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Nested Agency and the Architecture of Human Resilience

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Abstract

In the context of interconnected and uncertain transitions, from climate disruption and systemic inequality to rising life dissatisfaction, static models of resilience are no longer sufficient. Contemporary approaches to resilience increasingly emphasise not only the capacity to withstand or recover from external shocks, but also the opportunity for deep social transformation. In this reshaping of resilience studies, the concept of agency becomes central. This paper argues that agency is an underexplored link in resilience theory.

This contribution articulates a theory of nested agency, unfolding from individual to collective to system. Drawing on insights from the Capability Approach, Transition Studies, Neurobiology and Phenomenology, it develops a relational, reflexive understanding of agency that reorients resilience systems from technical adaptation to normatively grounded transformation, where individuals and organisations reinterpret meaning, shift values, and reshape systems

Resilience is often treated as an external attribute of systems or communities, described through robustness, redundancy, or recovery speed. However, these characteristics do not emerge in isolation; they are shaped by the decisions, behaviours, and adaptive capacities of the people and organizations within those systems. In this sense, resilience is not merely a property of structures; it is a reflection of the agency exercised by individuals and collectives navigating complexity, uncertainty, and change. Agency, in this context, is not a static trait but a dynamic, relational, and context-dependent substantive freedom to act that underpins how actors interpret, respond to, and ultimately reshape their environments. It unfolds across multiple, interconnected layers; from the personal to the organizational to the systemic. These layers are neither sequential nor hierarchical; rather, they form a system of mutual influence, where individual meaning-making and collective action recursively shape the evolution of socio-technical and environmental systems.

However, dominant approaches to resilience often overlook the reflective dimension of agency. Policy and design frameworks tend to rely on instrumental rationality, a mindset that treats actors as predictable, utility-maximizing entities who adapt through control, prediction, and optimisation. This framing reduces agency to rationalisation: the ability to optimise action within fixed goals and established structures.

This paper challenges that view by introducing a distinction between rationality and reasoning. While rationality is linear and control-oriented, reasoning is contextual, dynamic, and integrative. It enables individuals and collectives to navigate complexity with coherence and intentionality, aligning their actions with evolving values and social meaning. In this framework, reasoning is the internal logic of agency; the internal capacity that allows people to reflect, reframe, and act intentionally in uncertain

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and contested environments. Agency, thus, is understood not merely as the freedom to act, but as the capacity to act with intention and coherence, consider alternatives, align actions with evolving values, and pursue goals they have reason to value. Rather than treating reasoning as separate from agency, it is framed here as the internal conversion factor through which agency is exercised: the reflective process through which individuals and collectives examine values, consider alternatives, and make choices they have reason to value.

Crucially, this reflective capacity of agency is what enables resilience to become more than technical adaptation. It opens up the possibility for resilience not only to bounce back, but to bounce forward, not simply absorbing shocks, but responding in ways that challenge dominant assumptions and reconfigure relationships and systems. In this sense, resilience emerges not just from structural robustness, but from the depth and quality of agency exercised by those within the system.

A key element of this process is the role of mental models, the often-unconscious cognitive frameworks that shape how individuals make sense of the world and define what constitutes a “good life.” When mental models are shaped by dominant social norms, commodified identities, or institutional pressure, they can constrain both agency and resilience by reinforcing adaptive preferences, where individuals reshape their aspirations to fit within unjust or stagnated systems.

However, when mental models become visible, reflexive, and open to transformation, they can function as powerful levers for change. Through reasoning, individuals and collectives can challenge inherited assumptions, realign actions with dynamic values, and develop new imaginaries for social and ecological life. In this sense, resilience is not simply about recovery or optimisation; it emerges through new ways of thinking and acting enabled by agency.

On this basis, this paper articulates a multi-level theory of transformation that connects personal development through agency to the emergence of adaptive systems resilience:

- At the individual level, agency begins with self-awareness and value clarity, enabling individuals to act from a sense of inner coherence.
- At the organizational level, this agency catalyses shifts in culture—creating space for participatory governance, ethical leadership, and deliberative innovation.
- At the systems level, individual and collective agency enable systems to bounce forward rather than merely recovering.

This progression aligns with the concept of leverage points in systems theory, with deep inner shifts (values, mental models, mindsets,) representing the most powerful levers for systemic change.

By anchoring resilience in the lived experience of agency, we move toward a model of development that is not only adaptive and dynamic but also conducive to living valuable lives.

Collective Agency, Resilience, Reason