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Introducing systems- and complexity-informed evaluation

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Abstract

For the last several decades and recently amidst the COVID-19 pandemic, many in the global evaluation communities call for shifts from linear, reductionist ways of thinking and working to approaches that embrace systems and complexity. In this introductory chapter, we orient readers to key systems and complexity traditions and terms and how these have been put to use in the evaluation field. Doing so provides a foundation from which to engage with the subsequent chapters. We close this chapter with highlights from the case examples featured in this issue.

INTRODUCTION

The COVID-19 pandemic has upended social institutions and processes worldwide and compelled humanity to face the inherent uncertainty and continual change that affect our immediate and lasting well-being. Governments, philanthropic foundations, nonprofit groups, and others work rapidly to assess and respond to immediate needs for direct services and to redesign and modify large-scale systems. Evaluation has a crucial role to play in these response efforts. In order for evaluation to adequately contribute, some argue that new ways of thinking and practicing evaluation are needed, as illustrated in the excerpt below written in the international aid and development context:

> Applying locally-led, politically-informed and adaptive forms of MERL [Monitoring, Evaluation, Research and Learning] in the COVID-19 context and beyond requires a shift in mindset and approaches. Situations of complexity, in which it is difficult to predict the relationships between cause and effect,

> do not lend themselves to linear approaches and fixed indicators. Instead, they require 'navigation by judgement', ongoing learning and adaptation and greater privileging of local knowledge, and of the perspectives of those who are often excluded. Rather than being focused on upwards accountability, simple numbers and good news stories, the core function of MERL in this context is to support a better understanding – in real-time – of the changing operating context, to generate learning about the immediate impact of policy and program responses and their longer-term effects, and to inform decision making by front line staff (Tyrrel et al. 2020, p. 3).

One approach to this "shift in mindset and approaches" (Tyrrel et al., 2020, p. 3) has been a turn to systems thinking and complexity science (STCS) among scholars, practitioners, commissioners, and others in the global evaluation communities.

Although circumstances surrounding the COVID-19 pandemic have sparked or amplified this turn for some, interest in the systems and complexity fields has been underway for over three decades in the evaluation field. Beginning in the late 80s and early 90s, practitioners in the United Kingdom began applying concepts, as well as theories and methodologies, from the systems fields to the practice of evaluating social policies and programs (Gregory & Jackson, 1992; Midgley, 1996; Ulrich, 1988). In the United States, the 2002 American Evaluation Association (AEA) meeting included a gathering of systems and evaluation practitioners that culminated in the publication of the *Systems Concepts in Evaluation Anthology* (Williams & Imam, 2007). Some of those involved formed the Systems in Evaluation Topical Interest Group within AEA. There has since been a flurry of books on systems- and complexity-related topics in evaluation (e.g., Forss et al., 2011; Morell, 2010; Parsons et al., 2019; Patton, 2011; Wolf-Branigin, 2013). Systems and complexity have been featured in themes of evaluation voluntary organizations for professional evaluation and highlighted as subjects of interest in flagship evaluation journals. There are monographs, briefs, blogposts, and other materials put out by evaluation commissioners, such as the latest appendix dedicated to complexity in evaluation in the United Kingdom's Magenta Book that provides guidance for evaluating policy (Bicket et al., 2020).

This issue broadly focuses on the trend of systems- and complexity-informed evaluation—the use of ideas (i.e., theories, concepts, ways of thinking) and/or practices (i.e., methods, approaches) adapted from the systems and complexity fields and used in the evaluation field. The systems and complexity fields include the areas of research and practice concerned with systems, such as systems science, cybernetics, operational research, complexity theory and science, among others. Within the systems and complexity fields, there are different schools of thought that differ and disagree about some of the fundamental assumptions and approaches to researching systems and complexity. However, evaluators working within this banner are drawing on a variety of concepts and methods from within the systems and complexity fields and applying them to different aspects of evaluation practice. This creates tremendous variation within systems- and complexity-informed evaluation. Yet, for many in the evaluation field, systems and complexity remains one banner calling attention to shifts from traditional linear and reductionist ways of thinking and practicing evaluation.

