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Transition design: Elements of practice

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ABSTRACT

Transition Design (TD), a discipline framed by Irwin, Kossoff, and Tonkinwise in 2015, integrates design-informed approaches with systems change, transitions research, and grassroots action to address societal challenges. Ten years post-inception, this study examines TD in practice through 35 empirical cases. Although working from common elements of practice, the cases often depart from the TD Framework method demonstrated in the flagship Ojai case. Reasons are varied, with practitioners looking outside design as well as drawing from creative and material practices within design. Modifications were needed, for instance, to engage with non-Western cultures, incorporate Indigenous worldviews and other forms of knowledge, and facilitate ‘ontological openness’. Tensions emerge as practitioners leverage the opportunities available to them, discrete pieces of work, and short-term funding toward long-term systems transformation. It is clear, however, that TD has opened space for a growing range of practices that put design in service of progressing transitions.

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Introduction: A design practice for transitions

Transition Design (TD), introduced as a Provocation in 2015 by Irwin, Kossoff, and Tonkinwise (2015), is a discipline that integrates design approaches with systems change, transitions research, and grassroots action to address societal challenges. Kossoff and Irwin (2022, 22) describe TD as a ‘transdisciplinary field aimed at addressing complex (wicked) problems that manifest in culture and place-specific ways’ through ‘systems level change—change that is coordinated across multiple societal sectors at multiple levels of scale over long arcs of time’. TD offers a co-creative lens to the transition tasks of understanding dynamics, identifying ‘leverage for guiding societal transitions’, and

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developing ‘agency’ in driving processes of systems change (Hebinck et al. 2022, 1009). By integrating ‘design’s core competencies (visualization, prototyping and form-giving) with user-centred, social and generative research methods’ (Irwin, Tonkinwise, and Kossoff 2020, 33), TD supports leverage and agency through propositional, materialising approaches for making sense of and ‘changing reality’ (Swann 2002)—together.

Ten years post-inception, this study analyses 35 empirical TD cases. Among the cases, several follow the emerging Transition Design approach (Irwin 2018, 2019), demonstrated by the flagship Ojai case (Irwin and Kossoff 2017a, 2017b). Several cases either modify or take a different approach, opening questions about TD scope. The analysis highlights rich, diverse areas of practice (like futuring), practice dynamics, and opportunities for further development of TD.

The transition design approach

Over the past decade, the TD body of knowledge has been steadily developing among the TD framers and a growing cohort of researchers and practitioners. The *TD approach* (Irwin 2018), consisting of the *TD Framework* and *TD Phases* (Figure 1), sets out a conceptual model for TD. The TD Framework (Irwin, Kossoff, and Tonkinwise 2015) specifies four areas of knowledge, action, and self-reflection: visions, theories of change, posture and mindset, and new ways of designing (2015, 7). Providing a vital foundation for the emerging discipline, the TD Framework named a gap in design, established TD amongst other disciplines, and carved out space to explore *via* practice.

The three TD Phases (Irwin 2018, 971–984) specify distinct practice stages e.g. reframing present and future, designing interventions, and waiting and observing. In describing the TD phases, Irwin articulated an activity sequence that provides detail for how the TD approach can work in practice. That activity sequence is referred to here as the *Framework method* (Figure 1), as termed by Cowart and Maione (2022, 38) and as first demonstrated in the Ojai case (Irwin and Kossoff 2017a, 2017b).

Anticipating growth and evolution over time, TD framers emphasized that methodology was not fixed and stated intent ‘to develop this area with the help of other educators, practitioners, and researchers’ (Irwin, Kossoff, and Tonkinwise 2015, 4).

Method

This study proceeded in three steps: 1) finding empirical cases, 2) coding and tabulating practices, and 3) theming. Inclusive of the Ojai case, 35 cases were identified. The first step, finding cases, was not straightforward. The search term ‘transition design’ procured millions of results that resisted filtering to a manageable scope. Furthermore, as observed by Van Selm and Mulder (2019, 331), ‘projects are not always carried out under the flag of transition design’.

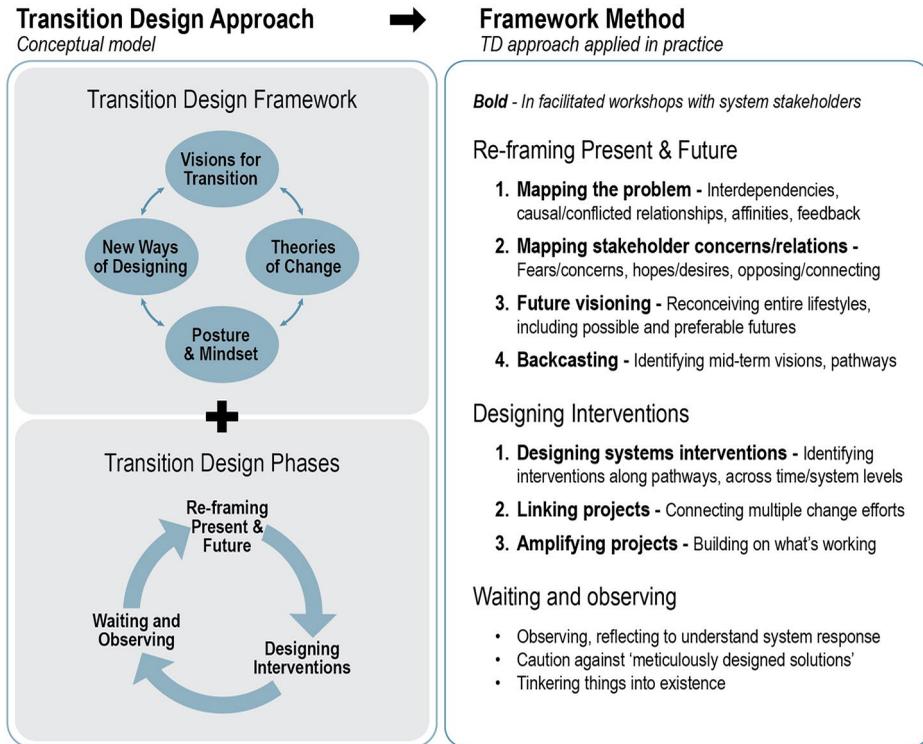


Figure 1. The Transition Design Approach, adapted from Irwin, Kossoff, and Tonkinwise (2015) and Irwin (2018), and the Framework Method (Irwin 2018, 971–984).

