Rethinking the Moral Compass for Evaluation

Thomas A. Schwandt, Ph.D.
Professor Emeritus, University of Illinois at Urbana-Champaign

Invited presentation:
Center for Evaluation Innovation, 2019 Evaluation Roundtable
April 11, 2019
Eden Prairie, MN

I have been asked to offer some thoughts on the practice of evaluation in uncertain times. By uncertain times I mean a sense of confusion, contradiction and ambiguity about what it means to act with purpose in the world. Cultures seem at war with one another, there is deep division over values, facts seem to be of little relevance in debates about social direction, and we are wrestling with complex, nonlinear, and often unpredictable interrelationships between social, political and environmental issues.

The term 'postnormal' captures this sense. It was first introduced in science in 1993 to signify that science was no longer functioning in the 'normal' way. That is, with a rather straightforward link between scientific evidence and policymaking. Postnormal was the term used to point out that at the intersection of policymaking and science, facts are uncertain, complexity is the norm, values are in dispute, stakes are high, decisions are urgent and there is a real danger of man-made risks running out of control. Currently, postnormal times is a phrase used to indicate that we are in an in-between period where old orthodoxies are dying, and new ones have yet to fully emerge. Times best characterized by complexity, contradictions and, occasionally, chaos.

Specifically, I am concerned with the normative or moral compass of evaluation in these times. Normativity is the experience of designating some actions or outcomes as good, right or desirable and others as bad, wrong or undesirable. So, for our purposes the key question is 'What actions and outcomes in evaluation are good and desirable? What should evaluators do?'

This is not simply a matter of professional ethical behavior, that is, being honest and transparent, having respect for others, exercising professional autonomy and so forth. This is an important and related topic, but not my focus today. In addition, a focus on the moral compass of evaluation is more than a matter of the role and identity of the individual evaluator; rather, it

is about the role and identity of the profession or the social enterprise of evaluation as a whole. Questions about evaluation's moral compass are questions about what kind of evaluation is relevant to understanding and assisting decision making, governance, social services, and the like in today's social-political-cultural-technological world.

My thesis is that we are between times in evaluation, and the classic, orthodox, modernist understanding of evaluation and its moral compass is nearing the end of its shelf life. Two caveats before I offer a characterization of this compass: First, I realize there is danger in claiming that there is a single, widely agreed-upon understanding of evaluation when there many approaches to evaluation, many perspectives on the purposes it serves (accountability, learning, knowledge development, etc.), disagreements on how politics influences the practice, on the meaning of use, on the types and value of evidence, and so on. Yet the official definitions and mission statements from evaluation associations and societies as well evaluation policies and frameworks as spelled out by major organizations including many members of the Council on Foundations, the European Commission, the World Bank, the United States Agency for International Development, the United Nations Evaluation Group, and so on display remarkable consistency in defining what evaluation is and what role it plays in society.

Second, much of what I will have to say today is not new. For at least the past twenty years, many of us have been discussing and debating the direction of evaluation in society as well as the relationship between professional expertise and responsibility and citizen involvement. Equally contested has been whether evaluation must reflect an explicit commitment to the redress of social problems, and if so, how that commitment should be expressed. From my perspective, the issue of evaluation's moral compass is more urgent now, and that is what I hope to show.

The Modernist Practice of Evaluation and Its Normative Compass

The modernist practice of evaluation is represented in a story we tell ourselves about evaluation. It goes like this: Evaluation is a professional undertaking that produces orderly, systematic, organized knowledge about the value of things. It possesses knowledge and competence about both method and the logic of valuing that is validated by a community of

peers, and it is oriented toward important social values such as transparency, accountability, and equity. Hence, like other professions it is a form of collegial, cognitive, and moral authority. In addition, its work is grounded in the following:

- Language of problem and solution (versus issues and adaptations)
- Event-oriented and solution-focused thinking (versus problem driven and feedback loops)
- Assumption of a 'right' answer (versus accepting that inquiry is never ending)
- Oriented to goal achievement (versus oriented to double and triple loop learning)
- Assumes world contains systems that can be engineered (versus embraces systems thinking)

Looking at it from a governance perspective—evaluation is a practice that exists within and promotes a delivery mode of governance—citizens and communities are recipients, beneficiaries of social, economic and environmental interventions given them by agencies, organizations, NGOs, and governments. Evaluation is dedicated to appraising the success of these interventions as solutions to society's problems. It is wedded to a view of policymaking happening through often piecemeal interventions targeting specific social problems (as opposed to seeing governing as an ongoing struggle with interrelated wicked problems). And it is linked to a fairly linear framework (mental model) of planning, knowledge use, and policy making.

