THOUGHTWORK

Evaluative Thinking Workshop Resource from Michael Quinn Patton

Evaluative thinking is a specialized example of instrumental thinking grounded in a particular field of practice: program evaluation. This workshop resource combines other writings on evaluative thinking to provide a coherent resource.

Rigorous Evaluative Thinking:

Beyond Banality in Evaluation Practice

Michael Quinn Patton

Program evaluation involves assessing the extent to which efforts intended to do good actually do good. Since, proverbially, the road to hell is paved with good intentions, I open workshops on evaluation with an evaluation version of the biblical creation story. Every culture in the world has a creation story that explains how that group of people came to be. The evaluation Genesis story, which opens all editions of the Utilization-Focused Evaluation books, including the latest 5th edition, reveals evaluative thinking through questioning. Here it is.

In the beginning God created the heaven and the earth. Then God stood back, viewed everything made, and proclaimed "Behold, it is very good." And the evening and the morning were the sixth day. And on the seventh day God rested from all work.

God's archangel came then, asking, "God, how do you know that what you have created is 'very good'? What are your criteria? On what data do you base your judgment?

Just what results were you expecting to attain? And aren't you a little close to the situation to make a fair and unbiased evaluation?"

God thought about these questions all that day and God's rest was greatly disturbed. On the eighth day God said, "Lucifer, go to hell."

Thus was evaluation born in a blaze of glory.

The ensuing discussion of this story among evaluation workshop participants focuses on how to determine if a program is doing good. Goodness must be defined in some way,

which requires criteria and elucidation of the values that would inform judgments about effectiveness: whether desired (good) results were obtained.

The banality of goodness

Elizabeth Minnich reframed Hannah Arendt's widely cited phrase "the banality of evil," changing it to the title of her book *The Evil of Banality* (Minnich, 2017). She believes that the phrase "the banality of evil," once so controversial, has itself become banal through repetition, misrepresentation, misunderstanding, and oversimplification.

I confess to having oft-repeated Arendt's phrase "the banality of evil" in my own teaching and writing over many years. I thus found Minnich's reframing freshly provocative and her explanation of the rephrasing altogether convincing. I internalized it quickly. What caught me off guard, as I reported in reviewing her book for the *American Journal of Evaluation* (Patton, 2018b), and rattled my comfortably assembled conceptual apparatus was the jarring phrase "the banality of goodness." I didn't see that coming. It is all the more unsettling, then profound, and ultimately enlightening for that very reason. How can doing good be banal? To seriously ponder this question and understand the answer is to enter into what Minnich means by "the life-and-death importance of thinking."

Purposefully "doing good" can itself become unthinking, mindless, no more than a sop to conscience, a prop for conventionally defined self-esteem, a way of passing boring time or earning points for some other purpose we have in mind (getting into college; preparing to run for the school board; being thought to be good by our neighbors; seeking compliments from our coreligionists; getting out of the house when retired). Certainly, admirable things

may be done as a result of all sorts of motivations, but that is no protection against banal conventionality, mindlessness. Even dramatic intensive goodness can be motivated by a kind of reflex notion of heroism that is entirely conventional. It is then a matter of luck—for the recipients of such acts as for the one acting—whether what is thus thoughtlessly done turns out to help, or hurt.

Unthinking obedience to or use of good conventions in decent-enough times is evidently less frightening than when mindless conventionality enables massive evils, but thoughtlessness—any mindlessness, taking us through life on autopilot—puts us at serious risk of colluding, and perhaps worse, with the larger systems that shape our worlds if, as, when, they once again go wrong. The mystery really is not how so many good Germans could have become Nazis, nor how so many good Christians could have been slaveholders, or good Arabs, slave-traders, or how many good parents could send their businesses overseas to profit from the virtually, sometimes actually, enslaved labor of other peoples' children. The mystery, I fear, is how so many of us so often, without even thinking about it, no more do good than we do wrong, or evil, but simply behave ourselves, or absent ourselves, or try to do well whatever the terms of the game. We do not even choose; we simply reach into our grab-bag of conventions, of processed concepts, and follow the one that seems most familiar, most likely to seem apt to the people whose approval we generally glide along on. Or not: often enough, we just keep walking, pay

no attention, do not remember, do not feel, as is rightly said, called upon to do something. Realities call out to us; we do not hear. This can be the case even when we are doing something because we think it good: *anything can be done thoughtlessly.* (Minnich, 2017, pp. 151-152; emphasis added)

Beyond the banality of evaluation

"Anything can be done thoughtlessly."

That "anything" must include evaluation. So much of evaluation is done with a compliance mentality, just going through the motions. Much evaluation is done to fulfill funding obligations, meet accountability requirements, and feed whatever bureaucratic machinery thrives on routine reporting. The banality of evaluation: thoughtless, mindless compliance. Concern about banal evaluation is part of what has led to increased attention to the importance of evaluative thinking in recent years. *Evaluative thinking* involves rigorous analysis of evidence and reasoning to inform judgments of merit, worth, value, and significance based on explicit values. Rigorous evaluative thinking offers an antidote to banality in human affairs and inquiries of all kinds. Learning and using evaluative thinking and reasoning may ultimately be more important and have more far-reaching implications than merely applying evaluation methods and using evaluation reports. In what follows I'll review the co-evolution of evaluation as a field and evaluative thinking as a core disciplinary competence. Then I'll return to the issue of evaluating goodness, and correspondingly, identifying and preventing extensive evil.

Emergence and History of Evaluative Thinking

"If I have seen further, it is by standing on the shoulders of giants."

Sir Isaac Newton in 1676

The term *evaluative thinking* has become widely used in the last decade as part of work in the evaluation profession on core competencies, building and strengthening evaluation capacity in programs and organizations, and examining the contributions of evaluation to the public good and vibrant democracy (Buckley, Archibald, Hargraves, Trochim, 2015, p. 1; Vo & Archibald, 2018)). But the origin of the emphasis on evaluative thinking in the writings of evaluation's pioneers provides context for its relevance to the problem of extensive evil and countering the banality of evaluation. Before examining early writings on evaluative thinking, let me take a step backward and set a larger context by explaining what program evaluation is.

What is evaluation?

Evaluation is a systematic process to determine merit, worth, value or significance based on explicit values. So what does that mean in practice? Let's use one kind of evaluation, *program evaluation*, to illustrate. Programs and projects of all kinds aspire to make the world a better place. Program evaluation answers questions like: To what extent does the program achieve its goals? How can it be improved? Should it continue? Are the results worth what the program costs? Program evaluators gather and analyze data about what programs are doing and accomplishing to answer these kinds of questions.

A program evaluation has to be designed to be appropriate for the specific program being evaluated. Health programs aim to make people healthier and prevent disease. School programs strive to increase student learning. Employment training programs try to help the unemployed get jobs. Homelessness initiatives work to get people off the streets and into safe housing. For each kind of program, an evaluation would gather and analyze data about that program's effectiveness.

We all evaluate, whether formally or not. We do it almost every day when we decide what to wear or how to prioritize the various tasks that lay before us. The evaluation profession has developed systematic methods and approaches that can be used to inform judgments and decisions. Because making judgments and decisions is involved in everything people do, evaluation is important in every discipline, field, profession and sector, including government, businesses, and not-for-profit organizations.

