CATALYZING TRANSFORMATION: A PROSPECTIVE THEORY

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1 Abstract

This article works to overcome the gap in understanding of *how* purposeful transformative system change can be brought about. We present a prospective, process theory of catalyzing purposeful transformative change towards thriving socio-ecological systems that provides a framework for action by actors termed transformation catalysts to bring other change makers into purposeful and effective transformation systems. In this process, people or initiatives serving as transformation catalysts work to connect, cohere, and amplify the transformative potential of typically unconnected, fragmented change initiatives operating in underorganized systems into effective transformation systems, cohere their aspirations and action plans, and amplify impact through individual and collective implementation and emerging additional transformation systems as needed contextually. Connecting involves seeing who is doing what to shift the system and sensemaking that explores what needs to be done and why. Cohering involves co-creative collective visioning to emerge shared aspirations and actions plans. Amplifying involves stewarding change makers in the transformation system to implement their action plans both independently and collaboratively as appropriate, and learning and adapting from those efforts.

2 Keywords

System Transformation, Transformation, Systemic Change, Organizing System Transformation, Transformation Catalyst, Transformation System.

3 Introduction

In the context of what is now being called polycrisis—an intersecting mix of intractable problems[1] that threaten the foundations of civilization as we know it, the need for system transformation is becoming clearer to many, including business leaders[2,3], foundations[4], academics[5–7],

intergovernmental panels[8,9], and economists[10]. Keen observers argue for a transformative shift in socio-economic and ecological systems towards greater emphasis on human and planetary wellbeing[11,12] in societies and economies that operate equitably and inclusively within planetary boundaries[13], preserve biodiversity and ecosystem services[5,10,14], and reduce inequality[15,16], among other transformative changes.

Although the 'what' of such transformative change has become clearer, and considerable amount of work has been done to understand transformative change, what is still lacking are good theories about *how* purposeful transformative change in desired directions can be brought about. In what follows we introduce a prospective[17], process-based catalytic approach for achieving transformative change and building powerful transformation systems in ways that are both situationally appropriate and diverse, while providing a set of core processes and principles that can be applied in numerous contexts. We briefly discuss the limitations of existing theory about transformative change, then build our theory of how purposeful transformation can be accomplished, we explain what needs to change, and how catalytic action can be used to connect, cohere, and amplify the work of numerous actor into cohered and purposive transformation systems.

4 Background

Our prospective or aspirational, future-oriented theory[17] for catalyzing purposeful system transformation builds on a body of existing theory. This literature emphasizes the need for collaboration and network weaving to create cohesion and link key actors[18–20], which in turn orients system change agents towards acknowledging and emphasizing inherent relationality among actors —and, not incidentally, nature[21]. Much research emphasizes the importance of having a systems-orientation[18,22,23], because of the multi-scalar and multi-directional nature of system change[24,25]. In turn that requires participatory and inclusive approaches[24] towards co-production or co-created action[26,27]. The systems-based understanding is rooted in understanding the nature of both complexity (as in complexity science)[28–30] and 'wickedness' as with wicked problems[31–33] associated with polycrisis, which in turn acknowledges the uniqueness of each context and the need for contextually appropriate approaches, pathways, and actions.

Others acknowledge that the emergent processes associated with transformative change and its co-created nature require ongoing learning and adaptation in addition to clearly articulated core values[18,24,26]. Purposeful transformative change is also based in experimentation[34], because of its inherent uncertainties and unpredictability. Significant attention needs to be paid to what Meadows called leverage points for transformative change[35], that is, places in the system that enable ripple effects beyond the immediate changes envisioned or attempted. Since Meadows also emphasized the importance of paradigm or mindset shift in fostering transformation, the notion of shifting core narratives or social imaginaries[36] that inform such mindsets[37–39], particularly important cultural mythologies[40], takes a central place as an important lever for transformative change in our theory.

