucial role of a worldview shift in enabling such practices:

“This is where I think that worldview shift is so key. And practices that help people, embody almost more of an empathetic understanding... you know, we were used to putting ourselves say, in the shoes of other people, but what would it be like to put ourselves in the the feet or the fins of a whale? Can we do that? And what does that look like?”

Reggie Luedtke, Coalition of Everyone
Practitioner Interview

7.2.2. An ethos of care and reciprocity

As outlined in the previous paragraphs, the different approaches to surfacing non-human perspectives - through explorations of needs and thresholds - speaks to a wider tension that exists at this moment of profound systemic shifts. Regenerative practices, informed by First Nations axiologies and epistemologies, seek to strengthen the ecosystemic life-giving potential of human activities, through a paradigm in which non-humans have agency, and humans are valuable custodians. On the contrary, prevailing institutional approaches, framed as seeking environmental sustainability and underpinned by an ethos of human-nature separation, continue to externalise the social and ecological costs of human activity, albeit (ineffectively) limited by meagre limits - regulatory and otherwise (Wooltorton et al., 2020). Ecological economist Tim Jackson evokes this point in his writing that “valuing only what can be produced and consumed at cost to the planet misses the foundation for life itself” (2023, para. 30).

It is worth noting the fundamental ontological difference between fostering consideration of (1) non-human needs and (2) ecological thresholds - despite the fact that strategically speaking, both approaches are valuable in regenerative transitions. To be guided by

a relational ethos of Caring for Country to nurture a regenerative human presence on Earth, requires us to embody a deep sense of care and reciprocity in our systems of economics and governance (Jackson, 2023; Tronto 1993). Responding to breached ecological thresholds on the other hand, does not necessitate this ontological orientation - and indeed in its current manifestations is characterised by social practices and institutional infrastructures that largely do not recognise the intrinsic value and agency of the non-human living world (Poelina et al., 2023). In many cases thresholds to human activity are placed only where further destruction of habitats and ecosystems would be likely to have negative impacts on human wellbeing and even more so, economic productivity (Jackson, 2023). Articulation of ecological thresholds does not however *have* to be made in this anthropocentric, deleterious manner, and *can* indeed be valuable when formed from a grounding in relationality, founded upon principles of care and reciprocity, and in complementary consideration of intrinsic non-human agency and their needs.

A relational approach, underpinned by an ethos of care and reciprocity can be seen in both Regen Sydney and Coalition of Everyone - with their prefigurative politics playing a valuable role in modelling regenerative cultures, economics and governance processes (as explored in section [6.1.2.](#)). Additionally, the fundamentally collaborative orientations of the two organisations helps to foster cultures of reciprocity whereby participants various avenues to find personal and professional value (Davis et al., 2023). Coalition of Everyone's Regen Places program of work is also leading in this regard, helping a broader network of practitioners to test and trial regenerative practices, alternative to dominant mechanisms in their fields of expertise. Additionally Regen Sydney's Sydney Doughnut acts as a living North Star vision, through which future participants can continue to emergently experiment with methods of relational collaboration based on an ethos of care and reciprocity. At the same time it also affords use as a tool that can speak the language of the prevailing system - allowing for qualification and quantification of externalised economic impacts.

7.2.2.1. The role of limits

While a grounding in values of care and reciprocity lends itself as a reframing through which to envision and articulate the nature of regenerative futures in a particular context, this approach by itself does not challenge and shift the prevailing systems characterised by socio-ecological injustice. Similar to the discourse of degrowth acting to provoke change to existing growth-obsessed economies towards steady state economies, the ability to define limits to the externalisation of social and ecological impacts can act as a bridge towards socio-economic systems underpinned by care and reciprocity (Brand et al., 2021).

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- 7.2.2.1. The role of limits

Initially, it may seem counterintuitive that a deficit-focused approach that uses the imposition of limits is ontologically compatible with the strengths-based intersubjective framing based on values such as care and reciprocity. However, both these methods are not only compatible, but simultaneously necessary in the toolkit of a Transition Designer who works with individuals, organisations and institutions who are all at different stages of their system-shifting journeys. Additionally, the development and application of socio-ecological limits can hasten shifts towards economies underpinned by care and reciprocity, especially through their intentional designing of desirable social practices and institutional infrastructures.

Thresholds, when devised through processes rooted in participation and collective self-determination, would be better framed as conscious self-limitations rather than as deficit-based technocratic impositions. Social scientists Brand et al. suggest that “the question remains how to practically enact such limits that lead to more durable and institutionalised forms of practices and how a democratic governance of limits can be implemented across various spatial scales” (2021, p. 279). The following section [7.3.](#) will further explore methods for engagement with social and ecological thresholds - including metrics and indicators.

7.3. Revealing ‘invisible’ social and ecological impacts

7.3.1. Sensing social and ecological thresholds

As described in section [7.2.1.1.](#), there are various framings of non-human actors through which both non-human needs and ecological thresholds can be considered. Additionally, social considerations are important to be made, not only as aspirational foundations, but also as thresholds beyond which impacts and externalisations on internal or external populations are deemed ethically untenable (Brand 2021 et al., 2021). This section will explore frameworks, mechanisms and metrics with which social and ecological thresholds can be developed - with reference to examples from my sites of research.

The following discussions will draw upon my field research, in particular attempting to elicit the practical value of socio-ecological thresholds as they are relevant to localised areas such as cities and bioregions. Planetary boundaries, as discussed in the literature review section [2.4.3.3.](#), are difficult to *downscale* to be applicable at the local scale, and as such indicators and metrics for socio-ecological wellbeing at these scales must be drawn from context-specific expertise (Turner & Wills, 2022). Such locally devised benchmarks could actually also be of value when *upscaled* to inform a global response to planetary boundaries. The late renowned climate scientist Will Steffen described this issue with downscaling planetary boundaries as follows:

The quantitative downscaling of planetary boundaries, and we've tried to do it, presents some significant challenges. The basic problem here is the Earth is a complex system, so it doesn't scale up from what happens locally. There are emergent properties that only appear at much larger scales, and it's these emergent properties that we're trying to put the planetary boundary framework around (2022, 30:19).

Ferretto et al. echo this sentiment with regards to downscaling the planetary boundaries, and advocate for the development of context-specific regional parameters that do not ineffectively bastardise the planetary boundaries, as well as a focus on ecosystemic regions that might not conform to political boundaries in practice (2022). The development of place-based local and regional indicators for wellbeing that holistically integrate both social and ecological considerations is indisputably required. The inclusion of both social and ecological metrics together, is not in opposition to the intent of the planetary boundaries, but in fact it would allow for more nuanced context-specific requirements for socio-ecological justice to be contributed - to local places as well as to the global arena (Brand et al., 2021).

7.3.1.1. Dimensions of the Sydney Doughnut

The Sydney Doughnut is specifically directed towards convening cross-sector projects, and collaborative research at the city-scale of Greater Sydney. The adapted dimensions of the Doughnut that were articulated

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through a series of community workshops and stakeholder roundtables (see section [7.1.1.1.](#) for more about this co-design process) are well placed to act as an integrated set of lenses through which to guide and evaluate progress in Sydney towards a regenerative economy. The scale for which the Sydney Doughnut was developed is crucial to consider, especially when viewed with an understanding of the unique value of both hyper-local guiding frameworks at the one scale, and the planetary boundaries at the other end of the spectrum. Primarily located between these two scales, the Sydney Doughnut looks to identify socio-ecological dimensions that are relevant to the regional scale of Greater Sydney as seen in the Figure below, as well as important relationships with other scales.



Figure 73. Rolling the Sydney Doughnut at multiple scales

Whilst the diagram above is a conceptual depiction, Regen Sydney developed it so as to situate the Sydney Doughnut and its adapted dimensions in such a way that they might not be misconstrued as relevant at all other scales. The social and ecological dimensions that form the Sydney Doughnut seek to specifically strengthen efforts towards regenerative economics at the city-scale. All of the scales of engagement shown in the spiral diagram are complementary, necessary and mutually reinforcing, and beg the question - how might the Sydney Doughnut be harnessed at the city-scale, adapted at the local-scale, and also, how might it catalyse engagement with global responsibilities?

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The revised set of social dimensions (inner circle) and ecological thresholds (outer circle) that make up the Sydney Doughnut are articulated based on the network's contributions and in doing so are well placed to act as a compass for further action. In particular, three social dimensions were added to form the Sydney Doughnut - 'Access to Nature', 'Arts & Culture' and 'Digital Equity', and the dimensions making up the ecological ceiling are all thoroughly adapted so as to be relevant to the city-scale rather than emergent global dynamics. These reframings of the ecological dimensions look to frame subsequent action through aspects that locals can work with - what they can see, sense, touch and quantify - in Sydney; whilst of course acknowledging that the health and vitality of Sydney's living systems play a part in determining the health and vitality of ecosystems across our shared planet. The Figure below shows a snapshot of the dimensions of the Sydney Doughnut, which can also be seen in greater detail on pages 24-25 of Attachment 5.

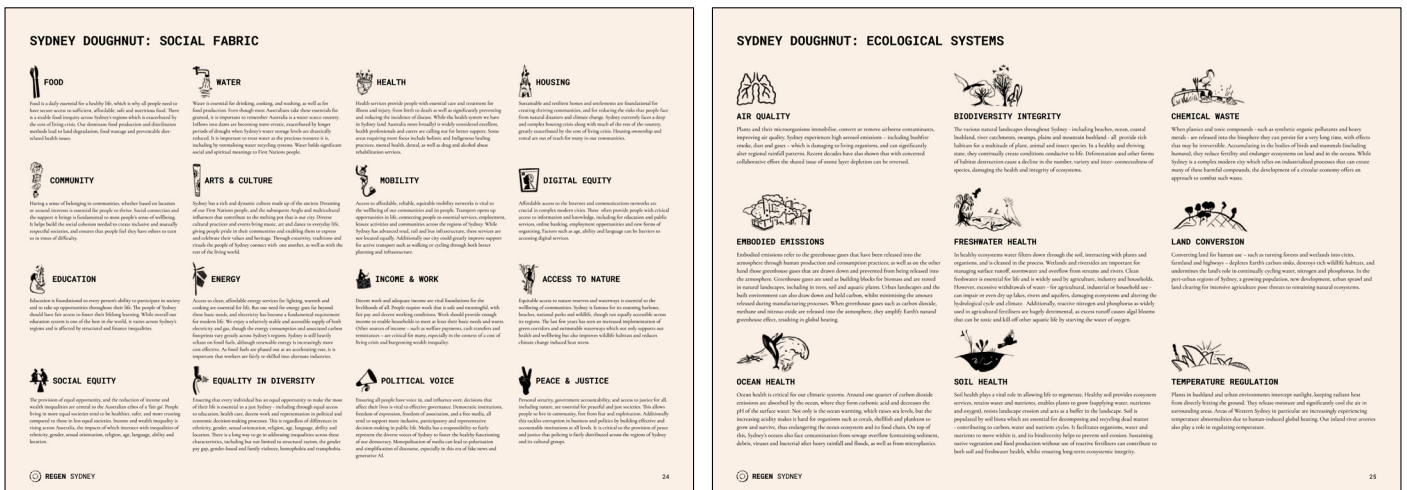


Figure 74. The social fabric and ecological systems making up the dimensions of the Sydney Doughnut

The meaningful use of such context-specific Sydney Doughnut dimensions “requires flexibility and responsiveness via adaptive and reflexive governance that includes the capacity to redesign institutions and avoid institutional path dependency” (Turner & Wills, 2021, p. 6). Additionally, the indivisibility of social and ecological considerations, in the Sydney Doughnut, as well as its implicit collectivisation of local aspirations with externalised impacts, is captured in the following comment.

“The stakeholders that need to be lobbied - to permeate through a much wider group of people, a sense that there’s another way of designing the economy, that puts ecology at the centre of everything. And not just ecology in some sort of pristine conservationist way, but our embeddedness in the material world. So Caring for Country is as social as its environmental.”

Bronwen Morgan, Regen Sydney Practitioner Ireland

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7.3.1.2. Considering land use dynamics with ABC Regen

The ABC Regen process looks to engage with social and ecological thresholds through co-emergent cultural and bio-geo-physical factors that can be identified and realigned, especially with regards to land use dynamics relevant to the context in question. The second part of the process (The Story of Place) is most concerned with revealing land use dynamics, and guides collaboration through explorations of (1) Story of Past, (2) Story of Now, and (3) How Does Culture Shape Landscape? The Figure below depicts the steps involved in these activities, which can also be seen in greater detail in **pages 21-22 of Attachment 7**.

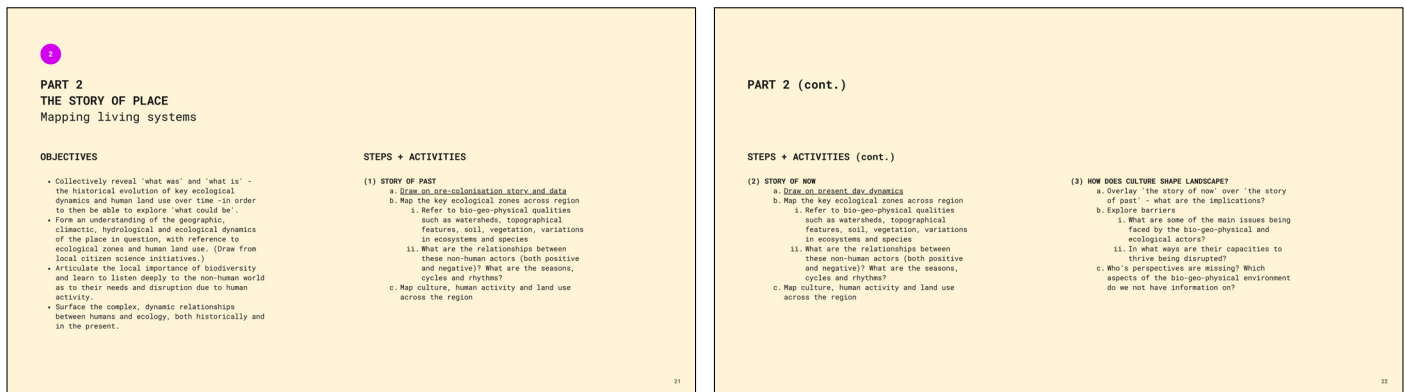


Figure 75. Exploring land use dynamics with ABC Regen's 'The Story of Place'

Underpinning the co-design here is an intention to reveal 'what was' and 'what is' - the historical evolution of key ecological dynamics and human land use over time - in order to then be able to explore 'what could be'. Participants are to be guided to co-create a map that overlays (1) key ecological zones across the region - referring to bio-geo-physical qualities such as watersheds, topographical features, soil, vegetation, variations in ecosystems and species, and (2) the relationships between these non-human actors (both positive and negative) - including seasons, cycles and rhythms, as well as (3) human activities, land use and culture - including key industries and economic ventures. By interrogating the evolution of land use and bio-geo-physical qualities over time, participants will gain a nuanced understanding of the challenges that non-human actors face due to human activity. In essence these are externalisations of the local economy of the region in question, and allow for an articulation of ecological thresholds.