Examples of evaluation questions include:

- What is the quality of program or policy implementation?
- What outcomes are being achieved?
- Are the real needs of people being met?
- What works for different people in what ways and under what conditions?
- How do cultural and diversity variations affect what is done and achieved?
- What are the costs and benefits of a program, policy, product, or training effort for personnel evaluation?
- What unintended consequences or negative side effects are appearing that need to be addressed?
- What unintended consequences or negative side effects are appearing that need to be addressed?
- What are key success factors that others can learn from and use?

These are just a few of the many kinds of evaluation questions that can be asked—and answered -- with evaluation information and data. (For an in-depth review of evaluation approaches, methods, purposes, and uses, see Patton, 2012).

The intersection of evaluative thinking and critical thinking

Evaluative thinking adapts critical thinking to evaluation contexts and situations of evaluation" (Buckley, Archibald, Hargraves, Trochim, 2015, p. 1). The Foundation for Critical Thinking (2016) traces the intellectual roots of critical thinking to Socrates in ancient Greece where, some 2,500 years ago, he developed what became known as the Socratic method. He established the importance of seeking evidence, closely examining reasoning and assumptions, analyzing basic concepts, and tracing out implications not only of what is said but of what is done as well. His method of "Socratic Questioning," an effective teaching approach, highlighted the importance of clarity and logical consistency, and the value of asking probing questions. Confused meanings, inadequate evidence, or self-contradictory beliefs often lurked beneath smooth but largely empty rhetoric. (Foundation for Critical Thinking, 2016, p. 1)

The intellectual history of critical thinking in the Western world runs through Thomas

Aquinas in the Middle Ages and helped propel the Renaissance and Enlightenment through the
contributions of Francis Bacon, René Descartes, Thomas Moore, Thomas Hobbes, John Locke,
Immanuel Kant, and Sir Isaac Newton to name but a few among the many classical philosophers
who probed deeply into the nature of reason, judgement, logic, knowledge, and critical thinking.

The result of the collective contribution of the history of critical thought is that the basic questions of Socrates can now be much more powerfully and focally framed and used. In every domain of human thought, and within every use of reasoning within any domain, it is now possible to question:

- ends and objectives,
- the status and wording of questions,

- the sources of information and fact,
- the method and quality of information collection,
- the mode of judgment and reasoning used,
- the concepts that make that reasoning possible,
- the assumptions that underlie concepts in use,
- the implications that follow from their use, and
- the point of view or frame of reference within which reasoning takes place.

 (Foundation for Critical Thinking, 2016, p. 1)

Evaluative thinking, then, is a specific contemporary application of Socratic reasoning, and the profession of evaluation both recognizes and honors that heritage (Buckley, Archibald, Hargraves, Trochim, 2015; House, 1977, 1980, 2014; Scriven, 1976, 1993, 1995).

Thinking Evaluatively in Bloom's Taxonomy

In 1956, Benjamin Bloom with collaborators Max Englehart, Edward Furst, Walter Hill, and David Krathwohl published an influential *Taxonomy of Educational Objectives* that became widely known as Bloom's Taxonomy. The taxonomy consisted of six major categories: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. The categories after Knowledge were presented as "skills and abilities," with the understanding that knowledge was the necessary precondition for putting these skills and abilities into practice.

Comprehension "refers to a type of understanding or apprehension such that the
individual knows what is being communicated and can make use of the material or idea
being communicated without necessarily relating it to other material or seeing its fullest
implications."

- Application refers to the "use of abstractions in particular and concrete situations."
- Analysis represents the "breakdown of a communication into its constituent elements or
 parts such that the relative hierarchy of ideas is made clear and/or the relations between
 ideas expressed are made explicit."
- Synthesis involves the "putting together of elements and parts so as to form a whole."
- **Evaluation** engenders "judgments about the value of material and methods for given purposes." Source: *Taxonomy of Educational Objectives* (pp. 201-207)

In 2001 the taxonomy was revised by a team of cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialists and published as *A Taxonomy for Teaching, Learning, and Assessment* (Anderson & Krathwohl, 2001). The revision placed more explicit emphasis on the thinking processes involved in education. To evaluate is to "justify a stand or decision" by appraising, arguing, defending, judging, selecting, valuing, critiquing, and weighing. Bloom's Taxonomy influenced educators generally, and education evaluators particularly, by making thinking evaluatively an explicit, high level goal, near the top of the learning outcomes pyramid. (See Exhibit 11.1.)

I've been reviewing the precursors and foundations of evaluative thinking in philosophy and education, with a grounding in critical thinking. Now I want to turn to the writings of evaluation pioneers who articulated the role and importance of evaluative thinking.

The Foundations of Evaluative Thinking in the
Writings of Evaluation's Pioneers

In 1976 Michael Scriven wrote a seminal book entitled simply *Reasoning*. It's a big picture book that is too little known in evaluation despite being fundamentally about evaluative thinking. What do I mean by big picture? Consider this opening premise:

Reasoning is the only ability that makes it possible for humans to rule the earth and to ruin it. All other alleged distinction between us and other life forms on the planet turn out to be illusory. (Scriven, 1976, p. 2)

He goes on to argue that reasoning is essential to democracy, "but above all, there's one supreme advantage for the use of reason, privately or publicly. Reasoning is the best guide we have to the truth" (p. 3).

The Logic of Evaluation

Scriven has consistently emphasized that evaluation is fundamentally about rendering judgments of merit, worth, and significance. Rendering judgment involves a critical thinking process that he articulated as the *logic of evaluation*.

The phrase logic of evaluation is used here to refer to the specific principles of reasoning that underlie the inference processes in all and only the fields of evaluation. The general logics of inductive, deductive, and statistical inference, although widely used in evaluation, are not part of the logic of evaluation as the term is used here, as there is nothing evaluation-specific about them. However, particular applications of those general principles may be specific to the practice of evaluation and hence fall under the logic of evaluation. (Scriven, 1995, p. 49)

For Scriven the "fundamental problem is a construction problem: the problem of whether and how one can get from scientifically supported premises to evaluative conclusions" (p. 51). That leads to the *synthesis problem*:

The synthesis problem is the problem of when and how one can integrate several subevaluations (or scores on different dimensions of performance), each referring to a different dimension of the performance or qualities of a particular evaluand—or each referring to different components of the evaluand—into an overall evaluative conclusion (p. 52).

In explicating the logic of evaluation, and the reasoning processes that undergird reaching evaluative conclusions and rendering evaluative judgments, Scriven anticipated what is now called evaluative thinking. He posited that "the logic of evaluation is not only of intellectual importance as the backbone of the discipline of evaluation but worth studying for its significant implications for practical methodology (p. 68).

In a special issue of *New Directions for Evaluation* authored entirely by Scriven (by the way, the only such issue ever published by a single author), he shared "Hard-Won Lessons." These included the admonitions that evaluation is not measuring goal attainment, not applied social science, and that the field of evaluation is much larger than just program evaluation. This is where Scriven articulated his vision of evaluation as a transdisciplinary logic based on reasoning about how to render judgments; essentially, he laid the foundation for *evaluative thinking as fundamentally transdisciplinary*.