Further, there are numerous reports, research papers, and initiatives from a broad array of actors theorizing *what* changes are needed in system transformation[2,8,10,41]. Many of these publications emphasize the importance of shifting towards an integrated socio-ecological paradigm emphasizing flourishing, balanced, and healthy human, nature, and planetary interrelationships[11,12,12]. Most such descriptions, in fact, emphasize values like equity, inclusion, social and ecological justice, as well as flourishing human-nature intersections[4,16,42,43]. Other approaches focus on the importance of limiting human impacts on (increasingly breached) geophysical limits of planetary boundaries[13,37,44],

although often with insufficient attention to human population growth and its impacts[45].

Some transformation specialists describe the desired future associated with transformation in terms that emphasize a focus on fostering *life* as opposed to the wealth, growth, and consumption[3,46–48] orientation of today's societies and economies[49,50]. Commonly stated aspirations emphasize equity and inclusion, particularly of marginalized or previously colonized peoples[51,52], social justice and fairness[46,53], and participation[34,51,54], with much attention to co-creative or co-production processes[43,54,55]. Some descriptions also add localization of control and decision-making[56,57] to issues of voice and participation. Further, with all the attention on sustainability, there is a growing recognition that something beyond 'sustaining' current practices and systems is needed for emerging a socially just and ecologically flourishing world[58,59]. In turn, that conception is aligned with much Indigenous wisdom[60–62], because it is based on recognizing that humans are integrally part of, interdependent with, and interdependent on nature[37,58].

In summary, the *what* and *why* of transformed socio-ecological systems literature generally emphasizes transformation of socio-ecological systems holistically towards equity, justice, fairness, and inclusiveness for humans operating within planetary geophysical boundaries[44,63] that results in flourishing for humans and other than human beings[22,37,51,58]. Further, there is significant and growing literature focusing in three arenas: types of transformations, transformation pathways, and barriers and enabling conditions for transformation[64–66] that provide adequate descriptions of what characterizes transformation. Despite this proliferation of literature, however, there is scant attention to the processes that change agents can use to emerge *purposeful* transformative system change. Thus, there is a distinct need for going beyond what one paper calls 'blah blah blah' to explore *how* such purposeful transformation[67] towards equitable, inclusive and thriving socio-ecological relations can be brought about[7,22,67] (for an exception, see Westley's work[68]). Here we take up this challenge to develop a coherent and innovative theory of catalyzing purposeful system transformation.

5 Approach

The rest of this article presents a prospective theory of catalyzing purposeful transformation towards thriving socio-ecological systems that transformation catalysts can use to connect, cohere, and amplify the work of change agents who typically operate in underdeveloped systems into cohered and effective transformation systems. These ideas are based on a synthesis of the literature introduced above, as well as our collective years of working with ideas and practice of *purposeful* system change[64,69–73,73] [should we disguise?]. In particular, we build on work done in collaboration with [to be named if the paper is accepted]. Figure 1 outlines the theory to be developed below.

Epistemologically, this theory of catalyzing transformation is prospective[17,74] rather than, as most theories are, retrospective, in two senses. First and most importantly, it is a collective 'envisioned prospection', which means that it is oriented towards enabling participants, that is, catalysts and change makers, to envision and try to bring into reality a set of shared aspirations for the future[17]. This collective envisioning has been described as 'sensing, presencing, intuiting future-forming, collaborative construction of a better world'([17], p. 26). Secondly, it is sufficiently new that it is offered, in a sense, as a prospective or future-oriented set of descriptions of *how* more effective purposeful systemic change can be catalyzed and placed into and tested in practice. Thus, catalyzing purposeful transformation engages a participative, co-creative process aimed at prospectively emerging a collectively desired future world that does not currently exist[17,74].

Although that future can be imagined and actions[74] towards it taken, specific outcomes cannot be controlled or predicted.

Ontologically, these ideas are built on a quantum, complexity-based, and wicked problems understanding of the world that provides a realistic and highly relational perspective on the way the world—and systems within it—work, based on today's scientific understandings. Specifically, it is based in understanding the systemic implications of quantum physics combined with 'complex wickedness', which is an integration of complexity-based systems[32,75–77] and wicked problems[31,32,78,79] theories. Together these understandings describe the inherent characteristics of any living (socio-ecological) system and move away from mechanistic, reductionist, and positivist understandings of how the world functions towards a living systems and quantum physics-based ontology. These three perspectives when combined view systems and the living world as an interconnected, inseparable whole that is deeply entangled and interconnected, complexly interrelated, inherently relationally based, emergent, and dynamic[80,81]. Although it is often necessary to define systems and their boundaries, it is important to recognize that living systems' boundaries are permeable—and integrally linked to other systems.