Table 1. Literature search.

Reference cited	Web of science	Google scholar
Irwin, T. (2015). Transition Design: A Proposal for a New Area of Design Practice, Study, and Research. <i>Design and Culture</i> , 7(2), 229–246. https://doi.org/10.1080/17547075.2015.1051829	130 (2024) 29 (2025)	620 (2024) 120 (2025)
Irwin, T. (2018). The emerging Transition Design approach. <i>Design Research Society 2018: Catalyst</i> . University of Limerick 25th – 28th June 2018. doi: 10.21606/dma.2017.210 .	N/A	152 (2024) 75 (2025)
<i>The Irwin 2018 search also returned papers citing:</i>		
Irwin, T. (2019). The Emerging Transition Design Approach. <i>Cuadernos del Centro de Estudios de Diseño y Comunicación</i> (73). https://doi.org/10.18682/cdc.vi73.1043		
Total papers scanned		1126

After some experimentation, I found that reverse searching two TD publications mentioning practices produced results. I used both Web of Science and Google Scholar, with Google Scholar providing better results. The search (Table 1) was repeated in January 2025 to include 2024 publications. Prior to this study, a colleague shared the Ojai case and I found the Future of Fish case (Dahle 2019) in a general TD literature scan. Two cases came from my research cluster (Crofts 2025; Kashyap, Svejkar, and Tonkinwise 2024).

Search results were filtered for three requirements: 1) empirical cases 2) defined as TD, TD plus other approaches (like participatory design), or related

(like design for transitions), and 3) named practices. Papers referencing the same case were counted as one, with non-duplicate practices tabulated (for instance Hyysalo, Lukkarinen, et al. (2019) and Hyysalo, Marttila, et al. (2019)). Because TD builds toward 'ecologies of interventions', cases sometimes included multiple projects, as in Wallace (2019), Samuels-Ballantyne (2020), Juri et al. (2021) and Miller (2024).

The cases identified represent a broad sampling but cannot claim to be comprehensive. For instance, the search covers academic but not grey literature, potentially leaving some aspects overemphasized or unaddressed (like professional practice). Cases were excluded, for instance, where pdfs could not be retrieved (7) or for languages I cannot read, like Spanish—although four cases originate from Spanish-speaking countries. No cases emerged for Central, Southern, or Southeast Asia, the Arabian Peninsula, or Africa. The reasons for such limitations are unclear and could be a product of the search method, TD not being adopted (yet), or other factors. Future studies should aim for an even broader distribution to better understand diverse cultural dimensions of practice. Despite these limitations, the study covers cases in 17 countries (and 1 global case), which is sufficient for highlighting major trends in TD practice and areas for future research and practice.

The second step, coding and tabulating practices, drew upon a review of 17 process frameworks which named 15 activities relevant to TD (Miller 2024, 125–160). With these activities serving as initial codes i.e. following thematic analysis methods (Bryman 2015; Lester, Cho, and Lochmiller 2020), different practices could be tabulated. Because practices are myriad, unclear terms were tabulated out of caution. For similar reasons, practices may have been missed. Codes were iterated based on case usage, resulting in an updated set of 12 practice types (Table 2, Table 3). Formats and methodological origins were also tabulated. Methods were identified inductively.

Overview of the cases

TD examples have been steadily accumulating over the past 10 years (Figure 2), with a dip in 2021 potentially attributable to the COVID-19 pandemic.

Cases originate from around the world. Some cases feature more than one location or take a global view (Figure 3).

Case topics range from water to agrifood, energy, mobility, policy, product systems, and more (Figure 4).

Findings: Elements of TD practice

The cases could have been analysed several ways, for instance by context, stakeholders, participation, or capabilities. This study focused on tabulating

Table 2. Tabulated practices.

Practice type	Description	Frequently mentioned practices
Data collection (Discovery)	Orienting to context, gathering data	(33) Design research, desktop research, semi-structured interviews, expert consultation
Facilitation methods	Designing and managing group processes for dialogue, collaboration, and co-creation	(33) Workshops, focus groups, panels, facilitated dialogue. Researchers supporting facilitators (2)
Embodied, relational, and grounding activities	Forming connections, relationships. Physically connecting, grounding. Accessing wisdom in the body, place, and community.	(14) total: <ul style="list-style-type: none"> • Meals, icebreakers, impromptu networking; slower pace, unstructured dialogue, conviviality (14) • Embodied practices (8) like breathing exercises, bodystorming, role playing, live prototyping, using objects to understand systems • Connecting to place, caring for country (2)
Stakeholder and network mapping	Establishing who/what may be involved and impacted, their connections	(14) Including mapping stakeholders (6), their concerns (6), relations (5), cooperation and conflict (1)
Sensemaking (general)	Methods for analysing and synthesizing data	(25) practices mentioned, including user personas or typologies (10), identifying challenges and root causes (7), thematic analysis (5)
Systems sensemaking and mapping	Developing understanding of a system. Often aided by visualisation	(22) including frameworks like Multi-Level Perspective (10), STEEP analysis framework (8), Meadows' Leverage Points (6). Problem or system mapping (17), causal loop diagrams (2)
Futuring and visioning	Stimulating imagination for alternative futures	(29) Including narratives, storytelling (21), backcasting (8), scenario methods (7)
Framing opportunity and pathways	Identifying promising pathways and areas to intervene	(23) including: <ul style="list-style-type: none"> • Framing, reframing (7) • Pathways (7) • Theory of Change (5) • Ecologies of intervention or similar (6)
Generative ideation	Creating ideas, concepts for re-solving challenges	(18) including: <ul style="list-style-type: none"> • Card sets (8) • Idea generation (5) • Generative tools, canvases (5)
Materialising, testing, and iterating	Developing experimental and real interventions to influence change, observe what works	(30) including <ul style="list-style-type: none"> • Prototype testing (14) • Undertaking interventions (11) • Enabling others to intervene (11) • Experimenting (9)
Participatory decision-making	Navigating choices together	(6) including prioritisation (3), voting (2)
Reflection, learning, and evaluation	Intentional learning processes	(15) including: <ul style="list-style-type: none"> • Individual (self) reflection (10) • Group-based (7) • Data-based (7)
Multimedia communications and outputs	Creative media supporting communication, transparency, participation, documentation, dissemination	(27) including: <ul style="list-style-type: none"> • Pre-reading, presentation materials (6) • Collaboration tools/materials (16), like Miro (8) • Engagement channels (5) like Zoom/Teams (3) • Outputs (19) – Videos (5), reports (4), templates (4) • Dissemination channels (11) like online tools, websites (6)

practices to establish how TD is being applied. The resulting catalogue is organised here by practices, formats, methods, and methodological origins—key elements of practice.