In this way, ABC Regen seeks to foster the identification of ecological thresholds at the local and bioregional scale - which can allow for more targeted responses from both public and private sectors. Climateworks Centre affirms this localised approach to engaging with ecological thresholds: "defining environmental limits is complex... it is important to consider environmental impacts at an appropriate scale to guide environmental management decisions" (2022, p. 30). Not only are the local

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and bioregional scales invaluable to considering ecological thresholds in a nuanced manner, but through ABC Regen's approach of harnessing a land use framing, social dynamics can be simultaneously addressed in an integrated manner. Maps are inherently contested artefacts (as described in section [7.1.2.2.](#)), and with their power to reveal conflicting interests, visualisations of land use dynamics can also help to highlight instances where social costs are being externalised amongst stakeholders. Not only can this mapping exercise help to elicit the extent and co-evolution of distinct ecological zones (e.g., sandstone, tidal mangroves etc.) and human land use (e.g., light industry, hospitality etc.), but participants can situate themselves as stakeholders into the map so as to more tangibly engage with the interconnected impacts that are surfaced (Sharp & Ramos, 2018).

7.3.2. Grappling with globally entangled impacts

Although in large part the wider movements for regenerative economics and bioregional governance have sprung from a need to account for and respond to the externalisation of socio-ecological costs, they are still predominantly characterised in the Global North by calls for economic localisation, distributed governance and material self-sufficiency, with less regard given to the creation of avenues for global justice, and the prevention of the further development of trends towards isolationism.

Despite efforts to situate their work in decolonial orientations, both Regen Sydney and Coalition of Everyone are implicated in this assessment, with their programs of work and network engagements to date largely aimed at surfacing place-based socio-cultures and political economies. Whilst this is indeed of utmost importance, it must also be complemented by advocacy and agitation for our societies to develop mechanisms by which to enter into and uphold a global socio-ecological contract (Boehnert, 2018). This is not an easy task by any means, with vast structural and institutional barriers challenging such an assertion - including world trade norms, supply chains, as well as international governance, financial and monetary systems that perpetuate historical imperialist dynamics (Schmelzer & Nowshin, 2023).

Berlin-based degrowth activists working towards an internationalist degrowth agenda, Matthias Schmelzer and Tonny Nowshin argue for the development of a global justice perspective that includes integration of ecological reparations, freedom of movement and an overhaul of the international trade and financial systems:

Degrowth should not be confined to ending the harm of the Global North's externalisation and appropriation, but should also include internationalist, reparation-centred policies that actively counteract negative repercussions on the Global South, repair past harm, and remake the world system after growth to enable global justice (2023, p. 21).

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An internationalist degrowth agenda such as that described above requires Global North countries to not only dematerialise their economies so as to account for their material and ecological footprints, and transform the consumption-side impacts of global supply chains (Howard-Vyse & Kashyap, 2023; Johar & Stancic, 2023), but to also address “centuries of colonial and ecological debt” (Schmelzer & Nowshin, 2023, p. 16). The fundamental point to be made here, is that efforts to transform economic systems can and should not be separated from histories of imperialism. Acclaimed author Amitav Ghosh eloquently describes in his book ‘The Nutmeg’s Curse’ that “the discussion of climate change, as of every other aspect of the planetary crisis, tends to be dominated by the question of capitalism and other economic issues; geopolitics, empire, and questions of power figure in it far less” (2021, p. 116).

This moment of interconnected challenges calls upon us to rewrite the rules of the global economy, taking leadership from the Global South and First Nations people who provide examples of pluriversal design (Feffer, 2023). Organisations such as Regen Sydney and Coalition of Everyone are well placed to shift the collective consciousness away from patterns of overconsumption, and in effect help to foster degrowth transitions.

“It’s actually an issue which usually brings up feelings of guilt and cognitive dissonance and discomfort because we’re all implicated in so many more emissions. If you get this accusation that you’re sometimes preaching to the converted, I mean, it’s actually an argument for making this central because even if you are preaching to the converted, you’ll find this issue exposes the vulnerability of what we’re all doing.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

At the same time, there needs to be a concerted effort to focus on systemic and institutional, rather than only individual-level changes. The role of design in this context, can be to reveal and fight against the concealment of systemic and institutional patterns of global injustice, as seen through the prioritisation of ‘per capita’ metrics in the face of glaringly larger socio-ecological externalisations, such as those of military operations. Again, Ghosh elucidates this point:

Today, concealment is vital to the effective use of power. In the case of the United States, this masking has been so successful that it is easy to forget that the military is not just the largest employer and investor in the United States but also one of the driving forces behind the American economy. Out of sight, out of mind, as the adage goes—and so it is that all matters related to the national security apparatus are excluded from the carbon footprint of the average American (2020, para. 12).

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Operating in the entangled complexity of centuries-old dynamics, co-design is particularly suited to expanding the context of collective consideration to “knit stories of care, justice, collaboration, love and tolerance that, like myth, can endure and enact ecological relationality” (Jain, 2023, para. 48). It is for this ‘knitting together’ of diverse stakeholders, stories and approaches that the Sydney Doughnut and ABC Regen process have successfully carved out a space, and through which they seek to continually deepen collective explorations. Largely for concerns of strategic organisational viability, the discussions facilitated to date by Regen Sydney and Coalition of Everyone have primarily focused on questions of local aspiration for regeneration. Guided by their prefigurative politics and modeling of regenerative cultures however, the organisations have acknowledged the need to more explicitly guide action towards upholding global responsibilities.

Included in this is the consideration of consumption-side impacts, where often production-side impacts take precedence, and ultimately to aid collaborators to find agency in responding to this challenge. There is no clear path forward, but by facilitating the networks and forums in question to ground framings of economics and governance in deeper contextual understanding of neocolonial dynamics, they might better be able to reveal ‘invisible’ socio-ecological impacts, and collectively agitate for a response. It might help in this endeavour to consider two types of global impacts: (1) those that are felt amongst *specific people and places in other regions*, e.g., deforestation in Amazon and Borneo for food production - grazing and cultivation, or the modern slavery experienced by cobalt miners in the Congo for lithium-ion battery supply chains; and (2) the harder to define *emergent properties that could destabilise socio-ecological systems*, e.g., the various tipping points for Earth’s biosphere equilibrium, or geopolitical tensions precipitating the collapse of trade, or foreshadowing war.

Of course, organisations such as Regen Sydney and Coalition of Everyone, as well as the stakeholders involved, have a limit to their agency; their scope of potential impact does not immediately extend to many of the concerns outlined in this section. However by broaching topics of global justice, attempts at agitation and advocacy can indeed be made, especially with regards to supply chain justice, standards for multinational enterprises, international trade and finance, as well as reformed international democratic frameworks (Schmelzer & Nowshin, 2023).

7.3.3. Working with data in regenerative economics

Qualitative and quantitative data plays an important in revealing the occurrence of social and ecological impacts, highlighting variations within and across contexts, as well as surfacing the nuanced ways in

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- 7.3.3. Working with data

which seemingly separate issues are interconnected. Both qualitative and quantitative approaches are valuable to interrogate different aspects of socio-ecological impacts - in particular the former is more attuned to understanding complex interactions, whilst the latter better allows for the formation and analysis of trends. Holistic scientists Goodwin et al. suggest that “it is possible to have a science both of quantities and of qualities, but we need to understand the strengths and the weaknesses of each and use them appropriately” (2001, para. 26).

Prevailing approaches to measuring and guiding socio-ecological progress are framed by a widely held ‘carbon tunnel vision’ wherein a reductive focus on carbon emission reduction impedes upon examination of interrelated socio-ecological dynamics through holistic frameworks. A compelling model such as the Sydney Doughnut has the potential to expand the nature of this conversation, and to help navigate through the inherent technical and cultural challenges involved.

“It’s both a technically tricky challenge, and a culturally tricky challenge, because cultural shifts make people uncomfortable, and the measurement is really hard.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

7.3.3.1. Developing holistic indicators of progress

Whilst dominant metrics seek to quantitatively track social and ecological dynamics in a siloed and reductive manner, there is great potential to evolve this practice to more systemically guide regenerative transitions with appropriate indicators for progress. This can include the development of indicators for socio-ecological factors that have so far been overlooked, as well as to harness more integrated forms of metrics that cut across social and ecological dimensions. In doing this, both quantitative and qualitative forms of measurement can be of value, as outlined in the above paragraphs.

As it stands, the federal government of Australia has indeed released its own ‘[Measuring What Matters](#)’ wellbeing framework which seeks to track progress based on health, security, sustainability, cohesion and prosperity (Commonwealth of Australia, 2023). These thematic clusters altogether contain 50 key indicators with which to monitor progress - these are a valuable springboard from which to strengthen institutional support for a wellbeing economy, however there is a notably inadequate representation of indicators for ecological health. Additionally the indicators in their entirety are geared towards measuring and tracking the social wellbeing of the local population without any consideration for global responsibilities (social or ecological). Similarly, the ‘[City](#)

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Resilience Index' created by Arup aims to understand and measure city resilience, and details a range of metrics to better guide holistic city planning (Arup, 2017). The indicators in this framework are more suitable to the city-scale, albeit lack some aspects specific to the Australian context when compared to the Measuring What Matter framework.

With a much more nuanced and thorough framing, the Cornerstone Indicators developed by Dark Matter Labs in partnership with Samhällskontraktet and Dr. Katherine Trebeck are not simply a top-down tool for measurement and tracking, but a series of context-specific indicators developed through a prototype participatory process looking to strengthen civic engagement (Dark Matter Labs, 2023a). They describe the Cornerstone Indicator process as being more suited to small to mid-scale locations, with a view to have local indicators and wellbeing insights inform policy-making at higher scales. The prototype process that the group facilitated was based in the Swedish city of Västerås and built upon on existing best practice wellbeing frameworks, to surface what really matters to people taking part, to identify aspects of wellbeing that are currently unmeasured, and to visualise in an accessible form a new set of indicators.

The background research and the co-design process undertaken are both very well informed, while the resulting indicators, which engage with both statistical analysis and citizen participation, were organised thematically to cut across siloed framings. Examples of themes include 'number of families who enjoy not owning a car', and 'feeling positive about the week ahead on Sunday evenings'. The thematic framings through which indicators are interrogated allow for a profoundly holistic and accessible form of measuring progress. One area for improvement however, is in greater inclusion of ecological considerations - whilst there is some analysis of environmental concerns, they are primarily through the lens of human needs, and certainly do not take inspiration from the planetary boundaries or other frameworks for local-scale ecological representation (Bai et al., 2024).

While these precedent wellbeing frameworks offer a big step away from the dominant paradigm of GDP (Gross Domestic Product) and endless economic growth in their articulation of metrics for social wellbeing, they still fall woefully short in thoroughly surfacing indicators for ecological health in line with the globally recognised planetary boundaries (Brand et al., 2021). Although the Doughnut Economics framework is by no means perfect, it can more successfully support a holistic approach to measuring wellbeing. Critically, the Doughnut Economics model offers rich potential in interrogating the ways in which integrated, holistic and place-based measures of progress might support policymaking to deliver outcomes that are both ecologically 'safe' and socially 'just'. Regen Sydney seeks to harness the Sydney Doughnut as a tool with which to convene collaborative

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research in a similar fashion the Cornerstone Indicators described above, whilst making sure to enable an integrated and balanced interrogation of both social and ecological dynamics. By holistically framing the interrelatedness of social and ecological aspects through relevant indicators, as well as by facilitating a participatory context-specific process, qualitative and quantitative analyses can more effectively help to foster a co-evolution of both the socio-cultural paradigm and institutional measurement processes.

“It’s all about measurement. And it’s all about some technocratic aspects of policymaking that already exists that we’re going to tweak, or even revolutionise. Yeah, but it’s not a culture change. It’s a measurement change. And people will say how measurement matters. So people do what is measured. So if we change the measure, then the culture will change.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

7.3.3.2. Regen Sydney’s ‘Living Lab’

The drive to harness the Doughnut Economics model to identify and harness holistic indicators for the socio-ecologically integrated measurement of progress beyond GDP is a growing phenomenon worldwide, including as first pioneered by the City of Amsterdam, and more recently by Regen Melbourne, who continue to apply a deeply participatory approach (Barth et al., 2021; Thriving Cities Initiative, 2020). Through the Living Lab program of work, Regen Sydney seeks to build upon these exemplars and conduct similar work in the Greater Sydney context - underpinned by ongoing collaborative research with key stakeholders, with the goal of developing metrics that incorporate the nuance of lived experience, weaving together the stories of qualitative experiences that can help to contextualise data and bring indicators to life.

There is great value in measuring progress at the national level, however with the geographic and demographic diversity of a city such as Sydney, local and city-scale indicators become highly valuable to be able to identify and respond to context-specific needs that might otherwise slip through the cracks (Ferretto et al., 2022). Defining, measuring and evaluating metrics at the neighbourhood and city levels can not only inform local council strategies, but aided by a networked platform can also advise on the city-wide policies of the state government. The development of integrated social and ecological indicators through deeply collaborative processes can help to hold governments accountable to the communities of Sydney, harnessing the Sydney Doughnut as a compass for progress, and addressing gaps in the strategic plans of local councils and state government to achieve more holistic wellbeing outcomes.

There are many considerations to be made by Regen Sydney in developing a holistic measurement framework in the context of Sydney, including:

- The acknowledgement that whilst some indicators already exist, other relevant metrics will need to be established first, before data may be collected. This data can be collected through surveys, research, and collaboration with local institutions and universities.
- The need to maintain transparency in data collected through regularly reporting on progress - including through a living dashboard, as seen in [Regen Melbourne's City Portrait](#).
- The impetus to create feedback mechanisms to continuously assess and adjust policies and initiatives based on the evolving needs and aspirations of the community. This should include avenues for citizens to hold governments accountable.

As Regen Sydney looks to co-create Sydney's own City Portrait, they will be required to (1) conduct in-depth background research into existing metrics, and establish a transdisciplinary public policy advisory group, (2) co-design a framework of thematically relevant indicators (both qualitative and quantitative), with reference to the Sydney Doughnut dimensions, (3) co-create a first iteration of a City Portrait, which would involve the compilation of relevant data for each context-specific thematic cluster of indicators, and (4) synthesise and curate findings so as to facilitate broader engagement, and to encourage ongoing evolution of the indicators and importantly, interrogation of measures made. It will be paramount for Regen Sydney to integrate diverse indicators across sectors, so that the measurements made can act as a touchstone for the public acceptability of the trade-offs and tensions inevitably at stake in broader city-wide planning.