Given this understanding of the nature of reality, system change makers using the approach discussed below recognize that they cannot predict or control outcomes, since they are emergent, nonlinear, and because actions and actors entangled, that they too are entangled in or part of the system undergoing change[82]. The quantum-based, complexly-wicked perspective on the nature of socio-ecological systems means that impacts and outcomes emerge from the interactions (in what might be characterized as an epigenetic process[83]) of actors who are brought together in transformation initiatives. Such interactions require change makers 'letting go' of pre-conceived plans and ideas to orient towards emergent, co-created possibilities as envisioned in agreed and active engagement with other participants. As we will describe, the catalytic function envisioned in this theory involves co-emerging broadly shared new narratives and cohered aspirations (visions) and action strategies that have the potential to reshape paradigms and consequent actions towards realizing a desired future[82].

In the theory discussed below there are two other important assumptions. One is the idea that system transformation is a distinct form of change that works at very fundamental levels, affecting multiple interacting and important elements of the system. Three overarching elements can be broadly defined as the purpose(s), paradigms (or mindsets), and performance metrics that inform directionality and sensemaking in the system, and, in turn, these elements influence what practices inform how the system operates as well as the power structures within the system[84]. Second is the assumption that in the type of systems described above, catalytic processes, to be discussed in more detail, will be more effective at bringing change about than more directive, linear processes.

6 Organizing catalyzing purposeful transformations

Catalyzing purposeful system transformation (see Figure 1) prospectively conceptualizes a set of processes and organizing principles for achieving purposeful, large- (and small-) scale system change. It involves a (set of) actor(s) and agent(s)[68] serving as transformation catalyst(s)[71,72] who bring together other change makers—actors and initiatives in a given context (system)—into purposeful and effective transformation systems[70]. The collection of entities in transformation systems are (or would like to be) working for systemic changes towards an aspirational and collectively-shared future, developed out of catalytic processes termed connecting, cohering, and amplifying, explained below. Transformation catalysts work to connect, cohere, and amplify the collective transformative potential of multiple previously un-connected or loosely-connected actors

engaged in systemic change into purposeful transformation systems working towards shared aspirations and agendas. We suggest that this approach to catalyzing transformation[18,26,68] offers a powerful set of processes that can be applied in widely different contexts and adapted as necessary. Yet it still provides sufficient guidance so that cohered and amplified actions can be organized to shift the system in the desired direction. Figure 1 outlines this process, which is explained in detail below.