Looking at it as a form of rationality—evaluation is wedded to notions of social progress, effectiveness and efficiency in social programming. Evaluation is genuinely modern in its ambition—in its optimistic belief in the possibility of improving society via data gathering and rational decision making. Rigor, independence, accountability, logical frameworks, measurable results, and risk minimization are key watchwords. Evaluation promotes itself as a reliable means of providing some certainty in the appraisal of value. It has prided itself on its ability to deliver independent, external, expert determinations of value by employing the unique logic of evaluation. Evaluation supports learning via building an evidence base of best practices that

help achieve stated goals and targets while attending to both intended and unintended effects of programs and policies.

Looking at it from an organizational perspective—evaluation is, with few exceptions, entrenched in large organizations, The World Bank, the Asian Development Bank, Green Climate Fund, United Nations Development Programme, the International Fund for Agricultural Development, 3ie; closer to home WestEd, the CDC, AIR, and at least nominally in all federal agencies. This institutionalization is also evident in a variety of evaluation capacity building efforts, as well as in efforts to formulate government evaluation policies as promoted for example by both the American Evaluation Association's Evaluation Policy Initiative and the Global Parliamentarian Forum for Evaluation. Sometimes this institutionalization of evaluation approaches the status of what my colleague Peter Dahler-Larsen calls evaluation machines, permanent, repetitive, routine-based operations, producing streams of information, linked directly to decision and implementation processes via mechanisms like results-based management and investment learning platforms (e.g., Food & Agricultural Organization of the UN).

Looking at it from an innovation perspective—again, with a few exceptions, innovation in evaluation appears to be focused primarily on how the work should be done—on method. A recent webinar on innovations in evaluation sponsored by Better Evaluation, UNICEF and EvalSDGs is a case in point.[1] The promotion for the webinar claimed, "When existing evaluation tools, processes, methods and systems are not enough, you need to draw on innovations in evaluation", and the innovations discussed were negative program theory; triple-row logic models; data rehearsal; big data; collecting, disaggregating and reporting data by sub-groups, and rubrics.

The normative direction for classic, orthodox evaluation is one of providing scientific advice. This is the equivalent of value-neutral science. It is instrumental valuation. Using the tools of the social sciences, evaluators respond to client requests and client criteria for

[1] EVALSGDs is a network of evaluators, policymakers, and others dedicated to enhancing the role of evaluation in the 2030 Agenda. See https://evalsdgs.org/ for a description as well as for the Briefing Papers the group has produced on evaluation.

generating knowledge of effectiveness and efficiency of projects, programs and policies and turns that knowledge over to the client for their eventual use. Evaluation serves as a tool for reporting, auditing performance and accountability and maybe even learning by actors within an organization, assuming there is considerable attention paid to the pedagogy and circumstances of adult learning.

Some Characteristics of Uncertain Times

The normative stance of modernist evaluation sketched above has a much shorter shelf life than we might imagine, largely because of the challenges entailed in the following aspects of our uncertain times.

The Fourth Industrial Revolution

Klaus Schwab, founder and executive chairman of the World Economic Forum has argued that the Fourth Industrial Revolution "will change not only what we do but also who we are. It will affect our identity and all the issues associated with it: our sense of privacy, our notions of ownership, our consumption patterns, the time we devote to work and leisure, and how we develop our careers, cultivate our skills, meet people, and nurture relationships." (https://www.weforum.org/agenda/2017/03/klaus-schwab-new-narrative-for-globalization/)

Transformational Development

The 2030 Agenda for Sustainable Development holds forth the promise of transformational development. The word "transformation" is not used *descriptively* to refer to the level and nature of change as it occurs, but *normatively* to convey the desire that something about what we do and achieve and why and how, should be fundamentally different in the future from the way it is now. Transformational development requires changes in social structures and relations, including addressing the growing economic and political power of elites and patterns of stratification related to class, gender, ethnicity, religion or location that can lock people (including future generations) into disadvantage and constrain their choices and agency. It also means changing norms and institutions, both formal and informal, that shape the behavior of people and organizations. Taking a similar line of argument, The *SDG Transformations Forum* emphasizes three types of change and their purpose—incremental

(improve performance), reform (understand and change the system and its parts), and transformational (to innovate and create previously unimagined possibilities).