The Logic of Evaluative Argument

In 1977, Ernie House spent a sabbatical at the center for the Study of Evaluation at UCLA, worrying about when the next earthquake would occur. He distracted himself from such ponderings by writing a pioneering monograph on *The Logic of Evaluative Argument*. That monograph led to and provided the foundation for his hugely influential and enduringly important book on *Evaluating with Validity* (1980). In both books, and in his prolific writings and presentations ever since, he has insisted that evaluation is not first and foremost about methods, but is about making sense of evidence and creating a coherent, logical, and, ultimately, if successful, persuasive argument about what the evidence shows.

Evaluation is an act of persuasion directed to a specific audience concerning the solution of a problem. The process of evaluation is prescribed by the nature of knowledge--which is generally complex, always uncertain (in varying degrees), and not always propositional--and by the nature of logic, which is always selective. In the process of persuasion one must ascertain who the audience is and find a basis of agreement on premises, both of facts and values, and on presumptions. Two criteria for evaluation are: the most efficient way to a given end, or the most effective use of available resources....

Both formulation and interpretation require good intuitive judgment. The evaluator and the audience must employ their reasoning in a dialogue, and both must assume responsibility, since evaluation is never completely convincing nor entirely arbitrary.

The most significant decisions are those that have long-range implications but defy easy extrapolation, that are so entangled with everything else that they resist precise formal analysis. To those we are forced to apply our intuitive logic, our common sense, it is in the nature of these complex problems that knowledge about them is limited, that it is

less than determinate. In the face of uncertain knowledge, the task of entangled decision making becomes less one of absolutely convincing ourselves with proofs than one of persuading ourselves with multiple reasons. The criterion becomes not what is necessary but what is plausible (House, 1977, p. 2).

Ernie House, drawing on his roots in philosophy, has offered an insightful, provocative, and inspirational values framework for judging the quality and validity of evaluations: *truth*, *beauty and justice*.

Put simply, my broadening of the concept of validity was based on the idea that if an evaluation is untrue, or incoherent, or unjust, it is invalid. In other words, an evaluation must be true, coherent, and just. All three criteria are necessary. By contrast, sound fiscal judgment is not necessary to establish evaluation validity, that is, if an evaluation is expensive, that doesn't make its findings invalid. To add some flair, I talked about "truth, beauty, and justice" in evaluation. The underlying concepts were argument, coherence, and politics. Truth is the *attainment* of arguments soundly made, beauty is the *attainment* of coherence well wrought, and justice is the *attainment* of politics fairly done. (House, 2014, p. 31)

Deciding what is valid is fundamentally a challenge of evaluative thinking. House has provided an especially inspiring perspective on the core elements of evaluative thinking that go beyond mere logic and reasoning. And, of course, truth, beauty, and justice harken back to Socrates, where we began this review.

Jane Davidson has added her own provocative and inspirational twist to House's criteria

True "beauty" in evaluation is a clearly reasoned, well-crafted, coherent evaluation story that weaves all three of these together to unlock both truth and justice with breathtaking clarity... House, in his 1980 book *Evaluating with Validity*, argued that truth trumps beauty and justice trumps them both. In other words, get the social justice priorities right, deliver valid answers relative to those, and then convey it all beautifully and believably.

I'd like to flip House's idea on its head. What if beauty wasn't merely about how well the evaluative story is told? What if the *process* of creating a clear, compelling, and coherent (beautiful) evaluative story was in fact the key to unlocking validity (truth) and fairness (justice)? (Davidson, 2014, p. 43)

Other evaluation pioneering thought leaders

I have highlighted the contributions of Scriven and House in laying the foundation for what we now call *evaluative thinking*. They are far from alone. What we now call evaluative thinking, Carol Weiss (1998) called "an evaluative cast of mind" and discussed collaborative evaluation as "helping program people reflect on their practice, think critically, and ask questions about why the program operates as it does. They learn something of the evaluative cast of mind—the skeptical questioning point of view, the perspective of the reflective practitioner" (p. 25).

Marv Alkin (1990) illuminated evaluative thinking as a core issue for debate in evaluation. Bob Stake, Nick Smith, Tom Schwandt, Eleanor Chelimsky, and Egon Guba were other pioneers in articulating the value of thinking evaluatively. Evaluative thinking is embedded in the Joint Committee Standards and American Evaluation Association Guiding Principles.

Space does not permit presenting these and other pioneering contributions to evaluative thinking. The fundamental point of this review is that we are getting more sophisticated about the nature, importance, and manifestations of evaluative thinking in our current work. But the fundamental importance of critical thinking, reasoning, logic, warranted arguments, and telling a coherent, evidence-based story are all part of evaluation's history and are the precursors and pillars of what we now call evaluative thinking. On that note, I want to add some of my own forays into evaluative thinking in my early writings. In so doing, I shall propose expanding what we understand to be evaluative thinking beyond just critical thinking.

Process use and evaluative thinking

In the third edition of *Utilization-Focused Evaluation* (Patton, 1997), I introduced the notion of process use. I explained:

When I refer to "process use," then, I mean using the logic, employing the reasoning, and being guided by the values that inform our practice. One way of thinking about process use is to recognize that evaluation constitutes a culture, of sorts. We, as evaluators, have our own values, our own ways of thinking, our own language, and our own reward system. When we engage other people in the evaluation process, we are providing them with a cross-cultural experience. They often experience evaluators as imperialistic, that is, as imposing the evaluation culture on top of their own values and culture—or they may find the cross-cultural experience stimulating and friendly. But in either case, and all the spaces in-between, it is a cross-cultural interaction....

Process use is distinct from use of the substantive findings in an evaluation report. It's equivalent to the difference between learning how to learn versus learning substantive knowledge about something. Learning how to think evaluatively is learning how to learn and think critically, and those who become involved in an evaluation learn by doing. Facilitating evaluative thinking opens up new possibilities for impact that organizations and funders are coming to value because the capacity to engage in this kind of thinking can have more enduring value than a delimited set of findings. This especially resonates for organizations interested in becoming what has come to be called popularly "learning organizations." Learning to see the world as an evaluator sees it often has a lasting impact on those who participate in an evaluation—an impact that can be greater and last longer than the findings from that same evaluation. Findings have a very short "half-life"—to use a physical science metaphor; they deteriorate very quickly as the world changes rapidly. Specific findings typically have a small window of relevance. In contrast, learning to think and act evaluatively can have an ongoing impact. The experience of being involved in an evaluation, then, for those stakeholders actually involved, can have a lasting impact on how they think, on their openness to reality testing, and on how they view the things they do. (Patton, 2008, pp. 152-3)

Exhibit 11.2 presents my attempt to specify core elements of evaluative thinking two decades ago (reproduced from Patton, 2008).

Rigorous thinking

No problem can withstand the assault of sustained thinking.

Voltaire (1694 – 1778)

French philosopher

As I noted in the beginning of this review, evaluative thinking is typically approached as an application of critical thinking to conducting evaluations. I think that framing is too narrow. In 1981 I did a book on *Creative Evaluation* in which I argued that evaluative thinking required both critical thinking and creative thinking, despite the common belief that these are opposing ways of thinking. Indeed, I would now go further, as I did in the 4th edition of *Qualitative Research and Evaluation Methods* (Patton 2015, pp. 701-703). I now posit that rigorous evaluative thinking combines critical thinking, creative thinking, inferential thinking, and practical thinking.