Practices

Thirteen different practice types (Table 2), each encompassing diverse practices, reveal TD's designerly tilt in catalysing systems change for transitions.

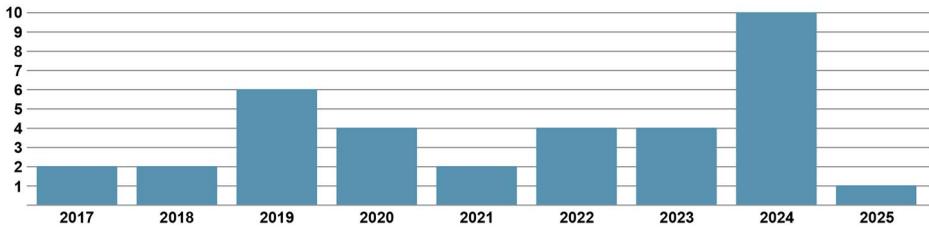


Figure 2. Empirical cases by year. *NOTE: 2024 scan included one case published in 2025.*



Figure 3. Map of cases (World map graphic by Freepik).

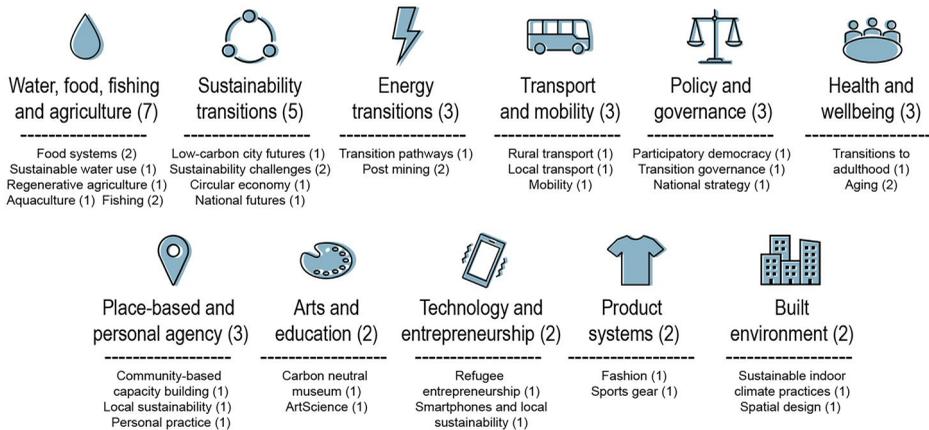


Figure 4. Cases by topic.

Formats

Analysis highlighted seven *formats* e.g. unit of work or mechanism through which TD is enacted. Some cases used multiple formats. Critically, a format is often the ‘thing’ that gets funded. Formats included:

Table 3. Summary of methods.

METHODS ANALYSIS	Sub-category	TRANSITION DESIGN FRAMEWORK										METHOD SPECIFIC TO A PHASE OR INTERVENTION										AGENCY									
	METHOD	TRANSITION DESIGN FRAMEWORK										METHOD SPECIFIC TO A PHASE OR INTERVENTION										AGENCY									
	Format	[Grid]										[Grid]										[Grid]									
	Workshop / series	[Grid]										[Grid]										[Grid]									
	Projects / programs	[Grid]										[Grid]										[Grid]									
	Platform	[Grid]										[Grid]										[Grid]									
	Lab	[Grid]										[Grid]										[Grid]									
	Catalyst model	[Grid]										[Grid]										[Grid]									
	Personal practice / Life projects	[Grid]										[Grid]										[Grid]									
	Studio (educational setting)	[Grid]										[Grid]										[Grid]									
	Practices	[Grid]										[Grid]										[Grid]									
	Data collection / Discovery	[Grid]										[Grid]										[Grid]									
	Facilitation	[Grid]										[Grid]										[Grid]									
	Relational / Embodied / Grounding	[Grid]										[Grid]										[Grid]									
	Stakeholder / Network mapping	[Grid]										[Grid]										[Grid]									
	Sensemaking	[Grid]										[Grid]										[Grid]									
	Systems sensemaking	[Grid]										[Grid]										[Grid]									
	Futuring and Visioning	[Grid]										[Grid]										[Grid]									
	Framing opportunity	[Grid]										[Grid]										[Grid]									
	Generative methods	[Grid]										[Grid]										[Grid]									
	Materialising change	[Grid]										[Grid]										[Grid]									
	Participatory decision-making	[Grid]										[Grid]										[Grid]									
	Reflection / Learning / Evaluation	[Grid]										[Grid]										[Grid]									
	Outputs	[Grid]										[Grid]										[Grid]									
	*Framed as Transition Design	[Grid]										[Grid]										[Grid]									

- **Workshops** (20)—Sometimes as a series
- **Projects and programs** (11)—Targeting a deliverable or outcome
- **Platform** (2)—A ‘bounded space’ for broad engagement (Virtual/physical, temporary/long-term)
- **Lab** (2)—An ‘open space’ for longitudinal innovation and experimentation (Virtual/physical)
- **Catalyst model** (2)—Systems change incubation. Investing in, amplifying the work of changemakers
- **Personal practice/life projects** (2)—An individual’s design practice or life as the locus of experimentation and transformation, extending into professional/social projects
- **Studio** (8)—Design education format with unique limits and freedoms

Methods

To identify methods, or recurring configurations of practices and formats, cases were clustered by similar approaches. This resulted in three clusters, comprised of 10 sub-clusters (Table 3). Two clusters diverged from the TD Framework method.

Cluster 1) TD Framework method

The *Framework method*, as described previously, provided early guidance for practice. Some cases followed the *Framework method* closely whilst others adapted it. For instance, one case combined the *Framework method* with frame innovation (Kashyap, Svejkar, and Tonkinwise 2024). Whereas most *Framework method* cases were workshop-based, the SARAS Cycle (Juri et al. 2022) used a platform format to cultivate ‘ecologies of interventions’ through workshops and sub-projects.