The collaborative ways of working Regen Sydney look to harness through this program of work are an alternative to the overwhelmingly siloed practices of government institutions (Chambers et al. 2021). The transdisciplinary and cross-sector approach held by Regen Sydney deeply acknowledges that overlapping solutions can tend to be compartmentalised through prevailing top-down and departmental forms of governance (Turner & Wills, 2022). Additionally Regen Sydney's Living Lab offers a valuable opportunity for government and industry to partner with university based research institutions in the co-creation, iteration and testing of novel forms of socio-ecologically responsible forms of governance (Hadfield et al., 2023). Ultimately holistic measurement frameworks such as this can help to better guide capital towards necessary initiatives in an integrated manner, across previously overlooked socio-ecological domains.

7.4. Designing a new politics of place together

In his book 'Down to Earth', renowned philosopher Bruno Latour speaks to the prospect of a terrestrial politics - a politics of place - that can help to provide an alternative path to dichotomised views of local vs. global, and social vs. ecological.

Redirecting attention from "nature" toward the Terrestrial might put an end to the disconnect that has frozen political positions since the appearance of the climate threat and has imperiled the linking of the so-called social struggles with those we call ecological (2018, p. 82).

The work of both Regen Sydney and Coalition of Everyone attempts to capture this spirit of interconnectedness between social and ecological issues, and to strengthen a politics of place. The context-specific engagements conducted by the two organisations, by harnessing collaborative processes, aims to facilitate communities to grapple with the shared realities of their places, and find ways to "live in the same world... and perceive a landscape that can be explored in concert", instead of submitting to battles of ideological superiority or attempts to "repair cognitive deficiencies" (Latour, 2018, p. 25). Tasman highlights the need for communities themselves to take agency, resolve tensions, and step into power:

"You know, it's acknowledging the systems change that is already happening locally. Amplifying the stories of them instigating change, the way that change has happened. And the skills and knowledges that exist locally to enable that to happen. There's also something in supporting community to step into power, particularly in communities who have been under oppression, not had power before."

Tasman Munro, DIRC
Practitioner Interview

7.4.1. A culture of participation and systemic collaboration

Place-based participation and systemic collaboration²⁷ is vital to surfacing the deeply contextual approaches required to foster systemic shifts towards regenerative economics, whether considering the local, city or bioregional scales. In realising these ambitions, it is worth acknowledging that state and federal governments also have an invaluable role to play - particularly in the facilitation of decentralised forms of governance to operate in an effective and impactful manner.

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I define the term systemic collaboration as pertaining to that which is multi-stakeholder, cross-sector, multiscalar and multi-level in the given context of a region or thematic focus.

Without cross-scale coherence, local action can be frustrated by wider economic and political systems. Local authorities may have little control over important issues such as planning processes, even if political power has been devolved for other concerns. Furthermore, institutions at the smallest scale, though well placed to respond to context-specific issues, typically have limited capacity, power or authority (Turner & Wills, 2022, p. 5).

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There are many forms that cultures of participation and systemic collaboration can take, and in the sections to follow I interrogate those that have been in development in my two sites of research. In particular the examples that I present help to highlight the ways in which the collective ambition and agency of collaborators are sought to be strengthened, as well as identifying potential challenges in upcoming programs of work (Britton & Anderson, 2016; Britton et al., 2022). Part of the call to action for Regen Sydney and Coalition of Everyone is to embody - in their organisational strategies and programs of work - a recognition that there is no silver bullet to help communities face up to the multiple challenges of this time, but rather that people of all persuasions must be guided to constructively navigate through structural tensions in a relational manner (Peach & Smith, 2022).

“Conflict is part of the work - how do you create productive conflict and lean into that? Because the productive tensions and conflicts and the wrestling of different views is what will lead to a good decision. And that’s why you need diversity in that decision - diversity creates conflict and tension and you know, different energies. But with that, you need to provide practices to support people to do that.”

Tasman Munro, DIRC
Practitioner Interview

7.4.1.1. Regen Sydney’s ‘Neighbourhood Activations’

Regen Sydney is developing two programs of work that seek to convene diverse stakeholders and build capacity in two different ways: (1) Neighbourhood Activations, which aim to grow a culture of participation and shared visions for socio-ecological wellbeing amongst citizens and businesses in conjunction with local government, and (2) City-Scale Pilots, which are a grouping of emerging thematically framed projects that are to be developed across the regions of Sydney, harnessing cross-sector collaboration between leading organisational stakeholders. This section and the one to follow will describe these programs of work, the ways in which agency is sought to be enabled for citizens and professionals alike, the potential impact of the work, along with insights to be drawn from key precedents (Sharp & Ramos, 2018).

“The goal is to encourage and make pathways for everybody to be able to access how to participate... how to be citizens. Because we need everybody to be feeling that they can contribute and participate in stepping into their own roles.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

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- 7.4.1.1. Regen Sydney's 'Neighbourhood Activations'

When considering the Neighbourhood Activations and its intent to strengthen self-determination in local-scale decision-making, it is apparent that the collaborators themselves must be enabled to co-create participatory governance initiatives from the early stages of inception. An underpinning relational approach in the context of this program of work, seeks to build social infrastructure - partnerships based on trust and agency - whereby key collaborators can help to guide the creation of working groups that involve suitably placed relevant stakeholders (Engle et al., 2022; MacDonald-Nelson et al., 2024).

This begs the question of who might be involved, with Regen Sydney highlighting *anchor institutions* as needing to have a central role in building lasting participatory governance. These stable and normative organisations deeply rooted in their communities - often universities, hospitals, schools or large businesses - have a long-term presence and significant resources, making them well-suited to drive systemic change (Elzen, 2012; Jackson, 2015). Anchor institutions are characterised by having established relationships with local communities, meaning that they can ensure that a wide range of voices and perspectives are included in participatory forums. They frequently also have influence at the local, state, and even federal levels, so are able to advocate for policies and participatory processes in a sustained manner that is not subject to short-term political changes. Other stakeholders who are vital to strengthening participatory governance processes are:

- Citizen democracy experts
- Community advocacy groups
- Local businesses
- Council representatives (across community engagement, environmental planning, economic development and social services etc.)
- NGOs focused on civic engagement
- Schools and universities
- Philanthropic foundations

The forums that facilitate the development of such relationships are not to be conducted as isolated interventions, but rather woven together to meaningfully develop the participatory culture and relational ethos of the community. In this regard, the value of dedicated convenors²⁸ cannot be overstated, especially in fostering transparency and inclusivity, holding stakeholder tensions and guiding participants to iteratively navigate complex systemic issues (Britton et al., 2022). Regen Sydney seeks to conduct such work in conjunction with numerous council areas in Sydney, building upon a first partnership with Waverley Council, through their Thinker in Residence program. Fundamental to harnessing the Sydney Doughnut at the neighbourhood scale are the co-design processes through which the framework can be further localised as relevant to the context.

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I use the term 'dedicated convenors' to place particular emphasis on the ongoing and iterative nature of such engagement. This falls into the purview of systems convening, and might harness a range of co-design approaches including those of Transition Design, Doughnut Unrolled or otherwise.

Regen Sydney hopes to find support for this sort of sustained engagement, however will also seek to handover the convening role for neighbourhood-scale engagements to local partners once the relevant participatory infrastructure is developed.

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*"Yeah, whether you call it a pilot - to co-design as testing and learning, you know, it can lower barriers for a group.. say **this is just a pilot, we're here to learn, to tap into that learning mindset and say, let's give it a go. This is not the final thing.** This is about us learning together, what we're doing here is it's a test, it's a pilot, we're designing it, it's not the final thing."*

Tasman Munro, DIRC
Practitioner Interview

The fostering of greater agency for participants can be enabled by framing co-design forums as a process through which to test and iterate the framework, and by finding a balance of creative expression and explorations of systemic complexity. The Neighbourhood Doughnut body of work by Civic Square (2022) is a well developed and nuanced precedent in this regard, and has helped to inform a variety of forums that can allow Regen Sydney to facilitate this manner of engagement:

- Public discussions and street installations
- Mapping exercises (stakeholder, current state, future state)
- Creative visioning and co-design workshops
- Walkshops, roaming surveys and field visits
- Community dinners
- Readings, show and tell
- Yarning circles, debates and deliberative discussions
- 2D and 3D mockup development
- Community-led presentations and showcases

Harnessing co-design methods such as these, Regen Sydney aims to showcase visual artefacts and mockups in physical spaces to tangibly evoke the explorations made by participants - rather than only having finished concepts and prototypes, a living archive of a community's desires and tensions can be a powerful tool for systemic change. Creative artefacts, strategies, reflections and installations will certainly help the community to see itself - literally through the depictions of systemic change that residents and stakeholders envision, along with articulations of the ongoing work in progress. Material manifestations such as these can help to concretise the directionality of neighbourhood participation. Britton et al. affirm this approach, with their framework suggesting the need for a combination of (1) spaces - local hubs and shops, (2) people - participants and organisations, and (3) tools - equipment for the development of ideas (2022, p. 78). Of course these participatory forums, like other co-design processes, must in the spirit of reciprocity consider the nature of value exchange, and best support the needs of collaborators - in particular with regards to strengthening their connection, learning, wellbeing and impact (Britton et al., 2022, p. 236).

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7.4.1.2. Regen Sydney’s ‘City-Scale Pilots’

The participatory engagements conducted through the Neighbourhood Activations will help to catalyse Regen Sydney’s City-Scale Pilots program of work, albeit with greater focus on professional and organisational engagement in thematic contexts that cut across the local government and socio-cultural demographic regions of Greater Sydney. The processes harnessed to foster and strengthen cultures of active citizenship across civil society and private enterprise in local neighbourhood contexts are equally valuable in the city-scale - especially in the formation of partnerships and cross-sector alliances that may increase visibility and momentum to enable broad-based support for the local government strategies (Sharp & Ramos, 2018). Indeed, it can be challenging to building partnerships and funding viability across the boundaries of local government, yet this is what the City-Scale Pilots look to surface - the creative prototypes and strategic findings from the Neighbourhood Activations will certainly help to extend strategic partnerships across neighbourhoods and LGAs in Greater Sydney.

Two of the developing areas of focus draw from city-scale programs at work at Regen Melbourne - Participatory Melbourne and Swimmable Birrarung (Yarra River). With similar working titles at Regen Sydney - *Participatory Sydney* and *Swimmable Goolay’yari* (Cooks River) - these programs of work look to shift the conversation around deliberative democracy and watershed restoration respectively, and will harness the Sydney Doughnut framework to guide the scope of collaboration. The role that Regen Sydney seeks to play in both of these contexts is one of systems convenor, which as described in section [6.4.3.4.](#) includes guiding coalitions of unusual alliances through collaborative processes with a North Star vision, and bringing coherence to system-shifting pilot projects. Key to this role is a recognition that many initiatives already exist in the domains of focus - it is in their linking up as an ecosystem of practitioners that a new model can be prefigured.

“It’s about connecting up islands of places that do that. And all doing it until it becomes natural.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

While the Participatory Sydney and Swimmable Goolay’yari programs in development have vastly different areas of focus, there are some key learnings to be taken from Regen Melbourne’s experience that apply across them both, including (1) the value of having anchor partners, who together convene the program of work, bringing in their diverse networks of organisations and their disciplinary expertise relevant to the context,

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(2) conducting background research upon which collaborators can co-create a vision for their collective impact, (3) having a dedicated project lead to manage the program of work, separate from core team activities, (4) using evocative storytelling to articulate the collaborative processes and insights, helping to further build the field and engagement, and (5) finding dedicated project funding, separate from backbone funding - including from philanthropists - to support the programs of work as relevant to their impact areas. Framing these city-wide collaborative platforms as entities that exist in the commons, and such that there is no single 'project owner', helps to make them conducive to drawing in collaborators from both the public and private sectors, along with ordinary citizens - ultimately to pilot alternative modes of governance that are adept at fostering socio-ecological wellbeing.

Challenges to building City-Scale Pilots include the siloed and disparate efforts encouraged by short-term and project-specific funding, as well as the disconnection between initiatives across regions. Platforms for participatory governance, river health (and other areas of focus) that are founded upon support networks of aligned organisations can help to circumvent these issues. Thematically contextualised city-wide platforms can help to democratise and provide coherence for ongoing funding allocation, set a long-term agenda based upon the opportunities and goals of collaborators, as well as connect the ecosystem of already existing practitioners across Greater Sydney (Britton & Anderson, 2016; Frantzeskaki & Bush, 2021). The development of physical artefacts and tangible socio-material outcomes through these pilots plays a key role in demonstrating their practical value - something which is a traditional component of design-based prototyping, and is also prominently seen in the demonstrator projects of [A New Normal, Sydney](#).

With the experimental spaces that these pilots can provide, collaborators can better prototype models of relational governance that embody care and reciprocity, including by fostering agency for the diverse range of participants, and non-human entities alike (Chang & Johar, 2021; Dark Matter Labs, 2023b). Co-founder of Dark Matter Labs, Indy Johar asks the following question on cultivating relational forms of agency "how do you create the freedoms to create the agency to be in relationship, the agency to be able to care for the systems you're in relationship with?" (2023, 1:10:56) - in effect Regen Sydney's portfolio of projects might better be seen as a 'portfolio of agency'.

7.4.1.3. Bioregional adaptation in practice

The approach that Coalition of Everyone has taken is quite different to that of Regen Sydney, particularly with its ABC Regen and Earth's Bank Account programs of work - the latter is explored in section [7.4.2.2.](#)

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Both of these programs of work seek to build capacity and capability - the ground work for the development of participatory cultures and systemic collaboration - rather than working directly towards neighbourhood governance or for thematically focused city-wide collaboration such as that to be conducted by Regen Sydney. The broader systemic view of Coalition of Everyone looks to fundamentally shift the conditions through which regenerative initiatives might be more viably developed and implemented. With a guiding focus to foster bioregionalism, Coalition of Everyone recognises that the development of place-based socio-cultural identities goes hand in hand with participatory governance and regenerative economics.

