

Review

Enacting Economic Resilience: A Synthesis of Economic and Communication Frameworks

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Abstract: This work examines three frameworks for responding to economic disruption: risk mitigation, systemic recovery, and economic resilience. Specifically, by reviewing the metatheoretical commitments, analytic contexts, and implications of two economic perspectives, represented by risk mitigation and systemic recovery, we argue that current approaches to understanding resilience in academic economics have failed to address ongoing and emergent disruptions in the economic and social world. In response, this work also reviews a possible synthesis of economic and communication frameworks. This review places the economic resilience framework, inspired by the communication theory of resilience, in conversation with extant literature in economics, communication studies, and other disciplines and concludes with an outline for further theoretical, methodological, and practical development.

Keywords: resilience; communication; systemic risk; systemic recovery



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1. Introduction

Eight times per year, members of the U.S. Federal Reserve System (the Fed) meet as the Federal Open Market Committee (FOMC) to discuss, evaluate, and craft the nation's monetary policy. Though they may invoke the public to justify its actions, the Fed does not allow public attendance at these meetings. Instead, throughout 2019, the U.S. Federal Reserve undertook a new nationwide series of community consultations with the ostensible goal of learning from the public it serves. Named Fed Listens, these events were described as “a review of the monetary policy strategy, tools, and communication practice” used by the central bank to achieve its “congressionally mandated goals of maximum employment and price stability” by directly hearing from citizens from various walks of life ([Federal Reserve 2020](#), p. v). The organizers of these events designed them to offer insight into the relationships among the central bank monetary authority, its communication practices, and the varied constituencies the Fed serves by inviting diverse perspectives.

Unfortunately, the events and the Fed's report failed to live up to the promises of such an undertaking. Amidst vivid descriptions of continuing hardship and deepening uncertainty, the report offered up uninspired recommendations, including adapting the FOMC minutes for various audiences and providing a summary of policy action when publishing meeting minutes. Given that the Fed released this report and conducted its final Fed Listens event in May 2020, during the onset of the COVID-19 pandemic, which would cause inestimable economic damage and kill 18.2 million individuals globally by the end of the year ([Wang et al. 2022](#)), the summary of findings from the Fed Listens programs seem trite at best and out of touch at worst. Even when local leaders, businesspeople, labor organizers, and many others came to speak about the role that creative economic leadership could play in driving positive change and responding to ongoing disruptions in their communities, the Fed's findings indicate that many of these community problems result from a lack of comprehension regarding how the Fed identifies problems, how it can respond to them, and how the economy works.

Despite the contentious utility of these recommendations, the report also reveals a stark contrast between the descriptions of economic confidence espoused by bankers and businesspeople and the depictions of deepening disenfranchisement from those at the economic margins. These contrasts illustrate the material and social disparities of an economy marked by growing economic inequity. These are not just wealth gaps; they are also trust gaps (Foster and Frieden 2017). During widespread economic instability, disparities in wealth and confidence can have severe, negative consequences for the propagation of social and economic harms and can delay or prevent meaningful recovery both for marginalized people and economies at large (Kyland and Zarazaga 2016; Smeeding et al. 2021). In other words, the way that people experience economic disruption, recovery, and resilience is entangled with social and material conditions (Lucas and Buzzanell 2012). For people at the margins, the meaning of economic downturn is different than for those whose interests are centered in FOMC meetings and for those who are likely to read the minutes. Crafting new, better economic realities and substantively addressing economic harm, especially during times of crisis, requires addressing various systems and accounting for differences instead of reconciling them or abstracting away the multiplicity of the social and economic worlds that people inhabit.

Unfortunately, academic economics in its current form seems ill-equipped to conduct such inquiry. Critics of the discipline have described how prevailing economic theory (Lawson 1997, 2017; Romer 2016) and methods (Romer 2015; McCloskey 2008) are either indifferent toward or incapable of adequately addressing longstanding problems. These issues, compounded by the norms of academic economic training (Klamer and Colander 2019) and ideological and disciplinary incentives (Fourcade et al. 2015; Mirowski 2013), render economists' reflections on the shortcomings of their approaches un insightful, as in the case of the Fed Listens program. In response to these deficits, Hynes et al. (2020) argued for an approach using civil engineering and systems theory as a framework for understanding the complexities of overlapping social, academic, and political systems and as a method for evaluating the overall system's ability to recover and adapt. Their work demonstrates how increasingly nested systems and the potential for cascading failures justifies a move from a more traditional strategy of risk mitigation and toward a philosophy of economic resilience that prioritizes: investing in infrastructure, quantifying resilience efficiencies, and developing real-time mechanisms for evaluating policy alternatives. Undoubtedly, the shift is meaningful and significant, but still neglects the central audience for which, we argue, practical, methodological, and theoretical developments should be centered on: people.

For organizational communication scholars working to develop a communication-centered perspective on economic resilience, we provide the above observations to contextualize and warrant this review, not to admonish economic perspectives, rebut them, or deny their utility, but instead to complement and enhance existing work. Over the past decade, organizational communication scholarship has experienced a significant shift away from exploring organizations as a container for communication and people. Instead, researchers have begun examining organizing as a communicative process constituted by people through interaction (Bisel 2010). However, despite the expansive utility of such a framework for exploring non-normative contexts (e.g., businesses and non-profits), organizational communication scholars have neglected to explore the organization of grander systems such as the government and economy using these tools or to engage with economic scholarship in meaningful ways (Wildman 2008; Sparviero 2010). Along the same lines, despite the growing body of economic literature employing communication concepts, such as transparency (Cole et al. 2021), narrative (Nyman et al. 2021; Shiller 2019), and uncertainty (Tuckett et al. 2020), relatively few engage with the extensive history of work in these areas by communication scholars (e.g., Berger and Calabrese 1975; Boje 1991; Deetz 1992; Fisher 1984, 1989). This lack of engagement has been detrimental to both disciplines, but through this review, we aim to center the social processes of communication and organization as a means of exploring economic resilience and developing avenues for the theoretical, methodological, and practical advancement of both disciplines.

To this aim, we begin with an examination of three alternative frameworks for responding to economic disruptions: risk mitigation, systemic recovery (Hynes et al. 2020), and the communication theory of resilience (CTR; Buzzanell 2010, 2018b, 2019). Essentially, these three frameworks create complementary, non-mutually exclusive means for exploring three central questions: (1) How are disruptions defined? (2) How are disruptions addressed? (3) How does addressing disruption affect the future? We explicitly articulate these questions using the passive voice and the general language of disruption to avoid implications related to agency, actions, and aims. As such, these three questions provide a framework for the deeper analysis of each view's metatheoretical commitments (ontology, epistemology, and axiology), analytic contexts (social, academic, and political), and implications (theory, method, and practice). Thus, following the overview of the three frameworks, we address each of these questions in turn using examples from the Fed Listens report (Federal Reserve 2020) and the COVID-19 pandemic to examine each view. Finally, we conclude with a practical reframing of six communication resilience processes (Buzzanell 2010; Hintz et al. 2022) and a general discussion of future directions and collaborative developments for communication and economic theory.

2. Frameworks: Risk Mitigation, Systemic Recovery, and Economic Resilience

As Hynes et al. (2020) observed, many prevailing economic frameworks for responding to disruption center the idea of mitigating risk. Though it can vary wildly, this framework for addressing disruption centers the idea of avoiding crises altogether. It is important to note that perspectives on how to mitigate risk vary wildly from laissez faire advocates of extremely minimal intervention (e.g., Friedman 1962) to views that allow for imperfect market operations. Although we still present various perspectives under the umbrella of risk mitigation, for the purposes of this review, we primarily explore this framework in terms that allow for a clearer understanding of policy recommendations and have an interest in realistic assumptions about economic agents (contra Friedman 1953). To this end, we mainly use extant work on systemic risk as an example for how this framework addresses economic disruption because it offers clear contrast to both systemic recovery and economic resilience without presupposing that economic disruptions are entirely preventable. Systemic risk emphasizes the interaction between institutional organization, human behavior, and economic outcomes, or, in other words, the potential that a disruption in financial markets will create widespread harm (Centeno et al. 2015). Measures of systemic risk often depict degrees of fragility or vulnerability in the financial infrastructure, which allows the increasingly complex and interconnected systems of global capitalism to function (Acharya et al. 2017). Unfortunately, these depictions of economic vulnerability broadly disregard questions related to social contexts, material disparities, or confidence deficits and instead emphasize issues related to institutional and incentive structures (Keen 1995; Minsky 1982). Nonetheless, the literature surrounding systemic risk demonstrates the utility of endogenizing certain elements of organization and analyzing specific aspects of human behavior while also revealing potentially significant gaps, which we review later.