The State of Democracy Around the World

The International Institute for Democracy and Electoral Assistance in its 2017 report The *Global State of Democracy* points out that governments, parliaments and political parties are increasingly viewed by their electorates as unable to cope with complex policy problems. Many see a crisis of legitimacy in democratic institutions and processes, coupled with a creeping erosion of public trust, which exposes democracies as fragile and vulnerable. In its 2018 report *Freedom House* argues that democracy faced its most serious crisis in decades in 2017 as its basic tenets—including guarantees of free and fair elections, the rights of minorities, freedom of the press, and the rule of law—came under attack around the world. Seventy-one countries suffered net declines in political rights and civil liberties, with only 35 registering gains. This marked the twelfth consecutive year of decline in global freedom. The United States retreated from its traditional role as both a champion and an exemplar of democracy amid an accelerating decline in American political rights and civil liberties.

Complexity Turn in the Applied Social-behavioral Sciences

While there are multiple ways of understanding the term complexity and its relation to systems thinking, it is undeniable that some kind of complexity turn is happening not just in the natural sciences, but in the applied social sciences and evaluation as well. This is evident in efforts both to explain the relationship between complexity theory, systems thinking and social scientific research and to illustrate its application in contemporary concerns such as strategy development in philanthropy and international development thinking and practice. Importantly, complexity science and systems thinking is not just influencing scientific research and evaluation but has significant implications for policymaking from resisting engineering solutions to complex problems to embracing experimentation and failure. (I might add that one of the issues that is a source of much confusion in the relationship between systems thinking and evaluation is whether we are talking about systems as things that can be engineered or systems as a process—a way of thinking about the complex set of interactions in a situation.)

Reimaging Measurement

A project that I assume many of you are familiar with, Deloitte's "Reimagining measurement" initiative that held a mirror up to the social sector field and, in the process, explored possible futures for measurement, evaluation, and learning. One of the three characteristics identified for a better future was "Better empowering constituents and promoting diversity, equity, and inclusion." It is about reframing who gets to define what is needed, what constitutes success, and what impact we are having. Further, it emphasized that the collection and use of data is itself infused with power dynamics and the means of addressing or perpetuating inequities.

Thinking and Working Politically

Thinking and Working Politically (TWP) is a Community of Practice (CoP) first met in Delhi in November 2013 (https://twpcommunity.org). It aims to help better understand how to translate into operationally relevant guidance the evidence that *political factors* are usually much more important in determining developmental impact than the scale of funding or the technical quality of programming. The CoP aims to deepen and extend the analysis and understanding of the politics that drive developmental processes. It focuses on what is distinctively *political* about politics – power, interests, agency, ideas, and the subtleties of building and sustaining coalitions. It argues in particular for more focus on recognizing and working with the different forms of power, on understanding how and where interests develop, and on the role of ideas.

Problem Driven Iterative Adaptation and Doing Development Differently

Championed by efforts of the Overseas Development Institute, the Manifesto of Doing Development Differently (DDD) states that successful initiatives reflect common principles that include: (1) Focusing on solving local problems that are debated, defined and refined by local people in an ongoing process, (2) blending design and implementation through rapid cycles of planning, action, reflection and revision (drawing on local knowledge, feedback and energy) to foster learning from both success and failure, (3) managing risks by making 'small bets'--pursuing activities with promise and dropping others. Problem-driven iterative adaptation

(PDIA) is a management strategy of try-learn-iterate-adapt that promotes local solutions for local problems, problem-driven positive deviance, and scale through diffusion.

Megatrends

A 2017 report from *Deloitte's Center for the Long View* entitled *Megatrends*, again something you may be familiar with, examines 35 drivers of change in society, technology, the environment, the economy and politics that intersect to create ten megatrends—universal trends affecting multiple aspects of our world and resulting in overlapping stories of the future. Two that particularly caught my eye are polarization—the rise of divisiveness and divergence—and the erosion of governance—the decline of the traditional world order of direct democracy.