Critical thinking demands questioning assumptions; acknowledging and dealing with preconceptions, predilections, and biases; diligently looking for negative and disconfirming cases that don't fit the dominant pattern; conscientiously examining rival explanations; relentlessly seeking diverse perspectives; and analyzing what and how you think, why you think that way, and the implications for your inquiry (Loseke, 2013; Klein, 2011).

Creative thinking invites putting the data together in new ways to see the interactions among separate findings more holistically; synthesizing diverse themes in a search for coherence and essence while simultaneously developing comfort with ambiguity and uncertainty in the messy, complex, and dynamic real work; distinguishing signal from noise while also learning from the noise; asking wicked questions that enter into the intersections and tensions between the search for coherent meaning and persistent uncertainties and ambiguities; bringing artistic, evocative, and visualization techniques to data analysis and presentations; and inviting outside-the-box, off-the-wall, and beyond-the-ken perspectives and interpretations.

Inferential thinking involves examining the extent to which the evidence supports the conclusions reached. Inferential thinking can be deductive, inductive, or abductive – and often draws on and creatively integrates all three analytical processes – but at the core is fierce examination of and allegiance to where the evidence leads.

A rigorously conducted evaluation will be convincing as a presentation of evidence in support of an evaluation's conclusions, and will presumably be more successful in withstanding scrutiny from critics. Rigor is multifaceted and relates to multiple dimensions of the evaluation.... The concept of rigor is understood and interpreted within the larger context of validity, which concerns the "soundness or trustworthiness of the inferences that are made from the results of the information gathering process" (Joint Committee on Standards for Educational Evaluation, 1994, p. 145)....There is relatively broad consensus that validity is a property of an inference, knowledge claim, or intended use, rather than a property either of a research or evaluation study from the study's findings. (Braverman, 2013, p. 101).

In reflecting on and writing about "what counts as credible evidence in applied research and evaluation practice," Sharon Rallis (2009), former president of the American Evaluation Association and experienced qualitative researcher, emphasized rigorous reasoning: "I have come to see a true scientist, then, as one who puts forward her findings and *the reasoning* that led her to those findings for others to contest, modify, accept, or reject" (p. 171; emphasis added).

Practical thinking calls for assiduously integrating theory and practice; examining real world implications of findings; inviting interpretations and applications from non-researchers (e.g., community members, program staff and participants) who can and will apply to the data

what ordinary people refer to as "common sense;" and applying real world criteria to interpreting the findings, criteria like understandability, meaningfulness, cost implications, and implications to address societal issues and problems.

In combing and integrating these ways of thinking, *evaluative thinking* forces clarity about the inquiry purpose, who it is for, with what intended uses, to be judged by what quality criteria; being explicit about what criteria are being applied in framing inquiry questions, making design decisions, determining what constitutes *appropriate* methods, and selecting and following analytical processes; and being aware of and articulating values, ethical considerations, contextual implications, strengths and weaknesses of the inquiry, and potential (or actual) misinterpretations, misuses, and misapplications. In contrast with the perspective of rigor as strict adherence to a standardized process, evaluative thinking emphasizes the importance of understanding the sufficiency of rigor relative to context and situational factors (Clarke, 2005; Patton, 2012).

Rigorous evaluative thinking

Methods do not ensure rigor. A research design does not ensure rigor. Analytical techniques and procedures do not ensure rigor. Rigor resides in, depends on, and is manifest in *rigorous thinking* – about everything, including methods and analysis. This means valuing intellectual rigor. There are no simple formulas or clear-cut rules about how to do a credible, high quality analysis. The task is to do one's best to make sense of things. An evaluator returns to the data over and over again to see if the constructs, categories, interpretations, and explanations make sense -- if they sufficiently reflect the nature of the phenomena studied. Creativity,

intellectual rigor, perseverance, insight-these- are the intangibles that go beyond the routine application of scientific procedures. These are bedrock elements of rigorous evaluative thinking.

In concluding this section on rigorous thinking, I offer this reflection from Nobel prize-winning physicist Percy Bridgman: "There is no scientific method as such, but the vital feature of a scientist's procedure has been merely to do his utmost with his mind, *no holds barred*" (quoted in Waller, 2004, p.106). I would say the same of evaluative thinking.

Critical Reflective Practice for Evaluators

Evaluators own capacity for evaluative thinking is ever at risk of succumbing to banality. In discussing this with Minnich for my review of her book in the *American Journal of Evaluation*, I sought her insights as someone outside of our profession looking in. After her comments appeared in the published review, several evaluation colleagues commented on the value of her perspective, parts of which I share here.

Methodology" is a nice fancy word, but "method" is usually what people are actually talking about when they say methodology. So the meaning of methodology can be lost, and if we lose "methodology" in its own right, we lose 'the study of the logics of method,' the reflective dimension we need to justify a choice of method. Methodology is thinking about choice of methods that will then shape disciplined reasoning, and can then help us think about those choices without continuing to be constrained by them. And thinking itself can reflect on limits of methodology. (Minnich, personal communication) This reminds us to think about our thinking, and how our thinking is embedded in all we

do, especially methodological choices and how we think about what rigor means, "demonstrating

rigor" being a core aspiration of evaluators. She continued:

Technical languages can become the kind of banal that allows people to do thoughtless on up to evil things. There is a constant risk in doing one of the most basic and important things of which our minds are capable – making categories.

Thinking and language interacting creatively are how we comprehend without reduction, how we retain our own and others' freedom of mind. Limit thinking to knowledge, opinion, belief, and these lock in and become dogmatic – perhaps deadly, certainly deadening, boring. Limit language to the worn coins of cliché, convention, jargon, insider professional language and the same thing happens. The past, the retrospective, smothers the present, the prospective future – and then there are ever more insider/outsider divisions for obvious reasons. Only the already initiated can speak to each other with comprehension. Awful thought...and not unfamiliar to any of us.

We can *think about language* even as we use and are used by it, and that allows us, as Toni Morrison put it, to become aware of "the otherwise invisible bowl within which we swim."

In some ways, I want nothing more than to help awaken, nourish, and make utterly contagious a fine and insatiable love of thinking and its complement, language, among other things but basically to keep our mind's products from being prisons, rather than homes, works of art, tool shops, keys.... (Minnich, personal communication)

This kind of increased awareness is what her invitation to join the conversation about the life and death importance of thinking offers evaluators specifically and stakeholders generally, which means everyone.

Values and valuing as central to evaluative thinking

The scholarly journal *New Directions for Evaluation* offers a way to track emerging developments in the profession and discipline of evaluation. In 2018, Anne Vo and Thomas Archibald edited a special thematic volume of the journal on *Evaluative Thinking*. An extensive review of evaluation publications identified four core domains of evaluative thinking: (1) values, (2) valuing, (3) systematic cognitive processes, and (4) supporting thoughtful evaluation use (the application of evaluation thinking in doing evaluations and building evaluative capacity in programs and organizations (Vo, Schreiber & Martin, 2018, pp. 32-44).

Evaluators collect data about program effectiveness and interpret the findings, but the essence of the evaluative function is facilitating and rendering judgment. At the center of the word evaluation is valu[e]. Rendering a judgment involves applying values to the data and interpretation of the findings. Data are data. Findings alone do not determine whether a result is good or bad. Values and standards are needed for that determination. Data may show that gender equity or racial integration has increased as a result of a project intervention. Whether that increase is "good" depends on what values inform that judgment. If one supports gender equity or racial integration, it is good. If one opposes gender equity or racial integration, the findings are bad. Regardless, the findings remain the findings. It is the judgment that varies depending on the values brought to bear.