Much as systemic risk endogenizes questions of economic crisis, the notion of systemic recovery, a concept from civil engineering that describes organizing responses to infrastructure disasters (Gonzalez et al. 2017), can offer scholars a similar endogenizing framework for exploring how economies adapt and transform in response to disruptions. For civil engineers, the question of resilience is largely material. This is understandable. When infrastructure fails, the process of (perhaps literally) rebuilding is complicated by issues in physical space: How will people receive care if hospitals are overwhelmed? How will people move around when bridges collapse? How long will it take to rebuild homes? If scholars center material concerns, the question of resilience begins to echo the language of Joe Biden's ongoing, albeit stalled, work on infrastructure spending in the aftermath of the COVID-19 pandemic: Build Back Better. This observation is borne out in other literature from civil engineering regarding the need to bounce back and generally leave infrastructure better or more resilient than it was before disruptions occurred (Trump et al.

2020b). Importantly, though Hynes et al. (2020) eschew the language of systemic recovery in favor of economic resilience, given (a) their deep engagement with strategies and policy recommendations from civil engineering and (b) their use of systems theory more broadly, the term systemic recovery is more appropriate for this view. Summarily, systemic recovery is a framework for adapting to disruptive circumstances that seeks to create a broader ability to identify and implement changes efficiently and effectively throughout the system.

The communication theory of resilience (CTR; Buzzanell 2010, 2018b, 2019) is the final framework for addressing economic disruptions that we consider in this review. Buzzanell (2010) first articulated CTR to explore resilience as a centrally social process whereby people, in response to disruptive trigger events, enact resilience to create a new normal. This work eschews the positive psychology of fostering resiliency (as a trait, e.g., Rutter 1999; Skodol 2010) in favor of the social construction and enactment of resilience. This linguistic conversion from resiliency (trait) to resilience (enactment) is important; this is the heart of a communication-focused perspective on resilience. Invoking an economic crisis as an example context, Buzzanell (2010, 2019) developed a perspective on resilience that emphasizes the constitutive processes of adapting and transforming circumstances in response to and in anticipation of disruptions. Explaining what makes a system embody resiliency, Buzzanell argued that resilience is what people labor to do and say as they grapple with crises affecting themselves and others during the present and while crafting the future (Agarwal and Buzzanell 2015). Moreover, as people individually and collectively make sense of disruptions and enact resilience, the narratives they create shape forward-thinking logics upon which individuals craft their understandings of what is probable, what is pragmatic, and what is possible (Betts et al. 2022). The essential contrasts here between this communication view as economic resilience and the ideas framed above as systemic recovery (Hynes et al. 2020) become particularly clear when thinking about the addressee of adaptation questions. Whereas systemic recovery emphasizes reforming and optimizing extant societal structures and systems, CTR as a framework of economic resilience emphasizes transforming and adapting the ongoing processes of social organization, driven by discourses and narratives, and enacted by people. Though there are other distinctions between these views that provide further clarification of their complementary utility, this is a central throughline of the distinctions between these views that we now explore in greater detail.

As summarized below in Table 1, these three frameworks have various commitments and ideas regarding the nature of disruptions, their presentation of resilience, and the objects of resilience. Though there is clear room for further nuance and subdivision within each perspective, we believe that these three frameworks, as articulated above, offer clear contrast and heuristic value as we move to examining each framework in more detail.

Table 1. Summary of frameworks.

Framework	Disruptions Can Be ...	Resilience Is ...	Disciplinary Origins	Key Authors and Works
Risk Mitigation	Prevented	An outcome	Economics	Minsky (1982) Keen (1995)
Systemic Recovery	Preempted	A designed systemic trait	Engineering	Hynes et al. (2020) Trump et al. (2020a)
Economic Resilience	Transformative	An enacted social process	Communication	Buzzanell (2010, 2018b)

3. How Are Disruptions Defined? Shocks and Sensemaking

The Federal Reserve Bank of Dallas hosted the first Fed Listens meetings in South Dallas, and after members, of the Dallas Fed toured the historically disproportionately underserved community. During the meeting, an advocate for families of incarcerated or formerly incarcerated people described how increasing wages “from \$8 an hour to \$10 an hour is not going to substantially impact their quality of life” as part of a discussion of

financial, physical, and social capital deficits (a) that create localized unemployment and (b) that underemployment exacerbates but does not cause (Federal Reserve 2020, p. 14). The advocate argued that these severe and entrenched inequities are the key to understanding the community's economic deprivation relative to both Dallas and the nation. However, the Fed's report of the Dallas event uses this quotation to demonstrate the importance of addressing high unemployment and the proliferation of low-wage jobs in connection with its dual mandate of price stability and full employment. This assertion lies in direct contrast to the evidence provided by this community advocate who is actively involved in working to address these issues locally. Notably, the report draws this conclusion and discusses other findings from the event prior to presenting any description of the conversations that took place. This misappropriation of the advocate's ideas occurs devoid of context and is plausibly an invitation to disregard the specific content of the conversations that took place in favor of the useful ideas.

This use of the Fed Listens concept to simply reaffirm the generally accepted, and congressionally mandated, role of the central bank is both an unfortunate representation of the wasted potential of these events and an insightful example of how a large portion of the economic world approaches defining and identifying disruptive events. Thus, it is revealing that in various perspectives in academic economics, disruptive events are almost universally described as shocks. This language is included within: dominant neoclassical perspectives, such as dynamic stochastic general equilibrium (DSGE) modeling and real business cycle theorizing (e.g., Long and Plosser 1983; Nelson and Plosser 1982); post-Keynesian frameworks and systemic risk (e.g., Keen 1995; Minsky 1982); developments in modern monetary theory (e.g., Kelton 2020; Tcherneva 2020); and even Marxist work (e.g., Kalecki 1954, 1990). Despite its near universal adoption in economic parlance, framing economic disruptions as shock is not a neutral theoretical or linguistic quirk, and it has significant implications for economic ontology and the analysis of social worlds in the economic models that we now explore.

3.1. Shocks and Objective Ontologies of Disruption

Treating economic disruptions as shocks creates an objective understanding of disruption by simplifying the social experiences of disruption from all involved (everyone) into the experience of the economy at large. Analyses of journalistic (Cai and Dignan 2019; Skorzynska and Deignan 2006), educational (Alejo 2010), and political (Zeng et al. 2021) representations of economies through metaphorical language articulate how framing devices forward an objectified vision of economic reality that is distinct from any social context. In these metaphorical terms, descriptions of economic disruptions as shocks imply a sense of surprise, speed, and singularity; they evoke images of lightning strikes and car crashes. These pictures are at odds with researched accounts. Most investors reported believing the market was overpriced prior to the October 1987 crash, rendering surprise dubious (Shiller 1987). The financial meltdown that resulted in the Great Recession occurred over the course of months and through multiple attempts to avert disaster (Bernanke et al. 2020; Blinder 2013, 2018). The evolution of the COVID-19 pandemic has played out across vaguely defined variants and waves and defies definition as one singular event (Ayala et al. 2021; Zhang et al. 2021). These contrasts between the academic framing and social or historical experiences of disruptive events in economic life are indicative of a broader distancing between the economic and social world that the frame of economic shocks reinforces. The frame of economic shocks defines the reality of disruption as an objective occurrence outside of the realm of social consideration or evaluation.

Within the framework of risk mitigation, this objectification is most clear when examining the positivist ontology of orthodox (or, neoclassical) economic thought. Though questions of economic ontology are often underexplored in the economic literature, orthodox perspectives centralize distinction between markets and people to forward the work of objective economics as a positive science (Friedman 1953). In the case of orthodox economic thought, the objectification manifests in the simplification of all human actors

into representative individuals and rational actors, regardless of the empirical or heuristic utility of these caricatures of human social behavior (see Kirman 2010a). By abstracting away the pesky and complex behaviors of realistic agents, orthodox economic perspectives can embrace the idea that disruptions, as economic shocks, can only emerge exogenously, or outside of the market system. In other words, the framing of disruption as a shock is a key piece of the orthodox project of positive economic science because it allows for the perfection of the internal economic models it relies upon. Further, by denying the possibility of endogenous disruptions, this framing facilitates the disregard of all market outcomes as anything other than the efficient operation of omniscient markets (Mirowski and Nik-Khah 2017). Simply, the only risks worthy of mitigation exist outside the economic systems, obviating any need for a policy response.