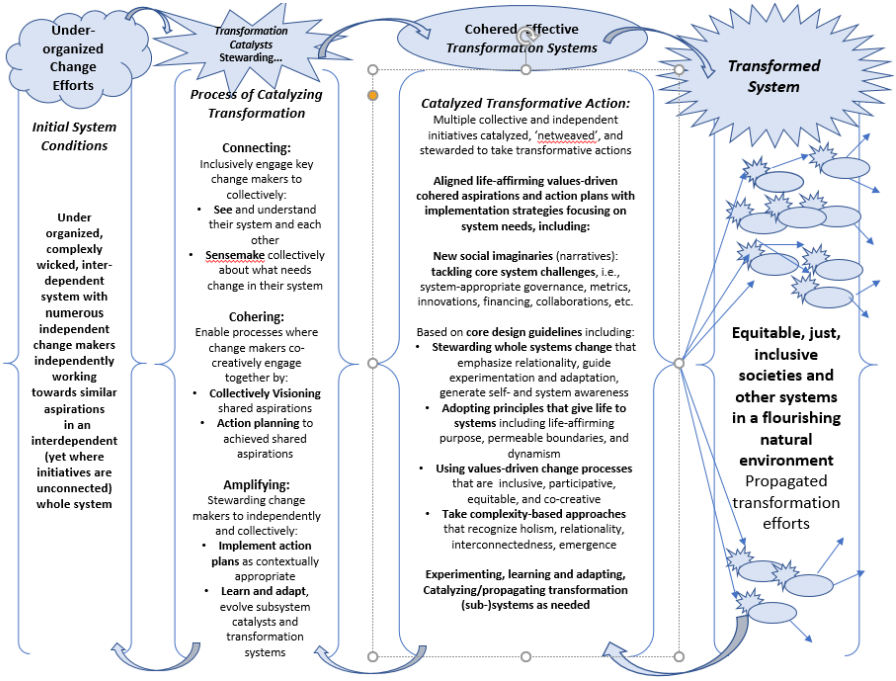


Figure 1. Catalyzing purposeful transformation: a process framework for catalyzing purposeful transformation by connecting, cohering, and amplifying the work of change makers into effective transformation systems.

Catalysis in chemical reactions involves the introduction of an agent into chemical process that creates significant change without undergoing change itself. In the systemic context discussed above, however, it is important to recognize that transformation catalysts (TCs) are inherently part of the system undergoing change. As they are part of the system, they will co-evolve as the system changes because of the emergent, interconnected, and dynamic nature of such shifts. Importantly, transformation catalysts recognize that it is participants—change makers—in emerging transformation systems who are the key actors undertaking transformative initiatives and actions. Through the quantum and complexity lenses, it is evident in these contexts that there is no such thing as 'objective', or for that matter, values neutral, observers and actors, since the premise is that of interconnectedness and interrelatedness in one holistic system. Hence, just as humans cannot be separate and distinct from nature, so change agents cannot be separate from the changes they attempt to foster in a complex adaptive system.

Further, the past does not predict the future in socio-ecological contexts that are complexly wicked, because of the interactive, engaged, and co-creative processes of prospective (future-oriented) emergence that are embedded in change dynamics. That is, because what emerges from novel or newly-structured interactions and engagements is, the outcomes of catalysis are, by the nature of interactions and engagements in the system, nonlinear and unpredictable.

6.1 The Work of Transformation Catalysts: Connecting and Cohering

Transformation catalysts in this prospective process are actors—individuals or people working in initiatives—who recognize the need for systems transformation and are willing to steward (but not 'plan' or 'lead' in the traditional sense) change. They do so by proactively bringing together a collection of 'the willing'—other actors and initiatives who are interested and probably already engaged in similar aspirations for a given context, and who are largely initially not directly connected with or necessarily knowledgeable of each other. Transformation catalysts, we argue, can be most effective using processes to connect, cohere, and amplify the transformative potential of these typically fragmented change initiatives, who operate in what have been called underorganized systems[85]. They work to align change makers into effective transformation systems, cohere their aspirations and action plans, and amplify impact through individual and collective implementation and emerging additional transformation systems as needed contextually. The processes that our framework argues will help accomplish these aspirations, building on and connecting the literature introduced above into a process of catalysis and transformative action, are explained below.

Connecting: Two processes are core to connecting. One is 'seeing' or helping relevant parties define and understand the relevant system and its (possibly redefined) purposes. Seeing the system means understanding the multiple aspects of the system, for example, where niches of innovation exist, what the current landscape and regime and their dynamics are[20,86,87], and who is doing what, where, and how, which can be accomplished through various forms of mapping processes[88,89]. Mapping involves identifying actors already working (or willing to work) towards change and explicitly connecting them in shared processes of, the second element 'sensemaking'[88–90]. Mapping includes stakeholder identification processes to uncover the potential relationality and shared agendas that exist among participants and initiatives, and their (collective and independent) transformative potential as an emerging transformation system. As actors connect and understand the whole system better, catalysts can help them begin to think about themselves as a purposeful transformation system[70], able to cohere and align their activities for systemic impact, rather than solely as individual, largely unconnected actors doing their own thing (with relatively little transformative impact).