Whether considering shifts in culture, governance, economics or funding, the framing offered by bioregionalism faces some challenges - especially in a settler colonial context such as Australia, where there are countless ways that places have been historically mapped and re-mapped as mechanisms that further dispossess First Peoples, whether or not done intentionally. Bioregionalism, for this reason, best serves the purposes of place-based collaboration as a way for communities and economies to be better connected to ecological realities, when also simultaneously engaging with First Nations groups. Underpinning the call for bioregional adaptation, is the need for human activity to be readjusted according to the ecological realities of a given place - and in the Australian context, this often means the need for deeper engagement with First Nations language groups, as well as other relevant framings of bio-geo-physical regions, such as watersheds.

A co-evolution towards place-based cultures, governance, economics and funding is underway, and it is clear that (1) all of these aspects can and must occur simultaneously, and (2) walking with First Nations through relational practice is paramount to realising socio-ecological wellbeing outcomes. While the prospect of shifting towards bioregionally-adapted place-based systems holds much promise, it must be acknowledged that it would entail huge shifts to the status quo that present structural impediments to its realisation.

"It's going to involve changing the game. And a lot of times, neither political party or any political party want to change the game, they understand the rules, the vested interests, they know how it works. And so I think we need to create a new game. That's why we've talked about organising bioregionally, [with] assembly meetings, letting people vote for the health of people and non-human beings and others."

Reggie Luedtke, Coalition of Everyone
Practitioner Interview

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Nevertheless, Coalition of Everyone’s engagements have shown that it is worthwhile having these framings as guiding paradigms with which to mobilise a growing collective literacy in this endeavour. Whilst seeds for new practices embodying place-based cultures, governance and economics are prevalent in the Australian context, funding is a notable outlier, with place-based funding mechanisms underdeveloped and undervalued (Müller et al., 2022). It is not yet clear what kinds of shifts in the funding landscape would best allow for bioregionally-adapted place-based systems to flourish, however some alternative models will be interrogated in section [7.4.2.](#)

In this regard Coalition of Everyone’s ABC Regen process, and Regen Sydney’s Sydney Doughnut contain the seeds with which bioregional adaptation can be developed - building upon the regenerative economics and even the circular economy movements. They have nurtured emerging models for place-based cultures, governance and economics - echoing calls made by cosmopolitan localists; they just need the resourcing required for further implementation. As these organisations continue to advocate for systemic shifts such as those described above, funding from various sources, including from prevailing institutions as well as alternative place-based capital can surely play a role in hastening their work.

7.4.1.4. Citizens’ assemblies and deliberation

Coalition of Everyone’s organisational foundation is set in the practice of deliberative democracy - something that continues to hold value in the context of bioregional governance with the ABC Regen process. There is no doubt that deliberative engagements and the reshaping of democratic institutions are vital to the realisation of bioregionally-adapted regenerative economies, with citizens’ assemblies recognised as a viable form for collaborative political reform. “Global-level reform will not be possible without first building more cohesive and sustainable societies... one way to do that is through citizens’ assemblies” (Schwab, 2020, para. 1). Accordingly, the six part series of assemblies of the ABC Regen process ends with citizens’ assemblies as the sixth and final part.

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PART 6
ADOPTING STRATEGY
Citizens' Assembly deliberation

OBJECTIVES

- Assemble four sessions for the Citizens' Assembly through democratic lottery - a mini-public that represents the demographics of the local community population; our partners at Sortition Foundation can assist
- Facilitate the mini-public to evaluate the emerging transition pathways and weigh up priorities that have surfaced, informed by a balanced mix of experts providing independent knowledge of costs and benefits to help with the moral choices required
- Involve the larger public through agenda-setting, input and media engagement, helping to build legitimacy for the transition pathway

STEPS + ACTIVITIES

(1) **RECRUITMENT & AGENDA-SETTING**

- a. Recruit participants for the mini-public
- b. Combine with a media and communications strategy to ensure a good response rate and legitimacy of the process
- c. Agenda-setting of the mini-public's deliberations through broad community engagement (such as surveys)
- d. Provide a summary of transition pathways & associated materials for the mini-public

(2) **SESSION 1**

- a. Meet & greet
- b. Refine the agenda
- c. Choose experts to inform the process

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PART 6 (cont.)

STEPS + ACTIVITIES (cont.)

(3) **SESSIONS 2-3**

- a. Deliberate to discuss merits and costs of the pathways, activities and priorities that have been suggested
- b. Become informed on viewpoints as informed by the chosen experts

(4) **SESSION 4**

- a. Refine and create a prioritised pathway for transition with concrete proposals for action
- b. Make the moral choices needed to prioritise between pathways

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Figure 76. Prioritising and adopting strategy with ABC Regen’s citizens’ assemblies

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- 7.4.1.4. Citizens' assemblies and deliberation

The Figure above depicts the specific steps and activities that make up this part of the ABC Regen process - which can also be seen in greater detail in **pages 27-28 of Attachment 7**. The citizens' assemblies serve the purpose of further interrogating the co-designed transition pathways for place-based governance (developed earlier in the process) so they may be prioritised for implementation. Learning from key precedents, four citizens assemblies draw upon a mini-public - a wider community group that represents the demographics of the place - to test the relevance and feasibility of previously developed strategies, including through the advice of visiting experts (IiDP, 2020; MacDonald-Nelson et al., 2024). By having broader participation in the citizens' assemblies, they act to provide legitimacy to the outcomes.

The agenda-setting and prioritisation that characterises the assembly process helps to (1) guide future place-based governance engagements, (2) consolidate an emerging literacy amongst the local public, and (3) advocate for institutional policy and legislative reform. The citizens' assemblies are important to the ABC Regen process, especially when needing to allocate funds towards different strategic pathways. Without this sixth part of the ABC Regen process, the previous co-design does not adequately involve ordinary citizens from the broader public. The deeper analytical explorations of the earlier steps are indeed better conducted with a committed working group, however with the needs of the community and place at heart, the citizens assemblies offer a valuable balancing mechanism to the engagements - environments that “de-other the *landscape of conversation*” (Johar, 2023, 1:14:53). In this vein, citizens' assemblies are very much in the public zeitgeist, and are seen by many as having the potential to redirect democracies away from centralisation, corruption and state capture. The following quote from Bronwen identifies the imminent uptake of citizens' assemblies.

“There’s this guy who’s been running this [series] in New South Wales for years on citizen juries. And I’ve participated in some forums he’s done. He feels like we’re on the edge of people taking citizens’ juries seriously. He often cites the Irish story - in making abortion legal and making gay marriage legal. And people say it would never have happened without the citizen juries.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

Demand for participatory governance and regenerative economics has been expressed through the City of Sydney citizens' jury concepts report (City of Sydney, 2019), as well as through the role that Democracy Next continues to play as a global leader in encouraging the development of these processes across various cities (MacDonald-Nelson et al., 2024).

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Clearly city planners and local government have a lot to gain from conducting deliberative engagements in responding to the interconnected challenges of our time; as the [Innovation in Democracy Programme](#) in the UK describes, “deliberative public engagement will be more important than ever in supporting effective responses and securing public consent for future policy” (IiDP, 2020, p. 48).

If such methods are to succeed, we will need to grapple with the concentration of power that is inherent to prevailing representative democracies. As systemic designers Goodwin et al. so eloquently articulate, this is “about participation being more than just involving citizens in decision-making processes - it’s about decision-making processes that affect our lives being more participatory, and people being agents of change, not objects” (2022, p. 9). Similarly, an evolution of deliberative engagements ought to be guided by the interconnectedness of people and place - social and ecological concerns - as well as to integrate the perspectives of non-human actors, and consideration of global impacts. This presents an opportunity for deliberative engagements to continue to develop methods suitable to the holistic interrogations necessitated by bioregionally-adapted governance.

7.4.2. The pivotal role of funding

As mentioned in many instances throughout this thesis, funding continues to be a major structural blocker for Regen Sydney and Coalition of Everyone, as well as for numerous other regenerative initiatives encountered through my research. Funding and investment for these organisations is not an isolated issue, rather it is but one manifestation of systemic wealth inequality that is characterised by obscene accumulations of capital that largely impede or at the very least distract from regenerative transitions, as well as a cost of living crisis experienced widely by ordinary citizens.

It is a cruel but not entirely unexpected irony that at this very point in time, when we most need a focused and redirected use of our collective resources, that we also find ourselves grappling with a large and still increasing wealth inequality - with abysmal political and socio-economic responses to the hoarding of the ultra wealthy. We need to be amplifying the solutions that we already have, for example, rewilding, strengthening First Nations knowledge and practices, enhancing renewable technology, manufacturing and innovation, all underlined by participatory and distributed decision-making.

The seeds of a new system certainly do exist. The resourcing of such initiatives seems to be the single most pressing blocker to greater action - which in itself has a variety of causes - (1) philanthropists are not

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redirecting funds fast enough to initiatives outside of a business as usual orientation, (2) vast hoards of wealth are locked up in offshore accounts and in billionaires’ estates, and (3) current representative decision-makers have vested interests such that they are unwilling to upset powerful and wealthy lobbyists (a form of state capture), nor do they seem even slightly inclined to reverse (or supersede) failing neoliberal approaches (Australian Democracy Network, 2022).

As it stands, capital predominantly flows towards initiatives that foster economic growth (Hickel, 2023). Large sums of money support public and private sector development of defence capabilities and technological innovation (e.g., STEM, AI). Masses of climate resilience funding go to the military to maintain the established global geopolitical hegemony (Ghosh, 2021). This is a corrupted version of capitalism that strives for an impossible trickle-down to socio-ecological wellbeing, aided by the corporate obfuscation of big-fossil and big-tech; whilst the struggle to maintain modern forms of empire and imperialism directly prevents action towards the realisation of a regenerative economies. “What we need instead is to find a way out of the individualising imaginary in which we are trapped” (Ghosh, 2021, p. 135).

“This is just the dilemma of anything new that’s not in the groove of the capital imagination, because it will take time to fund it.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

This lopsided system of capital accumulation is a global problem that calls for distributed local solutions. In this quest, demonstrator projects are beacons that showcase potential new assemblages of funding and power distribution. In full recognition of the structural challenges present, Regen Sydney and Coalition of Everyone seek to develop pilot projects with smaller amounts of *catalytic funding*²⁹ that facilitate the organisations to then draw further funding, and iteratively develop their scope of impact, and the efficacy of their systemic approaches (Leadbeater & Winhall, 2020).

“We’ve had to create something that is outside of the system, we’re not resourced, but that has given us the freedom and agility to choose where we go and not be coerced by funding. And now it needs to go back in to the system or plugin somewhere, which I think is a story of innovation.”

Alice Howard-Vyse, Regen Sydney
Practitioner Interview

²⁹ Regen Labs is an emerging organisation that is specifically focused on developing catalytic funding as a field of practice, in support of regenerative initiatives.

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Ultimately, as Regen Sydney and Coalition of Everyone seek to foster participatory forms of governance and regenerative economics, their work implicitly contributes to shifts in the funding landscape, and by extension to concentrations of power. In the following two sections I will explore the emerging approaches in development in my sites of research, and in their communities of practice.

7.4.2.1. Systemic investing

A key approach to funding that is quickly developing in the field of regenerative transitions, and is also being explored by Regen Sydney and Coalition of Everyone is known as systemic investing. This approach, (also known as systemic capital or ‘funding for systems change’ depending on the audience) is informed by the mission-oriented innovation framework - discussed in section [6.4.](#) - and seeks to guide capital investment across portfolios of linked projects through long-term emergent and iterative engagement (Griffith Centre for Systems Innovation, 2023b).

Systemic investing seeks to circumvent the pitfalls of short-term siloed project-based funding with linear outcomes for investment - through the formation of long-term partnerships guided by North Star visions in developing cross-sector demonstrator projects (Hofstetter, 2020; Lofgren, 2024). As Kaj Lofgren from Regen Melbourne states, it is not only about the quantity and urgency of investment in regenerative transitions, but also about the *quality of capital* - to shift “the finance paradigm and investment logic away from incrementalism and single-point solutions and towards systemic transformation” (2024, para. 4).

Society will need to have a conversation about the purpose of money in the 21st century. Shall monetary wealth continue to be a source of power, status, and self-worth, or shall it return to a more basic function as a facilitator of sustainable and prosperous societies? (Hofstetter, 2020. p. 23).

Dominic Hofstetter from the [TransCap Initiative](#) refers to systemic investing as a nascent financial practice that is characterised by “the strategic deployment of diverse forms of capital, guided by a systemic theory of change and nested within a comprehensive systems intervention approach, for the purpose of funding the transformation of human and natural systems” (Hofstetter, 2023, para. 4). There is great synergy between systemic investing and systemic design practice, evident in their orientation towards navigating systems complexity amongst cross-sector stakeholders and across scales, as well as in their drive to identify structural leverage points in their theories of change with a view to create coherence in synergistic multi-stage project interventions.

Systemic investing builds upon these articulations, advocating for strategically linked investments across project portfolios, and for

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funding architectures that take a “*polycapital approach* to funding different interventions in a systems change program” (Hofstetter, 2023, para. 14). In practice, this requires efforts to combine diverse funding sources in a targeted manner across a portfolio of projects, and to maintain mechanisms for measurement and evaluation that allow for evolution in the funding architecture (Mortimer et al., 2020). Additionally, the provision of governance across portfolios of projects is vital, as is the facilitation of coherence amongst diverse collaborators and activities, so as to have directionality towards a shared mission, and consequently, holistic articulations of outcomes (Hannant et al., 2022).

“I mean currently no funder is going to measure [a cultural shift or relationality] counted as impact or outcomes. And that’s the problem isn’t it? It’s like it’s invisible to the formal world of measurement. But, you know, we’re one instance in many instances that are starting to do that, so that it just becomes more natural.”

Bronwen Morgan, Regen Sydney
Practitioner Interview

In these discussions it is worth noting a key difference in the formative conditions of Regen Sydney and Regen Melbourne - with the latter auspiced by Small Giants Academy with a sizable initial financial backing from key partners - that has allowed the organisation to develop quicker and have more impactful projects, especially as their funding has also grown since their inception. While Regen Sydney has not had access to funding partnerships of this variety in the earlier stages of its formation, Regen Melbourne has helped to guide Regen Sydney more recently, with regards to the search for catalytic funding to kickstart broader implementation of its portfolio of projects, as well as in finding a suitable auspicing partner. The lessons about finding a mix of potential funders and the role of partnerships with local councils have aided Regen Sydney to develop an emerging engagement with systemic capital in practice. The relational dimensions of funding partnership development cannot be overstated in their importance, especially with regards to philanthropic investment, but also with governmental grants. Regen Melbourne has expressed interest in aiding Regen Sydney in an ongoing manner to help shape its strategic outlook, in particular in its search for capital investment and backbone funding.

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Debentures are a medium to long-term debt instrument similar to bonds, except that they are not back by any collateral or physical assets - making them suitable for raising capital. Please see [here](#) for more information (BCCM, 2021).

