

Catalytic Actions of Transformation Catalysts

Subjects: [Behavioral Sciences](#) | [Economics](#)

Contributor: Sandra Waddock , Ju Young Lee

Transformation catalysts (TCs) are ways of organizing that take catalytic actions to connect, cohere, and amplify the efforts of numerous initiatives oriented towards resolving complex socio-ecological problems like the ones embedded in the UN's Sustainable Development Goals. TCs target systems-level solutions by working with narrative to bring about cognitive or paradigm shifts and orient towards systemic change. They take catalytic actions by connecting, cohering, and amplifying the actions of numerous otherwise unconnected actors. TCs use sensemaking processes to problematize and create urgency around key issues, through adopting a systems orientation.

transformation catalyst

catalytic action

system transformation

SDGs

connecting

cohering

amplifying

sensemaking

1. Introduction

In [our paper](#), we focus on and elaborate on the role of a new form of organizing that embodies the systems perspective and potentially facilitates the timely achievement of socio-ecological goals like and beyond the SDGs by bringing about transformational changes at the systems level: the transformation catalyst (TC) ^[1]. By identifying 27 TCs and analyzing their websites, we document how TCs are distinct from other entities, in their transformational agenda, catalytic actions, sensemaking, and systems orientation, all of which make TCs better suited for tackling complex problems and facilitating transformational changes at the systems level.

2. Defining Transformation Catalysts

Transformation catalysts have been defined as follows:

“Transformations catalysts (TCs) are promising organizing innovations specifically designed to address complexly wicked societal problems and opportunities and bring about purposeful system transformation. ... Specifically, they connect, cohere, and amplify efforts of other initiatives in an attempt to overcome the fragmentation and lack of impact They help coalitions of actors emerge shared visions, goals, aspirations, or other narratives that enable them to align their efforts, even while they pursue their individual agendas”.

^[1] (p. 168)

In chemical reactions, the catalyst is an agent that brings about rapid changes without itself necessarily changing. In social circumstances, the idea of the catalyst has taken on a broader meaning of precipitating events or changes. In the case of TCs, those changes are transformative in nature, attempting to change the fundamentals of a situation [1].

TCs represent a new and still emerging way of organizing that is uniquely oriented to fostering transformational system change at a large scale [1], and that may offer some hope for dealing with the complexities with the wicked or even super wicked [2] problems associated with the UN SDGs and similar issues.

3. Identifying What Transformation Catalysts Do

TCs have emerged in two interconnected contexts. First is a growing recognition of the need for systemic transformation change, identified by many observers, especially in the wake of the COVID-19 pandemic, and as articulated in the SDGs and the climate emergency. Understanding this context combines with the awareness of the complexly wicked nature of the systems that need to change, which means that no single actor will be able to bring about transformation [3]. The other context has a growing capacity to work catalytically with a variety of actors, often online, connecting efforts that are attempting such transformational change in new ways, to bring about more effective, situationally relevant, and impactful transformation of whole systems at different levels of analysis.

TCs are a relatively new organizational phenomenon, hence little is known about how they define and implement their catalytic work. We focused on the following exploratory research question: how do transformation catalysts describe the catalytic work that they do? Using their website descriptions, we focused on determining what is meant by catalytic action in the context of the transformation catalyst. We developed a common framework with four major categories (transformation agenda, catalytic action, sensemaking, and systems orientation), with relevant subcategories, as described in the next section (see coding in **Figure 1**).

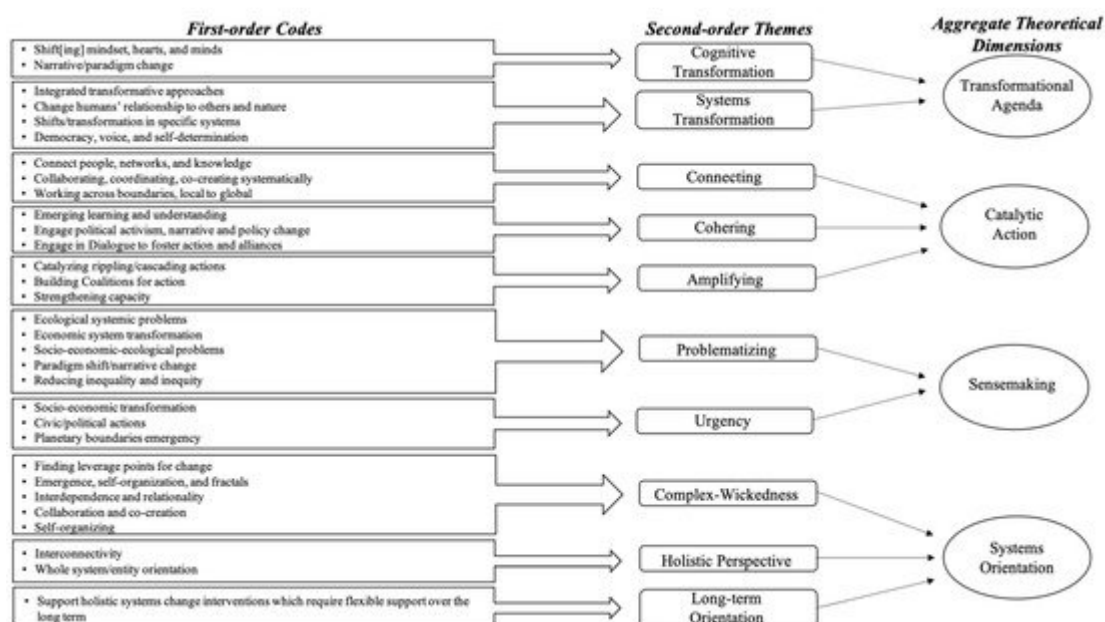


Figure 1. Coding scheme for transformation catalyst action strategy data.