The other process we argue is needed is 'sensemaking'[91–93], which here means helping connected actors understand enough about their specific context or whole system to work together effectively and potentially align their independent activities towards shared aspirations developed in the cohering process, discussed next. Recognizing that the nature of *purposeful* system change involves changing significant relationships and fundamentals in a system, one way to synthesize and articulate in system-specific ways *what* changes are needed is to recognize that there are five core system dimensions, all of which need attention[84]. These dimensions include how the *purposes* of the system are defined, understood, and play out in practice. Transformation catalysts facilitate connected change makers' recognition of how the relevant system and its (assigned and permeable) boundaries and purpose(s) are (need to be) is currently and needs to defined.

In seeing and sensemaking processes, catalysts help participants think about other core aspects of the system, particularly including how they perceive the system and their relationship to it. That is,

transformation system participants begin to define what paradigm (or mindset) they (individually and) collectively hold with respect to the system. Understanding the paradigm is important because shifting and even transcending paradigms is considered to be the most powerful transformative change lever[35]. Also important is to determine what performance metrics need to be used to assess and evaluate the system holistically[94]. These three aspects of any socio-ecological system—purpose, paradigms, and performance metrics—in turn influence the operating practices of the system and the important power relationships and resource flows that determine how the system actually performs and meets its intended purposes[84]. Thus, catalysts can use approaches like appreciative inquiry[95] or Theory U[96], or any number of others[89], to ask participants whether or not the currently-defined purpose is 'fit for purpose', and, if not, how those purposes, paradigms, and key performance metrics[84] might need to be rethought.

Cohering*:* Once participants in an emerging transformation system have been initially connected, transformation catalysts help them begin to co-create their desired/aspirational future for the relevant system. In doing so, they can begin to *cohere* their activities in new ways that can involve using a variety of shared visioning processes(e.g.,[95–98]) that can inform new narratives or social imaginaries[36] that inform mindsets and paradigms within the relevant system. Cohering in this prospective process involves two main set of activities, collective visioning to emerged shared aspirations, and strategizing collective (and independent, if appropriate) action plans.

Shared visioning processes, such as three horizons[97], appreciative inquiry[95], Theory U[99], and numerous others[89], can help initiatives understand better what needs to change and towards what ends, as well as how they might undertake different changes processes. The three horizons approach can be particularly useful, as it simultaneously illustrates the current system and its dynamics and issues (first horizon), along with the desired or aspirational future (second horizon), and pressures and dynamics currently in play that are moving towards or working against the desired future (second horizon)[97]. Other approaches like appreciative inquiry[95,100] and Theory U[99] also offer powerful framing for emerging positive, future-oriented shared aspirations.

As visioning evolves, participants in these processes can begin to sense where their initiative's individual actions are aligned (or not) with emerging new futures (narrative), and where collective engagement[18,101,102] and action, co-producing results, is needed to bring the aspirational future into reality. As that vision evolves, participants can engage in collaborative action planning[18,103,104] with a greater degree of transformative potential than individual actors without shared agendas might have had. Note that the participants emerge the vision and action strategies, not the transformation catalysts. These two activities—shared visioning and action planning—can help initiatives cohere their actions as a transformation system in ways that they previously could not because they were unconnected with others who share similar agendas. That leads amplification, disucucsed next.

6.2 The Amplification Work of the Transformation System

In the catalyzing transformation process, it is helpful to envision the collection of actors in a transformation system as being in what is called a loosely-coupled system[105,106] or underorganized system[85]. That under-organization or loose coupling means that traditional hierarchical organizational structures are not present in the system. There is no central authority (including the catalyst) to assume conventional leadership, yet transformation system participants need to evolve implementation strategies and actions, along with continual experimentation, learning, and adaptation to achieve purposeful change. Because participating initiatives remain independent, while simultaneously attempting to amplify their collective efforts, moving actions forward

involves transformation catalysts taking a stewardship role that follows core design guidelines as they work to implement action strategies and plans and evolve their ongoing learning.