Burkett et al. suggest that the move away from conventional investment practices focused on single point solutions towards systemic capital could be aided by “emerging instruments such as co-operative shares, debentures³⁰ and co-operative capital units” (2023b, p. 12), which is very aligned with what Coalition of Everyone is attempting to foster with their Earth’s Bank Account program of work.

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7.4.2.2. Earth's Bank Accounts: local pooled funds

In the face of structural funding blockages, Coalition of Everyone is looking to develop locally pooled funds that are specifically oriented towards enabling regenerative initiatives through community leadership and place-based participatory governance. Pooled funds are a valuable mechanism with which to facilitate long-term strategic orientations and citizen-led governance of regenerative transitions - as they essentially shift funds from the private and public sector to the commons, where decentralised decision-making forums can better advocate for priority initiatives into which to allocate money.

Other local pooled funds exist, including through participatory granting processes facilitated by The Australian Centre for Social Innovation in their Fire to Flourish program (TACSI, 2022), and place-based impact funds developed and supported by [Ethical Fields](#) in the Australian context (McNeill et al., 2023). These are fantastic precedents, which Coalition of Everyone continues to learn from, especially in building upon community wealth building approaches to also have greater explicit attention given to ecological regeneration. "What if every bioregion in the world had a nonprofit entity that was set up, that was structured to be in service to that place? (Power, 2023, 43:45).

While conducting ABC Regen co-design sessions with Wararack, discussions about the value and viability of the processes inevitably led back to questions about resourcing and capacity. The Earth's Bank Account program of work emerged from this profound lack of resourcing faced in local contexts such as Castlemaine. While the skills, processes and organisations are abundant, they are simply not viably funded through current mechanisms. Part of the capacity-building that such funding would enable in local contexts is critical leadership development and support for convening roles - as these are vital ingredients to nurture the conditions for citizen-led place-based governance.

"I can see it working easier at the local level rather than the global. I think that's where the transition will lie. Because I've been talking to global businesses, and they're frustrated by not seeing the the impact that they're having, by investing in carbon markets and things like that. So it feels like if you knew that you could point to the impact that you're having, then that's where change can actually start to manifest."

Paula Kensington, Coalition of Everyone
Practitioner Interview

Coalition of Everyone seeks to develop Earth's Bank Accounts as a way to reframe notions of value, from the abstract to the place-based and

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from siloed to linked measures. By bringing questions of value to local contexts that communities and businesses are invested in, this program of work looks to overcome the disparity between market values and socio-ecological wellbeing. As an alternative approach to community investment, the program has a focus on prioritising social and ecological returns, with a particular focus on bioregional adaptation, and is to be a network of impact funds that are co-ordinated and administered by Coalition of Everyone as guided by community leadership. To achieve its aims of acting as a resourcing instrument to assist the flow of funding directly to local projects in bioregions, trustees from the communities in question will be legally obligated to make decisions in the interests of their bioregions. The governance to oversee each Earth's Bank Account will draw from the ABC Regen process to give non-human actors representation, harnessing local knowledge and First Nations perspectives to facilitate the participatory budgeting of funds. Blended funding for Earth's Bank Accounts is to be sourced from diverse channels such as crowdfunding, one-off investments, annual memberships, and high net-worth individuals.

"So we're working with pioneers who are already there, [but] just don't know how. I think there's a huge educational awareness piece that has to run alongside all of this so that the thinking is shared and accessible - to reach beyond bubbles and echo chambers, but you still need to work with those sort of early adopters, so that you can demonstrate a thing."

Willow Berzin, Coalition of Everyone
Practitioner Interview

Whilst there is this educational awareness piece to be conducted as Willow suggests above, Coalition of Everyone already finds a great deal of energy to contribute amongst its network of collaborators. They are driven by the call to shift capital from the public and private sectors into the commons, however one of the barriers to entry for such organisations is the legal work required for them to make donations.

"Today, those companies need to pay [for legal work] to make that donation. And that adds friction to them making the donation. I think if we had a funder that was paying for that legal work required to make that donation and to put nature on the board, then we would probably already have, I don't know, somewhere between five and 10 companies already that would have gifted equity to emerge from it."

Reggie Luedtke, Coalition of Everyone
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Coalition of Everyone's Earth's Bank Accounts are a natural fit in the growing movement to develop Decentralised Finance (DeFi), which seeks to harness emerging digital technologies to overcome some of the hurdles faced in shifting away the prevailing centralised financial system. Seeking to not only fund community-led regenerative governance, but also to transform the financial system more broadly, public distributed financing looks to utilise cryptocurrency in order to "create a space for peer-to-peer service provision, trade, and economic activity, fostering the distribution of public finance and financing institutions" (Johar & Begovic, 2020, p. 38). Ultimately, such an approach to developing distributed funds could better support the participatory governance of regenerative initiatives (with ongoing local, diverse stakeholder involvement), the impetus to support projects in a linked manner, as well as the need to be grounded in the landscape scale - whether in bioregions, watersheds, or otherwise. Leading bioregional educators Isabel Carlisle and Paul Pivcevic analyse the framing of bioregions as a framework of value and suggest that:

This is not simply about putting funding into projects in a landscape in order to deliver multicapital returns. It is about funding multiple and linked projects that shift a whole bioregion towards being able to regenerate itself. In this, the role of the convenor, enabler, trust-builder, mediator and meaning-maker is critical (2022, p. 123).

It is a large systemic shift to move from transactional paradigms of value creation towards those that are relational, however the demonstration of new approaches through models such as Earth's Bank Accounts would likely act to encourage government spending into distributed finance when they are able to see its efficacy.

"I think the businesses that voluntarily do this play a key role, because those businesses provide a lot of tax revenue for governments. If they're giving that to nonprofit, it's showing that this is effective. Then those businesses can start to lobby the government to scale this up. The government can't say that businesses don't want to support this, because of the the businesses that already are supporting it voluntarily."

Reggie Luedtke, Coalition of Everyone
Practitioner Interview

In practice local pooled funds like Earth's Bank Accounts characterise a valuable push to shift systemic financial mechanisms; their capability to effect impact could be profoundly accelerated by broader reforms to government taxation that would free up funds for efforts in the commons - including taxing billionaire wealth for redistribution, and more effectively regulating offshore tax havens amongst other endeavours.

7.4.3. Emerging governance practices

The research I have conducted through Regen Sydney and Coalition of Everyone has affirmed the need for polycentric systems of governance, so that the specific conditions faced across different scales of consideration can adequately and thoroughly be interrogated and addressed through participatory decision-making. With the numerous existing forms of government (local, state, federal etc.), as well as the many alternate frames of reference (First Nations language groups, bioregions, cities), it might seem as though there are inherent systemic incompatibilities that characterise articulations of polycentric place-based governance.

In this regard, Shann Turnbull, Natalie Stoianoff and Anne Poelina unpack the alignment that exists between polycentric and Indigenous governance systems - in particular articulating that various decentralised and distributed forms of decision-making across scales could in practice work together to subvert existing centralised power structures. Their explorations of polycentric typologies surface complementary framings of First Nations localities alongside larger landscape-scale bioregions and basins (Turnbull et al., 2023). The table shown below is presented in their research:

| The Australian component of Earth and water-centred bottom-up governance by Gaia | | |
|--|---|--|
| Level | Localities | Organisational Form |
| 6 | Global | Global federations of PSG incorporated organisations by types of 5 host climate regions and other attributes. |
| 5 | Shared water basins | Incorporated and unincorporated PSG associations were federating lower levels within climate types and 13 water basins. |
| 4 | Bioregions | 89 incorporated and unincorporated PSG associations federating 419 sub-regions. |
| 3 | Sub-regions Suburbs/towns | 419 incorporated and unincorporated lower-level PSG entities. |
| 2 | Language groups/Tribes | Unincorporated , Incorporated, Corporate, and non-profit PSGs. |
| 1 | Neighbourhoods Clans/ moiety/Skin/Totems | Unincorporated , Incorporated Associations, Non-profit corps. Locally controlled investor-stakeholder endowment corporations continuously re-birthing providing a universal dividend to all citizens as achieved in Alaska. ⁴¹ |

Figure 77. Australian architecture of polycentric self-governance (Turnbull et al., 2023, p. 67)

This reading of the emerging place-based governance landscape helps to situate the value of Regen Sydney and Coalition of Everyone’s focus across different scales of intervention - all scales of reference are important in the formation of participatory social infrastructure that is adept at guiding regenerative transitions. The call to nurture a place-based, or ‘Terrestrial’ politics as Bruno Latour puts it, does not prefigure an isolationist form of localisation, but rather it seeks to reshape human activity to find reciprocity with the living world,

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across multiple simultaneous scales of reference (Latour, 2018). In this endeavour it is vital to have organisations and initiatives that work at local, city and bioregional scales to concertedly adapt their economies, governance and cultures, whilst at the same time complementary networks act to share learnings and knowledge across contexts, which can aid the development of a planetary culture of custodianship.

To act effectively and coherently in the face of uncertainty, we need “a new statecraft premised on a different institutional infrastructure, agile architecture for policy and regulation, new forms of legitimacy, and radical devolution of power and investment. A new framework for internationalism and global public interest is also necessary (Johar & Begovic, 2020, p. 29).

The radical shifts that entail a new politics of place are characterised by distributed mechanisms for participatory governance and funding - requiring not only various types of institutional transformation, but also a co-emergence of relational, place-based socio-cultural paradigms (Chang & Johar, 2021). Deputy Director of the Griffith Centre for Systems Innovation, Joanne McNeill suggests that new forms of governance must embrace the messiness and complexity that comes with the necessary act of breaking the technocratic vs. democratic binary - bridging engagement between both private and public sector, as well as with policy-makers and ordinary citizens, through ongoing decision-making.

In new public governance-style relationships, ‘negotiated interactions’ around these decisions occur throughout the process. The sense of engagement generated as a result facilitates the ‘pooling of public and private ideas and resources’ and builds joint ownership over actions amongst internal and external partners and stakeholders (Torfing & Triantafillou, 2013 p.15). This creates openings for significantly altering the discourse around how complex public problems may be tackled, shifting away from conceiving them as public sector problems to issues that publics are involved in addressing (McNeill, 2023, p. 6).

In this manner, systemic shifts are not abstract considerations, but inseparable from tangible influences and impacts in the contexts of place and community.

“The way I see it is that systems change needs to happen from within community. And there’s work to strengthen communities capabilities to be able to shift the system. And that involves their local system, but also the bigger, quote unquote, system of policy and big jobs and organisations.”

Tasman Munro, DIRC
Practitioner Interview

7.4.3.1. Subverting techno-centric transition paradigms

In Australia, as in many other Global North contexts around the world, a carbon tunnel vision amongst institutions continues to precipitate a

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framing of the transitions underway as those that are centred around techno-material infrastructures (Burkett & McNeill, 2022). This manifests itself with an exaggerated focus on renewable power generation, electric vehicles and circular economy supply chains amongst other things, such that the social, cultural and political implications of addressing our interconnected ecological crises are seen as secondary dimensions for consideration - albeit with some exceptions such as efforts to equitably transition fossil fuel communities into alternate industries.

I should clarify here that for a start, (1) prevailing institutions seldom explicitly recognise the nature of the interconnected ecological crises, with the climate crisis but one aspect, and (2) the interconnected ecological crises are actually a symptom of emergent systems of human activity - and hence might better be called a crisis of separation between humanity and the living world. In this regard, prevailing institutional responses, with their techno-centrism, fall very short of honestly grappling with the complex dynamics at hand. It is indeed the case that techno-material approaches that avoid confronting the underlying systemic causes “are favoured by those who are content with the system that privileges overproduction overconsumption and disproportionate benefit to a few” (Boehnert, 2018, p. 161). Joanna Boehnert goes on to suggest that:

Current ideological blindspots determine that the deployment of these strategies is not effectively addressing ecological crisis on a viable scale. The barriers to effective implementation are simultaneously the personal assumptions of decision-makers putting these concepts into practice, as well as system-level incentives that consistently thwart attempts to construct sustainable alternatives (2018, p. 161).

It is for these reasons that Regen Sydney and Coaliton of Everyone (as well as other regenerative initiatives such as the Transition Towns movement) embody a prefigurative politics that is relational and holistic in its appraisal of systems dynamics. Key to their attempts to subvert techno-centric approaches is not to exclude such paradigms altogether, but to integrate them into alternate framings of (1) socio-cultural drivers and collective worldviews, and (2) mental models and conceptual frameworks; both of which are apparent in the participatory and distributed forms of engagement entailed in their systems convening practices, programs of work, and in the orchestration of specific instances of co-design. Willow underscores the importance of collectively practising models that challenge mechanistic worldviews, as exemplified in the theory of change co-design processes explored earlier, as well as in putting nature on the board - discussed in section [7.4.3.2.](#)

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“None of this works if you’re not in relationship. So there’s a shift away from mechanistic, siloed, box-ticking thinking, to lived, bodily experience - shifting change towards how living systems actually work, what makes us alive, what lights us up. The next economy is a really different paradigm.”

Willow Berzin, Coalition of Everyone
Practitioner Interview

The externalisation of considerations outside of techno-centric paradigms is fundamentally co-emergent with the underlying mechanistic worldviews that characterise the prevailing system. “Externalities are not just an accounting glitch: they are a denial of our complex entanglement and a structural flaw in our economic theory of value” (Bekker et al., 2023, para. 26). Systemic design practice offers great value in this context, with its ability to embody socio-cultural shifts into radical project portfolios that still exist within prevailing systemic paradigms, yet attempt to prefigure alternate forms of governance. Holistic, relational and emergent systemic complexity is a central area of focus here, aided by frameworks and tools that inherently subvert a narrow focus on techno-material concerns (Jain, 2023).

Not all frameworks inherently allow for such framings, despite their ubiquitous use in sustainability transitions - the Multi-Level Perspective (MLP) is one such model (Geels et al., 2017). Whilst it has been invaluable to the development of the transition management field - which looks to facilitate sustainability transitions through participatory processes (Sharp et al., 2022) - its foundational conceptualisation is in *socio-technical* systems transformations. In this regard, the MLP embodies a somewhat mechanistic and anthropocentric, albeit at least non-linear view of systems change dynamics. The framework itself does not adequately prefigure regenerative analyses of systems dynamics, which is explained at least in part by its development - informed by historical, technologically-induced regime changes (Geels, 2010; Gottschamer & Walters, 2023; Wallace, 2021). Despite this, transition management as a field has continued to develop beyond analytical reductionism over at least the last two decades, more recently attempting to afford a transdisciplinary understanding between ‘design’ and ‘transitions’, and to better embody emergent principles in practice, whilst still somewhat techno-material in its focus (Loorbach, 2022; Loorbach & Coops, 2021).