Alternatively, we can examine the umbrella of systemic recovery frameworks in terms of heterodox economists' work, many of whom (e.g., Lawson 1997, 2008, 2010; Mäki 2002) have offered clear rejections of the distinction between people and markets and the notion of rational actors upon which orthodox work builds. Nonetheless, much economic heterodoxy still relies on a similar objectification of the relationship between the social and economic worlds. Lawson (1997) specifically called for a reorientation toward realist theorizing and a social ontology of economies. The problem arises when economists attempt to validate their theoretical frameworks with reference to the real structures and the objective behaviors of economic agents. Prevailing perspectives obfuscate the relative construction of those economic institutions, the relative experiences of agents' interactions with those institutions, and the relative interpretations of economists formulating their accounts of both into theory. The example from the Dallas Fed Listens events exemplifies how this objectifying concept of economic shocks can force policymakers and academicians to rewrite peoples' experiences in familiar theoretical terms. Although the advocate mentioned above clearly demonstrated their belief that unemployment was not the central cause of the economic deprivation in South Dallas, the Fed took it upon themselves to correct her ideas. In this way, the writers behind the Fed report have reformulated the words of the advocate to reflect an objective mold for theorizing economic shocks, which in turn could justify a response from the Fed. In other words, people's subjective experiences are only actionable disruptions insofar as they fit the objective standards of the economic, institutional, or political systems fit to address them.

3.2. *Synthesis: Sensemaking and Economic Theory*

Economic resilience described in the language of CTR reframes the notion of disruption in terms of a social constructionist ontology that understands the reality of these economic events in terms of the social experiences of the people living them. Rather than approaching the analysis of disruption as the diagnosis of an event with a singular, objective characterization, CTR urges researchers to understand how individuals make sense of disruptive experiences (Betts et al. 2022). Weick's (1969, 1976, 1995) work on sensemaking is both influential in organizational communication, and the communication discipline more generally, and illustrative of the role that sensemaking practices might play in reframing economic disruption. The concept of sensemaking explicitly denies that organizations operate as social objects. In the framework of sensemaking, organization is a social process of crafting collective meanings after events have occurred in order to justify action at present. Put into the language of resilience, as people make sense of disruptive events, they form the basis upon which they will respond to disruption (Betts et al. 2022). Communication researchers emphasize that the experience of disruption is a malleable social construction (Buzzanell 2018a) by recalling concepts such as memory plasticity (Pasupathi 2001) and narrative reframing (Clair and Kunkel 1998; Koenig Kellas 2018). Additionally, even though sensemaking is not always easy or possible (e.g., Frank 1995; Hagedorn 2004), the process of crafting meaning through communication and social interaction shapes how individuals (a) comprehend the past, (b) make decisions at the present time, and (c) understand future possibilities.

In concert with existing economic work in both risk mitigation and systemic recovery frameworks, economic resilience that explores disruption as a social process of collective sensemaking can be a valuable tool for economic theory. This is not a reconsideration of the relationship between the social and economic worlds; it is a dissolution of their division. When framed in terms of sensemaking, the interrogation of systemic risk allows researchers to question how the social arrangement, or organization, of economic systems influences the identification and subsequent response to disruptions. This perspective on economic resilience has significant implications for both economic and communication theory. First, by emphasizing social processes of evaluating circumstances, the conception of economic disruptions as sensemaking urges researchers to seriously consider the lived experiences of those who comprise the economic systems they study. Economies are social organizations that exist in relation to and separate from material conditions. People do not respond to markets; they constitute markets. Thus, by viewing disruptions as a social process of sensemaking rather than as objective shocks, economic resilience as a framework is attuned to emergent issues that might not register as disruptions otherwise.

Second, by more critically evaluating how people experience the economy and make choices, economic theorists can construct more robust explanations of the causes of (and responses to) crises. Leaving the terra firma of positivism and realism for the murky waters of social constructionism does not entail succumbing to the siren's call and dashing economic science against the rocks of relativism. Instead, this is an invitation to interrogate the multiplicity and complexity of experience among those who experience economic disruption. Finally, communication scholarship would benefit from such examinations, too. Given that organizational communication emphasizes questions of sensemaking, inquiry that applies the framework to various contexts beyond the bounds of normative management inquiry can further develop and enhance explanations of the communicative and social phenomena at play.

4. How Are Disruptions Addressed? Optimization and Adaptation

The Federal Reserve Bank of Cleveland took a different approach to implementing the Fed Listens vision by holding a series of events, some in concert with other regional Federal Reserve banks. Again, the purported goal of these events and a capstone policy summit was to provide a means of analyzing how the Fed achieves its dual mandate, with the Cleveland Fed emphasizing the differing experiences of communities they identified as low and moderate income (LMI). Given this emphasis, the summary findings from the event might seem to be a step in the right direction. The report frames ongoing conversations in the context of data, indicating that a majority of survey respondents (including "workforce boards, food pantries, small business centers, workforce training providers, and housing or health and human services agencies" (Federal Reserve 2020, p. 62)) either did not know or did not believe the Fed considered LMI community interests when crafting policy. Considering this finding, the summary from the community advisory council might have been an extremely positive agenda for demonstrating that the Fed *does* consider their interests. The report noted deficits related to personal credit, underemployment, employment access, housing, and public funding. Of course, it only noted these concerns after framing them as beyond the scope of the monetary policy authority of the Fed and dismissing them as insoluble, especially in comparison to the actionable concerns of the Business Advisory Council suggestions described in the very next section of the report.

For decades, feminist economists have argued that the dominance of quantitative analyses, survey-based data gathering, and inattention to marginality distorts the validity of researchers' claims and stymies the process of addressing economic disruptions. They have argued that this emerges as a result of imbed sexist (Beneria 2007; Berik 1997; Berik and van der Meulen Rodgers 2009; Gown et al. 2000) and racist (Power 2004; Price and Sharpe 2020) assumptions into the foundation of contemporary economic scholarship. Along similar lines, Romer (2015) criticized the "mathiness" (p. 89) of academic economists who allow mathematical complexity to obfuscate the methodological prestidigitation that transforms

dubious political conclusions into natural scientific facts. Put simply, the methodology of academic economics acts as a magic trick that presents certain, presupposed policy aims as the only optimal solution to any given economic problem. This is the same argument that McCloskey (1998, 2008) has made for decades regarding the rhetorical, not objective, justification of dominant economic ways of thinking. The practice of economic analysis conflates the desire for objective understandings of human behavior with a warrant for damaging policies in the quixotic pursuit of optimality. It is this quest that we deconstruct in this section and resynthesize in a communicative framework of economic resilience

4.1. Optimization and Economic Epistemology

Within the framework of risk mitigation, systemic risk perspectives have emphasized how the institutional and incentive structure of financial markets inevitably undermine stability and create significant economic harm (Minsky 1982). Though this work does not amount to Friedman's (1953) pure actuarialism, it reifies a similar determinism through the methodology of economic modeling. Minsky explicitly forwarded a perspective of economic disruption with endogenous origins, shaped by the social behavior of humans engaging with economic institutions and incentive structures rather than an objective standard of rational expectations. Later work to formalize models of this process (e.g., Grasselli and Lima 2011; Keen 1995) operationalized these tendencies and inspired important reflections on the status quo and potential future financial and ecological disruptions (Bovari et al. 2018; Costa Lima et al. 2014). Undoubtedly, these are useful tools for understanding certain vulnerabilities in financial systems, but because they attempt to create fixed frameworks for human behavior and institutions, they can be poor tools for exploring solutions that change those frameworks. As systemic risk perspectives rely on fixed operationalizations of human behavior, they cannot always account for shifts in how humans respond to ongoing events in unpredictable and dynamic ways due to the rapid evolution of economic disruptions and their social contexts. The answer, of course, is not to throw out the models; instead, researchers in an economic resilience framework can work toward an economic methodology that accounts for this type of dynamic and attunes to these types of shifts. Responding to disruption necessitates an economic methodology that emphasizes reflexivity and adaptation.

