#### TOXIC LEADERSHIP IN CONTEXT

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#### **ABSTRACT**

A sizeable body of research and other literature has been developing about toxic leadership and workplace bullying. Our earlier work found distinctions between tough bosses and true bullies in the workplace. A later study showed that military officers were able to clearly identify differences between tough but effective leaders, and toxic leaders. That work was extended into the organizational climates which seem to promote toxic leaders and bullies. Other colleagues have explored potentials for changes in bullying behavior through executive coaching interventions, noting that some executives simply lack awareness of their behaviors, or the effects on those around them. The focus of this paper is the synthesis of earlier findings, to begin a more systemic understanding about the relationships between individual, organizational, and societal behaviors with respect to bullying and toxic leadership.

Keywords: toxic leadership; toxic behavior; workplace bullying; systems research; holistic model

#### INTRODUCTION

This paper extends previous research and theory-building about workplace bullying and toxic leadership. It will do so through the use of an eight-part framework, developed in an upcoming book titled "A guide to systems research: Philosophy, processes and practice" (Edson, Henning, & Sankaran, Eds., in press). The framework suggests an approach for conducting holistic, systems-oriented research studies, and parallels the steps of participatory action research (PAR). This is in keeping with the themes for the ISSS 2016 conference in Boulder, CO, of wholeness and sustainability.

While workplace bullying and toxic leadership might seem far removed from issues such as sustainability of the biosphere, or of global socioeconomic systems, they may also be examples or indicators at a different level of organization.

## 1. Philosophical perspective

The ways in which we understand problems have a great deal of bearing on how we attempt to solve them. Most things that we label as problems are assumed to have one or more causes. From that premise we try to (1) identify the cause, and (2) eliminate or remove it, or (3) interrupt the relationship between cause and effect.

In humans, however, cause and effect are typically complicated. Very few behaviors have simple, direct causes, beginning even at the level of genetics. In the realm of psychology, many biological and social factors come into consideration including medical pathologies, personality

disorders, developmental abnormalities, and so on. Even determining which behaviors are problematic, in what situations, is not always clear.

Bullying is a behavior which has raised increasing attention in recent years. In 2014, the U.S. Centers for Disease Control and Department of Education, together, released the first uniform definition of bullying at the federal level

(http://www.stopbullying.gov/news/media/facts/index.html#listing). This effort was directed at bullying in schools, and cites research finding that between one quarter and one third of youth reported being bullied at school. Bullying happens most frequently during middle school (grades 6 to 8 in most U.S. school districts), is more often verbal and social than physical, and is most frequently targeted at those who are considered "different" (e.g. lesbian, bisexual, gay, transgender, etc.) Just over 70% of students and school staff each report having witnessed bullying events at school.

According to a 2014 national survey by the Workplace Bullying Institute, 27% of U.S. workers had direct past or current experience with abusive conduct at work (<a href="http://www.workplacebullying.org/wbiresearch/wbi-2014-us-survey/">http://www.workplacebullying.org/wbiresearch/wbi-2014-us-survey/</a>). And much like in schools, about 72% of the American public is aware of workplace bullying.

The position taken in this paper is that there is no simple cause-and-effect relationship which explains bullying or toxic leadership. They are not just matters of individual deficiencies, whether meanness, or poor genetics, or a bad upbringing. They are also not directly the fault of mechanistic corporations, or bureaucratic institutions, or a failing society. There are too many variations in the behaviors and relationships – at least as understood thus far. Individuals with similar backgrounds and characteristics act out those traits quite differently throughout their lifetimes. Likewise, individuals react to the same circumstances in many different ways.

This is not to imply that individual traits and contextual circumstances do not affect behaviors. They do, but not apparently in simple, linear ways.

#### 2. Framework

According to Kineman (in press), "frameworks are commonly adopted as heuristic ways of organizing a practice or study to learn and/or problem-solve" (p. 5). A framework is a way of capturing or describing a phenomenon.