Other models are indeed underpinned by relational, emergent and integrative qualities of systems-level transitions, without the same inherent techno-centric focus as that described. Pioneer in regenerative development Bill Reed provides a valuable depiction of ‘the trajectory of ecological design’ which captures a shift from degenerative systems

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to regenerative systems (2007, p. 676). In my adaptation of this diagram (as seen below) I include contemporary examples that help to further illustrate the nature of the transition underway - drawing upon my research findings. This framework is by no means a replacement for a dynamic tool such as the MLP, however perhaps when they are used in concert, insights would draw from the strengths of both.

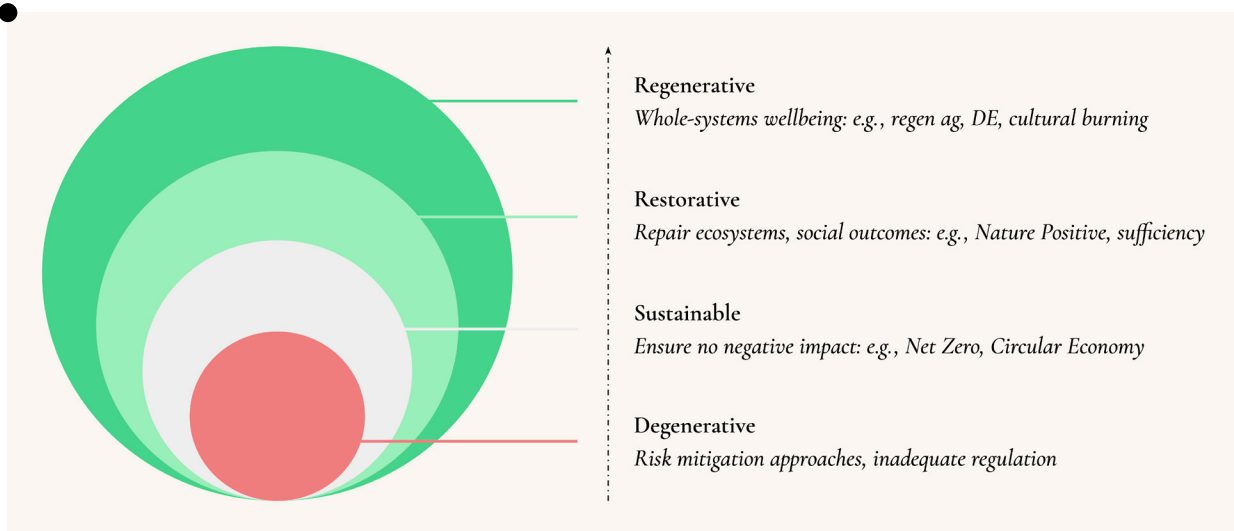


Figure 78. Raising the collective ambition for regeneration [adapted] (Reed, 2007, p. 676)

It is of utmost importance to grounding frameworks such as those discussed in clearly articulated principles and intentionality for place-based socio-cultures - as exemplified by the work of Dark Matter Labs to reimagine forms of governance that embrace the emergent complexity of systemic shifts (Johar & Begovic, 2020). In their body of work [Radicle Civics](#), they scaffold articulations of transitions upon three overarching transformations - from objects to agents, from externalities to entanglements, and from private/public to commoning - worldview shifts which act to bring nuance and directionality to systemic interventions in a holistic manner (Bekker et al., 2023; Chang & Johar, 2021). In this vein, the guiding principles developed by Regen Sydney and Coalition of Everyone continue to serve an important role in the further adaptation and development of transition frameworks that can help to bring coherence to their programs of work. Additionally, as design researcher and educator Niki Wallace suggests, transition frameworks are a valuable tool, but especially so when they are grounded in practical application “the MLP is a helpful heuristic but without applicability, a heuristic remains trapped in theoretical contexts” (2021, p. 4).

7.4.3.2. Putting nature on the board

Coalition of Everyone has sought to foster the development of alternate forms of governance for public and private sector organisations so that they might better consider the needs of the living world in their operations. One primary avenue of exploration has been to have non-human

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entities represented on the boards of organisations, which Coalition of Everyone has trialled with its own governance. A primary motivating factor for this is to transform how organisations frame the creation of value - conventionally seen through the lens of money and profit.

“I think value has always been seen as money. And I think that’s where some of the education is around. Well, actually, there’s value outside of that. So I wonder what will happen when we’re actually bringing in value? And how can we bring in value into our system - our ecosystem into our business systems?”

Paula Kensington, Coalition of Everyone
Practitioner Interview

Coalition of Everyone co-designed and tested a process of giving non-human entities legal rights and representation on the board, by having its own board meeting in April 2023 which included a proxy for the Birrarung (Yarra) River - held in the session by First Nations advisor, Yin Paradies. With the proxy taking part in the discussion, after a check in from all members present, the usual sequence of agenda items was undertaken, with particular input found to be had when discussing questions of strategy and operational activities. It was found that all conversations were shaped by this participation, with even mundane discussion points being guided by the broader organisational purpose to serve the regeneration of the living world. Having a non-human entity such as this represented on the board can serve to move beyond monetary valuations of nature - which inherently devalue the living world due to aspects that simply cannot be measured with a monetary figure.

The experience at Coalition of Everyone was encouraging in affirming the selection of a particular aspect of nature to be represented by proxy (rather than a vague all-encompassing representation), for its ability to more tangibly ground contributions (Ansell, 2022; Ansell et al., 2022). Additionally, the team found that it might be good to have dynamic aspects of nature represented - so as to allow for more relevant interrogations of the topics at hand. Simeon Rose has developed a similar mechanism with his organisation Faith in Nature, speaks to the value of this approach:

And while this vote is not a casting vote, it does show all other directors how Nature would vote – so no director can be wilfully blind to the impact of their own vote, should they choose to vote a different way. With this model in place, we cannot be wilfully deaf to Nature’s voice (2023, para. 14).

There is no doubt that this is a potent mechanism by which humans can better listen to non-human needs - that are already glaringly being

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expressed (Rose, 2023). Representing nature on the board can help to profoundly shape organisational governance, strategy development and ongoing operations - building upon momentum for the private-sector to more thoroughly commit to nature-based solutions in a manner that frames the climate crisis and biodiversity loss as interconnected ecological crises (Henry, 2023). Private sector organisations have much more agility than government institutions when it comes to constitutional change, and so are well placed to experiment and demonstrate the potential impact of such developments. Legal practitioner-researcher Brontie Maria Ansell corroborates this point:

We know governments can be very slow to enact constitutional change. Very few around the world have enacted rights of nature provisions into their constitutions. However, corporations are generally independent of the political system and can move much faster to change, and that can have a cascading effect (2022, para. 5).

Giving nature legal rights, agency and recognition at the foundation of organisational decision-making certainly adds to momentum generated by some instances globally, where aspects of nature have been afforded legal personhood - one example being the Whanganui River in Aotearoa (New Zealand). Despite the challenges faced by government institutions to enshrine rights for nature, there are increasingly more examples from across both the public and private sectors to help demystify the process. Organisations such as Regen Sydney and Coalition of Everyone have an important role to play here as intermediaries, enabling external collaborators to develop their organisational approaches with view of the broader cross-sector stakeholder ecosystems within which they operate (Frantzeskaki & Bush, 2021).

Designing innovative methods for non-human representation, with legally binding constitutional changes to organisational mandates can allow for mechanisms by which nature cannot simply be voted out of governance - allowing for longer-term processes for human activity to be brought into reciprocity with the living world. These approaches might have the leverage to appropriate existing legal frameworks to better strengthen the relations that co-create a 'sense of place' and allow for "new place meanings, characteristics, and capacities" to be regenerated" (Frantzeskaki et al., 2018, p. 1047).

An area for further exploration would be engagement with the perspectives of future generations, which regenerative business entrepreneur Carol Sanford frames as 'time-binding' (2022). How might representations of future generations also be made on boards of directors and in organisational governance to further prefigure an orientation of humans as a keystone species? The emerging governance practices discussed in this section show that there needs to be a diverse array of approaches

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that are specifically suited to the contexts of private and public sector activities (Avelino, 2017). Additionally, both systems-level design practice and distributed decision-making processes ought to continually consider and articulate their scope for regenerative impact in the context of polycentric scales of intervention.



Part 4: An evolving practice

In this final part of the thesis I surface the implications of my research for design-led systems-level transitions, as a nascent field of practice, as well as for me personally as a practitioner. I explore the importance of various design practices I have encountered through my field research - with reference to my guiding purpose to foster the development of an Earth Democracy.

Part 4 has one chapter: (8) Design and research for Earth Democracy.

8. Design and research for Earth Democracy

8.1. Designerly practice

Through my doctoral research and its findings, it is clear that design has a vital role to play in the emergence of Earth Democracy. The various *participatory, vision-led and integrative* manifestations of design practice are able to bring tangible expression and coherence to the realisation of Earth Democracy - which is itself a powerful prefigurative framing for governance and economics that epitomises the ontological essence of bioregionally-adapted regenerative systems-level transitions. The role that design, co-design and systemic design continue to play in the contexts of Regen Sydney and Coalition of Everyone are wide-ranging, including in guiding development of their systems convening, project portfolios, organisational strategy, prefigurative politics, multi-stakeholder forums, collaborative research, network weaving and visual sensemaking, amongst many other facets of practice. Characterising design practice through these activities are the *multi-dimensional, relational and co-emergent* forms of collective engagement that simultaneously foster *cognitive interrogation, axiological evolution and embodied experimentation* (Fayard & Fathallah, 2023).

8.1.1. Designing for systems-level transitions

The orientation towards systems-level change at Regen Sydney and Coalition of Everyone, is potently characterised in (1) their prefigurative politics that embody pluriversal-ecocentric ontological orientations, (2) their convening of programs of work as project portfolios across sectors, (3) their continuing engagement with an emerging cross-sector, place-based financial landscape, (4) their iterative approach to realising multi-stage, multi-level³¹ impact across scales, and (5) their facilitation of discursive, generative collaborative forums with a view to constructively navigating contradictory perspectives.

My research has shown that designing for systems-level transitions requires that practitioners and organisations “makes explicit the values and worldview underpinning them” (Griffith Centre for Systems Innovation, 2023a, p. 1). Regen Sydney and Coalition of Everyone have both accomplished this successfully - through their prefigurative politics, and clearly defined missions - which indeed, in the early stages of formation challenged their ability to secure funding, due to the transformational nature of their programs of work. However this explicit articulation of their guiding principles has allowed for the emergence of deeply aligned networks of practitioners, who have relationally fostered the development of opportunities for both organisations.

Systemic design practice can be clearly differentiated from social and strategic design practice in this regard - with the former attempting

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Here, multi-level refers to the various dimensions of intervention articulated by the MLP (Multi-Level Perspective) - niches, regime and landscape (Geels et al., 2017).

to prefigure desirable models for multi-stage regenerative transitions, whilst the latter is largely concerned with isolated project-based interventions. Rather than engaging in a conventional client/service-provider relationship, systemic design practice looks to relationally model - through testing and iteration - the shifts that collaborators seek to realise, with a view to “embody the operating philosophy of a new system” (Leadbeater & Winhall, 2020, p. 28). For this reason, positionality, stance, worldview, mindset and outlook are seminal to systemic design practice (Nelson & Stolterman, 2003).

Additionally, systemic design practice seeks to form coalitions of cross-sector actors from across traditional disciplinary silos in its participatory development of portfolios of linked projects (Bijl-Brouwer, 2023). This broader systemic engagement is of course greatly aided by co-design processes such as (1) the prototyping of not only material objects, but also actions, behaviours, interactions, relationships and impacts (McKercher, 2022), as well as (2) the thematic synthesis of diverse sets of qualitative and quantitative data into multi-dimensional mediums, including written research, visual artefacts and physical mockups that help the system to ‘see itself’ (Bijl-Brouwer & Loon, 2023). Designer educator Jon Kolko describes synthesis as a process of abductive sensemaking “that helps the designer move from data to information, and from information to knowledge” (Kolko, 2011, p. 40). Sensemaking is especially valuable in the complex context of regenerative transitions - and I reflect on these processes in more detail in section [8.1.2.](#)

My field research has led me to believe that designers possess unique culturally-sensitive skillsets in not only being able to facilitate collaborative engagement with the future state (through framings of North Star visions), but to also help the comprehensive navigation of the multiplicities of transition pathways (through concretised interrogations of project portfolio missions) across multiple nested scales - leading to reframed collective action relevant to emergent system dynamics (Costanza-Chock, 2020). “Vision... isn’t just another strategic plan. Vision is a reordering of how we see reality. Without it we’ll never reach the roots of climate change or war or poverty. We’d just wallow in the same old darkness of our limitations” (McIntosh, 2023, p. 179).

8.1.1.1. Comparing systemic design and Transition Design

As explored in the literature review section [2.4.5.3.](#), Transition Design can be framed as a subset of systemic design, as they share many common qualities, however there are some key differences that are worth surfacing, with particular reference to their manifestation in my sites of research. A paramount distinction to be made is their ontological orientations - whilst systemic design practice is well

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placed to prefiguratively model alternate socio-cultural paradigms, the approach in and of itself does not have its own socio-political agenda in the way that is characteristic of Transition Design (Boehnert et al., 2019). Transition Design has a clear political agenda and ontological directionality that pervades all aspects of its practise - fostering design-led societal transitions toward more sustainable futures.

In contrast, whilst systemic design does also look to enact a temporal awareness and multi-stage shifts through coalitions of diverse stakeholders and living prototypes, it has a broader contextual framing that is not specifically directed towards socio-ecological justice in the same manner - and is indeed a valuable approach in other diverse contexts of design-based intervention (Drew et al., 2021; Tonkinwise, 2014). At the same time, systemic design articulates systems convening as a core aspect of facilitating long-term shifts - not only as systems-level processes that can be leveraged and intervened in (as in Transition Design) but also in the network-weaving and coalition-buiding with diverse cross-sector actors. The diagram below depicts some of the simliarities and distinctions between the two approaches, with reference to Buchanan’s four orders of design (1992, p. 9).