Those outside the banner, who may or may not see variation, wonder whether and what difference systems- and complexity-informed evaluation makes for evaluation theory and practice. Like other trends in the evaluation field, there are champions, skeptics, those pragmatically awaiting to see what all of the fuss is about, and those who hold a blend of these views. Yet, there has been little research that takes stock of what has been learned across applications of STCS in evaluation (Gates, 2016, 2017; Mowles, 2014; Walton, 2014, 2016). This leads to confusion and contradictory claims about what systems- and complexity-informed evaluation entails, whether and how it's different from traditional evaluation, and whether and how these differences make a difference in the real circumstances in which evaluations are conducted. Furthermore, a lack of research on evaluation on this topic poses risks for systems- and complexity-informed evaluation becoming a passing fad rather than a substantive shift within the evaluation field.

This issue responds to questions in the field about what difference systems and complexity approaches make for evaluation in practice. By taking a global and interdisciplinary scope and including a balance of cases from government, philanthropic, and private evaluation work, the issue intends to capture the attention and interest of varied audiences within evaluation. Those new to STCS will find useful overviews of the field and key terminology as well as rich practical examples. Those engaged in systems- and complexity-informed evaluation in some manner, whether as commissioners, evaluators, or stakeholders, will hear from those at the forefront about their successes, challenges, and lessons learned. Regardless of prior knowledge, this issue sheds light on an area of practice that has become trendy yet lacking in accessible examples.

In this introductory chapter, we orient readers to key system and complexity traditions and terms and how these have been put to use in the evaluation field. Doing so provides a foundation from which to engage with the subsequent chapters. We close this chapter with highlights from the subsequent case examples.

SYSTEMS AND COMPLEXITY TRADITIONS AND TERMS

Systems and complexity traditions are a set of fields, disciplines, and areas of research and practice that focus on the study of systems and complexity. These traditions have developed over a similar time frame as the evaluation field, with similar concerns and evolutions in theory and practice marking their development (Midgley, 2007; Picciotto, 2020). *Systems* and *complexity* often appear together when discussed in the evaluation field, yet refer to distinct fields and schools of thought. There is no agreement on whether complexity falls under the umbrella of systems fields or whether it stands apart (Reynolds et al., 2012). Although the core areas of the complexity field—complexity theory, complexity science, and complex adaptive systems—are closely tied to systems and can therefore be arguably put under the systems field umbrella, some view complexity as a distinct field with complexity-specific research journals, professional conferences, and areas of practice.

Systems traditions

Systems thinking emerged in various disciplines as a holistic approach to the phenomena of interest within that discipline. For example, Capra and Luisi (2014) examine the emergence of systems thinking in organismic biology, Gestalt psychology, ecology, and physics. Systems thinking meant ways of thinking about connectedness, relationships, patterns, and context among other implications. Systems thinking also led to the development of subdisciplines including "practical holism, general systems theory, operations research, complexity sciences, first order cybernetics, second-order cybernetics, and inter-disciplinary systems sciences" (Ison, 2010, p. 29). Across these more traditional and systems-centered disciplines, various systems communities have arisen including systems analysis, systems biology, whole earth systems, systems engineering, farming systems, complex adaptive systems, systems ecology, system dynamics, social systems, systemic family therapy, information systems, management sciences, management learning, management cybernetics, systemic complexity, applied systems, systems agriculture, critical systems, and critical systems heuristics (Ison, 2010).

People tracking the historical development of systems thinking have identified three major developments, often referred to as "hard," "soft," and "critical" systems thinking (Midgley, 2007). Each one of these developments is associated with philosophical assumptions about the nature of systems and the role of systems theorists and practitioners. What matters for our understanding of systems traditions is the notion that these developments were influenced by philosophical debates about ontological traditions (systems as representing real-world entities) and epistemological traditions (systems as learning devices to inquire about real-world entities) (Reynolds & Holwell, 2020).

First-wave approaches developed during the post-World War II decades including general system theory (Von Bertalanffy, 1968), cybernetics (Ashby, 1956; Weiner, 2019), system dynamics (Forrester, 1961; Sterman, 2000), and complexity science (Weaver, 1948) view the models of systems they create as representations, although imperfect, of reality. Second-wave systems approaches view systems not as representations of reality, but as heuristic tools to aid intersubjective understanding, promote dialogue, build shared understandings of situations, and accommodate diverse perspectives. Third-wave approaches, such as critical systems heuristics (Ulrich & Reynolds, 2010), take as their starting point the second-wave view of systems as social constructs that are useful for understanding situations, but critique second-wave approaches for failing to pay sufficient attention to how power relationships can distort participatory processes and for failing to consider the larger social structures that generate unjust outcomes.