Kineman (in press) proposes a framework which includes Aristotle's *four causes* (formal, efficient, material, and final). This follows similar concepts developed by Rosen (1978, 1985, 1990, 1991, 1993, 1999), on whom Kineman's relational theory (R-Theory) is built. Kineman then aligns the framework with the steps of participatory action research (plan, act, observe, and reflect), to create the structure as shown in Figure 1.

The framework represents a cycle, in which there is no necessary or correct beginning point. For most purposes, it is simplest to begin in the bottom right quadrant, representing phenomena which can be observed, and possibly measured. In Aristotle's framework, this is efficient cause,

or the aspects explained by material causes (e.g. the "cause" of a house could be explained by the materials from which it was made, such as wood, bricks, glass, etc.)

Toxic behavior does not have a material explanation in quite the same way. It is an event rather than an object. But there clearly are observables with respect to the behavior, as witnessed by those involved, as well as bystanders.

# Contextual System formal cause final cause Reflect Plan (design, attract, (meaning, goal, encourage, constrain) purpose, possibility) Whole **function** structure System Observe Act (practice, do, (conditions, results, inquire, change) outcomes, states) material cause efficient cause

**Figure 1. PAR Holon Framework.** From Systems Research Framework, by J. J. Kineman (in press), in M. C. Edson, P. B. Henning, & S. Sankaran (Eds.). (in press). *A guide to systems research: Philosophy, processes and practice*. Reprinted with permission.

Actual System

Moving clockwise around the cycle to the lower left quadrant, we move to questions about the actions which created the observables. What happened that caused the event which was observed? In the example of a house, there are workers who assemble the materials to create the structures that we see. For toxic behavior, there is typically one or more perpetrators who exhibit aggressive behavior, aimed at particular individuals with an intent to harm them (i.e. malice; see Daniel, 2009). This is tightly coupled with the observed acts, but is a necessary distinction in order to embody an actor as an agent in the process. The toxic behavior just not "just happen," but was committed by someone.

Moving further through the cycle, to the top left quadrant, "plan" might appear to imply conscious, premeditated preparation by the individual bully or toxic leader. In some cases, that may be true. As a formal cause, though, the implication is more general. As connected to the act of toxic behavior, there is some image of "how to hurt or demean another person that you intend to harm." It helps to explain why the specific behaviors took place which were then observed. In the case of toxic behavior, there can be assumed to be some working knowledge and experience with identifying vulnerable individuals, and with knowing the kinds of behaviors which cause harm or distress.

Moving to the final quadrant, reflection in this framework is about meaning and purpose. In the case of toxic behavior, these are not necessarily positive. It could be that the worldview which makes the behavior of the bully or toxic leader rational is one in which other people are inherently less valuable than the perpetrator, or in which others are seen as constantly threatening to the existence or betterment of the perpetrator. This quadrant could also imply a contextual environment in which raw competition had become the norm, around which roles and values had adapted.

The labels outside the quadrant represent descriptors which entail the cycle. Actions and observable behaviors exist in the "real world" of experience, or the actual system. Formal and efficient cause link to the functionality of the phenomenon in question. Observable actions connect with meaning in order to provide a structure of the phenomenon. Formal and final causes together create mental or conceptual models, the contextual system, from which patterns of behavior and meaning are derived.

## 3. Problem structuring and design

The world is full of objects and events and ideas that we pass by every day, with little notice or concern. Some, however, catch our attention, whether out of curiosity, wonder, astonishment, horror, etc. Some are only of passing interest, and others become objects of focus on which we will spend great time and energy.

Social behaviors tend to evolve in terms of their acceptance and interest, on larger scales. Human slavery was an accepted practice through millennia of history. It is now almost unimaginable to most people living in developed countries. Yet according to a report by CNN (<a href="http://www.cnn.com/interactive/2012/03/world/mauritania.slaverys.last.stronghold/index.html">http://www.cnn.com/interactive/2012/03/world/mauritania.slaverys.last.stronghold/index.html</a>) the practice was made illegal in Mauritania only in 2007, and between 10% and 20% of the population of the country still live in slavery.

A case could be made that anything which becomes common or typical enough could be considered "normal," simply by prevalence. There are, additionally, arguments about what is "natural," based on human similarities with other animals, such as primates or mammals. Competition between males during mating season, for instance, resulting in aggressive and sometimes violent conflicts, are typical of many species. Are these essentially the same as bullying, though, and would they justify that kind of behavior?