Design Guidelines: The transformation literature discussed above offers clear guidance for stewarding catalytic transformation as a network weaving (or netweaving)[18,19,107] process of bringing largely independent actors into alignment. First, given the orientation of most transformation efforts to just, inclusive, and flourishing socio-ecologies, one useful guideline is to adopt principles for action that 'give life' to systems[46,48,58]. Three core principles apply here. One is designing purposes to be explicitly life-affirming[100,108] to ensure that the 'quality without a name' that 'gives life' as architect Christopher Alexander called it, is present[109]. Another is recognizing the permeability of system boundaries that let new resources in and ones that are no longer fit-for-purpose go[110,111]. The third involves ensuring that the interactions and system as a whole exhibits novelty and dynamism[112] as needed and appropriate for the stage of the cycle and context.

A second design guideline emphasizes the importance of such catalytic efforts being values- and shared aspiration-driven[7,73]. Principles associated with inclusion, equitable collaboration and participation (reducing power differences as much as possible), and generating aspirations and potential actions co-creatively apply here[24,34,51] with respect to how various people and initiatives particulate in transformation efforts in particular. Another design guideline indicates the need for taking complexity-based perspectives[19,37,51,68], discussed earlier, to recognize the holistic nature of the system[34] and interconnections among its elements, its multi-level, -spatial, -stakeholder, and -perspective diversity[87,113], as well as its self-organizing (emergent) qualities[26,37,47,68]. The final design guideline (note that these guidelines are interconnected, not ordered) argues for taking the stewardship approach discussed earlier, i.e., a catalyzing, coaching, facilitating, and experimentation, learning-based[18,26] approach that helps participants in the system become aware of themselves as a system to cohere their efforts for more effective actions to be taken[26,68] to further the amplification process, discussed next.

Amplifying: Amplification involves implementation of action strategies and plans and learning and adapting as necessary to achieve change, while evolving subsystem specific additional transformation catalysts and systems. Amplification can be conceived as evolving and emerging a cascading array of initiatives, propagating change like seeds in an ongoing process that emerges new catalysts innovating sub-transformation systems in ways appropriate to specific contexts. The metaphor here is one seeds scattered, then sprouting and growing in ways matched to their ecosystem. The process of bringing actors together to create purposefully aligned transformation systems (connecting and cohering) begins to shift the system as actors get to know each other, understand what others are doing and begin to figure out where redundancies and gaps exist in transformation efforts, and realize where innovations and changes are needed.

Because of the complexly-wicked nature of the system, as the transformation system evolves the catalyst cannot control the emerging connections or co-created strategies and actions in conventionally-conceived ways. Rather, catalysts need to steward[68,114] and support the co-production[54,55] of proposed action strategies to tackle core systemic challenges (i.e., what needs to change) that *participants* wish to undertake. One way to conceive how successful transformation systems evolve is that participants put their plans into action, fostering the emergence of a cascade (or ripple effect) of similar activities in more localized (or possibly more global) contexts within the overall system. These new catalysts can work cohering the actors in those sub (or meta-) contexts to create new, more local or broader transformation systems as participants see the need and as a way of amplifying impacts. Doing so also involves participants truly tackling core system challenges, discussed next.

----------Figure 2 about here----------

Tackling Systemic Challenges: Any system that is the focus of purposeful transformation efforts has both obstacles to change—in the form of entrenched interests, current practices and policies, resource constraints, and many others[70]—as well as opportunities where the system has 'opened' sufficiently that change is possible[112,115]. The whole idea behind catalyzing transformation as a theory of change is that it is a new approach to *organizing* existing and emerging initiatives for transformative impact.

As Meadows pointed out transformation involves finding important levers with which to bring change about, including identifying and possibly rethinking dominant narratives that shape mindsets or paradigms[35]. Shifting key narratives (as noted earlier) around purposes and aspirations can enable emerging new social imaginaries[36] that reframe how the system is understood and inform relevant paradigms[35] that actors in the system hold. In turn, new paradigms or narratives inform different ways of engaging for actors in that system. For example, many transformation specialists argue for shifting the 'story' of human relationships with nature from one of separation to integration as a core aspect of transformative change[24,58,114] and others call for explicitly life-affirming new narratives[3,46,51]. Shaping socio-ecological systems to foster 'life' rather than financial wealth, as one example, can make a big difference in the goals, purposes, and practices that are generated by the system.

