Resilience Thinking in an Urbanizing World

J. Marty Anderies\textsuperscript{1,2}, Hallie Eakin, Marco Janssen\textsuperscript{3}, Charles Redman\textsuperscript{4}, Allain Barnett\textsuperscript{5}, Jacopo Baggio\textsuperscript{5}, Shauna Burnsilver\textsuperscript{6}, David Manuel-Navarette\textsuperscript{7}, Michael Schoon\textsuperscript{7}, and Sander Van Der Leeuw\textsuperscript{8}

1Arizona State University (ASU) – Tempe, Arizona 85287, United States
2Center for the Study of Institutional Diversity (CSID) – Tempe, Arizona 85287, United States
3Center for the Study of Institutional Diversity, Arizona State University (CSID) – United States
4Arizona State University (ASU) – United States
5CSID ASU – United States
6School of Human Evolution and Social Change ASU – United States
7School of Sustainability at ASU – United States
8Complex Adaptive Systems – United States

Abstract

Resilience concepts have emerged from a variety of perspectives and are being applied to address an even greater range of challenges. We as members of the Arizona State University Resilience Alliance Node are particularly focused on resilience concepts as they can be applied to navigating socio-ecological systems to increasingly desirable state and onto pathways toward sustainability. We believe that many of the currently useful resilience concepts have evolved out of studies of relatively small scale SESs and often focus on designing natural resource management strategies that maintain key ecosystem services and overall human well-being. We join with many other contemporary resilience thinkers who seek to expand the range of concepts to allow us to grapple with larger, more complex systems, more open systems that characterize our urbanized, global world.

We invite conference attendees to participate in a dialog session focused around six purposely provocative statements:

• To what extent does the classification of "urban" and "rural" as artificial systems boundaries limit our understanding of mechanisms of change in these systems?
• How do we catalyze collective action in an increasingly urbanized and globalized world when our problem solving practices in human history have been evolved in small communities?
• How do we navigate multiple conflicting resiliencies and non-resiliencies, especially if we decide to break the resilience of resilient, but undesirable social-ecological states?
• Urban level SESs develop institutions and infrastructure to channel resources and citizens into complex, self-organizing processes. However, are these self-organizing processes equivalent to ecological processes of self-organization?

*Speaker
†Corresponding author: charles.redman@asu.edu

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• How do we envision a flexible and resilient infrastructure? Given the dominance of infrastructure in our society do we need to develop a new set of system dynamics laws that reflect the emergent qualities of infrastructure?

• What is a desirable "stable state" for urban systems and how are our concepts influenced and limited by dominant paradigms such as development and sustainability?

The members of the ASU node will create brief "issue frameworks" for each of these statements to be distributed before or posted at the conference as invitations for concerned participants to join in the discussion. Each of these statements will have a Moderator-Rapporteur to catalyze discussion.

**Keywords:** collective action, complex adaptive systems, common, pool resources, governance, institution, resilience, self, organization, social, ecological systems, sustainability, system dynamics, urban resilience