The framework of systemic recovery implies a different approach toward achieving similar optimizing ends by disregarding the dynamism of social and economic systems. The lessons of the COVID-19 pandemic have not yet been written, let alone learned, but even as the ink dries, researchers are articulating the need for scholarship that does more than "get [people] back on the road to disaster" (Hynes 2021, p. 337) by calling for systemic recovery that addresses the acute and chronic problems that have severely harmed the myriad natural and social systems on which people rely. While calls like this one can begin directing attention from scholars, policymakers, and citizens to both the necessities of and opportunities for change, the economics discipline has seen similar arguments before. In the immediate aftermath of the Great Recession, the economics discipline faced a crisis of confidence from the policymakers and political leaders who craft institutions and policy in the image of economic theory (Callon 2007; Mackenzie 2006; MacKenzie and Millo 2003); from the citizens and families who lived and continue to live the social and material consequences of the downturn (Addo and Darity 2021); and from the scholars and thinkers whose methods, theories, and convictions were seemingly rebutted in one fell swoop (Kirman 2010b; Romer 2016). However, after a few short years, many economists coalesced around methodological explanations for what they deemed the superficially poor performances of dominant economic models (Blanchard 2018). It did not take long for researchers of economic orthodoxy to close ranks and begin reworking the evidence of the crisis as a methodological blip rather than as a fundamental flaw of economic science (Mirowski 2013).

4.2. Synthesis: Adaptation and Reflexive Economic Methodology

After reviewing these epistemological commitments, the utility of an economic resilience framework in synthesis with communicative perspectives can drive a reflexive methodology and inspire new ideas for responding to economic disruptions. One of the central challenges within orthodox economic perspectives is that their determinism prevents these views from considering new possibilities for actions. The emphasis on evaluating the optimality of a response using abstracted macroeconomic indicators that are only tenuously related to individuals' experiences can prevent crafting creative means of addressing disruptions. In contrast, communication studies have a long history of embracing myriad methodologies and perspectives and putting them in conversation with each other. The concept of developing a reflexive methodology is simply to urge critical reflection on the methods economists use and the influence those methods have on the conclusions researchers draw to encourage adaptation over optimization.

The Fed Listens event in Cleveland exemplifies this central issue of methodology. First, the use of survey measures to determine how many people believe the Fed considers their interests is dubious. The [Federal Reserve \(2020\)](#) summary of all Fed Listens programs provides little contextual detail, beyond some example respondent job titles or associations, as to whom the Fed surveyed. Second, the concept of the Fed Listens event as a means of interacting with and hearing from the public is similarly questionable, even before the report goes on to disregard many of the insights offered by the representatives at the events. Both the survey measure and the community events seem poorly designed and without much reflection regarding the quality of insights these conversations were designed to provide for the members of the Fed. Instead, if the Fed is genuinely interested in reflecting on the tools and practices it uses to achieve its goals, a communication methodologist might recommend interviews, focus groups, ethnography, or textual analysis. There are various techniques that could help develop insights related to the public relationship with the Fed, but centrally, they require a critical self-reflection that does not occur in extant work. In this way, by adapting its methodological toolkit, the economics discipline can equip scholars and policymakers with the means to adaptively respond to disruptive events.

5. How Does Addressing Disruption Shape the Future? Prescription and Prospecction

While the community consultations were still ongoing, the Federal Reserve system held a research conference in June 2019 under the auspices of the Fed Listens program. Although the conference included two panels explicitly labeled as such, the Federal Reserve's report does not explicitly center the insights gleaned from the public over the course of the community events from which it drew its name, nor does it provide details regarding the impact they had on this research conference. During the conference, however, several panels discussed the need for significant action to address some serious concerns that echoed (although were not directly inspired by) public commentary. Many of these panels centered on concerns that the Fed Listens report ([Federal Reserve 2020](#)) had previously dismissed as beyond the scope of the central bank's authority. However, given that trained economists presented these ideas, rather than public commenters, they offered specific frameworks for evaluating and pursuing new types of reform and action that the Federal Reserve could take. However, in the context of a discussion of the stabilizing power of communicating monetary policy given that "monetary policy is a fundamentally forward-looking endeavor" ([Federal Reserve 2020](#), p. 120), many people raised concerns regarding any possible structural reform of the Fed or its regulatory role. Panel participants and audience members dismissed these ideas with a common refrain: that they were beyond the scope of the Fed's authority and purpose. At the end of a year of holding events throughout the nation to evaluate the Fed's communication strategies and tools, the summary report concludes: "Federal Reserve officials have communicated concerns about rising risks effectively and have the tools to ensure adequate risk mitigation within the banking sector". Despite the collection of evidence to the contrary, the final policy summary from the report is that all is well.

Academic humility necessitates the admission that nuanced theory and rigorous methodology cannot account for the entire sum of possible human events. To put it bluntly, shit happens. However, this is not a justification for abandoning the projects of economic inquiry any more than it is an assertion that macroeconomics has accomplished its central task of depression prevention (Lucas 2003). Acknowledging academicians' fallibility has long been a key facet of any scientific inquiry (Kuhn 1962), but it is a significant obstacle for translating research into political practices. Friedman (1953, 1962) advocated for radically minimal government intervention in the affairs of the economy without a clear articulation of the relationships between the hypothetical world of his positive economic theorizing and the normative world of policy making. There is a similar lack of reflection on the axiological commitments of economic inquiry across the discipline, and while various scholars have rhetorically justified their positions using realist epistemologies (e.g., Lawson 2008, 2010), this is not a substitute for genuine and critical reflection on the value assumptions that inhere academic inquiry. Simply, it is not enough for researchers to advocate policy measures without an evaluation of the relationship between that inquiry and the practical world that it will impact.

5.1. Prescriptions and Economic Axiology

Contrary to Friedman's (1953) contentions that theoretical claims are only useful for explaining the world because they are predictive, socioeconomic work argues that theory is predictive because it drives the actions of economic agents in certain ways. Put differently, theory shapes both what people observe and how people behave (Mackenzie 2006). This is the foundation of the first central issue based on the axiological premises of the various economic perspectives that fall under the risk mitigation framework. Many of the socioeconomic critiques of economic theorizing (e.g., Callon 2007; Holmes 2009, 2013) rely on the idea that economic theory manufactures the social conditions and economic behaviors that it then relies upon to justify its validity; however, there is a deeper concern underneath the surface that goes largely unexplored. DeMartino (2011) and Fourcade (2010a) both explored the ethical dimensions of academic economic inquiry and reached similarly troubling conclusions. Fourcade (2010a, 2010b; Fourcade et al. 2015) documented the deep inroads that economic inquiry has made in the political imaginary of the United States. Much of her analysis emphasized the implied superiority of economics relative to other social scientific disciplines both within the academic literature and political circles (Fourcade et al. 2015). Moreover, economists in various academic and government positions are rarely, if ever, trained to handle questions related to the ethics of the discipline (DeMartino 2011). In many ways, this severe lack of reflection can be traced to Friedman's (1953) assertion that economics can and should operate as a positive science outside of the bounds of the real world while also still commenting and prescribing policy solutions for that world.

Along these lines, we can reconsider the work of McCloskey (1998, 2008) who has consistently argued that the moral and political assumptions obfuscated as scientific reasoning have caused significant harm. Graeber's (2011) anthropological explorations of debt have contextualized how these types of obfuscations work to remove people from their social context and justify atrocities. The International Monetary Fund's (IMF) role in proliferating austerity measures, through structural adjustment programs and for the purpose of refinancing colonial debts, has demonstrated how economic arrangements are evaluated prior to moral questions, with disastrous and deadly results (Graeber 2011). The retrospective economic inquiry on these programs is perhaps even more enlightening, though, because it offers a glimpse into the justifications for these policies in action. For example, Ban and Gallagher (2015) explored the impact of the Great Recession and associated financial instability on the IMF and concluded that recalibrating the institution might be desirable but that changes would be tempered by the nature of the institution. Additionally, herein lies the problem: unarticulated values in economic inquiry justify the uncritical acceptance of the status quo as natural, good, and, above all, economically efficient. Despite pervasive, ongoing, and genuine criticism from outside of economics (and

from within) regarding these assertions (e.g., Graeber 2011; McCloskey 2008), the artifice of scientific inquiry has enabled continued ignorance of these substantial questions. This is not an ignorance of happenstance; it is an organized feature that facilitates the ongoing operation of the disciplinary status quo. Due to the disciplinary superiority of economics as an objective social science, scholars and policy analysts can continue to write off their prescriptive solutions to economic disruptions as mere descriptions of the economic status quo.