The State of Public Discourse

Finally, around the globe we witness the effects of a toxic cocktail impairing our ability to reason together. A cocktail composed of a deadly mixture of the spread of post-truth politics, Babel that passes for public discourse, and the Backfire effect. *Post-truth politics* means a political culture in which debate is framed largely by appeals to emotion disconnected from the details of policy, and by the repeated assertion of talking points to which factual rebuttals are ignored. This is facilitated by the fact we are in the middle of a transition from a society of facts to a society of data. During this interim, confusion abounds surrounding the exact status of knowledge and numbers in public life, exacerbating the sense that truth itself is being abandoned. Data is not the same thing as truth.

The *Backfire effect* dispels **t**he misconception (widely shared in the field of evaluation, evidence-based policy, and so forth) that when your beliefs are challenged with facts, you alter your opinions and incorporate the new information into your thinking. The truth is that when your deepest convictions are challenged by contradictory evidence, your beliefs get stronger (*"You are not so smart"* at https://youarenotsosmart.com/).

There is *a great deal of Babel that passes for public discourse*, as examined in a book with the devasting title, "I'm right and you're an idiot" along with several others. The public square where we examine and debate problems of the commons should be forums for open, honest, higher quality debate but are polluted by toxic mix of polarized rhetoric, propaganda, and miscommunication. This is a sign of the collapse of civic virtue understood as the

dedication of citizens to the common welfare of their community even at the cost of their individual interests.

Challenges to the Field of Evaluation

These and other contemporary developments present several important challenges to the current normative compass of evaluation. I am not alone in this view. The 2017 report *From Contractors to Conduits: An Exploratory Dialogue among Funders and Evaluators* that I imagine you are familiar with noted that "what people define as evaluation is changing. There is a greater emphasis on incorporating learning, strategic analysis, and community engagement into evaluation. This represents a departure from classic social science approaches that favor objectivity over in-depth engagement." Taking a cue from the title of the popular book *This Idea Must Die*, my colleague Zenda Ofir in her blog, Evaluation for Development (http://zendaofir.com/) has argued that several ideas in evaluation must die, including evidence hierarchy and best practices.

Innovation in evaluation. The first challenge is one of grasping that innovation in technique and method in evaluation, while necessary, is insufficient in these uncertain times. What is needed is critical reflection on the substance of evaluation, on its basis, core or footing. If I put this as a question it would be something like this: "Are the primary concerns of the field of evaluation about how evaluators should go about doing their work, or alternatively, what evaluators' work should be about?" Should not the central rationale for evaluation—valuing—signify something that is not just quantitative and instrumental but qualitative and substantive? Should not valuing contribute in a significant and direct way to debates about social innovation and not simply be a matter of oversight and judging the performance of interventions?

The return of politics to the people is a second challenge**:** Evaluation is typically associated with the idea of democratic discussion unfolding in the formal political sphere of decision-making. A common assumption is that evaluation information feeds into and informs the formal political decision-making process (as it unfolds in government agencies, foundations, etc.). This is evident in the oft-quoted goal of how evaluation of public programs serves social betterment, as well as efforts to build evaluation capacity in institutions, agencies, and governments.

However, the idea of governance or governing is shifting away from a view of governments and agencies acting instrumentally in a world potentially amenable to cause-and-effect understandings of policymaking. It is shifting from a supply-side, goal-based instrumental *delivery* mode to a demand-side *relational* mode; that is, governing, managing and leading based on understanding processes and capacities that already exist in communities and how they can be integrated into policy and programming.

In this relational mode, politics returns to the people, to the sphere of everyday practices, interactions and understandings to viewing democracy not as composed of all the features of formal politics but as a way of life—as John Dewey put it. This is the realm of cooperative civic work of "a public"—a mix of people whose interests, backgrounds, and resources may be quite different. Public work means something more than the idea of public deliberation. It raises the expectation that citizens act as co-creators of a public world; citizens making a public life together. As politics returns to the people, the independent professional stance characteristic of much evaluation practice gives way to a role for the evaluator as a facilitator of public discussion in ways that share power and responsibility with citizens.