We synthesized how TCs take action and what they mean by catalytic actions in **Table 1**.

Table 1. Transformation catalysts' views of catalytic action.

Overarching Action	Defined as	Evidenced by
The 'What' and 'Where': systems transformation agenda:	Systems transformation involves targeting systems-level (or whole-system) solutions to bring about large-scale and fundamental changes in the relevant system(s) versus more incremental or fragmented approaches	<p>Cognitive transformation: bringing about shifts in peoples' mindsets, mental models, and paradigms by reconfiguring and transforming what are known as cultural narratives and telling inspiring new stories</p> <ul style="list-style-type: none"> • Mindset change (mental models, paradigms) • Narrative/paradigm/cultural mythology change (and underlying memes) <p>Systems transformation: targeting systems-level (or whole-system) solutions to bring about large-scale and fundamental changes in the relevant system(s) versus more incremental or fragmented approaches</p> <ul style="list-style-type: none"> • Integrated transformative approaches • Changing humans' relationship to others and nature • Shifting/transforming specific systems • Enhancing democracy, voice, and self-determination
The 'Who' and 'How': catalytic actions	Catalytic actions involve connecting, cohering, and amplifying the work of partners and collaborators, defined as bringing together a network of change-	Connecting: connecting initiatives/people together to inspire them to collaborate, coordinate, and co-create systemic action in the desired direction.

Overarching Action	Defined as	Evidenced by
	makers and supporting collaboration across, disciplines, sectors, nations, and other boundaries to co-create and emerge transformative change and build sustainable futures for all	<ul style="list-style-type: none"> Connecting people, networks, and knowledge Collaborating, coordinating, co-creating systemically Working across boundaries <p><i>Cohering</i>: building strong alliances and collaborative relationships across silos by combining, unifying, and synthesizing knowledge and strategies that build capacity to act and finance transformative change</p> <ul style="list-style-type: none"> Emerging learning and understanding Engaging political activism, narrative, and policy change Engaging in dialogue to foster action and alliances <p><i>Amplifying</i>: strengthening and empowering diverse groups of actors to organize, mobilize, and take action to create transformative change that impacts at different levels (community to regional to national and global)</p> <ul style="list-style-type: none"> Catalyzing rippling/cascading action Building coalitions for action Strengthening capacity
The 'Why' and 'When': sensemaking	Sensemaking involves TCs clearly acknowledging why and when transformative change is needed in a broad variety of contexts, recognizing issues and their impacts, and	<i>Problematizing specific topics</i> : articulating the problems in today's systems and the sometimes existential challenges to humanity that they represent, and arguing for a paradigm

Overarching Action	Defined as	Evidenced by
	articulating/disseminating the urgent need for transformative change and how it will be done, including shifting narratives.	<p>or systemic transformation towards flourishing futures</p> <ul style="list-style-type: none"> • Ecological system problems • Economic system issues • Socio-economic-ecological problems (integrated) • Paradigm shift/narrative change • Reducing inequality and inequity <p>Urgency for transformation: acknowledge that addressing the problems raised (in problematizing) requires urgent systems-level transformation at speed and scale that can only be achieved through targeted actions and mobilizations</p> <ul style="list-style-type: none"> • Socio-economic transformation • Civic/political actions • Planetary boundaries emergency
The 'approach': systems orientation	Adopting a systems orientation (systems thinking), which means thinking in terms of complex adaptive systems and wicked problems (with or without that specific language) and taking a holistic perspective on systemic change	<p>Systems orientation: adopting a systems understanding (systems thinking), which means thinking in terms of complex adaptive systems and wicked problems (with or without that specific language) and taking a holistic perspective on systemic change</p> <p>Complex wickedness (wicked complexity)</p> <ul style="list-style-type: none"> • Finding leverage points for change • Emergence, self-organization and fractals • Interdependence and relationality

Overarching Action	Defined as	Evidenced by
		<ul style="list-style-type: none">• Collaboration and co-creation• Self-organizing
		<p>Holistic perspective: recognizing that everything in complex wickedness is interconnected, spans multiple levels and sectors, and therefore need to be tackled holistically rather than in silos because the systems of interest can be considered living systems</p> <ul style="list-style-type: none">• Interconnectivity• Whole-system/entity orientation
		<p>Long-term orientation: seeing things and the prospects of systems over the long term, seeking long-lasting solutions and changes in systems to achieve long-term environmental and social sustainability for the future</p>

4. Concluding remarks

Transformation catalysts represent an emerging way of organizing change agents and initiatives that we argue are needed to integrate transformation initiatives, so that they can more effectively address the complexity, interconnectedness, and wickedness of achieving transformational goals, such as the SDGs and other such efforts.

An understanding of what TCs are and how they operate is timely and important because wickedly complex challenges associated with the UN SDGs require transformational change, not incremental or piecemeal approaches. Such transformational changes cannot be achieved by any single entity alone, be it government agencies, businesses, or NGOs. What is needed is the collective and coherent action of many initiatives guided by common aspirations. We believe that TCs may be a ray of hope in this context of complexly wicked problems. Moreover, by analyzing how the entities identified as TCs actually undertake their work and identify commonalities

across such entities, this study provides those interested in system transformations with an understanding of what elements are needed if TCs are to work, and how new ones can emerge.