While the issues mentioned above are specifically framed in terms of the risk mitigation framework, perspectives that approach disruptions through the lens of systemic recovery still embody some of these fundamental issues. Although frameworks in systemic recovery, such as that advanced by Hynes et al. (2020), articulate the need for reevaluating financial and economic structures, which is undoubtedly positive, there is a worrying capitulation to the value frameworks of dominant economic thought that reads as an attempt to placate views that need to be challenged. For example, Trump et al. (2020a) argued for a synthesis of efficiency and resilience as a means of achieving systemic recovery. Their central claim is that efficiency justifies addressing the COVID-19 pandemic because short-term tradeoffs do not exist when considering the impact of long-term systemic collapse. This is an astonishing framing. The language of efficiency reduces the notions of addressing the unambiguously apocalyptic consequences of ecological degradation and climate change or of addressing an actively raging pandemic as a non-tradeoff rather than as a moral, political, or existential necessity. Again, this is not to claim that concern for efficiency is unnecessary or undesirable; however, the unquestioning necessity of framing policy solutions in the language of economic efficiency has and does compound these ongoing imbricated crises. This is a systemic academic failure that stems from uncritical acceptance of efficiency as the supreme economic virtue. Economic work in the confines of these axiological commitments is like running an Olympic marathon as a three-legged race: although it may be possible to complete the race, it will undoubtedly take longer and require more work to reach a conclusion that will likely be disregarded because it was against the rules anyway.

5.2. Synthesis: Prospecption and Economic Policy

The emerging field of agnotology engages questions related to ignorance and doubt. Researchers in the area argue that examining the maintenance of ignorance can reveal important aspects of the ethics and practice of knowledge (Proctor 2008). In this evolving field, Proctor (2008) described the role that maintaining ongoing academic debates can play in preventing the meaningful redress of significant issues. For example, during the COVID-19 pandemic, skeptics justified their unwillingness to get vaccinated by arguing that the long-term consequences of the inoculations were still a matter of scientific controversy (Rutjens et al. 2021). This is an uncomfortable echo of the justifications for inaction regarding economic disruption that is compounded by the genuine belief amongst many economists that market forces will eventually return to equilibrium without interference in the long run. However, Keynes has already provided the most substantive response to the importance of the long term. The question of justification action versus inaction in the sphere of economic policymaking is at the heart of this reflection on economic axiology. This is a centrally communicative question for two reasons: (1) it centers the rhetorical justification of policy, and (2) it centers the subsequent organization of a policy response. The important point here is that the arguments people use to justify policy at the present time become the logical basis upon which those same decision makers begin to tell the story of the future (Boje 2001). Unfortunately, in the realm of economic analysis, there is little room for skepticism regarding the stories that researchers have been telling for decades, and even when there is room for such critical self-reflection, it occurs within the framework of a discipline that positions its work as objective analysis of human behavior. It is the insistence on finding an objective prescription for what ails the economy that stymies action. Rather than treating the academic debate as a question of values, economists frame the debate as one which

insists on divining the policy solution. It is this framework that allows policymakers and the public to indulge their doubts and hope that, in the long run, we will not all be dead.

Understanding the dynamics of these policy debates as a matter of value and not of finding objective truth is paramount to reinvigorating the economic imaginary. Using CTR, [Betts et al. \(2022\)](#) articulated the ways that the stories of disruptive events begin to shape the ways that people think about possible futures. Essentially, in building accounts of the past, people begin to limit their idea of what the future might be able to hold for them. We argue that this is what has happened in the economics discipline, which has mired itself so deeply in the existing approaches to responding to economic disruption that the salient questions of value and the relationship between research and practice become muddled and nonsensical. By beginning to actively have these conversations within the academic and policymaking community, economists can reinvigorate an economic imaginary that can begin to study and address the significant ongoing and evolving problems facing human societies. These conversations have to begin with humility and the reconsideration of the central questions of dominant economic perspectives, but these conversations are part of a necessary exercise of resilience within the discipline itself.

6. Communication Processes for Economic Resilience

In the context of this review of both economic and communication approaches to the question of resilience and systemic recovery, we argue that there are clear theoretical, methodological, and practical warrants for complementing existing economic frameworks with a communicative, social understanding of economic resilience. The central and unique claims of this analysis propose that: (1) economic resilience can be theorized as a social process of organizing and sensemaking; (2) economic resilience can be studied by adapting and crafting methods that explore social dynamism; and (3) economic resilience can be enacted by emphasizing flexible policy solutions and creative, prospective problem solving in social, academic, and political spheres. This framework offers various benefits for adapting and transforming the various contexts in which economic resilience is enacted. For example, as economic research works to grapple with the ecological consequences of current economic arrangements, it is not enough to work towards a single, objective understanding of how climate change will affect economic systems, because it will vary across time, space, and culture in ways that evolve and alter the nature of the disruption itself. It is not enough for economists to work tirelessly toward realizing an optimal solution that might never be realized, because methodologies must be multiplicative and varied just like the disruptions that economic inquiry aims to address. It is not enough for researchers to suppress or deny the imbricated values of their work because economic inquiry must be consciously and critically inseparable from the political debates it informs if it is to create meaningful change.

In addition to the central concepts of communicative sensemaking and adaptive-transformative tensions ([Buzzanell 2018b](#)), CTR centers six communication processes that individuals enact as part of resilience, namely: (1) crafting normalcy, (2) affirming identity anchors, (3) maintaining and using communication networks, (4) putting alternative logics to work, (5) foregrounding productive action/backgrounding negative emotion ([Buzzanell 2010](#)), and (6) resisting the status quo ([Hintz et al. 2022](#)). Given this review and the perspective on economic resilience advanced herein, we present a reframing of these six processes in the language of economic resilience: (1) mitigating harm, (2) articulating values, (3) acknowledging entanglement, (4) investigating alternatives, (5) evaluating (in)action, and (6) embracing transformation (as summarized below in [Table 2](#)). Although the original depiction of the CTR processes in [Buzzanell \(2010\)](#) have utility across disciplinary and contextual bounds, this rearticulation of these processes offers clearer direction for the application of these processes to addressing economic disruption.

Table 2. Summary of communication theory of resilience processes, adaptation, and descriptions.

Communication Processes	Economic Application	Description
Crafting Normalcy	Mitigating Harm	Working to reduce impacts
Affirming Identity Anchors	Articulating Values	Reflecting on value assumptions
Maintaining Communication Networks	Acknowledging Entanglement	Dissolving social–economic distinctions
Employing Alternative Logics	Investigating Alternatives	Considering various response options
Foregrounding Productive Action	Evaluating (in)Action	Rejecting inaction as a default
Resisting the Status Quo	Embracing Transformation	Re-evaluating goals

Much as Buzzanell’s (2010) initial articulation of the original five communication processes of resilience, and the additional sixth from Hintz et al. (2022), is a way for individuals to adapt and transform during times of disruption, we argue that the six processes reimaged above can guide the conversations that occur in policymaking, academic, and social contexts. For policymakers working to address disruptions, prioritizing the mitigation of harm serves as a reminder that people must be alive for policies to matter or have any potential to continue moving forward. For academics analyzing the possibilities of various policy solutions, articulating the values of inquiry can allow for transparent reflection on the assumptions imbedded in theory and method. For people trying to move forward, acknowledging the indivisibility of social and economic experiences reaffirms the necessity to address disruptions. Additionally, beyond the contexts in which people enact economic resilience, these processes can guide the development of economic theory, method, and practice in important ways. For economic theory, when the evidence of experience defies longstanding explanations, it is time to investigate alternative explanations for those phenomena; theory must bow to the evidence of experience. For economic methodology, inaction may be the null hypothesis in statistical analysis, but it is one of many choices that must be evaluated, not presumed as a naturally desirable default. For economic practice, embracing the transformation of economic systems, values, and goals allows for people across institutions to accept that the current organization of economic systems is not the only possible arrangement of economic systems; the existence of a status quo is not an argument for maintaining the status quo.