Aggression is one of many behaviors that can be positive or negative, depending upon the circumstances and context. An aggressive response to an attacker can be self-protective and socially appropriate. Aggression directed for no socially acceptable reasons at smaller or weaker individuals (one way to think about bullying) is typically unacceptable. There are situations, though, in which such behaviors are not only accepted, but encouraged or promoted, intentionally or not. There are also many circumstances in which aggression is seen as positive, but in which the acceptable use of aggression is not always clear. One example is sports activities, in which physical contact is a part of the game and children being taught to play are expected to learn to be "tough."

A free-market, capitalistic economy requires competition (at least as practiced in Western economies.) Anti-trust laws in the U.S. protect against the creation of monopolies, attempting to guarantee marketplace competition as a way of balancing supply and demand. Competition inherently creates levels of conflict as organizations vie for market share and profitability. Much as in sports, there is an assumption in many business settings that workers need to be tough and competitive for the good of the organization.

Importantly, there is no federal law in the U.S. against bullying. There are laws about discrimination, and about sexual harassment, but bullying only becomes a legal issue if it happens to someone in a protected class, in conjunction with legal violation.

In addressing an issue such as bullying or toxic leadership, how should an interested person begin? Is it a problem because it is reported widely in the media? Does having a strong reaction to observed or reported behaviors define it? Does it have to be identified by figures or institutions of authority in order to qualify as a problem? Does it need to be observable and measureable in formal ways to become a legitimate subject of study?

Questioning these assumptions is largely what led us to extend our research to the U.S. Army. If there were any realm in which being abrasive, and at times even abusive, might be justified, it would seem to be the military. What we found there actually undermines the rationale for bullying or abusive behavior in almost any realm (Daniel & Metcalf, 2015).

At least as early as 2004, the U.S. Army had begun its own studies about toxic leadership (its equivalent term for workplace bullying; see Reed). By 2012, Army Doctrine Publication 6-22, in *Army Leadership*, had defined toxic leadership as follows:

Toxic leadership is a combination of self-centered attitudes, motivations, and behaviors that have adverse effects on subordinates, the organization, and mission performance. This leader lacks concern for others and the climate of the organization, which leads to short- and long-term negative effects. The toxic leader operates with an inflated sense of self-worth and from acute self-interest. Toxic leaders consistently use dysfunctional behaviors to deceive, intimidate, coerce, or unfairly punish others to get what they want for themselves. The negative leader completes short-term requirements by operating at the bottom of the continuum of commitment, where followers respond to the positional power of their leader to fulfill requests. This may achieve results in the short term, but ignores the other leader competency categories of leads and develops. Prolonged use of

negative leadership to influence followers undermines the followers' will, initiative, and potential and destroys unit morale.

Similarly, Ulmer (2012) described toxic leaders as: "Individuals whose behavior appears driven by self-centered careerism at the expense of their subordinates and unit, and whose style is characterized by abusive and dictatorial behavior that promotes an unhealthy organizational climate" (p. 48).

In the Center for Army Leadership Annual Survey of Army Leadership (CASAL) *Technical Report 2011-3* (Steele, 2011), the Army conducted an in-depth analysis specifically on the problem of toxic leadership. In that study—the largest scientific survey specifically focused on the topic—one in five (20%) Army leaders indicated that their immediate superior demonstrated toxic behaviors.

A question posed by Army leadership in preparation for our study in 2014 was the degree to which they were either attracting and recruiting personnel who would exhibit toxic behaviors, or were bringing out toxic traits through training or experience. Hypotheses included the number and duration of deployments that active soldiers experienced due to the prolonged wars in Iraq and Afghanistan, as well as the reduction of mentoring of young officers – itself a result of the excessive deployment of personnel.

The importance of the Army's studies is less about defining toxic leadership as a behavior than about the focus on the effects. The destructiveness of toxic leadership is not only on individuals who might be targets of the abuse, but on the functioning of units within the military, and ultimately on the institutions themselves.