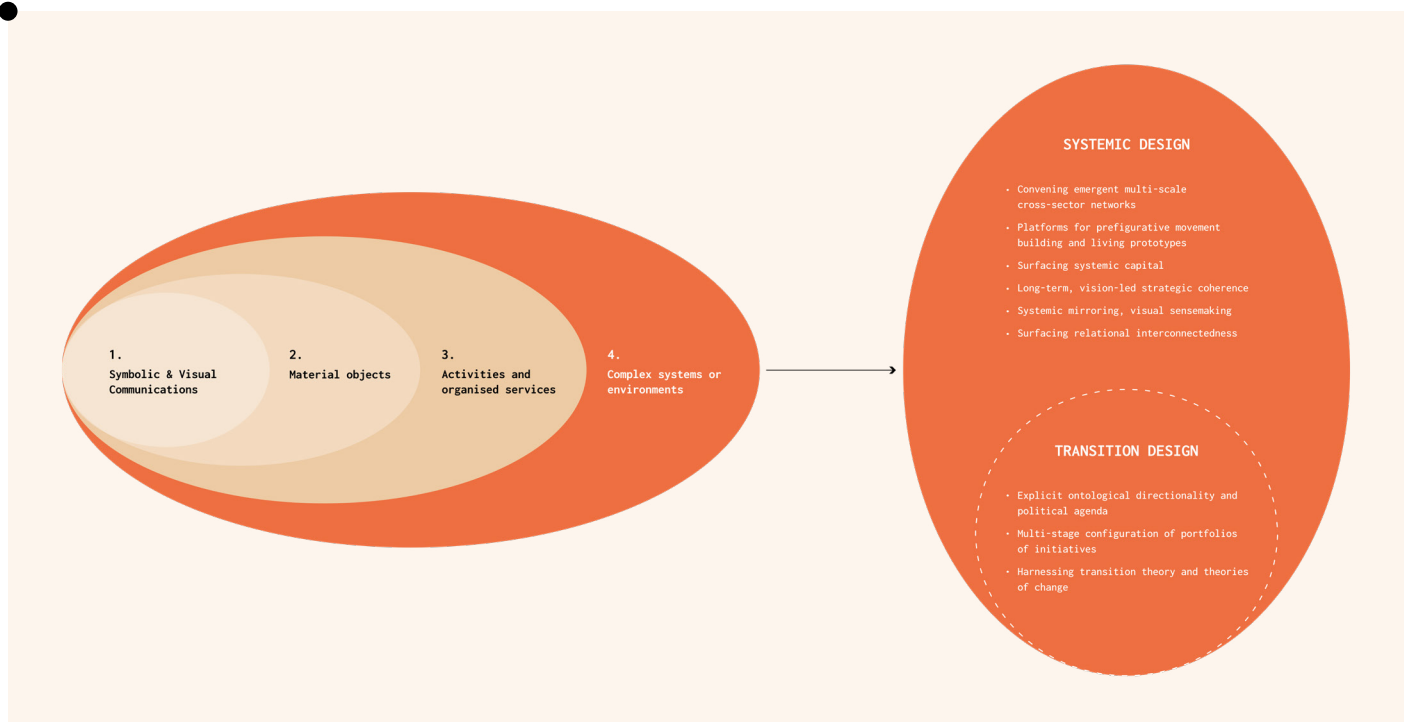


Figure 79. Practice-based differentiation between systemic design and Transition Design

My critical design ethnographic research - conducted as the only Transition Designer at Regen Sydney and Coalition of Everyone, working amongst colleagues with various other approaches (including systemic design), has allowed me to analyse the similarities and differences present between Transition Design and systemic design in application. The explicit ontological directionality towards socio-ecological justice

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embodied by Transition Design is perhaps most evident in Transition Design practitioners themselves. In a sense, Transition Design has its own theory of change for the role that designers can play in systems-level transitions - which guides practitioners to not only apply its methods of co-design engagement, system analyses and project portfolio development, but to also, crucially, orient them towards particular types of systemic changemaking (Tonkinwise, 2023).

Transition Design does indeed have a framework for co-design engagement as described in section [2.4.5.3.](#), whilst on the contrary systemic design does not specify particular participatory methods, but rather suggests various modes of practice - that are in essence guiding principles. The co-design framework that Transition Design harnesses places great value on a nuanced engagement with the everyday social practices that characterise the future state and the transitions being explored (Clausen & Gunn, 2020). The consideration of such detail helps to contextualise and ground otherwise abstract systems-level contributions made through transition theory frameworks - allowing for more embodied forms of interrogation. The broader remit of systemic design on the other hand, facilitates practitioners to better harness and adapt a wide range of co-design methods, for example the DEAL Doughnut Unrolled methodology, as used by Regen Sydney (Drew et al., 2021). Practitioners of both approaches must inherently be aware of the ontological constraints placed upon them by current systemic conditions, as they seek to foster the development of new systemic paradigms.

Overall, these similarities and distinctions could allow for greater agency in directing the efforts of practitioners, whilst of course, further practice-based research would help to surface greater detail around the nuances of applying the two approaches, and to continue carving out a legitimate and valuable field of contribution - particularly in the context of regenerative systems transitions (Beohnert, 2023; Gaziulusoy & Erdoğan Öztekin, 2019). There also exists an opportunity to continue interrogating the unusual assemblages in which various emerging academic and non-academic models manifest - including DEAL's Doughnut Unrolled, and AELA's Greenprints as well as transition frameworks such as the Multi-Level Perspective (MLP) and three horizons, amongst others.

8.1.1.2. Summary of findings

There have been many findings surfaced throughout the thesis across diverse areas of design practice, with regards to the orientation of practitioners and collectives, engagement processes, frameworks for strategic coherence as well as structural conditions for the effective realisation of outcomes. The following 10 points summarise the key findings made through my research, with a particular focus on the types

of *design practice that foster systems-level transitions* - in the context of bioregionally-adapted regenerative economics (otherwise framed as Earth Democracy in my discussions). These implications for design practice are drawn through participant observation in my two sites of research - Regen Sydney and Coalition of Everyone.

Summary of findings

Finding theme

Outline of systems-level design practice

1. Practitioner ontological orientation

Holding a clear political agenda and explicit ontological directionality informed by principles of decolonality and ongoing processes of inner regeneration, whereby the practitioner is cognisant and articulate about their subjective positionality in systems-level transitions. (See sections [6.1.2.](#) and [8.1.1.1.](#))

2. Collective prefigurative practice

Collective philosophical frameworks that embody worldviews of pluriversal-ecocentrism, expressing relationality and kinship between all actors of the living world through foundational framings of care and reciprocity. Embodied methods that go beyond the cognitive to de-centre the human and engage with non-human agency, perspectives and representation, seeking to foster the co-evolution of the bio-geo-physical with the cultural and socio-economic. (See sections [6.1.](#), [7.2.](#) and [7.3.1.2.](#))

3. Systems convening

Development of platforms for prefigurative movement building through emergent network weaving across public and private sectors. Constitution of 'middle out' coalitions that attract top-down institutional engagement along with considered bottom-up political insurgency - to enable decentralised ownership and power through social learning. (See sections [6.2.](#) and [6.4.3.4.](#))

4. Mission-oriented project portfolios

Formation of multi-stage, multi-level, ecologies of intervention, which act as assemblages of participation, fostering agency for collaborators across diverse systemic leverage points. Missions are oriented by North Stars (guiding compasses) that afford vision-led strategic coherence across portfolios of linked projects. (See sections [6.4.](#) and [7.4.1.2.](#))

**5. Grounding in place-
context**

Deeply contextual practice that is led by engagement with the qualities and needs of the stakeholders, communities and ecosystems in question, including through ongoing partnership with First Peoples. Development of participatory cultures amongst citizens through collaborative forums and deliberative democracy. (See section [7.4.1.](#))

6. Multiscalar engagement

Navigation of interconnected nested systems in seeding alternate forms of economics and governance, underpinned by the political approaches of cosmopolitan localism and polycentricity. Developing local contextual interventions through consideration of regional socio-ecological conditions, including questions of global justice. (See sections [6.4.3.](#), [7.3.2.](#) and [7.4.3.](#))

**7. Navigating complex
systems**

Cross-sector coalitions enabled to collectively engage with emergent system dynamics with the aid of transition theory frameworks. Theories of change harnessed to provide strategic coherence to missions, through articulation of linkages between programs of work, and opportunity areas across systemic leverage points. Visual sensemaking drawn upon as a crucial method with which to orient and provide directionality to efforts at systems convening. (See sections [6.3.](#), [7.4.3.1.](#) and [8.1.2.](#))

**8. Interconnected needs
and thresholds**

Fostering the development of bioregionally-adapted regenerative economics through development of both deficit-based imposition of limits, as well as strengths-based intersubjective approaches founded upon care and reciprocity. Drawing from existing methodologies e.g., DEAL's Doughnut Unrolled in this endeavour, uplifting qualitative articulations of wellbeing as a counterweight to the predominant focus on quantitative approaches. (See sections [7.2.2.1.](#), [7.3.1.](#) and [7.3.3.](#))

**9. Pilots and living
prototypes**

Iterative formation of experimental demonstrator projects that afford development of tangible manifestations of alternate economic and governance models. Drawing upon novel assemblages of stakeholders, social practices and material interventions as exemplar articulations of degrowth transitions, which also act as systemic mirrors, and as bridges in realising multi-stage transitions. (See sections [7.1.](#) and [7.4.3.2.](#))

10. Systemic investing

Encouraging the creation of multi-party agreements for the financing of long-term portfolios of linked projects, moving beyond a reliance on only philanthropic capital. Creating visibility for the value of catalytic funding, and engaging in the ongoing development of place-based capital and local pooled funds such as through bioregional bank accounts. (See sections [6.4.3.3.](#) and [7.4.2.](#))

8.1.2. Visual sensemaking

Sensemaking is a central component of design practice, especially when working with the complex dynamics of systems-level transitions - and can be seen to be valuable across the 10 areas of findings presented above. In particular, visual methods of abductive sensemaking have been crucial to my practice in two primary forms, including (1) individual processes of drawing and diagramming, and (2) collective practices of mapping, thematic analysis and distillation. In both these forms of sensemaking, design practitioners can find it valuable to build upon existing conceptual frameworks for systems-level transitions, as well as to develop novel assemblages of synthesised data (Kolko, 2010; Rye, 2024). In the following paragraphs I will describe the value of different methods used in visual sensemaking across my two sites of research. Sensemaking itself could be defined as “a motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively” (Klein et al., 2006, p. 71). Often this inferential and integrative process is seen by outsiders as a magical form of intuition, however this might be due to the fact that the process is not externally visible in the same manner as other design methods (Dorland, 2020).

While other aspects of the design process are visible to non-designers (such as drawing, which can be observed and generally grasped even by a naïve and detached audience), synthesis is often a more insular activity, one that is less obviously understood, or even completely hidden from view. (Kolko, 2010, p. 15)

Many forms of sensemaking conducted by designers are inherently visual, whether it entails the clustering of written sticky notes, relational systems mapping, journey mapping, synthesis with transition theory frameworks, or otherwise. The abductive nature of sensemaking is strengthened by the visual reorganisation of data, free from the cognitive constraints of pre-existing data architectures, such that novel forms of coherence are afforded (Wallace, 2020).

“A big way that I cope with that ambiguity is visual mapping. So the spaces that we’re working in are often very complex system spaces and tricky. Conceptually, there’s lots of different stories, themes, tensions; we’re working across multiple different communities, across places, across cultures, trying to approach change in different ways. There’s just so many balls in the air and you can get lost and that can contribute to the overwhelmingness for yourself, especially with the responsibility to hold people through that process - in that soup of ambiguity.”

Tasman Munro, DIRC
Practitioner Interview

Systems-oriented collaborative forums, (whether co-designing place-based strategy, organisational theories of change or portfolios of projects) that sensemaking processes attempt to synthesise are themselves messy and discursive, with insights formed around diverse concerns across scales, sectors, contexts and impacts areas, not to mention the inherent positionality of stakeholders in making their contributions. Visual sensemaking processes look to make meaning out of this ‘soup of ambiguity’ through iterative processes of deconstruction and reconfiguration, guided by the lived experience and positionalities of the designer-facilitator and participants in question. There is no surprise then, that in seeking to find coherence and clarity, visual sensemaking processes themselves are often messy and discursive.

One of the most basic principles of making meaning out of data is to externalise the entire meaning-creation process. By taking the data out of the cognitive realm (the head), removing it from the digital realm (the computer), and making it tangible in the physical realm in one cohesive visual structure (the wall), the designer is freed of the natural memory limitations of the brain and the artificial organisational limitations of technology (Kolko, 2010, p. 19).

The visual artefacts that were formed in my two sites of research - through both individual and collective sensemaking processes - acted to provide direction internally, for the team, as well as being valuable tools for external communications. In these endeavours, both organisations have their own colour palettes and visual language that evocatively reference their contexts of intervention. In releasing the Sketching a Sydney Doughnut body of work, Regen Sydney actually received comments from some members of the network, suggesting that the level of visual refinement through the report, diagrams and illustrations conveyed to them that the organisation was well resourced and highly developed in its programs of work. Of course, this was not the case, and goes to show the power of visual artefacts to communicate meaning in an implicit manner. Going forward, Regen Sydney seeks to balance its visual language, depicting a sketchiness that might better help to invite potential collaborators into what is overwhelmingly an ongoing work in progress.

There are numerous visual artefacts and frameworks that have been valuable in sensemaking and communications for Regen Sydney and Coalition of Everyone, including their theories of change, programs of work, the Sydney Doughnut, MLP, three horizons framework, and the Earth Equity Innovation Engine, amongst many others, as well as the diagrams I have created in the process of synthesising data through my doctoral research. Each instance of sensemaking has been aided by precedent frameworks that are valuable to the processes in very context-specific ways (Rye, 2024). Niki Wallace states that “[the MLP] observes the temporal and systemic nature of societal change which is useful for designers’ engagement with transitions as it provides insights into the emergence of complex/wicked problems” - a point which indeed applies to many other forms of visual sensemaking studied in my sites of research (2021, p. 5).

As a Transition Designer working in the context of bioregionally-adapted regenerative economics, I find it of utmost importance to stay abreast of the variety of analytical frameworks available in the field, and their potential to facilitate complementary understanding of narrative stories, qualitative research and quantitative data. These frameworks are constantly being evolved, and I look to continue adapting them myself so that they might better support design practice and systemic coherence in tangibly realising collective impact.

The collective sensemaking processes that have been conducted on Miro have been invaluable to the facilitation of a co-emergent shared understanding amongst the teams. Interestingly, we might not all be using the Miro platform, were it not for COVID-19 lockdowns forcing people to work remotely and find alternate ways to collaborate (Davis et al., 2021). The digital space of Miro allows for open-ended experimentation beyond the visual experimentation that is possible with real sticky notes and whiteboards, however of course it would be much more preferable to have colleagues meeting in person. The experimentation that is possible whilst sensemaking on Miro, is something Regen Sydney seeks to harness - particularly in their Neighbourhood Activations - which is due to begin in July 2024 with Waverley Council’s Thinker in Residence program. In this setting, collaborators will be encouraged to leave their conceptual explorations through the socio-ecological dimensions of the Sydney Doughnut in the physical space - the ‘Boot Factory’ - where the process and insights will be arranged spatially so as to hold a visual history of the community’s participatory engagement. Over a period of 12 months, this emergent exhibition will not be a polished and finished artefact, but rather will capture the living qualitative and quantitative explorations - so that others might then be able to step into the journey.