Recovery of practical reasoning is a third challenge: One current characteristic of our times is a fairly unwavering acceptance of scientific reasoning in programming and policymaking that relies on ideas drawn from the natural sciences and economics to the exclusion of history, culture, and politics; in short, scientific rationality "unchecked by experience, empathy, and moral grounding". On the contrary, practical reasoning is situated within political communities; it is viewed not in terms of a technocratic and bureaucratic rationality but as inseparable from how we regard people and what they do in everyday and public life. Evaluation ought to attend more to practical reasoning not scientific rationality. That means viewing evaluation as a moral-practical means to deliberate and act in relation to substantive issues in everyday life.

A growing realization of the importance of the phenomenon known as ***Co-production*** is another challenge. Originally introduced by the late Eleanor Ostrom, the term has multiple meanings in policymaking, governance, and research in different fields. I am interested in co-production as a means of redefining the relationship between professionals delivering a public

service and citizens. Mutuality and reciprocity replace the relationship of a client or consumer depending on an expert. Citizens are not merely beneficiaries in receipt of expert services but collaborators who contribute their knowledge, experience, skills and capabilities to creating social innovation. It is contrasted with a transaction-based method of service delivery in which citizens consume public services which are conceived of and provided by governments, foundations, and other nongovernmental organizations. Co-production is also an exploratory space and a generative process that leads to different, and sometimes unexpected, forms of knowledge, values, and social relations. Co-production is a dynamic process that takes the form of interactions between individuals and services, interactions between different rationales for participation and policy agendas, and interactions between different modes of knowledge production and between different kinds of value (e.g., economic, equity, social justice).

One final challenge I will mention is ***Ethical accountability:*** The discovery of the centrality of ethics to knowledge production and action. I don't mean ethics in the sense of professional ethics. The ethical consideration related to knowledge production is this: The failure to acknowledge uncertainty and complexity is not simply a technical error but also an ethical one. It is an ethical failure when we fail to take responsibility for our knowing. Ethics is not something that is supplementary to our understanding of the world. Ethics is always already part of what we do.

It has been said many times by advocates of systems thinking but bears repeating, one cannot study a situation in its entirety. One must choose what facts and values are in and what facts and values are out, what is important and what is not. We frame a situation in order to understand it—a frame is a perspective that makes it possible to address a situation in a particular way. Framing involves setting boundaries and thus placing limits on our understanding. And when we are dealing with the limits of our understanding, we are dealing with ethics. Because boundaries must be set, the evaluator, as a professional, bears responsibility for the consequences of setting boundaries in a particular way. Evaluators cannot simply appeal to their methodological expertise as the basis for justifying boundary making decisions. They have no in-principle advantage over ordinary citizens in that regard.

Reconsidering Evaluation's Normative Bearings

In rethinking the normative compass for evaluation, the field can take its bearings in several ways. Several orientations are sketched below.

Evaluation as advocacy. We all advocate in some way for something. Not least we advocate for the importance of evaluation to the well-being of democratic societies; we advocate for clarity and truth-telling in describing states of affairs, we advocate for professional autonomy; I am advocating for rethinking the moral compass of evaluation. Yet, this idea of advocacy as a normative compass for evaluation can be parsed even more sharply. First, there is advocacy as raising awareness of relevant criteria; for example, when evaluators are keen to emphasize the importance of child rights or more broadly human rights in evaluation or, as is the case with many evaluations funded via UN Women and UNICEF, emphasize that evaluations of interventions ought to attend to the extent to which interventions are equity-focused and gender-responsive. There is also advocacy in the sense of acting on behalf of; for example, when the evaluator assumes responsibility to bring forward for consideration the perspectives of those stakeholders typically disenfranchised or least heard or marginalized in a community. Third, there is advocacy as a form commitment to what is morally right or wrong. Examples here might include the feminist evaluator who believes the entire enterprise of evaluation and science for that matter needs to be rescued from androcentricity; or the evaluator committed to a culturally responsive framework for evaluation and the centrality of indigenous knowledge such that the aim is to reframe (focus on community stimulated research matters); rename (incorporate Indigenous world views and realities); and reclaim the evaluation environment (take control of our lives and land).

