**The Socioecological Systems Framework, COVID-19 and Organizations**

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COVID-19 is certainly a massive ecological shock to humanity, and in the most dire scenarios, it could lead to collapsing social systems in vulnerably communities and polities. How will we as organizational scholars make sense of COVID-19 scenarios and the role that organizations play in driving them? In my view, the pandemic and other looming ecological crises like climate change reinforce calls to consider a socioecological systems (SES) view of organizational behavior. Unlike sociotechnical fields that dominate organizational theory, SES are systems with biological and geophysical components, as well as social ones. The main dynamics within them are caused by “people who depend on resources and service provided by ecosystems, and ecosystems dynamics that are influenced, to varying degrees, by human activities.” (Chapin, III, Folke & Kofinas, 2009: 6). While the threat that global ecological change poses to society is self-evident to sustainability scholars, our discipline has been slow to incorporate ecological concepts and processes, like viral outbreaks and their underlying drivers, into our theorizing. We mainly have anecdotal understandings of ecology and organizations impact each other, and how this interplay feeds back into societal systems and maintains/disrupts their stability. In my own research on the interactions between ecological and organizational systems, the SES framework has served as an avenue for addressing this problem.

While relatively new to ONE scholars, a large interdisciplinary community has been using the SES framework to pool their expertise and develop integrative knowledge to study sustainable development. The mechanism for these efforts is systems theory, because it is compatible with a wide range of disciplines and thus acts as a common language. Indeed, systems theory is a framework for leading organizational theories. In addition, concepts and focal issues from our theories, including notably institutional and resource dependence theories, various theories of learning, and various political and economic theories, are central to SES research, including, for example, the seminal SES research conducted by Elinor Ostrom on the interplay and fit of ecological and institutional system processes. Finally, like organizations and their sociotechnical environments, SES are complex adaptive systems in a constant state of flux due to internal feedbacks and external stimuli. This flux, and their resilience to it, pushes SES to evolve into one of multiple potential stable states, including munificence, impoverishment, or collapse. A key organizing principle of SES research is that these systems can be managed into different states, so enlightened and scientifically grounded policy and strategy can give us agency over system dynamics. A key difference between SES and the organizational environments in our theories is that they have tangible boundaries, based on the geography of ecological issues that are relevant to specific social communities. For example, SES can be watersheds containing sets of municipalities that co-manage water availability for their stakeholders. In the SES framework, just like in ONE research, those stakeholders have conflicting interests, levels of power, and logics that create feedbacks and drive system flux. Importantly, tangible geographic boundaries provide opportunities to collect and analyze a wealth of relevant data involving entomology, geography, ecology, and demography that has been largely absent from our research because it could not be assigned to our fields of interest.

Indeed, our community has excelled at integrating a wide range of social sciences and ethical principles to explain sustainability without the SES framework. But more recently, some of our leading scholars have become disillusioned with the marginal impacts of corporate sustainability in practice, and are pushing us to recognize that market based corporate sustainability efforts are not working fast enough (see for example: Hoffman & Jennings, 2018; Lyon et al., 2019; Whiteman, Walker & Perego, 2013; Winn et al., 2011). Relatedly, others have called on us to integrate the natural sciences, including ecology, climatology, virology, and biology, in order to assess actual feedbacks and effects between organizational and ecological systems (see for example: Winn & Pogutz, 2013). For the current crisis, an SES view would help us do both, by providing us a universal translator (systems theory) to speak with to natural scientists. It would also help us model how system components and processes from various disciplines interact and feedback in stabilizing and disruptive ways. In turn, it would help understand how certain organizational actions shift system dynamics and impact a range of outcome in those systems. I imagine we will want to better understand how organizational actions, whether business-as-usual, altruistic or opportunistic, have mitigated (perpetuated) the pandemic or the balance/conflict between public health and economic priorities. The SES view can also help us develop more robust classifications for SES where organizations are embedded, by adding climatic, geographic and ecological variables to systems’ list of critical attributes. We would also be better able to identify system boundaries, and by extension, their resilience or vulnerability to ecological shocks. As a last idea, it would also help us study the role of organizations in cascading socioecological crises, like the effect of pandemics on our economic systems, or the effect of climate change on creating more powerful disease vectors for pandemics.

The interdisciplinary SES community shares common goals with us: to better understand how we can fairly manage socioecology to make it more munificent and resilient, and to call attention to factors driving our SES into impoverished or collapsing states. Organizational scholars have much to contribute to this effort, given our expertise in studying institutional, economic, and organizational processes. Some leading scholars in our community have put one foot into the SES effort already.[[1]](#footnote-1) But, we could go further by bridging disciplinary boundaries in our empirical research, and developing deductive reasoning on the interplay of ecological, institutional and organizational feedbacks. To conclude, many folks are likely to be familiar with Andy Hoffman and Dev Jennings’ work on the Anthropocene societies and scenarios for the future. They present one hopeful case of cultural realignment, where our species learn how to discern fact from fiction, recognize and mitigate inequities our systems, begin valuing ecological and social capital, and reorient our socioeconomic and institutional systems to solve grand environmental challenges. The implicit instrumental case for this scenario is that it would maximize our ecological, social and economic capital, given where we are now. SES research could help us in our quest to develop empirical evidence to support this case. Be safe and well everyone!

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1. Some in our community have theorized about corporate sustainability from a systems perspective (Mark Starik, Mike Valente), organizational resilience (Martina Linnenluecke), and SES as systems of analysis for studying resilience (Gail Whiteman, Monika Winn). In addition, some research has much in common with an SES view, including Andy Hoffman and Dev Jennings’ work on Anthropocene scenarios for society. There is also some limited empirical research on the impacts of ecology on organizational behavior (e.g., Nancy Kurland and Deone Zell’s work on water issues, CH Oh and Jennifer Oeztel’s work on natural disasters, my work with Jorge Rivera on climate change vulnerability). Clearly though, work on integrating ecology in management is in the first inning. Apologies to those I missed. [↑](#footnote-ref-1)