Combat units engage in activities which are often far outside the norm for average civilians who do not live in war zones. They face extreme violence, death, injury and trauma. The cohesion within individual military units is crucial to the functioning of the military at the highest levels. As explained by Henderson (1985), and as documented by many military veterans, it is the reliance on fellow soldiers, each protecting and supporting the other, which allows individuals to do the extraordinary.

In our own military study (Daniel & Metcalf, 2014), a series of semi-structured interviews with forty-four officers of the U.S. Army was conducted during the summer and fall of 2014. Thirty-two of the interviews took place in person with active duty officers attending the Command and General Staff College (CGSC) located at Fort Leavenworth, Kansas.

Of the 44 officers participating in this study, forty (91%) reported that they had either personally worked with or observed a toxic leader at some point in their career. Thirty-two of the officers (72.7%) had witnessed an individual being promoted to a position of increased responsibility despite being widely perceived by subordinates to be a toxic leader.

As noted in the definition from Army Doctrine Publication 6-22 (above), toxic leaders tend to focus on themselves to the detriment of those who serve beneath them. The men and women who participated in the interviews with us voiced that clearly and in great detail. Tough leaders

could be harsh, and were not always well-liked. They were usually respected, however, and often seen as bringing out stronger traits in those who reported to them. Toxic leaders, by contrast, tended to be feared, avoided, and anything but respected.

A frequent question has been why the military would knowingly allow toxic behavior to remain in their positions of authority, given its awareness from its own studies, and concern about the effects. There are no definitive answers, but one frequent suggestion has been simply that leaders who are toxic, but go unpunished, often get results – at least in the short-term. As explained by one participant in our study (Daniel & Metcalf, 2014):

We used to joke that this guy [the toxic leader] thinks we're doing things because of him but everything that's happening is happening in spite of him and he has no idea... And what's frustrating is that this individual...has been rewarded every step of the way. He's left a trail of tears behind him because his bosses always think that he's phenomenal because he produces such good results (and to be fair, he is a very competent individual). But they don't realize that he destroys everyone below him...

## 4. Modeling and simulation

Once a topic has been identified and a way of approaching it has been designed, how can it best be studied and described? Rosen (1985) described what he termed the *modeling relation*. This is essentially a summary of the scientific process of research. A phenomenon is observed and measured, and those observations are coded into a model of the system in question, ideally mathematically. This creates a *formal system*. The model is then tested against the *natural system* that it was meant to describe. Or as Kineman (in press) explained:

In plain language, the aim is to write models that perform like nature (including the nature of social and cognitive systems), using rules we believe these systems follow. If the encoding and decoding of a model commutes with the natural system in this way, that is, the model provides an accurate image of its performance, then we have a good model (p. 84).

Rosen drew a distinction between models and simulations. Kineman (in press) described the difference this way: "The modeling relation relates the way the domains work, testing a proposition or theory. In contrast, Rosen (1993) described simulation as a form of mimicry, where it is the behavior alone that is replicated, often by uncorrelated processes" (p. 104).

Our application of this distinction (which may *not* be the way in which Rosen intended it), would be as follows. You could imagine something like a Turing Test (to see if a computer could effectively masquerade as a human) for an encounter with bullying. At this stage of development, it is highly likely that a software program could be written to mimic an encounter with a bully, by phone, for instance. A caller would get an answer from a human-sounding voice, when would proceed in stages to ridicule and berate the caller, for no apparent reason. Most people would feel an emotional reaction to such an event, even if they were aware that they were not talking to another human. Such an encounter might be a simulation, but would not be a

model of bullying or toxic behavior in the ways that the holistic framework presented here would require.

The goal of a model, then, is to produce a sufficiently complete description of a phenomenon or system of interest. If a researcher or consultant were brought into an organization which was experiencing toxic behavior, one plausible approach would be to gather data in order to describe regular patterns resulting in toxicity. That might be done, for instance, using system dynamics, or a similar tool, indicating the actions which seemed to reinforce toxic encounters, and those that might balance or dampen them. That could be a useful model, particularly at the level of an individual organization.