We do not claim that these six processes collectively guarantee positive outcomes. These are not explicit policy recommendations. Though we have framed these processes in terms of economic resilience, they are still fundamentally communication processes. They are a framework for both analyzing and creating social worlds. This is the essence of a reflexive methodology for understanding economic resilience: the intellectual exercises of identifying disruption, analyzing responses, and creating policy are all part of the resilience process. This includes this review of economic resilience and its synthesis with communicative perspectives. When thinking in terms of social construction and economic policy, the academic act of reviewing economic resilience acts recursively, such that: (1) it facilitates the analysis of how policy actions shape the future, (2) it facilitates the analysis of how academic inquiry shapes policy actions, and (3) it becomes part of the academic inquiry of which it facilitates analysis. This is not an error; it is an acknowledgement that, although we believe that the communicative perspective articulated in this work is unique and heuristically valuable, the enactment of economic resilience can and should mean that it is subject to critique, adaptation, and transformation.

7. Limitations, Future Directions, and Conclusions

It is important to recognize various limitations of this review and the theoretical arguments contained within. First, at many points in the framing of economic viewpoints, we rely upon generalized, monolithic presentations of both orthodox and heterodox perspectives. While there is demonstrable evidence in favor of a unified presentation of economic orthodoxy (Harvey 2020), the same is not true of heterodox perspectives, which comprise a hodge-podge of paradigms of varying ontological, epistemological, and axiological commitments (Harvey 2020). Our presentation of these views as uniformly heterodox is

a simplifying move that, although encompasses the commitments of various schools of thought, cannot account for the multiplicity of paradigms. The boundaries of economic paradigms and their relationship to the frameworks we analyzed in this review are not always clear, but we have worked to offer fair analyses of every perspective even when they are not always easily articulable. Further work that explores possible connections between these varied perspectives would have great utility but is, unfortunately, beyond the scope of this review. Second, this review centers on examples derived from both United States governance and economic structure because their importance to the global economy render them relevant and heuristically useful contexts for examining economic resilience. As we have emphasized throughout this review, contextual and social factors have an enormous impact on the organization, resilience, and construction economic realities (Bajaj et al. 2021), and the centrality of the United States economy has demonstrable effects on our interpretations and analysis in this work. In this way, this work is not intended to operate as an immutable and unwavering indication of what economic resilience is and can be. These ideas are a complement to the extant literature and approaches rather than a dogmatic replacement of them. Moreover, cultural and institutional differences across nations have significant impacts on the ways that individuals, academicians, and policy-makers understand the process of enacting resilience, and although this work has centered examples and contexts from the United States, we believe that economic resilience, as a framework, can enable more insightful conversations regarding these differences than the other perspectives reviewed herein because they represent an overlap between social and other differences that are rarely captured or dramatically simplified in most orthodox economic inquiry. Nonetheless, as we have worked to approach the literature in this review with a fair-minded skepticism, we hope that deeper insights can be gained by further interrogating economic resilience as a framework for addressing economic disruption.

The Federal Reserve's analysis of its own communication practices and monetary policy aims in the Fed Listens program was not unenlightening due to bad faith on the part of the organizers. The researchers and policymakers at the Fed have a sincere interest in working to craft better monetary policy and economic leadership. Unfortunately, the theoretical, methodological, and practical frames the Fed applies to questions of economic resilience are simply not organized to address the entanglement of social and economic worlds; the dynamism and evolution of economic organization; or the necessity for flexibility and transformation in contemporary economies. However, by synthesizing contemporary economic work with ongoing developments in organizational communication theory, specifically, the communication theory of resilience, we argue that economists and communication researchers can engage in the mutually enriching development of theory, method, and policy. Future work embracing this framing can adapt modeling techniques to investigate necessary pre-conditions for the type of policy deliberations and problem-solving advocated in this review. Treating economic resilience as endogenous practices of systemic recovery will facilitate researchers' development of deeper contextual understandings of socio-economic systems which, in turn, becomes a foundation for improving and refining responses to economic disruption. Similarly, communication research can dig into the social and discursive processes at play in both the historical context of general disruptions and in the continually evolving morass of overlapping crises that deepen inequities at the social and economic margins.

At the Fed Listens event in South Dallas, a community advocate invoked the language of resilience to describe the people of her community and the challenges they encounter every day. Instead of beginning with an account of severe economic inequities, she argued that "these discussions would be counterproductive to exploring what this community is really about. This community has remained resilient and hopeful for many, many generations despite adversity" (Dallas Fed 2019). Later, this community advocate posed questions she had previously answered: "how do we empower a community" and "how do we foster an environment of economic opportunity?" Answer: by "organizing" and "demanding a voice at the table" for people who want to "be a part of building a better

place to live". These few words offer the most succinct summary of the ideas in this work possible. Economic resilience is the action and creation of people coming together to craft futures and normalcy. Reckoning with this notion does not necessitate the radical transformation of academic economics or even institutions such as the Fed itself. It only requires that they learn to listen.

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References

- Acharya, Viral V., Lasse H. Pedersen, Thomas Philippon, and Matthew Richardson. 2017. Measuring systemic risk. *The Review of Financial Studies* 30: 2–47. [\[CrossRef\]](#)
- Addo, Fenaba R., and William A. Darity. 2021. Disparate recoveries: Wealth, race, and the working class after the great recession. *The ANNALS of the American Academy of Political and Social Science* 695: 173–92. [\[CrossRef\]](#)
- Agarwal, Vinita, and Patrice M. Buzzanell. 2015. Communicative construction of resilience labor: Identity/identification in disaster-relief workers. *Journal of Applied Communication Research* 43: 408–28. [\[CrossRef\]](#)
- Alejo, Rafael. 2010. Where does the money go? An analysis of the container metaphor in economics: The market and the economy. *Journal of Pragmatics* 42: 1137–50. [\[CrossRef\]](#)
- Ayala, Andrés, Pablo V. Dintrans, Felipe Elorrieta, Claudi Castillo, Claudio Vargas, and Matilde Maddaleno. 2021. Identification of COVID-19 waves: Considerations for research and policy. *International Journal of Environmental Research and Public Health* 18: 11058. [\[CrossRef\]](#)
- Bajaj, Gita, Surabhi Khandelwal, and Pawan Budhwar. 2021. COVID-19 pandemic and the impact of cross-cultural differences on crisis management: A conceptual model of transcultural crisis management. *International Journal of Cross Cultural Management* 21: 569–601. [\[CrossRef\]](#)
- Ban, Cornel, and Kevin Gallagher. 2015. Recalibrating policy orthodoxy: The IMF since the great recession. Governance: An International. *Journal of Policy, Administration, and Institutions* 28: 131–46. [\[CrossRef\]](#)
- Beneria, Lourdes. 2007. Gender and the social construction of markets. In *Feminist Economics of Trade*. Edited by I. van Staveren, D. Elson, C. Grown and N. Cagatay. New York: Routledge, pp. 13–32.
- Berger, Charles R., and Ricahrd J. Calabrese. 1975. Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research* 1: 99–112. [\[CrossRef\]](#)
- Bernanke, Benjamin S., Timothy F. Geithner, and Henry M. Paulson. 2020. *First Responders: Inside the U.S. Strategy for Fighting the 2007–2009 Global Financial Crisis*. New Haven: Yale University Press.
- Berik, Günseli. 1997. The need for crossing the method boundaries in economic research. *Feminist Economics* 3: 121–25. [\[CrossRef\]](#)
- Berik, Günseli, and Yana van der Meulen Rodgers. 2009. Engendering development strategies and macroeconomic policies: What's Sound and Sensible? In *Social Justice and Gender Equality: Rethinking Development Strategies and Macroeconomic Policies*. Edited by Günseli Berik, Yana van der Meulen Rodgers and Ann Zammit. New York: Routledge, pp. 1–43. [\[CrossRef\]](#)
- Betts, Timothy, Elizabeth A. Hintz, and Patrice M. Buzzanell. 2022. Emplotting anticipatory resilience: An antenarrative extension of the communication theory of resilience. *Communication Monographs*. advanced online publication. [\[CrossRef\]](#)
- Bisel, Ryan S. 2010. A communicative ontology of organization? A description, history, and critique of CCO theories for organization science. *Management Communication Quarterly* 24: 124–31. [\[CrossRef\]](#)
- Blanchard, Olivier. 2018. On the future of macroeconomic models. *Oxford Review of Economic Policy* 34: 43–54. [\[CrossRef\]](#)
- Blinder, Alan S. 2013. *After the Music Stopped: The Financial Crisis, the Response, and the Work Ahead*. New York: Penguin.
- Blinder, Alan S. 2018. *Advice and Dissent: Why America Suffers When Economics and Politics Collide*. New York: Basic Books.
- Boje, David M. 1991. Organizations as storytelling networks: A study of story performance in an office-supply firm. *Administrative Sciences Quarterly* 36: 106–25. [\[CrossRef\]](#)
- Boje, David M. 2001. *Narrative Methods for Organizational and Communication Research*. London: Sage.