The centrality of values and valuing in evaluative thinking stands in strong contrast to advocates of "value-free" social science. Distinguished philosopher and evaluation pioneer Michael Scriven has written extensively about the "value-free fallacy." In an interview on "thinking about thinking" he said:

The origin of the value-free doctrine, it came from Max Weber making the point, in the first convention of sociologists -- that we'd better watch it a bit that we weren't getting into the business of criticizing the welfare system in Upper Saxony, or the government in Upper Saxony was going to cut us off at the pockets. That was a pretty sensible though somewhat chickenhearted piece of advice. But within about three or four years we had converted this into a religious doctrine, and people were saying, well, of course, science deals with facts, not with values. And yet every scientist at a university grades every one of his students, evaluates their work, without the least difficulty, and is challenged on it, and defends the grades, a highly evaluative process -- does that to colleagues, does that to work, does it to instruments. (Scriven, n.d., p. 1)

Value-free social science was based on the premise that science was about facts not values. But science includes far more than factual (i.e., non-evaluative) claims

Such claims range from evaluation of the quality of observational data and instruments, and the merits of experimental designs, hypotheses and theories, to evaluations of the worth of research proposals and scientific papers submitted to journals for publication, and to evaluations of the merit of scientific words and scientists. The difference between astrology and astronomy is essentially a difference in the quality of their data and the inferences from it.... Since science itself contains, at the heart of its practice and conclusions, many evaluative claims, the assumption that it is only concerned with claims that can be established as (non-evaluative) facts directly, or by inference from other facts, is wrong. (Scriven, 2007, p. 5).

Let me illustrate what can happen when value-free social science is applied in evaluation. In the 1980s a team of economists were commissioned by the World Bank to evaluate a campaign against onchocerciasis, more commonly known as river blindness. It is a parasitic disease that has blinded millions of people in sub- Sahara Africa. The evaluation results showed that the Onchocerciasis Control Program had prevented hundreds of thousands of people from going blind. But the evaluation included a cost-benefit analysis which was "inconclusive" because almost all the people who were helped lived in poverty and the benefit of saving their eyesight had no monetary impact because poor people make no contribution to the economy. The report concluded: "There are humanitarian benefits associated with reducing the blindness and suffering caused by onchocerciasis but these benefits are inherently unmeasurable, and we will not account for them here" (Lancaster, 2018, p. 63).

The program was judged to be doing humanitarian good but not economic good.

One argument for value-free (non-evaluative) science has been that goodness cannot be objectively observed in nature. The nature of nature (facts) can be observed and reported, but the goodness of those facts does not reside in nature and is therefore outside the purview of science. Scriven (2007) has devastated that line of argument. Since we are contemplating the banality of goodness, and using evaluative thinking to ensure the authenticity and meaningfulness of extensive good (in juxtaposition to extensive evil), let me quote Scriven at some length on both the philosophical and evaluative matter of assessing goodness.

...[T]he term [good] is learnt only in context: we learn what makes X good, for a thousand Xs, not by learning what good is and combining that with our understanding of what X is. Good, by itself, is a function word, not an abbreviation for a set of properties;

it simply reminds us of that second set of properties for each X, the set that we have learnt increases its merit or quality or value or worth, A good apple, for example, is one that lacks worms and bruises—but worms and bruises are not part of the definition of apple. (However, it's true that we tend to learn at least a little about what makes a good X along with learning what makes an X, so the notions are often genetically connected, at a simple level). This logical point is of great importance in the practice of evaluation, since the first step in many evaluation projects is to unpack the meritorious variant of the concept of which the subject of the evaluation is an instance—a health clinic, a curriculum innovation, a drunk-driving policy—into its constituent criteria, which can then be tied to empirical indicators for field investigation. And in doing this, we often need highly specialized knowledge, because knowing what makes a good clinic, for example, requires knowing what equipment it needs, and you don't learn much about that when you learn what a clinic is. That's partly because the needed equipment changes as medicine changes, and part of the utility of 'good' is that it's a pointer term that points us towards getting these updates. Hence, it's perfectly possible for 'good' to refer only to naturalistic properties even though no finite list of them is possible in the abstract because it's a different list for each evaluand and the list of evaluands is indefinitely extensible, hence not determinate. However, since many criteria of merit are not themselves naturalistic—for example, the criteria of merit for arguments—the project is impossible for other reasons. The bottom line is that 'good' is a concept that is analyzable into everyday functional concepts, not a referent to some transcendental property. So the

naturalistic fallacy provides, for more that one reason, no argument against the possibility of rational evaluation. (Scriven, 2007, p.5)

Good and evil

The line separating good and evil passes not through states, nor between classes, nor between political parties either, but right through every human heart, and through all human hearts.

Alexander Solzhenitsyn

Evaluators distinguish effectiveness from ineffectiveness, what's working versus what's not working, and success compared to failure. We may, on occasion, talk about "good programs" in contrast to "bad programs," or "good practices" versus "bad practices," but we don't use the language of evil versus good. Evil tends to have religious connotations. The term for studying the problem of evil is *theodicy*, which translates from the Greek as "the defense of the justice and righteousness of God in the face of the fact of evil" (Hick, 2010, p. 6). The invention of the word is attributed to Leibniz in 1697 and centered then, as it still does now, on the philosophy of religion problem of why an infinite and good God allows evil to exist (Hick, 2010). That theological problem transcends evaluative thinking.

Romeo Dallaire, head of the United Nations peacekeeping forces in Rwanda before and during the genocide there entitled his memoir *Shake Hands with the Devil* (Daillaire & Beardsley, 2004). But his analysis of the causes of the genocide place the blame clearly on human beings. Indeed, the formal evaluation of humanitarian aid to Rwanda following the genocide also examined its causes and located the culprits in human institutions and human beings (see Patton, Thought Piece #15, for details of the evaluation and its conclusions).

If, as Scriven persuasively argues, we can define and evaluate goodness, we can define and evaluate evil. Minnich's book on *The Banality of Evil* opens that door and points the way. Secularists can rescue evil from its religious affiliation by calling its manifestations by its true name. Forcibly taking children from their asylum-seeking parents is evil, not just bad. Torture is evil, not just ineffective. International policies that impoverish and support oppression are evil, not just practical politics. The "tyranny of experts" that ignore and undermine "the forgotten rights of the poor" is evil, not just ignorance justified by good intentions (Easterly, 2013). Greedily ravaging the environment for short-term prosperity in the face of long-term climate change catastrophe is evil. Identifying evil ought not be anathema to evaluation, or ruled out of bounds by evaluative thinking. To the contrary, rigorous evaluative thinking provides a basis for naming evil when and where it is found. "Calling things by their true names cuts through the lies that excuse, buffer, model, disguise, avoid, or encourage an action, indifference, obliviousness. It's not all there is to changing the world, but the key step" (Solnit, 2018, p. 1).

Count me as persuaded and converted. My engagement with the evil of banality through Elizabeth's work has liberated me from the shackles of religious hegemony in naming evil as evil. Preventing evil, both of the intensive and extensive varieties, surely requires identifying it and calling it by its true name. Evaluative thinking helps with the identification. Explicit values guide the naming. Acting on the identification and naming is the pathway to prevention. The failure to act, as Romeo Daillaire concludes in his Rwanda memoir, is to shake hands with the devil.