Another goal for a model of toxic behavior would be to create a "recipe" or blueprint for causing toxic behavior. If a combination of individual and organizational characteristics could be found which regularly brought out toxic behavior, with a high degree of reliability, then it could be said to be a reasonable model.

A similar, but somewhat different, model might help to identify leverage points for intervening in toxic situations. Similar to the "recipe" noted above, it would need to describe the process to an adequate level of detail and reliability. In this case, however, the intention would be to identify the strongest leverage points for reducing toxic behavior. As noted in comments from our study with the U.S. Army (Daniel & Metcalf, 2014), leverage points might be found in recruitment, or training, or mentoring and development, or practices of troop deployment, or any number of other possibilities.

A different approach to modeling would be a focus on the wholeness of the model, and the organization, itself. Rather than attempting to identify and eliminate the problem of toxic behavior, the goal might be to describe an organization in which toxic behavior was not an issue. Assuming that toxic behavior is detrimental to the organization as a whole, as frequently described in studies of the Army, how would an organization function which was so whole and "healthy" that did not include toxic behavior? (Answers to that question might extend well beyond the boundaries of an organization itself, into societal and even global aspects which would need to be included in such a model.)

Figure 2 provides a sample model of toxic behavior. It was developed from a template created by Kineman (in press), and describes a toxic scenario at two levels, both individual and organizational. It is based on information gathered through various studies and literature reviews, but is not based on data from any specific study. The model includes the same information as displayed in Figure 1, but in a slightly different structure due to the embedded systems described. This primarily changes how the actual and contextual systems, as well as structure and function, are placed.

The point of this example is not to present a factual or definitive model. Some of the descriptors used represent stereotypes about toxic behavior and problematic organizations, which may or may not be true of a given circumstance. They should be useful for discussion, however, especially in terms of the relationships between the descriptors provided.

For this example, let's begin with the lower right, inside cell, containing "observable conflicts". That is often where an actual study or investigation would begin. The actual system or behavior (one cell to the left) is labeled "Toxic Behavior". The action which creates this (lower left, inside cell) is "harmful actions with malice." That is the distinction found in earlier research by Daniel (2009).

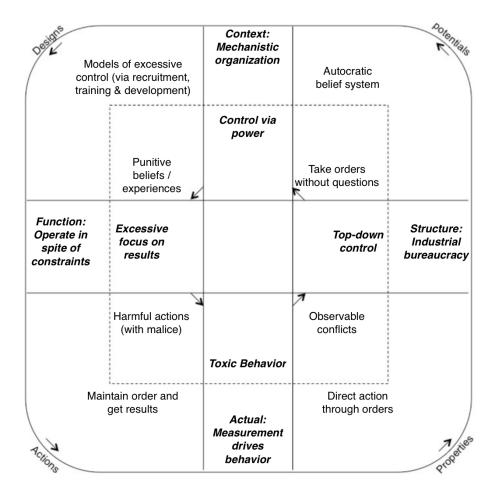


Figure 2. A two-level PAR Holon model of toxic behavior.

The descriptor in the upper left, inside cell is "punitive beliefs / experiences". This is meant to indicate a mindset or mental model which justifies the use of toxic behaviors. Those could come from early childhood or other experiences, or training which the individual received. Those mental models together with a practice of toxic actions allow for an excessive focus on results, even to the detriment of the people involved.

Moving to the upper right, inside cell, the purpose which this cycle serves is to create a system in which orders are accepted and implemented, not only without questions, but even without concern for how they get done, or the costs involved. Such a mindset and purpose, together, represent a truly mechanistic type of organization, without empathy or larger concern.

The middle right, inside cell, represents the structure of this system. In this case it would be traditional, top-down, command and control.

The outer ring of cells follows the same pattern of organization as the internal one, but represents characteristics of the organization as a whole. In this example, that could be most any level, from small (e.g. department or platoon) to the entire organization. In an actual study, of course, that distinction would have to be made explicit, and many levels of the organization might be involved, expanding the model significantly.