- Bovari, E., G. Giraud, and F. M. Isaac. 2018. Coping with collapse: A stock-flow consistent, monetary macrodynamic of global warming. *Ecological Economics* 147: 383–98. [CrossRef]
- Buzzanell, Patrice M. 2010. Resilience: Talking, resisting, and imagining new normalcies into being. *Journal of Communication* 60: 1–14. [CrossRef]
- Buzzanell, Patrice M. 2018a. Communication theory of resilience: Enacting adaptive-transformative processes when families experience loss and disruption. In *Engaging Theories in Family Communication*, 2nd ed. Edited by Dawn O. Braithwaite, Elizabeth Suter and Kory Floyd. New York: Routledge, pp. 98–109.
- Buzzanell, Patrice M. 2018b. Organizing resilience as adaptive-transformational tensions. *Journal of Applied Communication Research* 46: 14–18. [CrossRef]
- Buzzanell, Patrice M. 2019. Communication theory of resilience in everyday talk, interactions, and network structures. In *Reflections on Interpersonal Communication Research*. Edited by Steven R. Wilson and Sandi W. Smith. San Diego: Cognella, pp. 65–88.
- Cai, Dongman, and Alice Dignan. 2019. Metaphors and evaluation in popular economic discourse on trade wars. In *Current Approaches to Metaphor Analysis in Discourse*. Edited by Ignasi N. Ferrando. Boston: De Gruyter Mouton, pp. 57–78.
- Callon, Michel. 2007. What does it mean to say that economics is performative? In *Do Economists Make Markets?* Edited by Donald MacKenzie, Fabian Muniesa and Lucia Siu. Princeton: Princeton University Press, pp. 311–57.
- Centeno, Migeul A., Manish Nag, Thayer S. Patterson, Andrew Shaver, and A. Jason Windawi. 2015. The emergence of global systemic risk. *Annual Review of Sociology* 41: 65–85. [CrossRef]
- Clair, Robin P., and Adrienne W. Kunkel. 1998. “Unrealistic realities”: Child abuse and the aesthetic resolution. *Communication Monographs* 65: 24–46. [CrossRef]
- Cole, Alistair, Julien S. Baker, and Dionysios Stivas. 2021. Trust, transparency, and transnational lessons from COVID-19. *Journal of Risk and Financial Management* 14: 607. [CrossRef]
- Costa Lima, Bernardo, Matheus R. Grasselli, Xiang-Sheng Wang, and Jiasong Wu. 2014. Destabilizing a stable crisis: Employment persistence and government intervention in macroeconomics. *Structural Change and Economic Dynamics* 30: 30–51. [CrossRef]
- Dallas Fed. 2019. Fed Listens Community Listening Session [Video]. YouTube. Available online: https://www.youtube.com/watch?v=N988TWC1_o (accessed on 22 March 2022).
- Deetz, Stanley. 1992. *Democracy in an Age of Corporate Colonization: Developments in Communication and the Politics of Everyday Life*. New York: State University of New York.
- DeMartino, George F. 2011. *The Economist’s Oath: On the Need for and Content of Professional Economic Ethics*. Oxford: Oxford University Press.
- Federal Reserve. 2020. Fed Listens: Perspectives from the Public. Available online: <https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf> (accessed on 22 March 2022).
- Fisher, Walter R. 1984. Narration as a human communication paradigm. *Communication Monographs* 51: 1–22. [CrossRef]
- Fisher, Walter R. 1989. Clarifying the narrative paradigm. *Communication Monographs* 56: 55–58. [CrossRef]
- Foster, Chase, and Jeffry Frieden. 2017. Crisis of trust: Socio-economic determinants of European’s confidence in government. *European Union Politics* 18: 511–35. [CrossRef]
- Fourcade, Marion. 2010a. *Economists and Societies: Discipline and Profession in the United States, Britain, and France, 1890s to 1990s*. Princeton: Princeton University Press.
- Fourcade, Marion. 2010b. The United States: An economists’ economy. In *Economists in the Americas*. Edited by Verónica Montecinos and John Markoff. North Hampton: Edward Elgar, pp. 253–73.
- Fourcade, Marion, Etienne Ollion, and Yann Algan. 2015. The superiority of economists. *Journal of Economic Perspectives* 29: 89–114. [CrossRef]
- Frank, Arthur. 1995. *The Wounded Storyteller: Body, Illness, and Ethics*. Chicago: Chicago University Press.
- Friedman, Milton. 1953. *Essays in Positive Economics*. Chicago: University of Chicago Press.
- Friedman, Milton. 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Gonzalez, Andrés D., Airlie Chapman, Leonardo Duenas-Osorio, Mehran Mesbahi, and Raissa M. D’Souza. 2017. Efficient infrastructure restoration strategies using the recovery operator. *Computer-Aided Civil and Infrastructure Engineering* 32: 991–1006. [CrossRef]
- Graeber, David. 2011. *Debt: The First 5000 Years*. Brooklyn: Melville House.
- Grasselli, Matheus, and Bernardo Costa Lima. 2011. An analysis of the Keen model for credit expansion, asset price bubbles and financial fragility. *Mathematics and Financial Economics* 6: 191–210. [CrossRef]
- Gown, Caren, Diane Elson, and Nilufer Cagatay. 2000. Introduction. *World Development* 28: 1145–56. [CrossRef]
- Hagedorn, Sarah. 2004. My father, the “wounded storyteller”: A postchaos narrative. *Qualitative Inquiry* 10: 463–74. [CrossRef]
- Harvey, John T. 2020. *Contending Perspectives in Economics*. Cheltenham: Edward Elgar.
- Hintz, Elizabeth A., Timothy Betts, and Patrice M. Buzzanell. 2022. Caring for patients without personal protective equipment (PPE): Material conditions as multidimensional cascading triggers for resilience processes. *Health Communication*. Advanced online publication. [CrossRef]
- Holmes, Douglas R. 2009. Banking on words. *Cultural Anthropology* 24: 381–419. [CrossRef]
- Holmes, Douglas R. 2013. *Economy of Words: Communicative Imperatives in Central Banks*. Chicago: University of Chicago Press.
- Hynes, William. 2021. A systemic socio-ecological recovery from COVID-19. *Global Social Policy* 21: 335–38. [CrossRef]