Evaluative Thinking in Support of Democratic Vitality

John Dewey, in the 20th century, developed and articulated an approach to education that eschewed memorization, recitation, and repetition of content (the dominant approach to teaching) in favor of active engagement of students in learning how to learn and think. Dewey's prolific and influential writings emphasized the importance of critical thinking as both process and outcome in such books as *My Pedagogic Creed* (1897), *The School and Society* (1900), *The Child and the Curriculum* (1902), *Democracy and Education* (1916), and *Experience and Education* (1938). He argued that critical thinking was not just important for the development of the child but for the health of democracy.

Following this line of thought, Philosopher Hannah Arendt was especially attuned to the importance of critical thinking as a foundation of democracy. Having experienced totalitarianism under Hitler in World War II, then having fled it, she devoted much of her life to studying it and its opposite, democracy. She believed that thinking rigorously in public deliberations and acting democratically were intertwined. Totalitarianism is built on and sustained by deceit and thought control. In order to resist efforts by the powerful to deceive and control thinking, Arendt believed that people needed to practice thinking. Toward that end she developed 'eight exercises in political thought' (Arendt, 1968). She wrote that 'experience in thinking... can be won, like all experience in doing something, only through practice, through exercises' (p. 4). For example, Arendt thought it important to help people learn to think conceptually,

to discover the real origins of original concepts in order to distill from them anew their original spirit which has so sadly evaporated from the very keywords of political language—such as freedom and justice, authority and reason, responsibility and virtue, power and glory—leaving behind empty shells. (pp. 14–15)

The writings of Ernie House on *Deliberative Democratic Evaluation* (House & Howe, 2003) have brought this perspective into evaluation. House argues that a central function of evaluation incorporated into a democratic process is to give voice to stakeholders and support dialogue and deliberation. For such a process to be perceived as legitimate and credible, it must be fair, inclusive, and open.

The three principles are inclusion of all relevant stakeholder views, values, and interests; extensive dialogue between and among evaluators and stakeholders so they understand—one another thoroughly; and deliberation with and by all parties to reach conclusions. The conclusions might be jointly constructed rather than made entirely by the evaluator.

(House, 2009, p. 1).

Embedded in deliberative democratic evaluation is the capacity of stakeholders to engage in critical thinking (Patton, 2002). I reviewed House's early writings on the logic of evaluation argumentation earlier. Here I want to highlight another application of critical thinking for social change as contributing to evaluative thinking, the pedagogical work of Paulo Freire.

Freirean Pedagogy and Evaluative Thinking

Paulo Freire's approach to social change emphasized the importance of working with the poor and oppressed to analyze their situation and think critically about how to change it. He called this developing critical consciousness in the tradition of Marxism. In 1964, Paulo Freire was imprisoned in Brazil for 70 days as a traitor. He was subsequently exiled and worked in Chile for five years in the Christian Democratic Agrarian Reform Movement. In 1967 he published his first book, *Education as the Practice of Freedom*, bringing him acclaim and a position as visiting professor at Harvard in 1969. In 1968 he wrote his famous *Pedagogy of the*

Oppressed, published in Spanish and English in 1970, but not in Brazil until 1974. Critical consciousness, or conscientização (Portuguese), refers to attaining a deep, meaningful, realistic, and reality-based understanding of one's world. This includes becoming aware of how one has been indoctrinated and conditioned to think in particular ways by those with power and wealth who control traditional educational outlets including schools, governmental agencies, media outlets, and the business world. Freire (1970) introduced the idea of conscientização in his book Pedagogy of the Oppressed to emphasize that ordinary people, especially the poor, are oppressed by false consciousness, having internalized the message that they are inferior, without value, incapable, and useless. A pedagogy of the oppressed raises consciousness about the nature, sources, and implications of oppression, which include dominant and domineering myths so as to escape control by those in power and come to act with freedom and consciousness as a self-determining and thoughtful human being. This realization empowers the oppressed to take action.

For Freire, critical consciousness involved ongoing evaluation. The development and evaluation of a literacy campaign, which is the most extended example of Freire's approach in *Pedagogy of the Oppressed*, describes in depth and detail a participatory evaluation process. But Freire's critical pedagogy is not conceptualized as a project and the purpose is not to produce a report. Critical pedagogy is an ongoing process that aims to bring about long-term and lasting social change by affecting how a community of people think and their collective actions based on altered thinking.

Today, Freire's pedagogical influence is manifest in and represented by three major and intersecting evaluation approaches: empowerment evaluation, critical systems heuristics as a

way of operationalizing critical consciousness, and evaluative thinking as a core capacity to be developed in the process of conducting evaluations. Empowerment evaluation supports development of critical and evaluative thinking as sources of empowerment (Fetterman & Wandersman, 2005). Critical systems heuristics in evaluation design and implementation emphasizes explicit attention to power dynamics, taking into account diverse perspectives, representing diverse values, and being explicit about critical boundary decisions (Williams & Hummelbrunner, 2011). For example, debates about and proposed actions regarding climate change involve diverse perspectives about how to frame the issue, what is open for discussion (boundary decisions), and differentials in power that affect what is even considered actionable by those with more and less power. Evaluative thinking as a form of critical consciousness is fundamental to House's (1977) conceptualization of evaluation dialogue involving argumentative interaction between the evaluator and stakeholders, "a dialogue in which they are free to employ their reasoning" (p. 48). It is by challenging evaluative premises the evaluator puts forth that "the nature of the evaluation as argumentation becomes apparent" (House, 1977, p. 8). Democratic deliberative evaluation (House, 2014; House & Howe, 2000) both requires critical consciousness and enhances the capacity to think critically.

Barry MacDonald, influenced and inspired in part by Freire, was an early advocate of the democratic evaluation model (MacDonald & Kushner, 2005). He argued that the democratic evaluator recognizes and supports value pluralism, with the consequence that the evaluator seeks to represent the full range of interests in the course of designing an evaluation. In this way, an evaluator can support an informed and thoughtful citizenry, the *sine qua non* of a strong democracy, by acting as an information broker between groups that want and need knowledge of

one another and have the capacity to reason together. The democratic evaluator must evaluative thinking accessible to, appreciated by, and practiced with non-specialists—that is, the general citizenry. *That is how evaluation can contribute to the prevention of extensive evil.*

Writings on evaluation's role in supporting democratic processes reflect a significant shift in the nature of evaluation's real and potential contributions to a better world. Two decades ago, the emphasis was all on increasing use of findings for enhanced decision making and program improvement and, therefore, making sure that findings reflected the diverse perspectives of multiple stakeholders, including the less powerful. While that thrust remains important, a parallel and reinforcing use of evaluation focuses on helping people learn to think and reason evaluatively and on how rendering such help can contribute to strengthening democracy over the long term, a vision articulated by John Dewey, Paulo Freire, and Hannah Arendt, and brought into evaluation most often through the lens of social justice.