Evaluation as directly engaged in social change. This is the normative orientation of participatory action research or better yet, participatory learning and action. This view is probably best well known through the work of Robert Chambers in the field of international development. I might add that this is a particularly difficult normative orientation to adopt because a change agent needs to be competent not only in the concepts and means of evaluation but also in the issue under consideration such as economic development, structural racism, public health, and so on.

The final normative orientation is that of **evaluation as a form of professionalism that shares power and authority with citizens**. Here the evaluator acts as a deliberative advocate. The political scientist Albert Dzur defines this role as "democratic professionalism": "Sharing previously professionalized tasks and encouraging lay participation in ways that enhance and enable broader public engagement and deliberation about major social issues inside and outside professional domains." This orientation combines advocacy—voicing multiple views and standpoints—with both self-reflective and dialogical critique as well as refutation to refine those views and steer us away from baseless facts and mistaken inferences.

Using this normative compass for professional practice means citizens are not put in a position of incompetence, and hence, that professional competence cannot be adequately conceived without an underpinning notion of competent citizenship. Reflective practice requires both competent professionals and competent citizens. It thus requires of the evaluator the skills of the deliberative advocate—the ability to maintain principled convictions, build durable coalitions, and communicate constructively for change. It also means knowing something about communicative ethics such as discernment and responsibility in framing disagreements required to deal with conflicts.

This normative stance is not grounded in the typical belief that evaluation is a fairly reliable means of providing some assurance in the appraisal of the value of social interventions; it regards the production of evaluation knowledge as far less systematic and orderly and far more unruly. This normative stance for evaluation embraces the undertaking as a risk-laden effort in service of wayfinding; risk-laden because the promise of deliberative advocacy can be compromised by profound power inequities, economic inequality, and cultural difference. In this normative orientation evaluators make no claim to speak for others but rather to learn from voices that have been silenced. With this moral compass, evaluation is directed at advocating for examination of the ethics of an intervention: Does the object of evaluation reproduce unfair, unjust advantage or privilege? Does it promote a fair, just distribution of social resources and social opportunities? Are people connected to the object of evaluation and most impacted by inequities defining the need for an evaluation and the presence and role of an evaluator? What facts and values are privileged in the context of the evaluation and in the

evaluation itself? Who defines how evaluative judgements are made? What social power exists to leverage results of an evaluation and who has it? (http://taasaconference.org/wp-content/uploads/2018/06/40-TAASA-2018-Program-Evaluation-for-Social-Justice.pdf)

Last Words

Questions about evaluation's moral or normative compass are questions about what kind of evaluation is relevant to understanding and assisting decision making, governance, the design and implementation of social services, and the like in today's networked society, where a democratic orientation means a significantly enlarged component of public participation, where political systems increasingly display decentralization tendencies, where values of stakeholding groups increasingly are at odds, and where we are witnessing the rise of ideology as people seek dramatic change from the status quo. I believe the field needs a rigorous debate about this question of a moral compass, and perhaps you are just the folks to get it underway. Thank you for listening.

References drawn on/cited in this speech:

Andrews, M., Pritchett, L., & Woolcock, M. (2017). *Building State Capacity: Evidence, Analysis, and Action*. Oxford: Oxford University Press. Available for download at https://bsc.cid.harvard.edu/building-state-capability-evidence-analysis-action

Byrne, D. & Callaghan, G. (2014). *Complexity Theory and the Social Sciences*. London: Routledge.

Chambers, R. (2017). *Can We Know Better? Reflection for Development*. UK: Practical Action Publishing.

Chandler, D. (2014). Beyond neoliberalism: resilience, the new art of governing complexity. *Resilience: International Policies, Practices and Discourses* 2: 47-63.

Cillers, P. (2005). Complexity, deconstruction and relativism. *Theory, Culture & Society* 22: 255–267.

Dahler-Larsen, P. (2012). *The Evaluation Society*. Stanford, CA: Stanford University Press.

Deloitte (2017). *Reimaging Measurement: A Better Future for Monitoring, Learning, and Evaluation.* Available at https://www2.deloitte.com/content/dam/Deloitte/us/Documents/monitor-institute/us-monitor-institute-reimagining-measurement-toolkit.pdf

Dzur, A. (2008). *Democratic Professionalism*. University Park, PA: University of Pennsylvania Press.