Systems traditions also can be thought of in terms of various theories and approaches. Systems theories identified by Capra and Luisi (2014) include tektology, general systems theory, cybernetics, feedback, information theory, and self-organization (see Chapter 5). Major systems approaches discussed by Williams and Hummelbrunner (2011) include causal loop diagrams, system dynamics, social network analysis, outcome mapping, process monitoring of impacts, strategic assumption surfacing and testing, strategic area assessment, the containers, differences, and exchanges model, assumption-based planning, cynefin, solution focus, viable system model, cultural historical activity theory, soft systems methodology, scenario technique, systemic questioning, circular dialogues, and critical systems heuristics. In sum, systems traditions are concerned with studying and intervening in a complex world.

Complexity traditions

The study of complexity came about in a variety of disciplines as early as the 1920s when scholars and scientists found limitations with Newtonian science for studying the behavior of some kinds of systems (Capra & Luisi, 2014). Core assumptions of Newtonian science include reductionism (i.e., understanding the whole through careful study of the parts), linearity (i.e., outputs follow chronologically and proportionately to inputs), and predictability (i.e., by studying the influence of parts effects can be predicted). Efforts to apply complexity theory to the social sciences began in the 1990s—books published at similar times combined insights from mathematics of chaos and complexity with social theory, including Luhman's social systems theory (Cilliers, 1998), evolutionary theories (Kauffman, 1995), and Bhaskar's critical realist philosophy of science (Byrne, 1998). Over a similar period, insights from complexity theory and the sciences were applied to organizational management (Stacey, 1996), health (Plsek & Greenhalgh, 2001), public administration (Morçöl, 2002), and evaluation (Eoyang & Berkas, 1999). Each new application reviewed and interpreted the features of complex systems identified in the natural sciences, with a translation through to method. It is fair to say that use of complexity science within social science and evaluation is still developing, at both a theoretical and methodological level, as seen in the regularly updated visual map of the complexity sciences by Brian Castellani (2018) and numerous publications (Bicket et al., 2020; Byrne & Callaghan, 2014; Byrne & Ragin, 2009; Capra & Luisi, 2014; Gerrits & Marks, 2017; Geyer & Cairney, 2015; Kaplan et al., 2017; Williams, 2020). The degree to which method is informed by both complexity science and social theory is variable.

Systems and complexity terms

This section defines three main terms—system, complexity, and systems thinking—by providing definitions and references for each term. There are no widely agreed on meanings—terms are used differently across areas of study and theorists (Buckle Henning & Chen, 2012). We present these definitions so readers will have a working understanding of the terms when they read the subsequent chapters in this issue. Furthermore, these definitions afford an opportunity to acknowledge the distinctions or variations in meaning within each term.

System

A simple yet widespread use of *system* refers to a set of interrelated elements that interact to achieve a purpose (Ackoff, 1971; Hieronymi, 2013; Meadows & Wright, 2008). Purposes can be inherent (i.e., permanent, essential, or affixed) or ascribed (i.e., subject to interpretation by someone). For example, a set of books pulled at random from the shelves at a library is not a system. That same set of books brought home and alphabetized on a shelf is a system because alphabetization has created an interrelationship between the books (elements). The purpose, in this case, of alphabetical organization is an increased ease of finding a particular book. This definition of a *system* has three distinctions:

1. **Systems as ontological**: A set of interrelated elements that interact to achieve an inherent purpose. According to this definition, systems are real (ontological) entities with inherent purposes. For example, the human visual system consists of eyes, optic nerves, and the visual cortex, the interaction of which enables the transformation of visible light signals into cognitive representations of the immediate environment.
2. **Systems as epistemological**: A conceptually constructed set of interrelated elements that interact to achieve an ascribed purpose. According to this definition, systems have no ontological status. They are simply mental constructs that promote reflection, dialogue, and intersubjective understanding about a situation of interest. No claim is made that the system accurately represents a particular situation.
3. **Systems as ontological and epistemological**: Systems are ontological, but our ability to understand and make sense of them is epistemological—a complex, critical realist position.

Complexity

There is no one definition of complexity, but, in our view, there are five distinct meanings depending on whether complexity is used as: (1) a property of systems; (2) a property of the way systems change over time; (3) a property of situations; (4) a frame of reference; or (5) a way of referring to restricted or general complexity.

For a literature-based, visual representation of complexity-related terms, see Melo et al., 2020.