The extent to which cases adapted the *Framework method* determined two sub-clusters:

- **TD Framework method (7)** – Cases following the emerging TD approach, including the Ojai case (Chen 2023; Chen, Kočí, and Tian 2024; Iwabuchi 2020; Jarrell et al. 2024; Juri et al. 2021; Onafuwa and Patel 2022).
- **Adapted TD Framework method (4)** – Cases combining the *Framework method* with other approaches to suit context and culture, like working with Indigenous peoples and worldviews (Juri et al. 2022; Kashyap, Svejkar, and Tonkinwise 2024; Kong, Teng, and Liu 2024; McKendry 2024).

Cluster 2) method specific to a phase or intervention

Rather than rejecting cases that did not follow the *Framework method*, this analysis asks *how* are these TD examples—as their authors describe? The cases in this cluster focus on a phase or intervention:

- **Design of process (1)**—This case sets principles and guidance for ‘self-design’ as a precursor to further work (Ekmekçioğlu and Özkaraman Şen 2018)
- **Framing (2)**—Also as a preliminary step, these cases use participatory processes to frame challenges (Clausen and Gunn 2020; McCrory et al. 2021)
- **Futures (7)**—Futuring, a discipline itself, is frequently funded stand-alone. Diverse practices are represented: experiential futures, design fictions (Coward and Maione 2022); glimpses of the future (Gaziulusoy and Ryan 2017); stories of everyday life, foresight analysis, scenarios, gamification (von Flittner et al. 2022); narratives, visual collage (Gianelli et al. 2024); a storybook and letters from future citizens (Lee et al. 2024); a visioning board including short, mid, and long-term goals (Lin et al. 2024); and speculative scenarios (Spurr and Carrasco 2024).
- **Developing transition interventions (9)**—Cases focusing on interventions, like policy and governance (Culén 2023; Hyysalo, Marttila, et al. 2019; Hyysalo, Perikangas, et al. 2019; Lähteenoja et al. 2023) or product-service systems (Culén et al. 2023; Karahasanovic et al. 2020; Mok and Gaziulusoy 2018; Süngü 2019).

Cluster 3) methods for building agency and transition capacity

These cases combined multiple formats and interventions to build collective or individual agency for transitions. Sub-clusters include:

- **Amplifying change-making** (3)—These cases support positive deviance and link change-making activities for greater impact. Like a systems-change incubator, the Future of Fish case amplified the work of changemakers to address global overfishing (Dahle 2019). Using a symposium as crucible, another case convened local changemakers, introduced TD, and activated a network (Costa Gomez 2019). A third case sought to amplify the work of changemakers to increase transition to regenerative agriculture (Miller 2024).
- **Design activism** (1)—This case (Crofts 2025) facilitated community participation in energy transition dialogues.
- **Redesign of everyday life through personal practice** (2)—In these cases, the starting point for transformation was personal life and everyday behaviours. These cases incorporated other methodological influences, including redirective practice (Wallace 2019), conviviality, and ontological design (Samuels-Ballantyne 2020).

Methodological origins

TD was influenced by multiple sources, like Socio-Technical Regime Theory, Post-Normal Science, Social Practice Theory, Human Scale Development, Social Ecology, Social Psychology, Critique of Everyday Life, and Living Systems/Complexity theory (Irwin, Kossoff, and Tonkinwise 2015, 9). Cases also drew upon other methodological origins (Table 4).

Some methodological origins here may seem interchangeable. However, each has distinct historical, philosophical, theoretical and/or disciplinary origins, with implications for practice. Consider, for instance, multidisciplinary versus co-design approaches. In a multidisciplinary approach, disciplines work separately e.g. on their part of a solution (Schmalz, Janke, and Payne 2019). In co-design, people work together to co-create interventions, but—depending on the interpretation—the approach may not be multidisciplinary, trans-disciplinary, or involve people with lived experience. These disciplines also contain live debates, like those among scholars of transformations, transitions, adaptation and resilience about what matters in navigating systems change.

Discussion

Looking across 10 years of empirical application provides insight into five dynamics of TD practice.

Table 4. Methodological origins.

Category	Description	Methodological origins named
Participation	Who is involved, how and why	Participatory Multidisciplinary Transdisciplinary Co-design Co-creation Knowledge co-production Action research Convergence research
Transitions	Knowledge and practice domains seeking to understand, influence, manage, or adapt to change in complex systems	Transitions Transformations Adaptation and resilience Systems Thinking Social impact Community development Organisational development Living Systems/Complexity Theory
Futuring	Methodologies for engaging with the future	Foresight Futures Forecasting Backcasting Critical design Speculative futures Design fiction Experiential futures Causal layered analysis Art-Science
Design innovation	Co- approaches for designing innovation and change	Strategic design innovation Human-centered design User-centred design Service design Social innovation Frame creation Gameful thinking
Ontological openness	Supporting the capacity of oneself and others to recognise and respect realities and worlds, forms of knowledge, and ways of being beyond one's own, from Emmanouil (2017)	Holistic approaches Post-human positionality Biopsychosocial, integrative frameworks Feminism Activism Ontological design Redirective practice Pluriversal design Reflective practice Nomadic practices Decolonising design Indigenous worldviews and ways of being

Transformations and transitions

Although the term *transition* is in the TD name, the visions that TD calls for align with the concept of *transformation* as described by the transformation community—highlighting a practice dynamic in the cases. Hölscher, Wittmayer, and Loorbach (2018, 2) explain that *transformation* encompasses ‘large-scale changes in whole societies’ with attention to power dynamics, justice, changing how humans relate to and impact nature, emerging risks and disturbances, and ‘avoid[ing] undesirable transformations’ (1–2). Meanwhile, *transition* ‘denote[s] fundamental social, technological, institutional and

economic change from one societal regime or dynamic equilibrium to another' and 'has been mainly employed to analyse changes in societal sub-systems (e.g. energy, mobility, cities) (1–2). With its emphasis on the redesign of everyday life and 'human scale, place-based, but globally connected' visions in which 'communities...are in symbiotic relationships to the ecosystems within which they are embedded' (Irwin, Kossoff, and Tonkinwise 2015, 7), TD proffers transformational concepts of the future. The cases that focus on the *Redesign of Everyday Life* (Samuels-Ballantyne 2020; Wallace 2019) and some of the cases using *Futures* methods, like experiential futures (Coward and Maione 2022), speculative or critical design (Culén 2023; Culén et al. 2023; Spurr and Carrasco 2024), and design fiction (Iwabuchi 2020), exemplify this orientation to transformation.