Perhaps there are some learned capitalist and modernist motivations amongst designer-facilitators to hide the process and imperfections

of collaboration, and to just focus on the end product; however it is apparent that highlighting the journey and the process undertaken is of paramount value - and indeed is what underpins the ethos of co-design.

“Often I’ll do a lot of visual mapping to show people where we are. To show people that we are doing work, we have done work, we have created insights, we have seen connections. And we have identified some futures and sort of just make it tangible and visible. Where we are but also celebrating and acknowledging what has what is what is happening you know, because it can be invisible.”

Tasman Munro, DIRC
Practitioner Interview

Collective sensemaking that is aided by visual frameworks are a powerful way to navigate the multiplicities of intentions and positionalities that a diverse set of collaborators hold. Undertaking such processes enables the team to form bridges between seemingly disparate concerns, and consequently allows them to further evolve and develop their collective understandings. Similar to visual sensemaking, the co-creation of physical mockups and prototypes can allow for tangible, embodied collective reframings of insights; both visual and material explorations are important to my professional design practice. Conventionally written forms are perceived as somehow more objective, however everything is shaped by lived experience interpretations and positionality - something that visual and material methods harness well (Boehnert, 2018).

8.2. Research reflections

8.2.1. Reflections on my research methodology and methods

Whilst my research questions are primarily focused on design, the contexts of practice in which I have conducted this research are equally important. In this regard, I have attempted to curate my explorations such that they are acutely relevant to the pursuit of an Earth Democracy. In particular this has included the regenerative economics and bioregional governance fields of practice that largely characterise Regen Sydney and Coalition of Everyone respectively. Underpinning these frames of reference in the field research orientations drawn from the literature review and previous professional experiences, including the socio-cultural paradigms of ecocentrism and pluversalism, as well as the economic-political models of cosmopolitan localism and polycentricity.

My research approach, as well as the subjects of my research - work conducted by Regen Sydney and Coalition of Everyone - are all guided by the question 'what might the living world want from us?' in exploring the role of design, and in manifesting principles of care, reciprocity and justice. The critical design ethnography methodology has been well suited to this task, and I believe the findings and the stories reflexively articulated in this thesis offer many insights and areas for growth, for my two sites of research, as well as for other regenerative initiatives seeking to foster design-led systems-level transitions. This approach to my research has allowed me to synthesise insights across my two sites of study, and to be able to cross-examine instances of design in my interpretations, with valuable nuance contributed by the analysis of the practitioner interviews. As the fields of bioregional governance and regenerative economics further develop it will be important for research to continue to be undertaken to both (1) develop systemic design practice case studies in local contexts, and (2) strengthen shared understandings of design-led transition processes across regions.

The post-constructivist stance taken in my research has allowed me to interrogate the nuanced programs of work at Regen Sydney and Coalition of Everyone which value both qualitative subjectivity and quantitative objectivity in their engagements. Whilst the participant observation that I have conducted draws only from qualitative data, there has certainly been space to explore the emerging contributions of quantitative approaches to regenerative transitions. The wide-ranging manifestations of systemic design practice that I have interrogated - co-design forums, theories of change, project portfolios, governance processes, strategic roadmaps, visual artefacts and so on - are all hybrid arrangements of both material reality and social interaction, and thus have necessitated a holistic paradigm of study such as that offered by post-constructivism.

Conducting my research as an insider researcher has been hugely valuable to this research - so much so that it would have been impossible to answer my research questions in contexts of Regen Sydney and Coalition of Everyone without having taken such a position (Dahal, 2023). The deeply contextual and participatory nature of design practice in fostering systems-level transitions has required me to be fully immersed in the everyday organisational operations to understand and interrogate the ongoing nuanced meaning-making (Edwards, 2002). Certainly, more objective studies taken from an outsider perspective might be better placed to evaluate the impact of systemic design in actually effecting bioregionally-adapted regenerative transitions, however this was further to the scope of my research, as I believe that the still nascent field of interest has not developed to a point where such analyses might be effectively made (Fleming, 2018). The insider researcher position has needed me to avoid conflating my own perspectives with those of colleagues, organisations and interviewees, which I believe I have achieved in this thesis, in the way that I have framed findings, and presented these diverse perspectives (Finefter-Rosenbluh, 2017).

Whilst undertaking the 9 months of participant observation, the manner in which I engaged with Regen Sydney and Coalition of Everyone was identical in practice when compared to my involvement outside of this period. The consistency of my engagement and the trust held with colleagues has meant that my position as an insider researcher did not impact either of the teams, nor was it even noticed during day to day activities. As I have described as relevant through the thesis, there have indeed been some interpersonal tensions between team members, particularly when navigating questions of organisational strategy in the face of funding blockages.

Such moments are to be expected when shaping the foundational orientation and North-Star vision, with great focus required to hold the organisational integrity (Costley et al., 2010). In particular some Regen Sydney colleagues saw fit to conduct project-based private-sector consulting that might have compromised the position of the organisation as a systems convenor working in the commons. Again, my position as insider researcher allowed me to be privy to such dynamics, from the vantage point of my own positionality. In the following statement, anthropologist Kapil Dahal captures the importance of insider researchers clearly articulating their positionality in order to adequately frame their research.

Being reflexive of one's positionality does not handicap any researcher to generate rich information from the field. Since any representation is only partial and based on the specific limitations of the particular researcher's positionality and perspective, the researcher is expected to explicitly show [their] positionality so that the readers will comprehend the ethnography accordingly (2023, p. 401).

8.2.2. The journey so far and where to next

Through the crucible of this doctoral research, my design practice and orientation to systems-level transitions has greatly evolved from relatively naive understandings of the interconnected nature of socio-cultural, techno-material and econo-political systems, to a much more nuanced and applied sense of the value of design-led systems convening. Initially as I finished up working at the Design Innovation Research Centre, there was a sense of failed potential in the Sydney context, with regard to the blocking of avenues available for design to be harnessed in such a manner. At this time, many social movements were emerging, including the activism inspired by Greta Thunberg - leading me to consider other ways in which systemic transitions might be fostered. Despite this moment of questioning the role of design-led approaches, the 4 years of sustained engagement, with iteratively revised research focus areas has provided me with a renewed sense of possibility for systemic design practices in facilitating the emergence of an Earth Democracy.

The sustainable designer aiming at structural change must therefore be always also trying out different ways of living and working. In addition to the chance that such self-experimentation might light upon structural change pathways, the noncompliance with current structures that such a changing, experimental way of living entails will itself be an irritant to current structures. Sustainable designers should be visibly engaged in creatively critical acts, alerting others by example to the need for radical change (Tonkinwise, 2018, p. 444).

I seek to continue working with Regen Sydney and Coalition of Everyone, as well as to further embody a regenerative ontological orientation in my personal life (Wallace, 2019), including through my co-housing at the Peach Palace. With Regen Sydney and Coalition of Everyone receiving small quantities of funding as I finish up writing this thesis, I have hope that their project portfolios can indeed build upon this momentum and be better resourced in the months ahead.



Figure 80. Fostering engagement with the Sydney Doughnut in Manly, November 2023

Continuing with Regen Sydney, I have a desire to work in the place I call home, engaging with my local neighbourhoods, as well as the city more broadly through the emerging programs of work. I continue to play a convening role in the organisation as we seek to build organisational momentum, find an auspicing partner and secure backbone funding for the core team. With Coalition of Everyone, I would like to continue to push my practice in participatory governance through the research and development that characterises the ABC Regen process, applying and testing it in local contexts to create richer engagement with bioregional dynamics. In addition to applying my learnings in practice through these two organisations, I also look forward to engaging with new knowledge through ongoing research and teaching in academia.

Through all of these pursuits I am driven to encourage the collective expansion of focus in design-led systems convening from predominantly the local and social, to better engage with global and ecological considerations (Price & Bijl-Brouwer, 2023). Guided by the multiscalar framings offered by cosmopolitan localism and polycentricity, I find that working across scales is vital to my practice as a Transition Designer - in pursuit of an Earth Democracy. Global North overconsumption must be urgently addressed through degrowth, dematerialisation and the repair of maladaptive human behaviours - as a Transition Designer I seek to help shift our prevailing culture of passive consumerism to one of active citizenship (Merz et al., 2023).

I have an inherent motivation to confront global issues of justice (Ghosh, 2021), through their local context-specific manifestations, including by encouraging the development of degrowth transitions. With the unevenly experienced impacts of the climate crisis, and various ongoing examples of genocidal occupation and neocolonial oppression, it can be seen that the wellbeing of those in so called 'developing countries' (not to mention the non-human living world) continues to be systemically undermined by the imperial core of the Global North. It is abundantly clear that a future of greater inequality and fascism is quite plausible, and in this regard I know that I will always fight for the realisation of an Earth Democracy through my personal life and through my professional design practice.

Finally, to close out this thesis, I present a quote (shared with me by Alice from Regen Sydney) from systems scientists Peter Senge et al. that has guided me in my research and in my design practice more broadly: *“transforming systems is ultimately about transforming relationships among people who shape those systems”* (2015, p. 15).

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Appendix A: Principles of Earth Democracy

The following ten principles are outlined by Vandana Shiva (2005, p. 9):

1. All species, peoples, and cultures have intrinsic worth

All beings are subjects who have integrity, intelligence, and identity, not objects of ownership, manipulation, exploitation, or disposability. No humans have the right to own other species, other people, or the knowledge of other cultures through patents and other intellectual property rights.

2. The Earth Community is a democracy of all life

We are all members of the Earth family, interconnected through the planet's fragile web of life. We all have a duty to live in a manner that protects the Earth's ecological processes, and the rights and welfare of all species and all people. No humans have the right to encroach on the ecological space of other species and other people, or to treat them with cruelty and violence.

3. Diversity in nature and culture must be defended

Biological and cultural diversity is an end in itself. Biological diversity is a value and source of richness, both materially and culturally that creates conditions for sustainability. Cultural diversity creates the conditions for peace. Defending biological and cultural diversity is a duty of all people.

4. All beings have a natural right to sustenance

All members of the Earth Community, including all humans, have the right to sustenance - to food and water, to a safe and clean habitat, to security of ecological space. Resources vital to sustenance must stay in the commons. The right to sustenance is a natural right because it is the right to life. These rights are not given by states or corporations, nor can they be extinguished by state or corporate action. No state or corporation has the right to erode or undermine these natural rights or enclose the commons that sustain life.

5. Earth Democracy is based on living economies and economic democracy

Earth democracy is based on economic democracy. Economic systems in Earth Democracy protect ecosystems and their integrity; they protect people's livelihoods and provide basic needs to all. In the Earth economy there are no disposable people or dispensable species or cultures. The Earth economy is a living economy. It is based on sustainable, diverse, pluralistic systems that protect nature and people, are chosen by people, and work for the common good.

6. Living economies are built on local economies

Conservation of the Earth's resources and creation of sustainable and satisfying livelihoods are most caringly, creatively, efficiently and equitably achieved at the local level. Localisation of economies is a social and ecological imperative. Only goods and services that cannot be produced locally - using local resources and local knowledge - should be produced non-locally and traded long distance. Earth Democracy is based on vibrant local economies, which support national and global economies. In Earth Democracy, the global economy does not destroy and crush local economies, nor does it create disposable people. Living economies recognise the creativity of all humans and create spaces for diverse creativities to reach their full potential. Living economies are diverse and decentralised economies.

7. Earth Democracy is a living democracy

Living democracy is based on the democracy of all life and the democracy of everyday life. In living democracies people can influence the decisions over the food we eat, the water we drink, and the health care and education we have. Living democracy grows like a tree, from the bottom up. Earth Democracy is based on local democracy, with local communities - organised on principles of inclusion, diversity, and ecological and social responsibility - having the highest authority on decisions related to the environment and natural resources and to the sustenance and livelihoods of people. Authority is delegated to more distant levels of governments on the principle of subsidiarity. Self-rule and self-governance is the foundation of Earth Democracy.

8. Earth Democracy is based on living cultures

Living cultures promote peace and create free spaces for the practise of different religions and the adoption of different faiths and identities. Living cultures allow cultural diversity to thrive from the ground of our common humanity and our common rights as members of an Earth Community.

9. Living cultures are life nourishing

Living cultures are based on the dignity of and respect for all life, human and non-human, people of all genders and cultures, present and future generations. Living cultures are, therefore, ecological cultures which do not promote life-destroying lifestyles or consumption and production patterns, or the overuse and exploitation of resources. Living cultures are diverse and based on reverence for life. Living cultures recognise the multiplicity of identities based in an identity of place and local community - and a planetary consciousness that connects the individual to the Earth and all life.

10. Earth Democracy globalises peace, care and compassion

Earth democracy connects people in circles of care, cooperation and compassion instead of dividing them through competition and conflict, fear and hatred. In the face of a world of greed, inequality and overconsumption, Earth Democracy globalises compassion, justice, and sustainability.

Appendix B: Interview guide

The following questions will be used to guide the semi-structured interviews (to take place after the extended period of participant observation in both sites of research):

1. What are your key areas of expertise?
2. How do design, co-design and systemic design play a role in your professional engagements?
3. What design, co-design and systemic design methods do you employ?
4. In what ways can design, co-design and systemic design be a valuable approach in the context of bioregional governance/regenerative economic transitions?
5. What are some challenges faced by co-designers and systemic designers in these contexts?
6. Do you see yourself working as a trojan horse in your approach to changing the system? If so, how?
7. Using what methods has Regen Sydney/Coalition of Everyone helped develop place-based visions; what has worked well, and what could be improved?
8. How has Regen Sydney/Coalition of Everyone collaboratively developed transition strategies; what has worked well, and what could be improved?
9. With what methods has Regen Sydney/Coalition of Everyone facilitated engagement with the perspectives of non-human entities; what has worked well, and what could be improved?
10. How has Regen Sydney/Coalition of Everyone facilitated consideration of social and ecological thresholds; what has worked well, and what could be improved?
11. How do you work with different levels of the system in your approach to fostering transitions?
12. At what nested scale(s) do you find greatest potential for collaboration towards regenerative transitions?
13. How do you see distributed governance playing a role in the future of Australia's political economy?
14. What is the role of measurement and evaluation in your practice?
15. How might we best work in the uncertainty of systems change?



Thank you