1. **Property of systems**: A complex system is one where the whole, all the elements and their interrelationships, is greater than the sum of the parts due to nonlinearity and emergence, as well as other attributes (Byrne & Callaghan, 2014, p. 4). Nonlinearity refers to the output as being not directly proportional to the inputs, and emergence refers to properties of the complex system that cannot be reduced to the parts and interactions of the parts alone. Complexity in reference to systems is similar to what Midgley (2016) labels natural world complexity of "what is" where the ideal of inquiry is truth.
2. **Property of how systems and/or situations change over time**: A related line of complexity scholarship focuses on how systems change over time and, particularly, the causal mechanisms and processes that work to produce changes over time. For example, from chaos theory is the concept of initial conditions, where differences in the starting point of a system can cause large differences over time (Rickles et al., 2007). This has implications for comparing impacts of a program across different communities, as features of each community are part of the complex system from which impacts emerge, as is the program. There are multiple concepts of how complex systems change over time that could translate into both program theory of change and design of evaluation to identify and track change.
3. **Property of situations**: Complexity refers to the interrelationships that influence a problematic situation and the plurality of values interests, meanings, and perspectives associated with the situation. Complexity in reference to situations can occur at the level of a group or individual. This includes two domains of complexity in Midgley's (2016) work: social complexity regarding different perspectives, norms, and visions of "what ought to be" and subjective complexity regarding what an individual is thinking, intending, or feeling.
4. **Frame of reference**: Complexity can also be used more broadly to refer to a scientific paradigm—a framework containing assumptions, ways of thinking, and methodologies that is distinct from Newtonian science, as in the work of Byrne and Callaghan (2014). This could also include what Midgley (2016) refers to as the complexity of the interactions between elements of natural, social, and subjective complexity in the context of research and intervention practice. In this use, complexity serves not only as a frame of reference for what to apply but also to the processes of application.
5. **Restricted versus general complexity**: Restricted complexity tends to move from micro understandings of the elements or agents within systems to understandings of macro-level emergent properties, patterns, or behaviors. Restricted complexity assumes "simple rules" can be identified that structure emergent patterns from micro interactions. There is also a more general sense of complexity that conceives of social reality as emergent but not simply based on emergence from the agents and interactions that comprise the system (see Chapter 2 of Byrne & Callaghan, 2014). General complexity views such micro interactions as only one part of how emergent patterns are created.

These distinctions overlap somewhat with those made by Midgley (2016) in the areas of natural, social, subjective, and interactive complexity; therefore, we include those descriptions within this list. However, some may challenge our choice to incorporate his list with ours and argue that it offers a different way to delineate complexity altogether.

Systems thinking

With thousands of systems approaches, hundreds of systems theorists, and influences across disciplines ranging from biology to ecology to engineering, it is not a surprise that there is no one systems thinking approach. Even so, for our purposes, we identify four distinct meanings.

1. **Focusing on wholes rather than parts**: At its core and most basic definition, systems thinking means focusing on wholes rather than parts. As a contrast to the Western scientific method that analytically reduces phenomena to separate parts (i.e., reductionism) and how these parts each function (i.e., mechanism) to understand the phenomena, systems thinking begins with the whole and attempts to understand parts within the context of the whole.
2. **Systems theories, methods, approaches, or tools**: A classic meaning of systems thinking refers to the set of theories, methods, approaches, or tools that fall within the systems fields.
3. **Ways of thinking and/or being**: A cognitive process of countering traps in traditional thinking—specifically, countering traps of reductionism with holism, dogmatism with pluralism, and countering the subsequent traps of holism and pluralism with making boundary judgments (Holwell & Reynolds, 2010).
4. **Use of systems concepts**: A popular use of systems thinking in evaluation means using systems concepts, as in interrelationships, perspectives, and boundaries (Williams & Hummelbrunner, 2011); distinctions, systems, relationships, and perspectives (Cabrera & Cabrera, 2010); or containers, differences, and exchanges (Eoyang & Holladay, 2013).

VARIATIONS OF SYSTEMS- AND COMPLEXITY-INFORMED EVALUATION

Evaluators promoting and conducting systems- and complexity-informed evaluations draw on different aspects of these traditions, use variations of these and other terms, and apply them to issues and features of evaluation practice. This means that there is not one theory or way of practicing evaluation. Moreover, trends continue to change, leading to continual variation. To provide readers with a sense of what systems- and complexity-informed evaluation is all about, we outline five overarching ways these ideas are being taken up within the field. We identify these trends from our vantage points based on the literatures we read and review and our knowledge of current practices. The list is admittedly partial, and the trends are not mutually exclusive. Caveats aside, we identify the following five trends within systems- and complexity-informed evaluation: (1) relabeling what we already do as evaluators; (2) using concepts, principles, methods, and tools to evaluate interventions as/within systems; (3) systems thinking as a way of thinking, being, and acting as evaluators; (4) evaluation practice to foster innovation, system change, and/or ongoing learning and adaptation; and (5) transforming the role, activity, or field of evaluation itself.