At least 17 cases, however, work to change the status quo from within a societal sub-system whilst cultivating visions of vastly changed futures—bridging concepts of transitions and transformations. This dynamic in TD practice perhaps illustrates why Hölscher, Wittmayer, and Loorbach (2018, 2) characterise transitions and transformations not as 'dualism' but as a 'duality' within which 'respective approaches and perspectives can enrich each other'. For instance, one case that delivers a national sustainable development strategy (Lähteenoja et al. 2023) and two cases focused on transition pathways and conditions for energy transitions (Hyysalo, Marttila, et al. 2019; Hyysalo, Perikangas, et al. 2019) gently nudge how power is held through co-design and use governance for transformational purposes. Two of the cases that *amplify changemaking* (Dahle 2019; Miller 2024) both hold an overarching vision of a transformed relationship between humans and nature (respectively, sustainable fishing and regenerative agriculture) whilst supporting positive deviance at key opportunity areas (leverage points) to influence systems change. Reflecting on the question as to how these cases are all examples of TD, perhaps the distinction is not between transformation versus transition, but rather how transformation is sought in a case, including through transitions.

Influencing scale—from wherever you are

Another dynamic confronting practice is that transformative systems change goes beyond any one person, group, project/initiative, sector, or even societal sub-system. Through the lens of scale dynamics, we see that people tended to start where they were, use what they had, and influence what they could, to re-phrase a Permaculture principle. In terms of scale, cases focused on place and everyday life (cross-industry/sector) or place and specific industries/sectors, but not all three at once. Among the cases, 11 centred on place-based industry transitions, 6 focused on specific industries across scales, 15 undertook place-based or context-based challenges, and 3 explored everyday life (multi-sector/industry).

This dynamic of scale applies beyond TD cases. Increasingly, ‘multi-scalar’ (Halonen, Kuhmonen, and Albrecht 2025), multi-actor, multi-dimensional (Köhler et al. 2019), integrated pathways (Moallemi et al. 2024), and nexus approaches (Liu et al. 2018)—which produce ecologies of interventions (Irwin 2019, 172)—are examined in transitions research. However, it remains difficult to 1) develop visions that work across multiple levels of scale and 2) change multiple scales simultaneously. To address this dynamic, some scholars argue for bottom-up *and* top-down approaches with a variety of hybrid, complementary, and collaborative interactions amongst different types of actors (Conti et al. 2025, 11–12). This suggests that transitions are characterised by efforts to influence systems change from diverse points of practice across scales but does not eliminate the challenge of linking ‘ecologies of interventions.’

Short-term formats vs long horizons of time

Short-term formats like workshops (20 mentions) and projects (11 mentions) feature heavily in the cases, but they have limits. For instance, challenges with accessible, flexible, broad, and inclusive engagement (Davis et al. 2021; 2022), a sometimes-tenuous link to action, and—critically—inherent difficulties impacting long-term, systems change. The use of other formats, like lab catalyst models and life projects, help address short-term limitations and present an avenue for further innovation to achieve long-term change. Formats, in turn, are shaped by funding models, political cycles, and the dominant economic paradigm (Drew, Robinson, and Winhall 2021)—which also call for transformation efforts.

Postures and mindsets for working with self...and others

Discussing postures and mindsets, TD literature emphasises self. Practice also involves working with others on postures and mindsets. Cases engaged groups in posture and mindset work through reflective and reflexive practices as well as embodied, relational, and grounding activities, like the use of physical senses and capabilities (particularly in ‘sensing’ and ‘making’ activities), to breathe, be present, connect, and be in relation with one another and with place.

Many cases adapting the *Framework method* did so to better work with other cultures and worldviews. Practitioners supplemented the TD approach to help themselves and participants see more holistically and respect other ways of being i.e. facilitating *ontological openness* (Emmanouil 2017). For instance, concepts of time, use of frameworks, the normative direction of sustainability transitions, and futures approaches can be problematic for inclusion, plurality, and immediate stakeholder needs. This led practitioners to modify and diversify approaches for their audiences, including engaging

multiple ways of knowing and forms of knowledge, to cultivate respect for each other and work toward common ground.

TD practitioners also enter a world of escalating socio-political tensions, including conflict, contestation, and polarisation. Mindsets, postures, and practices for navigating contested spaces are increasingly vital for TD and transitions more broadly. However, just two cases mapped conflict relations. A handful of cases described deeply divided and conflicting perspectives (Crofts 2025; Juri et al. 2021; Kashyap, Svejkar, and Tonkinwise 2024; Miller 2024; Onafuwa and Patel 2022). One starting place for deepening practice in this area is to draw from related readings provided by TD framers, for instance on the original TD seminar website (<https://transitiondesignseminarcmu.net/>).

Leveraging creative and material practices

The unique value proposition that design brings to transitions is evidenced in the cases through creative and material practices. Some of the more readily understood applications of design for transitions are co-processes, systems mapping, and generating visions. Yet, design-based practices can enhance every aspect of transition efforts. For instance, creative practices for synthesising information and communicating outputs (27 mentions) proved vital in helping to facilitate engagement, build shared understanding, increase awareness, and promote dissemination, as described by Gaziulusoy and Ryan (2017). Materialising or 'making' practices like prototyping (13 mentions), architectural schematics (Spurr and Carrasco 2024), zine making and even sewing (McKendry 2024) helped render complex problems and interventions more accessible and discussable for case participants.

While TD has been maturing over the past 10 years, transitions research has changed as well. As transitions research turns more to facilitating and accelerating transitions (Köhler et al. 2019, 9), there is increasing opportunity for TD and design more generally to support imaging and experimenting with futures, pathways, interventions, and governance together with other disciplines like modelling, spatial mapping, and economic analysis, etc. Transition Management (Loorbach 2007) and the ongoing work of DRIFT (<https://drift.eur.nl/en/>) provide a prominent example not featured in these cases of a group integrating design with transitions research and governance.