The specifics associated with the system to be changed will be different, of course, depending on the nature and boundaries that describe how transformation catalysts and participants in the transformation system define the system, always a judgment call. In addition to narratives, however, there are several aspects of all socio-ecological systems identified as frequently needing attention by change makers[70]. Those aspects include governance and organizing structures suited to the desired future, ensuring and enhancing collaborative capacities and capabilities among change agents—as well as other types of institutions and groups, and shifting innovations towards ones needed in the desired future[70]. Further, because as an old accounting saw goes, you get what you measure, the metrics used to assess the system and the change efforts themselves need to be holistic and appropriate to the context, possibly designed as specifically fit for that purpose[84]. Finally, significant changes are likely to be needed in how transformative change and the changes made are financed[70]. Of course, there will be system-specific entrenched interests, alignments, institutions, and obstacles in educational, health care, community, business, and other types of systems that have to be explicitly identified and strategies found to change ones that need to change, depending on the context as well as the orientation of change makers in the transformation system.

7 Discussion & Conclusions

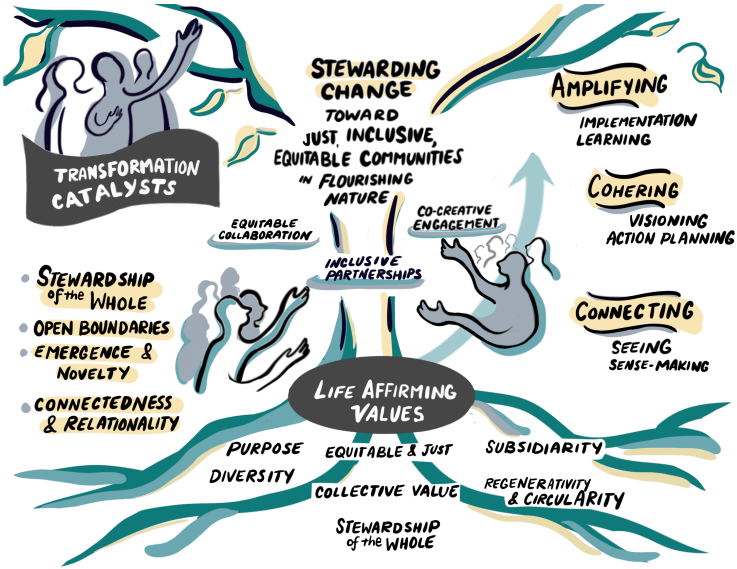
Overall, we have offered a prospective, process-oriented theory for *organizing* purposeful system transformation. Catalyzing transformation is a prospective, future and aspiration-based, way for actors called transformation catalysts to connect, cohere, and amplify the work of numerous initiatives to create effective transformation systems. We argue that these transformation systems can then work collectively and independently towards *purposeful* transformative change towards socially just and ecological flourishing systems. These ideas are prospective in that while they are based on significant experience and past literature, they are future-oriented and aspirational, rather than relying on past experience. Further, we acknowledge that they still need to be fully tested in practice and the theory further developed as more experience and insights are gained.

The catalyzing transformation approach is based in organizing for catalytic change, offering a

generic ‘how to’ think about bringing the reasonably well-defined elements of transformative change into a process that can be applied in and adapted to numerous socio-ecological contexts. We offer a reasonably comprehensive (we believe) set of activities that catalysts can undertake with participants in transformation systems to bring connection, coherence, and amplification into reality. Catalyzing transformation theory suggests strongly that such purposeful change is possible, albeit certainly not easy or without conflict, difficulties and obstacles. Accomplishing transformative change in any complex systems means that transformation catalysts need to adopt stewardship approaches and design principles that are quite different from conventional conceptualizations of leaders and leadership. Catalysis means bringing together and aligning many generally previously unaligned initiatives into effective and purpose-oriented transformation systems—that is, organizing typically underorganized systems so that they can accomplish greater transformative impact purposefully. Doing that can be fraught with conflict and egos that need consideration and effective collaborative processes.