First, some evaluators are simply rebranding or recasting what they do as evaluations of systems or complex interventions. The terms systems and complexity have appeared in the evaluation literature since the origin of the evaluation field. For example, early evaluation theorists including Lee Cronbach, Robert Stake, and others discussed the complexity of programs and their contexts and the need for evaluators and evaluations to acknowledge the ways social, economic, and political systems influence these programs. Evaluators use systems and complexity terms to refer to the real-world circumstances in which evaluators work and without any theoretical or methodological implications. For example, when evaluators talk about systems-level or systems-oriented evaluations that focus on units of analysis larger than programs or organizations without any conceptual underpinning to defining the evaluand as a system. Similarly, when evaluators claim that an evaluation focuses on a complex intervention because the intervention has multiple, interrelated parts whose interactions produce patterns that are confusing or difficult to discern, this uses the everyday understanding of complex. There is nothing wrong with using the labels “system” and “complex,” but the casual or commonplace use of these terms in evaluation should be clearly distinguished from evaluations that do draw on the STCS fields.

Second, evaluators are using methods, approaches, and theories to evaluate interventions as/within systems (e.g., Hawe et al., 2009; Moore et al., 2019). In public health, there are numerous examples of scholars calling for the use of systems science methods, particularly system dynamics, agent-based modeling, and social network analysis. Examples include Luke and Stamatakis (2012) who explain the utility of system dynamics, social network analysis, and agent-based modeling for research in public health; Rosas and Knight (2019) who document their case application of a systems-oriented approach to evaluation using group modeling, viable systems model, and social network analysis; and a recent commentary by Rosenthal et al. (2020) that advocates the use of systems science methods in global environmental health research, specifically regarding household air pollution and water, sanitation, and hygiene programs. See Carey et al. (2015) for a systematic review and Chughtai and Blanchet (2017) for extensive references on systems thinking and systems science in public health. Distinct from the use of entire methodologies or approaches, Westhorp (2012) and others have argued for combining complexity theory, realist philosophy of science, and substantive theories that speak to the causal mechanisms that explain how and why interventions work. To do so, complexity theory and realist evaluation provide the overarching frame of reference that view “reality as comprising multiple, nested, open systems in which change is generative, context dependent and time irreversible” (Westhorp, 2012, p. 406).

Third, evaluators can embody systems thinking as a way of thinking, being, and acting. Cabrera and Cabrera (2010) distill systems thinking into four interrelated, cognitive rules: distinguishing ideas (i.e., distinctions); examining parts and wholes in relation (i.e., systems); relating ideas (i.e., relationship); and viewing an idea or thing from differing points of view (i.e., perspectives). For them, systems thinking exists at the interplay of these rules applied to think about, study, or discuss some phenomenon of interest. In *Systems Concepts in Action*, Williams and Hummelbrunner (2011) discuss thinking systemically as demonstrating an understanding of interrelationships, commitment to multiple perspectives, and awareness of boundaries. They then distinguish a way of being from systemic thinking to refer to how people orient themselves to the world and the situations they interface with. Features of being systemic include being reflective, trusting in self-organization, assuming evolution, acting in a responsible manner, being a part of the world, and anticipating the reactions to one’s actions and acting accordingly (i.e., acting circular) (Williams & Hummelbrunner, 2011).

Ray Ison’s (2017) work, *Systems Practice: How to Act in Situations of Uncertainty and Complexity*, exemplifies this interconnected way of thinking, being, and acting. He conceives of inquiry as a relationship between a researcher/practitioner; situations of interest; their mental models of this situation; and approaches for understanding and acting in this situation. Although Ison (2017) and Williams and Hummelbrunner (2011) are not specific to evaluation, they are evident in the principles for systems-oriented evaluation developed by the AEA’s Systems in Evaluation Topical Interest Group (TIG) (Systems in Evaluation TIG, 2018). Oriented around four systems concepts (i.e., interrelationships, perspectives, boundaries, and dynamics), the principles provide guidance for how to think, be, and act when designing and conducting evaluations. Other examples draw on critical systems thinking as reflexive practice. Gates (2018) writes about using critical systems heuristics as a way of valuing within evaluations by carefully attending to inclusion, exclusion, and marginalization. Similarly, Torres-Cuello et al. (2018) blend fourth-generation evaluation and boundary critique to theorize an evaluation process in which evaluators and stakeholders examine and negotiate the boundaries to be used throughout the evaluative process.