- Hynes, William, Benjamin Trump, Patrick Love, and Igor Linkov. 2020. Bouncing forward: A resilience approach to dealing with COVID-19 and future systemic shocks. *Environment Systems and Decisions* 40: 174–84. [CrossRef] [PubMed]
- Kalecki, Michal. 1954. *Theory of Economic Dynamics*. New York: Routledge.
- Kalecki, Michal. 1990. *Capitalism: Business Cycles and Full Employment*. New York: Clarendon Press.
- Keen, Steven. 1995. Finance and economic breakdown: Modeling Minsky's "financial instability hypothesis". *Journal of Post Keynesian Economics* 17: 607–35. [CrossRef]
- Kelton, Stephanie. 2020. *The Deficit Myth: Modern Monetary Theory and the Birth of the People's Economy*. New York: PublicAffairs.
- Kirman, Alan. 2010a. *Complex Economics: Individual and Collective Rationality*. New York: Routledge.
- Kirman, Alan. 2010b. The economic crisis is a crisis for economic theory. *CESifo Economic Studies* 56: 498–535. [CrossRef]
- Klamer, Arjo, and David Colander. 2019. *The Making of an Economist*. New York: Taylor & Francis.
- Koenig Kellas, Jody. 2018. Communicated narrative sense-making theory: Linking storytelling and well-being. In *Engaging Theories in Family Communication*, 2nd ed. Edited by Dawn O. Braithwaite, Elizabeth A. Suter and Kory Floyd. New York: Routledge, pp. 62–74.
- Kuhn, Thomas. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kyland, F. E., and C. E. J. M. Zarazaga. 2016. Fiscal sentiment and the weak recovery form the Great Recession: A quantitative exploration. *Journal of Monetary Economics* 79: 109–25. [CrossRef]
- Lawson, Tony. 1997. *Economics and Reality*. New York: Routledge.
- Lawson, Tony. 2008. What has realism got to do with it? In *The Philosophy of Economics: An Anthology*, 3rd ed. Edited by Daniel. M. Hausman. Cambridge: Cambridge University Press, pp. 439–53.
- Lawson, Tony. 2010. Ontology, modern economics, and pluralism. In *Economic Pluralism*. Edited by Rob F. Garnett, Erik K. Olsen and Martha Starr. New York: Routledge, pp. 99–113.
- Lawson, Tony. 2017. What is wrong with modern economics and why does it stay wrong? *Journal of Australian Political Economy* 80: 26–42.
- Long, John B., and Charles I. Plosser. 1983. Real business cycles. *Journal of Political Economy* 91: 39–69. [CrossRef]
- Lucas, Robert E. 2003. Macroeconomic priorities. *American Economic Review* 93: 1–14. [CrossRef]
- Lucas, Kristen, and Patrice M. Buzzanell. 2012. Memorable messages of hard times: Constructing short-term and long-term resilience through family communication. *Journal of Family Communication* 12: 189–208. [CrossRef]
- Mackenzie, Donald A. 2006. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge, MA: MIT Press.
- MacKenzie, Donald A., and Y. Millo. 2003. Constructing a market, performing theory: The historical sociology of a financial derivatives exchange. *American Journal of Sociology* 109: 107–45. [CrossRef]
- Mäki, Uskali. 2002. *Fact and Fiction in Economics: Models, Realism, and Social Construction*. Cambridge: Cambridge University Press.
- McCloskey, Deidre. 1998. *The Rhetoric of Economics*, 2nd ed. Madison: University of Wisconsin Press.
- McCloskey, Deidre. 2008. *The Cult of Statistical Significance: How the Standard Error Cost Us Jobs, Justice, and Lives*. Ann Arbor: University of Michigan Press.
- Minsky, Hyman. 1982. The Financial Instability Hypothesis. Jerome Levy Economic Institute of Bard College (Working Paper, No. 74). Available online: <https://www.levyinstitute.org/pubs/wp74.pdf> (accessed on 22 March 2022).
- Mirowski, Philip. 2013. *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown*. London: Verso.
- Mirowski, Philip, and E. Nik-Khah. 2017. *The Knowledge We Have Lost in Information: The History of Information in Modern Economics*. Oxford: Oxford University Press.
- Nelson, Charles R., and Charles I. Plosser. 1982. Trends and random walks in macroeconomic time series: Some evidence and implications. *Journal of Monetary Economics* 10: 139–62. [CrossRef]
- Nyman, Rickard, Sujit Kapadia, and David Tuckett. 2021. News and narratives in financial systems: Exploiting big data for systemic risk assessment. *Journal of Economic Dynamics and Control* 127: 1–28. [CrossRef]
- Pasupathi, Monisha. 2001. The social construction of the personal past and its implications for adult development. *Psychological Bulletin* 127: 651–72. [CrossRef] [PubMed]
- Power, Marilyn. 2004. Social provisioning as a starting point for feminist economics. *Feminist Economics* 10: 3–19. [CrossRef]
- Price, Gregory N., and Rhonda V. Sharpe. 2020. Is the economics knowledge production function constrained by race in the USA? *Journal of the Knowledge Economy* 11: 614–29. [CrossRef]
- Proctor, Robert. N. 2008. Introduction. In *Agnotology: The Making and Unmaking of Ignorance*. Edited by Robert N. Proctor and Londa Schiebinger. Redwood City: Stanford University Press.
- Romer, Paul. 2015. Mathiness in the theory of economic growth. *American Economic Review: Papers & Proceedings* 105: 89–93. [CrossRef]
- Romer, Paul. 2016. *The Trouble with Macroeconomic (Working Paper)*. New York: New York University.
- Rutjens, Bastiaan T., Sander van der Linden, and Romy van der Lee. 2021. Science skepticism in times of COVID-19. *Group Processes & Intergroup Relations* 24: 276–83. [CrossRef]
- Rutter, Michael. 1999. Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy* 21: 119–44. [CrossRef]
- Shiller, Robert J. 1987. *Investor Behavior in the October 1987 Stock Market Crash: Survey Evidence*. National Bureau of Economic Research Working Paper. Cambridge: National Bureau of Economic Research. [CrossRef]
- Shiller, Robert J. 2019. *Narrative Economics*. Princeton: Princeton University Press.

- Skodol, Andrew E. 2010. The resilient personality. In *Handbook of Adult Resilience*. Edited by John W. Reich, Alex Zautra and John S. Hall. New York: Guilford Press.
- Skorzynska, Hanna, and Alice Deignan. 2006. Readership and purpose in the choice of economics metaphors. *Metaphor and Symbol* 21: 87–104. [CrossRef]
- Smeeding, Timothy M., Jennifer Romich, and Michael R. Strain. 2021. The long recovery from the great recession: An introduction. *The ANNALS of the American Academy of Political and Social Science* 695: 8–26. [CrossRef]
- Sparviero, Sergio. 2010. Understanding the problematic relationship between economics and communication studies and potential solutions. *Javnost* 17: 27–43. [CrossRef]
- Tcherneva, Pavlina R. 2020. *The Case for a Job Guarantee*. Cambridge: Polity.
- Trump, Benjamin D., Todd S. Bridges, Jeffrey C. Cegan, Susan M. Cibulsky, Scott L. Greer, Holly Jarman, Brandon J. Lafferty, Melissa A. Surette, and Igor Linkov. 2020a. An analytical perspective on pandemic recovery. *Health Security* 18: 250–56. [CrossRef]
- Trump, Benjamin D., Igor Linkov, and William Hynes. 2020b. Combine resilience and efficiency in post-COVID societies. *Nature* 588: 220–21. [CrossRef]
- Tuckett, David, Douglas R. Holmes, Alice Pearson, and Graeme Chaplin. 2020. Monetary Policy and the Management of Uncertainty: A Narrative Approach (Working Paper No. 13). Rebuilding Macroeconomics. Available online: <https://www.rebuildingmacroeconomics.ac.uk/narrative-theory-of-monetary-policy> (accessed on 22 March 2022).
- Wang, Haidong, Katherine R. Paulson, Spencer A. Pease, Stefanie Watson, Haley Comfort, Peng Zheng, and Aleksandr Y. Aravkin. 2022. Estimating excess mortality due to the COVID-19 pandemic: A systematic analysis of COVID-19-related mortality 2020–2021. *The Lancet*. advanced online publication. [CrossRef]
- Weick, Karl E. 1969. *The Social Psychology of Organizing*. Boston: Addison-Wesley.
- Weick, Karl E. 1976. Educational organizations as loosely coupled systems. *Administrative Science Quarterly* 21: 1–19. [CrossRef]
- Weick, Karl E. 1995. *Sensemaking in Organizations*. Boston: Sage.
- Wildman, Steven S. 2008. Communication and economics: Two imperial disciplines and too little collaboration. *Journal of Communication* 58: 693–706. [CrossRef]
- Zeng, Winnie H., Christian Burgers, and Kathleen Ahrens. 2021. Framing metaphor use over time: ‘Free economy’ metaphors in Hong Kong political discourse (1997–2017). *Lingua* 252: 102955. [CrossRef]
- Zhang, Stephen X., Francisco Arroyo Marioli, Renfei Gao, and Senhu Wang. 2021. A second wave? What do people mean by COVID waves?—A working definition of epidemic waves. *Risk Management and Healthcare Policy* 14: 3775–82. [CrossRef]