Start with the premise that a healthy and strong democracy depends on an informed citizenry. A central contribution of policy research and evaluation, then, is to help ensure an informed electorate as well by disseminating findings, as well as to help the citizenry weigh evidence and think evaluatively. This involves thinking processes that must be learned. It is not enough to have trustworthy and accurate information (the informed part of the informed citizenry). People must also know how to use the information, that is, to weigh evidence, consider the inevitable contradictions and inconsistencies, articulate values, interpret findings, deal with complexity, and examine assumptions, to note but a few of the things meant by "thinking evaluatively." Moreover, in-depth democratic thinking includes political sophistication about the origins and implications of the categories, constructs, and concepts that shape what we

experience as information and "knowledge" (Minnich, 2004), a core issue for Freire encompassed in his focus on critical consciousness.

Vo and Archibald (2018) conclude their *New Directions for Evaluation* volume on *Evaluative Thinking* with consideration of the role of evaluation plays when "democracy is in peril." They observe that a theme running through their volume is emphasis on "the essential role (both actual and potential) that evaluative thinking has in preserving and promoting a just, equitable, and democratic society" (p. 143).

In that same volume, Archibald, Neubauer, and Brookfield (2018) connect critical thinking and evaluative thinking to social justice. Drawing on Stephen Brookfield's extensive writings on teaching critical thinking (1995, 2012, 2017), they posit that critical adult education, "rooted in critically reflective practice and critical theory,... can reorient evaluative thinking as a critical, inherently political process that is essential for high-quality evaluation *and* for the promotion of an equitable and socially just evaluation profession and society at large (p. 110; emphasis in the original).

Our premise... is that equating evaluative thinking with critical thinking can be more meaningful and useful— the pragmatic, analytic, and political sense— if the emancipatory potential of criticality as a tool for social justice is readmitted to the equation. (p. 110)

In the next Thought Piece in this book, Stephen Brookfield reflects on the limitations of critical thinking for combating deeply entrenched beliefs about white supremacy.

Evaluative Thinking as a Sensitizing Concept

Some readers may have noticed, perhaps with growing frustration, that I have not offered an operational definition of evaluative thinking. I've reviewed its emergence as a core concept in the profession, made the case for its importance, and offered examples of its applications and values in evaluation practice. But still no precise definition. Nor will there be one. In an extensive literature review of the term reported in "Toward a conceptual understanding of evaluative thinking," Vo, Schreiber, and Schwandt (2018) concluded that, although the term is used pervasively among evaluators, it defies precise definition and "what it is and what it means will continue to evolve" (p. 44). Distinguished evaluation scholar and philosopher of science, Tom Schwandt suggests making peace with the inherent and inevitable ambiguity of such a wide-ranging notion.

Clarity and some degree of agreement on, if not precision in, evaluation terminology is of course useful, for if we are to nurture evaluative thinking among evaluators and stakeholders we need to be fairly clear on just what we are aiming to foster. Nonetheless, if complete conceptual clarity were a necessary prerequisite to effective learning and practice, we would likely never escape the weariness and, often, the tedium of definitional debate, particularly in the field of social inquiry that does not necessarily demand precision in use of certain terms. (quoted by Vo & Archibald, 2018, p. 140).

Evaluative thinking can usefully be thought of as a sensitizing concept. Qualitative sociologist Herbert Blumer (1954) is credited with originating the idea of the "sensitizing concept" to orient fieldwork. Sensitizing concepts in the social sciences include loosely operationalized notions like victim, stress, stigma, and learning organization that can provide

some initial direction to a study as one enquires into how the concept is given meaning in a particular place or set of circumstances (Schwandt, 2001). The observer moves between the sensitizing concept and the real world of social experience giving shape and substance to the concept and elaborating the conceptual framework with varied manifestations of the concept. Such an approach recognizes that while the specific manifestations of social phenomena vary by time, space, and circumstance, the sensitizing concept is a container for capturing, holding and examining these manifestations to better understand patterns and implications.

Evaluators commonly use sensitizing concepts to inform their understanding of situations. Consider the notion of *context*. Any particular evaluation is designed within some *context* and we are admonished to take *context* into account, be sensitive to *context*, and watch out for changes in *context*. But what is *context*? In 2009, the theme of the annual conference of the American Evaluation Association was *Context and Evaluation*. Animated discussions ensued among those attempting to operationally and specifically define context and those comfortable with contextual variations in meaning. Those seeking an operational definition of context ranted in some frustration about the ambiguity, vagueness, and diverse meanings of what they, ultimately, decided was a useless and vacuous concept. Why? Because it had not been (and could not be) operationally defined -- and they displayed a low tolerance for the ambiguity that is inherent in such sensitizing concepts.

Evaluative thinking is a sensitizing concept. A sensitizing concept raises consciousness about something and alerts us to watch out for it within a specific context. That's what the concept of evaluative thinking does. It says, things are happening to people and changes are taking place in programs and organizations as evaluation takes place, especially when

stakeholders are involved in the process. Watch out for how people are thinking about and experiencing evaluation. Pay attention. Something important may be happening. The process may be producing insights and learnings quite apart from expected findings. Think about what's going on as people think. Help the people in the situation pay attention to their thoughts, if that seems appropriate and useful. Perhaps even make systematic evaluative thinking a matter of intention.

But don't judge the maturity and utility of the concept by whether it has "achieved" a standardized and universally accepted operational definition. Judge it instead by its utility in sensitizing us to pay attention to the thinking that is part of evaluation both in making sense of findings and, beyond findings, thinking that is stimulated by the very processes of determining evaluation questions, establishing evaluation criteria for judging success, making methods choices, interpreting data, and rendering judgments of merit, worth, significance, and goodness.

What evaluative thinking is NOT

Sometimes we can more definitively specify what something is **not** than what it is. So, having presented some historical context for evaluative thinking, let me expand the landscape of inquiry by including attention to what IT (evaluative thinking) is **not**. As context, I am writing this shortly after the 2016 American presidential election which was characterized by fabrications, lies, misrepresentations, illogic, character attacks, and a general disregard for facts, data, science, and evidence. Politics inevitably involves different opinions. But as distinguished social scientist, policy researcher, and US Senator from New York, Patrick Daniel Moynihan, stated: "Everyone is entitled to his own opinion, but not to his own facts." Would that it were so! Instead we have seen the politics of the big lie resurrected at an unprecedented level:

"If you tell a lie big enough and keep repeating it, people will eventually come to believe it. It thus becomes vitally important for the State to use all of its powers to repress dissent, for the truth is the mortal enemy of the lie, and thus by extension, the truth is the greatest enemy of the State."

Author unknown

Often attributed to Joseph Goebbels

Minister of Propaganda, Nazi Germany

Here's the updated, research-based version from Nobel prize-winning decision scientist Daniel Kahneman in his best-selling book on *Thinking Fast and Slow*:

A reliable way to make people believe in falsehoods is frequent repetition, because familiarity is not easily distinguished from truth. Authoritarian institutions and marketers have always known this fact. (Kahneman, 2011)

The rise of social media makes disseminating big lies easier than ever. One consequence highlighted by the *New York Times* editorial board is that "when everyone can customize his or her own information bubble, it's easier for demagogues to deploy made-up facts to suit the story they want to tell.

That's what Mr. Trump has done. For him, facts aren't the point; trust is. Like any autocrat, he wins his followers' trust — let's call it a blind trust — by lying so often and so brazenly that millions of people give up on trying to distinguish truth from falsehood. Whether the lie is about millions of noncitizens voting illegally, or the crime rate, or President Obama's citizenship, it doesn't matter: In a confusing world of competing,

shouted "truths," the simplest solution is to trust in your leader. As Mr. Trump is fond of saying, "I alone can fix it."