The organizational level of this model is depicted in terms of a mechanistic and rigidly bureaucratic type of entity. As noted before, this involves stereotypes as much as data, and is meant for illustration. That is not to imply that the characteristics noted are unreal. They are representative in many ways of organizations which exist around the world. Efficiency, for example, has become a primary focus for organizations of many kinds, moving from the corporate sectors, to non-profits, to educational and governmental. The mindset shows up in the form of Six Sigma, Lean, and similar organizational interventions. This does not mean that such efforts are inherently negative or destructive, but in this case that they represent a way of thinking which implies a certain type of organization – ultimately, a closed system.

Note that this model does not imply an inherently "bad" organization, as a whole. There are many positive aspects, depending upon the context or setting in which the organization functioned. The key in this case is the presence of toxic behavior, which is destructive to the functioning and sustainability of the organization itself. A first-order question would be how to remove the toxic behavior. A second-order question would be how to change the nature of the organization itself, so that it did not create or perpetuate the toxicity.

In this model, there are explicit and important relationships between every adjacent cell – for the individual and organizational cycles, respectively, as well as between the cells in each cycle representing the same type of descriptor. The bottom right cells, for instance, in both cycles, represent efficient cause (observable behaviors) from Figure 1, and efficient cause at the individual and organizational levels are closely linked. They are not, however, directly causal. It is certainly possible, for instance, that a given individual might operate well outside the norms of his or her organization, in a particular situation – but that would be a different type of example.

This particular example was constructed to show a high level of coherence between the descriptors in the cells. In any number of real scenarios, there could be significant conflicts between the cells, indicating a system in disarray.

The relationships between the individual cells is also important with respect to change and variability. In any given scenario, places for intervention might seem obvious – and often do to those in charge. One of the most common organizational interventions is training. Even when called "organizational change," the actual activities involve telling employees what they should be doing or thinking differently. (This would affect the upper left cells of the model.) The long-standing assumption is that information translates into behavior, on the premise that human behavior is rational.

Other organizational change efforts focus on cultural change, which would target the upper right cells in the model. For many reasons, those are extremely difficult to achieve, whatever the true intentions. It is, though, one of the most crucial areas in this example, since the alignment between individuals and organizations about meaning and purpose are crucial to organizational functioning.

To be clear, this model is presented purely as a beginning point, for exploration and discussion. It is nothing close to a rigorous, mathematical model, which might attempt to describe the actual functioning of particular individuals in real organizations. By contrast, though, it might be helpful to show a model of a healthier and better-functioning organization.

One of the questions asked in our study with the Army was about great leaders. The point was to set a baseline, against which descriptions of toxic leaders could be compared. Every soldier interviewed was able to cite one or more leaders that she or he considered to have been great during their careers.

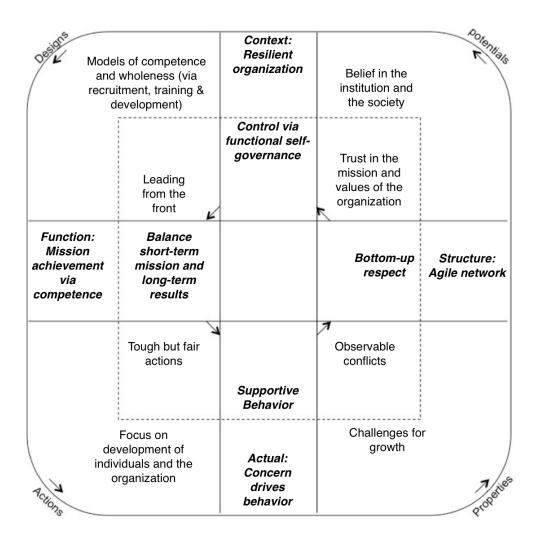


Figure 3. A model of great leadership

Figure 3 is built around characteristics that we heard described by participants in the study with the Army. As with Figure 2, though, the descriptors should apply across a wide variety of organizations. Many of the actual terms are our interpretations of the reports from participants in the study.

The primary link between Figures 2 and 3 is found in the bottom right, inside cell, with the descriptor "observable conflicts". As shown in the model, those are not inherently toxic or destructive. As noted in previous discussions, what appear to be conflictual interactions between a supervisor or officer and subordinate may not necessarily be toxic behavior. Conflicts sometimes happen for good reasons, and the ultimate results can be positive, even if the immediate interactions are unpleasant.