Conclusion

By cataloguing and naming elements of practice in TD cases, this study aims to further the intentional application, development, and impact of TD. This first decade of practice is perhaps just a beginning. If TD is to

continue maturing, the aperture circumscribing TD practice and research must be as wide as the scope of our dramatically changing global socio-political dynamics. First, as discussed in the Method section, the encounters of TD practice in diverse countries and cultures should be further researched, together with practitioners in their own contexts, to understand the reach, limits, and translations of TD. Second, whereas this study focused solely on TD, there is need for research into how TD practice intersects with other domains, including but not limited to transitions research, social innovation, collective action, and development approaches. How might TD approaches to sensemaking, materialising, and developing propositions for redesigning everyday life and catalysing systems change provide value to, integrate with, and learn from other domains? Third, there is need to enable people to imagine, grapple with, and design for pluriversal futures—in practice, in deeply contested spaces. There is urgent need to draw from and contribute to the global knowledge base regarding power, contestation, and conflict so that TD practitioners can locate their own limits, methods for care (of self and others), and approaches for easing tensions to support people to negotiate creative, workable options for shared futures.

This paper traces the growing and evolving discipline of Transition Design through empirical cases—that is, through practice. By cataloguing and comparing 35 cases from around the world, we see dynamics in TD practice and areas for further research. The cases reflect ways in which TD practitioners are using the opportunities available to them to work toward transformation and systems-scale change over longer horizons of time, even with discrete pieces of work and short-term funding. We see attempts at ambitious change in small ways. The cases show practitioners reaching outside of design to support others to develop the postures and mindsets for change whilst drawing deeply from within design to leverage creative and material practices to influence transitions. Looking across the 35 cases we observe that, rather than crystallizing into a single method or set of practices, TD has opened space for common elements of practice to be configured into a growing range of methods for engaging design in service of transitions.

Author contributions

CRedit: **Michelle A. Miller**: Conceptualization, Writing – original draft, Writing – review & editing.

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Dr. Michelle Miller is a designer-practitioner-researcher working toward regional and agri-food sustainability transitions. For more than 20 years, Michelle has led, facilitated, and helped build capability for design-based, participatory approaches to innovation and change-making via regional initiatives, strategy, organizational development, services, and product development. Her work has taken her into diverse areas including science, infrastructure, social services, media, telecommunications, government, regional communities, and agriculture.

Michelle's research aims to develop the practices, innovations, and capacities for progressing sustainability transitions. She facilitates groups of actors to unlock practical action and learn how to catalyse systems change through micro-experiments. This includes local, place-based strategies together with policies, technologies, resources, and structures.

Recent work includes a co-design approach to de-risk nitrogen use efficiency in cotton growing in Australia, including testing an insurance concept. Another project focuses on building regional capacity to navigate sustainability transitions through participatory engagement with system dynamics. Her PhD, *Designing Regenerative Transitions*, included a case study in regenerative agriculture transition.

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References

- Bryman, Alan. 2015. *Social Research Methods*. 5th ed. Oxford: Oxford University Press, Incorporated.
- Chen, Lijun. 2023. "Sustainable Transformation of Age-Friendly Community Centres Based on Transition Design."
- Chen, Lijun, Vladimír Kočí, and Haipeng Tian. 2024. "Historical Evolution of Age-Friendly Transitions in the Yangfangdian Community in Beijing: A Multi-Level Perspective."
- Clausen, Christian, and Wendy Gunn. 2020. "Staging Participatory Innovation as Transition Design." p. 106–122.
- Conti, Costanza, Andy Hall, Enayat A. Moallemi, Amar Laila, Christophe Bene, Jessica Fanzo, Matthew Ford Gibson, et al. 2025. "Top-down vs Bottom-up Processes: A Systematic Review Clarifying Roles and Patterns of Interactions in Food System Transformation." *Global Food Security* 44: 100833. <https://www.sciencedirect.com/science/article/pii/S2211912425000082>. <https://doi.org/10.1016/j.gfs.2025.100833>.
- Costa Gomez, Tania. 2019. "Analysis of Ongoing Transition Projects in Barcelona. An Approach to Transition Design from a Southern Perspective." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 73: 183–197. <https://doi.org/10.18682/cdc.vi73.1044>.
- Cowart, Adam, and Donna Maione. 2022. "Transitioning Toward the Slow and Long: Developing Experiential Futures Approach Toward System Change in Fashion." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 157: 29–63. <https://doi.org/10.18682/cdc.vi157.6844>.
- Crofts, Kimberley. 2025. "Examining the Role of Public Participation and Design in Planning Sustainability Transitions." Doctor of Philosophy, Design Architecture and Building, University of Technology Sydney.