Fourth, evaluation practice that draws on STCS can aim to foster innovation, system change and transformation, and/or ongoing learning and adaptation. Patton's (2011) *Developmental Evaluation* provides an early example of this. The approach challenges the classic distinction between formative and summative and the long-assumed unit of analysis for an evaluation as an intervention (e.g., policy, program) and recasts evaluation as an ongoing process of supporting innovation in complex and changing circumstances. His more recent *Principles-focused Evaluation (2018)* and *Blue Marble Evaluation (2019)* similarly conceive of evaluation as activities within ongoing change efforts. In the philanthropic sector across intervention areas, there is attention to systems change, described by Abercrombie et al. (2015) as:

> An intentional process designed to alter the status quo by shifting the function or structure of an identified system with purposeful interventions. It is a journey which can require a radical change in people's attitudes as well as in the ways people work. Systems change aims to bring about lasting change by altering underlying structures and supporting mechanisms which make the system operate in a particular way. These can include policies, routines, relationships, resources, power structures and values (p. 9).

This has spurred various applications of STCS within guides to evaluate system change initiatives (e.g., Cabaj, 2018; Hargreaves, 2010; Poth et al., 2016). In other areas, a shift to human learning systems is occurring to convey public management that emphasizes continuous learning and adaptation and a focus on leaders monitoring and altering systems to produce better outcomes (Knight et al., 2017; Lowe & Plimmer, n.d.). In system change and human learning systems, evaluation becomes part of a collection of strategies for data use and ongoing learning.

Fifth, systems and complexity can be applied to transform the role, operating environment, or field of evaluation itself. Robert Picciotto (2020), former director to the Independent Evaluation Group of the World Bank, argues "a gradual, yet revolutionary, transformation has begun regarding what evaluation should examine; what kind of questions it should address; how these questions should be structured; how answers should be sought; and how the results should be interpreted" (p. 59). He goes on to point out that evaluation is embedded within an "operating environment" – "the ever-changing ideas and discourses that dominate decision making in the public sphere" that provoke such changes (p. 59). He argues that this operating environment needs to change to create the conditions that support the kinds of questions, methods, and uses being sought through evaluation. Beverly Parsons (2020), in a presidential strand at the 2020 American Evaluation Association conference and a forthcoming book, argues for shifting the role of evaluation in society from a process that functions within hierarchical, industrial age systems to living systems. She argues that the field's foundational assumptions about social and economic systems derive from the Industrial Age and are based on science's view of nature as a machine. These assumptions within the field should shift to acknowledging the planet as a whole as a living, self-organizing system. A third example is the work of Schwandt & Gates

(2021) who expand the classic definition of evaluation as a process of combining values and evidence to render evaluative judgments of merit, worth, or significance and argue for evaluation to more broadly encompass practices that systematically bring together values and evidence to inform learning and action. This shift—from determining to developing value—expands evaluation from an activity culminating in an evaluative judgment (i.e., how well did we do) to a continuing, co-constructed process of evaluative learning and deliberating (i.e., what should we do next).

CONCLUSION

The systems and complexity fields present the evaluation field with a breadth and depth of theories, methodologies, approaches, and practices that can be translated and applied within evaluations. This chapter provided an initial introduction to systems and complexity traditions and three core concepts used—system, complexity, and systems thinking. These provide a starting place to further engage with these fields.

Over the past 30 years, systems- and complexity-informed evaluation has moved from a trend in the field to established practice in some areas. From our vantage point, we identify five trends within the broad banner of systems- and complexity-informed evaluation. Putting the first aside (i.e., relabeling what we already do), two trends point to the potential to enhance theory and methods used within evaluations and understand and enact one's role as an evaluator. These can be carried out within a traditional conception of evaluation. Then, there is a trend to shift evaluation from a focus on bounded interventions to supporting innovation, system change, and ongoing learning and adaptation. Lastly, and most drastically, some scholars argue for evaluation as a field to be altered in conjunction with its embrace of STCS. Although it is continuously important to take stock of where the field is at in its understanding and use of STCS, this in itself does not provide sufficient depth or guidance to those looking to learn about or conduct systems- and complexity-informed evaluation. The remaining chapters in this issue provide glimpses into what such practices look like and where they might be further developed.

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