The structure of the model in Figure 3 is exactly the same as for Figure 2. It is intended to represent, though, a very different kind of organization, built around the ways in which great leadership tends to affect an organization. It is not meant to be an absolute or eternal ideal. Organizations, as social systems, evolve over time in relation to their relevant environments. There was a point in time at which a well-functioning, highly structured bureaucracy was better than what preceded it. The model presented in Figure 3 is built around descriptions provided by participants from our recent study (Daniel & Metcalf, 2015).

## 5. Taking action

As noted in section three of this paper, about framing and design, there can be many reasons for studying or interacting with a given system. In Participatory Action Research (PAR), there is an assumption that change is tightly linked to research or investigation, and that all research is done for some larger purpose, whether stated or not. This traces back to the work of Kurt Lewin (1946), including his social climate studies, as well as to many others who helped to develop action research with the Tavistock Group and related universities.

The intention of an effort might primarily be change, and for that change to be effective the system and the problem both need to be understood adequately. Alternately, the intention might be something approaching "pure learning," or "fundamental research." Whatever the intention, some action undoubtedly follows.

For purposes of discussion, one action would simply be following a cycle of learning. In terms of Rosen's (1990) modeling relation, this would be comparing the formal system (the model developed, as in Figures 2 or 3) with the natural system, the organization or situation represented by the model. In practical terms, this could happen by publishing an article about the findings from a study in a peer-reviewed journal, and receiving the critique of a community of scholars familiar with the kinds of data involved.

In a participatory action research study, the researcher would typically be working with a group of participants as co-researchers. In that case, the model would be evaluated by the research team for verification and further refinement.

In both cases, there is a cycle of learning which is presumed to continue. In the case of research, the study itself might end, but if the topic is of any importance additional studies would be conducted, adding to the general body of knowledge about the subject. In a PAR study, the end of a first cycle of change is simply a first attempt, from which some amount of learning takes place. That only sets the stage for the next iteration, in which that learning is applied to a more refined attempt at change, hopefully with more improvement. As more learning takes place, the model itself improves, and acts as a better representation of the natural system in question.

There are many possible actions with respect to toxic behavior. The simplest and most direct is identifying and removing a perpetrator. If the problem is as simple as "one bad apple," that action might be all that is needed. In most organizations, however, that is rarely the case. Most organizational structures are such that roles tend to be repeated. Either a very similar person will be hired into the vacant position, despite appearing to be quite different, or the position itself will drive the new person into similar behaviors as the previous one. In that case, a different approach is needed, using something like the model presented here.

A major challenge in working with human social systems is that conducting controlled experiments is rarely possible. You cannot simply put an organization into a laboratory and test each of the variables in a model, while holding the others in a steady state and measuring correlations. Change is ever-present, and any change in one area will ripple through effects in others, simultaneously. Further, awareness levels of individuals vary. People often participate in behaviors in ways that they do not intend, or do not even recognize. Changing such behaviors is beyond the reach of simply providing new information.

Real and lasting change in organizations requires time and commitment. It often requires multiple attempts, including trial-and-error, and some failures, in order to learn what will work in the long-term. Failures, though, can also be understood as iterations around a PAR cycle. Each attempt creates a new starting point for the next iteration.

## 6. Reporting

Reporting what was learned in a study correlates closely with the purpose of the investigation. If the study was conducted for formal research then the results will most likely be reported in an academic journal of some kind, and that will dictate the format required. If the investigation was part of an intervention, then the resulting model, whether formal or generally descriptive, may just be incorporated as part of what guides the attempted change.

Reporting results well is a matter of targeting the right information to the right audiences in the most appropriate formats. Many PAR efforts involve participants with few technical skills and little to no formal education. They can, in spite of this, be highly valuable participants, contributing local knowledge and understanding about situations that would otherwise be inaccessible to outside academics or professionals. Data and results need to be translated for them as needed.

Alternately, if a formal model is required, the data and model must reflect that appropriately. Many scientists consider mathematics to be the only acceptable description in formal models and theories. That has advantages in terms of rigor, and translation across natural languages. It also has limitations, many of which are not addressed in traditional science.