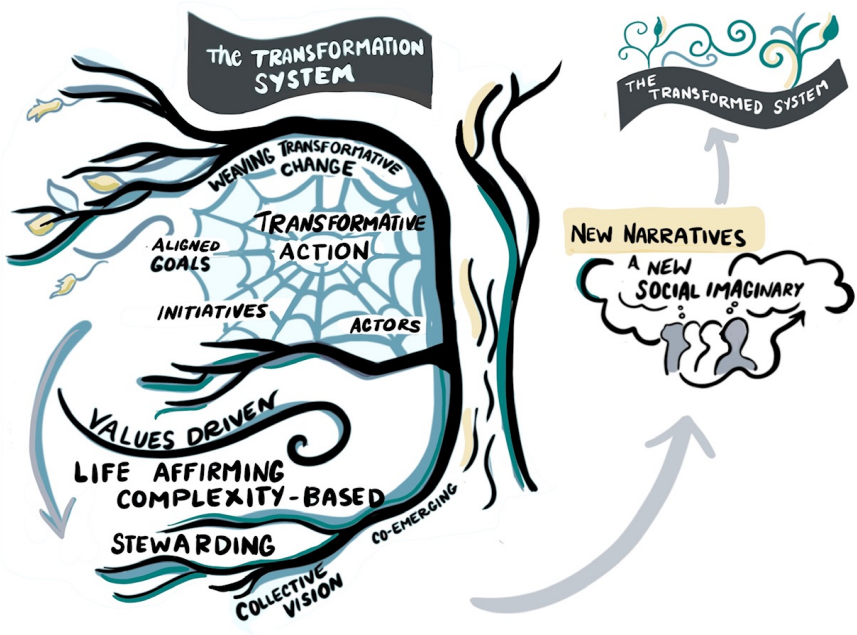
Catalyzing transformation is generic enough that anyone can use and adapt its framework to different contexts to begin to think innovatively about organizing purposeful transformative change, and specific enough to provide sufficient guidance for action. We believe that such a process-based theory that explains how purposeful transformative change can be achieved is particularly important for and needed in the complexly wicked contexts of today’s polycrisis, because, given its prospective nature, it offers hope in a context where that hope for an aspirational future can be lacking.

Figure 1. The Transformation Catalyst’s Role in System Transformation



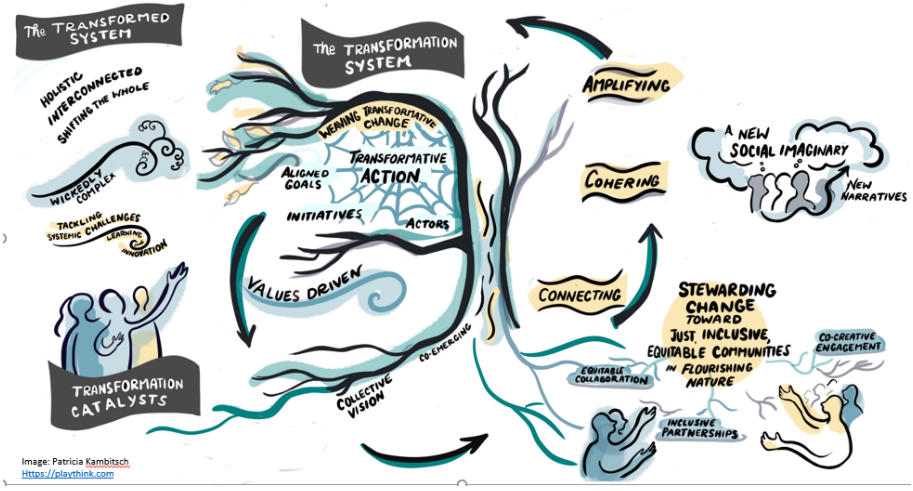
Source: (author) Sandra Waddock, *Catalyzing Transformation*, Business Expert Press, forthcoming.

Figure 2. Processes and Guidelines for Evolving Purposeful Transformation Systems



Source: (author) Sandra Waddock, *Catalyzing Transformation*, Business Expert Press, forthcoming 2023.

Figure 3. Theory of Change: The Overall Process of Catalyzing Transformation



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