- Culén, Alma Leora. 2023. "The Role of Participatory Transition Design in Mitigating Erosion of Participatory Democracy." IASDR 2023: Life-Changing Design 2023-10-09. <https://doi.org/10.21606/iasdr.2023.449>.
- Culén, Alma Leora, Ines Junge, Nicholas Stevens, and William Gaver. 2023. "Plurishop -a Workshop-based Method for Transitions Design."
- Dahle, Cheryl L. 2019. "Designing for Transitions: Addressing the Problem of Global Overfishing." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 73: 213–233. <https://doi.org/10.18682/cdc.vi73.1046>.
- Davis, Aaron, Niki Wallace, Ian Gwilt, Anna Ledtischke, and Richie Khoo. 2022. "Co-designing the Future in Complex Systems."
- Davis, Aaron, Niki Wallace, Joe Langley, and Ian Gwilt. 2021. "Low-Contact co-Design: Considering More Flexible Spatiotemporal Models for the co-Design Workshop." *Strategic Design Research Journal* 14 (1): 124–137. <https://doi.org/10.4013/sdrj.2021.141.11>.
- Drew, Cat, Cassie Robinson, and Jennie Winhall. 2021. "System-shifting Design: an Emerging Practice Explored." Design Council & The Point People. <https://www.designcouncil.org.uk/fileadmin/uploads/dc/Documents/Systemic%2520Design%2520Report.pdf>.
- Ekmekçioğlu, Deniz, and Meltem Özkaraman Şen. 2018. "A Proposal for a Method of the Redesign of Self-Organising Systems: The Case of Minibus Transportation in the Istanbul Public Transport System." *Strategic Design Research Journal* 11 (3): 230–240. <https://doi.org/10.4013/sdrj.2018.113.07>.
- Emmanouil, Nia. 2017. "Ontological Openness on the Lurujarri Dreaming Trail: A Methodology for Decolonising Research." *Learning Communities: International Journal of Learning in Social Contexts* 22: 82–97. <https://doi.org/10.18793/LCJ2017.22.08>.
- Gaziulusoy, A. Idil, and Chris Ryan. 2017. "Roles of Design in Sustainability Transitions Projects: A Case Study of Visions and Pathways 2040 Project from Australia." *Journal of Cleaner Production* 162: 1297–1307. <https://doi.org/10.1016/j.jclepro.2017.06.122>.
- Gianelli, Ignacio, Micaela Trimble, Silvana Juri, Nazarena Beretta, Denisse Torena, Manuela Acosta, Robert Acosta, et al. 2024. "Envisioning Desirable Futures in Small-Scale Fisheries: A Transdisciplinary Arts-Based co-Creation Process." *Ecology and Society* 29 (1): 1–17. <https://doi.org/10.5751/ES-14869-290120>.
- Halonen, Maija, Irene Kuhmonen, and Moritz Albrecht. 2025. *Rescaling Sustainability Transitions: Unfolding the Spatialities of Power Relations, Governance Arrangements, and Socio-Economic Systems*. Cham: Springer Nature.
- Hebinck, Aniek, Gijs Diercks, Timo von Wirth, P. J. Beers, Lisa Barsties, Sophie Buchel, Rachel Greer, Frank van Steenbergen, and Derk Loorbach. 2022. "An Actionable Understanding of Societal Transitions: The X-Curve Framework." *Sustainability Science* 17 (3): 1009–1021. <https://doi.org/10.1007/s11625-021-01084-w>.
- Hölscher, Katharina, Julia M. Wittmayer, and Derk Loorbach. 2018. "Transition versus Transformation: What's the Difference?" *Environmental Innovation and Societal Transitions* 27: 1–3. <https://doi.org/10.1016/j.eist.2017.10.007>.
- Hyysalo, Sampsa, Jani Lukkarinen, Paula Kivimaa, Raimo Lovio, Armi Temmes, Mikael Hildén, Tatu Marttila, et al. 2019. "Developing Policy Pathways: Redesigning Transition Arenas for Mid-Range Planning." *Sustainability* 11 (3): 603. <https://doi.org/10.3390/su11030603>.
- Hyysalo, Sampsa, Tatu Marttila, Sofi Perikangas, and Karoliina Auvinen. 2019. "Codesign for Transitions Governance: A Mid-Range Pathway Creation Toolset for Accelerating Sociotechnical Change." *Design Studies* 63: 181–203. <https://doi.org/10.1016/j.destud.2019.05.002>.
- Hyysalo, Sampsa, Sofi Perikangas, Tatu Marttila, and Karoliina Auvinen. 2019. "Intermediate Codesigning in Transitions Governance: Catalysing and Channelling Participant Action." *The Design Journal* 22 (6): 873–894. <https://doi.org/10.1080/14606925.2019.1661557>.

- Irwin, Terry. 2018. "The Emerging Transition Design Approach". <https://doi.org/10.21606/dma.2017.210>.
- Irwin, Terry. 2019. "The Emerging Transition Design Approach." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 73: 149–181. <https://doi.org/10.18682/cdc.vi73.1043>.
- Irwin, Terry, and Gideon Kossoff. 2017a. "Mapping Ojai's Water Shortage: The First Workshop, January 2017."
- Irwin, Terry, and Gideon Kossoff. 2017b. "Mapping Ojai's Water Shortage: The Second Workshop, May 2017."
- Irwin, Terry, Gideon Kossoff, and Cameron Tonkinwise. 2015. "Transition Design Provocation." *Design Philosophy Papers* 13 (1): 3–11. <https://doi.org/10.1080/14487136.2015.1085688>.
- Irwin, Terry, Cameron Tonkinwise, and Gideon Kossoff. 2020. "Transition Design: An Educational Framework for Advancing the Study and Design of Sustainable Transitions." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 105: 31–65. <https://doi.org/10.18682/cdc.vi105.4188>.
- Iwabuchi, Masaki. 2020. "Speculation of the Purpose of Life in 2050 from Kyoto: Case Study on Transition Design in Japan." *Pivot 2020: Designing a World of Many Centers*.
- Jarrell, Juliet T., Olivia M. Stransky, Jake Frazier, Andrew McCormick, Marlo Perry, Jacquelin Rankine, Loreta Matheo, Tomar Pierson-Brown, and Traci M. Kazmerski. 2024. "Using a Transition Design Approach to Explore the Adolescent Shift to Adulthood." *International Journal of Qualitative Methods* 23: 16094069241236216. <https://doi.org/10.1177/16094069241236216>.
- Juri, Silvana, Matilda Baraibar, Laurie Beth Clark, Mauricio Cheguhem, Esteban Jobbagy, Jorge Marcone, Néstor Mazzeo, et al. 2022. "Food Systems Transformations in South America: Insights from a Transdisciplinary Process Rooted in Uruguay." *Frontiers in Sustainable Food Systems* 6: 1–27. <https://doi.org/10.3389/fsufs.2022.887034>.
- Juri, Silvana, Cristina Zurbriggen, Sofia Bosch Gómez, and Marysol Ortega Pallanez. 2021. "Transition Design in Latin America: Enabling Collective Learning and Change." *Frontiers in Sociology* 6: 725053–725053. <https://doi.org/10.3389/fsoc.2021.725053>.
- Karahasanovic, Amela, Alma Leora Culén, Jan Skjetne, and Geir Hasle. 2020. "Designing for Transitions in Rural Transport."
- Kashyap, Kiran, Domenic Svejkar, and Cameron Tonkinwise. 2024. "Relational Repair: Co-Designing an Approach to Place-Based Circularity with an Ethic of Care." p. 149–180.
- Köhler, Jonathan, Frank W. Geels, Florian Kern, Jochen Markard, Elsie Onsongo, Anna Wieczorek, Floortje Alkemade, et al. 2019. "An Agenda for Sustainability Transitions Research: State of the Art and Future Directions." *Environmental Innovation and Societal Transitions* 31: 1–32. <https://doi.org/10.1016/j.eist.2019.01.004>.
- Kong, Yu., Chenglein Teng, and Chiencheng Liu. 2024. "Transition Design as a Strategy for Post-Pandemic Spatial Experience Enhancement: A Sustainability Perspective." *Sustainability* 16 (14): 5834. <https://doi.org/10.3390/su16145834>.
- Kossoff, Gideon, and Terry Irwin. 2022. "Prologue Cuaderno 157 Transition Design [Special Issue]." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 157: 21–27. <https://doi.org/10.18682/cdc.vi157.6843>.
- Lähteenoja, Satu, Tatu Marttila, Idil Gaziulusoy, and Sampsa Hyysalo. 2023. "Transition co-Design Dynamics in High Level Policy Processes." *Design Studies* 88: 101207. <https://doi.org/10.1016/j.destud.2023.101207>.
- Lee, Hyori, Minju Han, Byeongkuk Kwak, and Seungho Park-Lee. 2024. "Participatory Futuring with Citizens as One Way of Designing for Sustainability Transitions of a National Art Museum in Korea." *International Journal of Design* 18 (1): 55–76. <https://www.proquest.com/scholarly-journals/participatory-futuring-with-citizens-as-one-way/docview/3056819131/se-2>