He is not just indifferent to facts; he can be hostile to any effort to assert them....

Mr. Trump has changed this game. He has exploited, perhaps better than any presidential candidate before him, the human impulse to be swayed more by story than by fact. As one of his surrogates said recently, "There's no such thing, anymore, of facts. (New York Times, 2012, p. SR10)

We now know from research on how our brains process information that we are vulnerable to *confirmation bias:* the tendency to search for, interpret, favor, and recall information in a way that confirms our preexisting beliefs and prejudices, while giving little consideration to contrary evidence (Kahneman, 2011). In so doing, we mistake the repetition of the same thing over and over as confirmation of its truth. Repetition of the big lie becomes verification of its truth. As if the challenge of thinking clearly and rigorously was not already daunting, *truthiness* has ascended to overshadow truth. *Truthiness*, a term introduced sarcastically by comedian Stephen Colbert (2005), refers to the quality of preferring facts that *feel right* and that *one wants to believe* to be TRUE. No need to worry about actual facts and empirical evidence.

So, as we inquire into the definition, parameters, nature, applications, implications, and consequences of evaluative thinking, let's bear in mind what it is not: lying, big or little; manipulation of data to support perceived positions; cherry-picking evidence to distort the full truth; illogical and unwarranted conclusions; intentionally creating and disseminating false "news"; treating opinions as facts; *truthiness*; and fabricating evidence to support ideological and

political positions. And that's just the short list. We may not agree on a precise definition of evaluative thinking, but perhaps we can agree on what it is not.

Beyond Banality in Evaluation:

The High Stakes of Evaluative Thinking

This piece opened by looking at evaluation through the lens of banality: evaluation as thoughtlessness and mindless compliance with bureaucratic and funding accountability requirements. Banality in evaluation, as in other arenas, manifests as a fundamental failure to think.

Minnich (2017), in *The Evil of Banality: On the Life and Death Importance of Thinking,* was concerned with what can be done to prevent extensive, thoughtless, and mindless violence. She examined the Rwanda genocide as one of her many case examples. She enquired into how it is possible for human beings to engage in genocide, slavery, sexual trafficking of children, systematic rape, mass torture, and other acts of violence in the vast human arsenal of brutal and deadly acts of oppression and exploitation. Her premise, starkly put, is that thoughtlessness disables the conscience. With the mind disengaged and conscience disabled, it becomes possible for otherwise decent people to participate in systematized extensive evils such as genocide, human trafficking, and grinding exploitation of the most vulnerable. She concluded that any education that fails to awaken, practice, support, and prioritize thinking, this most basic of human capacities, fails where it matters most. *The same can be said of evaluation*. Applying Minnich's analysis to evaluation reveals the moral imperative of deepening the capacity for and practice of evaluative thinking, not only among stakeholders with whom evaluators work directly, but for the general citizenry. Let the subtitle of her book emblazon itself as a

catchphrase of evaluative thinking: *the life and death importance of thinking*. That's what it takes to get beyond banality in evaluation.

The volume of *New Directions for Evaluation* devoted to *Evaluative Thinking* (Archibald & Vo, 2018) represents a commitment to think through ways to facilitate evaluation that can free us not only from the weight of ignorance, but from the deadening, deadly hold of banality – mindless compliance, thoughtlessness in all its manifestations, and the deadly cynicism that thinking doesn't matter. The stakes could not be higher when we understand, truly and deeply understand, *the life and death importance of evaluative thinking*.

Never Again

The promise *Never Again*, central to the message and mission of the Holocaust Museum, was the title of Meir Kahane's 1972 best-selling book about the Holocaust. It is an aspiration the world has failed to realize. Rwanda. Darfur. Congo. Central African Republic. Syria. Rohingya in Myanmar. And the future?

While working on this book, I participated in three major conferences on various aspects of and likely consequences of climate change. Serious, knowledgeable, empirically-oriented, and sober-minded experts from around the world, working in a variety of sectors and engaged in diverse arenas of environmental, economic, and development research, conclude that by mid-century, this century, as many as 20 countries could be gone, 60 major cities could be underwater or under threat, and 1.5 billion people will likely be displaced. They believe that not only is humankind in danger from climate change, but that climate change will lead to massive

violence on a scale never before seen. Unless things change, the vision of *Never Again* must yield to the reality of *Again and Again and Again*....

I close this reflection with a heightened sense of *urgency*. The latest projections and scenarios about the effects of climate change on humanity globally, and the likelihood of extensive violence stemming from massive displacement of people, affirm and magnify the life and death importance – *and urgency* – of thinking and acting.

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Exhibit 11.1

Bloom's Taxonomy

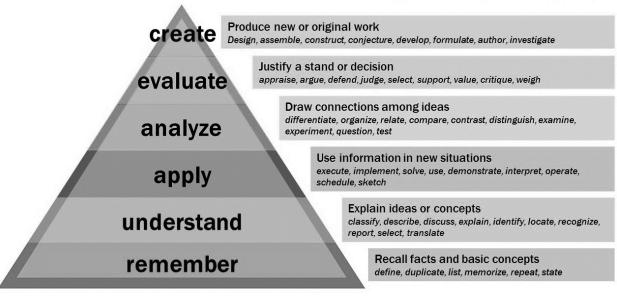


Exhibit 11.2. Principles of Evaluative Thinking

Be clear	Be clear about goals and purposes; be clear about what's being evaluated, what data will be collected, what judgments are to be made, how results will be used—indeed, be as clear as possible about everything.
Be intentional	Know what you want to do and why. Plan your work and work your plan. Think through what you're doing. Consider contingencies.
Be accountable	Systematically examine the extent to which your intentions and hopes work out as planned and accomplish what you wanted to accomplish.
Be specific	A favorite evaluation clarifying question: "What exactly do you mean by that?"
Focus and prioritize	You can't do or look at everything. Be purposeful in deciding what's worth doing and knowing. Make decisions and own their consequences.
Be systematic	Create a system that covers all priorities. Carefully document what occurs at every stage of decision making and data collection.
Make assumptions explicit	Determine what can and cannot be subjected to empirical test.
Operationalize program concepts, ideas, and goals	The fundamental evaluation challenge is determining how to measure and observe, quantitatively or qualitatively, what is important. Know and specify, operationally, what success will look like—and what constitutes failure. Reality testing becomes real at this point.
Distinguish inputs and processes from outcomes	Confusing processes with outcomes is common. Evaluative thinking looks at the connections between processes and outcomes, and that means distinguishing them and measuring both.
Draw conclusions	Have data to support allegations of fact; provide empirical support based on data and logical explanations for conclusions. This means a commitment to reality testing in which logic and evidence are valued over strength of belief and intensity of emotions.
Separate data-based statements of fact from	Interpretations go beyond the data and must be understood as what they are: interpretations. Judgments involve values about what is desirable or undesirable. interpretations and judgments
Make criteria and standards for judgments explicit	The logical mandates to be clear and specific apply to making criteria and standards explicit.
Limit generalizations and causal explanations to what data support	Overgeneralizations and overly definitive attributions of causality are epidemic outside the culture of research and evaluation.
Cultural sensitivity and cultural competence	Cultural variations and factors are critical to understanding.