Edmondson, R. (2012). Practical reasoning in place: Tracing 'wise' inferences in everyday life (pp. 111-130) in R. Edmondson and K. Hüsler (Eds.), *Politics of Practical Reasoning*. Lanham, MD: Lexington Books.

Filipe A., Renedo A., & Marston, C. (2017). The co-production of what? Knowledge, values, and social relations in health care. *PLoS Biol* 15(5): e2001403. Available at https://doi.org/10.1371/journal.pbio.2001403

Flyvbjerg, B. Landman, T. & Schram, S. (2012.) Introduction: New Directions in Social Science (pp. 1-14) in Flyvbjerg, Landman, and Schram, Eds., *Real Social Science: Applied Phronesis*, Cambridge UK: Cambridge University Press.

Gerrits, L. & Verwei, J. (2015). Taking stock of complexity in evaluation: A discussion of three recent publications. *Evaluation* 21: 4821-491.

Funtowicz, S. and Ravetz, J. (1993). Science for the post-normal age. *Futures* 31: 735-755

Hoggan, J. (2016). *I'm Right and You're an Idiot: The Toxic State of Public Discourse and How to Clean It Up*. Gabriola Island British Columbia, Canada: New Society Publishing.

Larson, A. (2018). Evaluation amidst complexity: Eight evaluation questions to explain how complex adaptive systems affect program impact. *Evaluation* 24: 353-362.

Kakutani, M. (2018). *The death of truth*. New York: Penguin Random House.

Kavanaugh, J. & Rich, M. (2018). *Truth decay*. Santa Monica, CA: RAND.

Maku, J.M. & Marty, D.L. (2013). *Dialogue & Deliberation.* Long Grove, IL: Waveland Press.

Midgley, G. (2000). *Systemic Intervention*. New York: Springer.

Ostrom, E. (1996). Crossing the great divide: Coproduction, synergy, and development. *World Development* 24: 1073-1087.

Pellini, A., Weyrauch, V., Mahlo, M., & Carden, F. (2019). *State capability, policymaking, and the fourth industrial revolution: Do knowledge systems matter?* Southern Voice Network. Available at http://southernvoice.org/state-capability-policymaking-and-the-fourth-industrial-revolution-do-knowledge-systems-matter/

Ramalingam, B. (2013). *Aid on the Edge of Chaos* Oxford: Oxford University Press.

Reynolds, M. & Holwell, S. (Eds.) (2010). *Systems Approaches to Managing Change: A Practical Guide*. London: Springer.

Sardar, Z. (2010). Welcome to postnormal times. *Futures* 42: 435-444.

Sarewitz, D. (2011). Liberalism's modest proposal Or, the tyranny of scientific rationality. *Breakthrough Journal* No. 2. Available at https://thebreakthrough.org/journal/issue-2/liberalisms-modest-proposals

Schwandt, T.A. (2017). Professionalization, ethics, and fidelity to an evaluation ethos, *American Journal of Evaluation* 38: 546-553;

Schwandt, T.A. (2018). Acting together in determining value: A professional ethical responsibility of evaluators, *Evaluation* 24: 306-317

Simons, H. (2006). Ethics in evaluation (pp. 243-265) in I.F. Shaw, J.C. Greene and M.M. Mark (Eds). *Handbook of Evaluation*. London: Sage.

Ulrich, W. (2017). "If systems thinking is the answer, what is the question? Discussions on research competence." (Expanded and updated version of Working Paper No. 22, Lincoln School of Management, University of Lincoln, Lincoln, UK, 1998.) *Ulrich's Bimonthly,* May-June 2017 (Part 1/2) and July-August 2017 (Part 2/2).

United Nations Research Institute for Social Development (2016). *Policy Innovations for Transformative Change: Implementing the 2030 Agenda for Sustainable Development*. Geneva, Switzerland: UNRISD. Available at

http://www.unrisd.org/UNRISD/website/document.nsf/(httpPublications)/92AF5072673F924DC125804C0044F396?OpenDocument

Vosselman, E. (2012). Accounting, accountability and virtue ethics in public organizations: From market bureaucracies to moral communities. Radboud University NiCE Working Paper 12-105 Available at https://www.ru.nl/economie/onderzoek/nice-working-papers/#h295575f9-e3c4-4afa-9485-422ecce102c8