- Lester, Jessica Nina, Yonjoo Cho, and Chad R. Lochmiller. 2020. "Learning to Do Qualitative Data Analysis: A Starting Point." *Human Resource Development Review* 19 (1): 94–106. <https://doi.org/10.1177/1534484320903890>.
- Lin, Yolanda C., Marisol C. Meyer-Driovinto, Tybur Q. Casuse-Driovinto, Asa B. Stone, Ashley R. Apodaca-Sparks, Naomi DeLay, Abigail B. Granath, et al. 2024. "Shared.Futures: Fostering Convergence and Envisioning Possible Futures through ArtScience." *Ecology and Society* 29 (4): 44. <https://www.ecologyandsociety.org/vol29/iss4/art44/>. <https://doi.org/10.5751/ES-15551-290444>.
- Liu, Jianguo, Vanessa Hull, H. Charles J. Godfray, David Tilman, Peter Gleick, Holger Hoff, Claudia Pahl-Wostl, et al. 2018. "Nexus Approaches to Global Sustainable Development." *Nature Sustainability* 1 (9): 466–476. <https://doi.org/10.1038/s41893-018-0135-8>.
- Loorbach, Derk. 2007. "Transition Management: New mode of governance for sustainable development." PhD, Erasmus University Rotterdam. <https://pure.eur.nl/ws/portalfiles/portal/46318147/proefschrift.pdf>
- McCorry, Gavin, Johan Holmén, John Holmberg, and Tom Adawi. 2021. "Learning to Frame Complex Sustainability Challenges in Place: Explorations Into a Transdisciplinary "Challenge Lab" Curriculum." *Frontiers in Sustainability* 2: 1–11. <https://doi.org/10.3389/frsus.2021.714193>.
- McKendry, Sally. 2024. "Some Football Threads: Exploring Transition Design towards More Socially and Environmentally Sustainable Production and Consumption of Football Kit within Aotearoa, New Zealand." Open Access Te Herenga Waka-Victoria University of Wellington.
- Miller, Michelle Alina. 2024. "Designing Regenerative Transitions." Doctor of Philosophy, Faculty of Design, Architecture and Building, University of Technology Sydney. <http://hdl.handle.net/10453/180835>.
- Moallemi, Enayat A., Andy Hall, Peat Leith, Michelle Miller, Frank Sperling, Rob Raven, Niki Frantzeskaki, et al. 2024. "Shortcuts for Accelerating Food System Transitions." *One Earth* 7 (3): 365–369. <https://www.sciencedirect.com/science/article/pii/S2590332224000332>. <https://doi.org/10.1016/j.oneear.2024.01.010>.
- Mok, Luisa, and İdil Gaziulusoy. 2018. "Designing for Sustainability Transitions of Aquaculture in Finland." *Journal of Cleaner Production* 194: 127–137. <https://doi.org/10.1016/j.jclepro.2018.05.013>.
- Onafuwa, Dimeji, and Kamal Patel. 2022. "Ancestors' Dreams: Transitioning to a More Equitable PostCOVID-19 Economy." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 157: 201–216. <https://doi.org/10.18682/cdc.vi157.6852>.
- Rittel, Horst W. J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (2): 155–169. <http://www.jstor.org/stable/4531523>. <https://doi.org/10.1007/BF01405730>.
- Samuels-Ballantyne, Emily. 2020. "Con Viv! Convivial Food Systems Design in Everyday Life." Schmalz, Dorothy L., Megan C. Janke, and Laura L. Payne. 2019. "Multi-, Inter-, and Transdisciplinary Research: Leisure Studies past, Present, and Future." *Journal of Leisure Research* 50 (5): 389–393. <https://doi.org/10.1080/00222216.2019.1647751>.
- Spurr, Sam, and Sandra Carrasco. 2024. "Architecture for Complexity: Speculative Design as Enabler of Engagement in Co-Designing Post-Mining Futures in the Hunter Valley." *Sustainability* 16 (16): 6842. <https://doi.org/10.3390/su16166842>.
- Süngü, Azra Tuğç. 2019. "Designing Transitions towards Integration: Entrepreneurial Capacity Development for Syrians in Turkey." Middle East Technical University.
- Swann, Cal. 2002. "Action Research and the Practice of Design." *Design Issues* 18 (1): 49–61. <https://doi.org/10.1162/07479360252756287>.

- Van Selm, Maaïke, and Ingrid Mulder. 2019. "On Transforming Transition Design: From Promise to Practice."
- von Flittner, Zeynep Falay, Idil Gaziulusoy, Sonja Nielsen, and Sanna Marttila. 2022. "Design for Sustainability Transitions: Reflections on Practice." *Cuadernos Del Centro de Estudios de Diseño y Comunicación* 157: 159–181. <https://doi.org/10.18682/cdc.vi157.6850>.
- Wallace, Niki. 2019. "Personal, Political, Professional: A Practice in Transition." *Journal of Management Policy and Practice* 20 (5): 66–79.