Different types of mathematics are appropriate to different forms of data, and each type implies a different set of rules and relationships. Rosen (1985) relied upon *category theory* as the mathematical approach that he thought most appropriate to the models that he proposed.

It is equally important to note that quantifying data, and formalizing theories, does not necessarily make them clearer or more accurate. Some data are measureable, but others are more qualitative or descriptive in nature. Representing qualitative data numerically often only serves to confuse a study, especially if the data are then analyzed as if they were quantitative. There are also assumptions built into studies using random samples, meant to generalize to larger populations. A critical assumption is that the total population in question is stable, therefore what is discovered in the sample remains true, and even predictable, about the population. That assumption establishes a closed system, or at least one that is operationally closed, and stable enough for the study at-hand.

By example, many kinds of change are demonstrated using some version of a Cartesian plane, where the *x* axis represents a variable in question, and the *y* axis represents time. The point is to show how the variable on the *x* axis changes over time. It is a common and useful type of model. There is an implicit assumption, however, that the plane itself (e.g. the sheet of paper on which the diagram is drawn) remains stable. It does *not* change, and is not a factor in the model. By contrast, imagine trying to draw a graph on the surface of liquid water. With the right tools and materials, it might retain some amount of stability, but with limitations.

For many traditional scientists and mathematicians, the example will be ridiculous. For many people who work with real organizations, it is the reality in which they work. Human social systems are not totally random or chaotic, but they are also only stable to limited degrees. Models are approximations bounded by the assumptions on which they are based. It is important to present models as accurately as possible, including the usually-unstated assumptions on which they have been built.

This caution applies directly to work done about toxic behavior. As should be obvious from much of the discussion in this paper thus far, toxic behavior is not simple. Discovering that an individual has committed a harmful act against another person, and done so with malice, does not mean that eliminating the perpetrator will remedy the problem. This needs to be carefully considered when reporting the results of what has been learned in an investigation. It does not mean that findings have to be equivocal. It does imply that all parts of the model presented (or an equivalent one) should be considered in a study meant to be holistic.

## 7. Competencies

The topic of this paper is on holistic research and interventions (i.e. systems modeling and PAR). The skills needed for basic research and interventions can be extensive. Including a holistic

perspective may seem like adding an additional dimension to space (e.g. from working on paper to working in three-dimensional space). It requires a different approach to thinking about both problems and solutions.

The framing of a problem is a question, not simply a matter of selecting a topic or identifying a problem. The question is not only the nature of the issue, but also the context in which it exists, and how those interrelate.

Choosing to investigate or to intervene in a situation also involves ethical decisions. Who is involved, and how will this affect them? Even if the intent is only to learn, not necessarily to create change, who will use the information and how? Will the participants of the study have any knowledge about, or involvement in, those decisions?

A PAR study implies a process of *learning together* with the participants. That, by itself, is quite a different competency for most people trained in traditional research or interventions. Producing holistic models, as demonstrated in this paper, is also quite different from traditional approaches familiar to most professionals. These are skills and competencies which require time and practice. They should also be expected to require some trial and error, as there are few truly holistic examples to follow yet.

#### 8. Reflection and Evaluation

The final step in the process is also the link between an end and the next beginning. As noted earlier, a PAR process is an ongoing cycle of learning and change. This step, then, represents a pause in the process, to assess what has been learned, and to determine how to move forward.

In traditional research, this step is embedded in the larger system of research. The outcome of a study is evaluated through a peer review process in an academic journal, and any value from the data or findings is taken forward into new research studies. The value of the study is usually assessed by to the attention that it receives from the relevant professional community, through citations in other academic papers, etc.

In applied settings, it is also common for efforts to end after one attempt, and often without any formal evaluation of the outcomes. In many consulting engagements, an assessment (i.e. model) of the problem is presented to a client, at which point the consultant is paid and leaves. He or she may never really know the degree to which the work was implemented, much less how successful it might have been.

In more direct engagements for intervention, a consultant's role is to determine whether toxic behavior has actually taken place, in response to complaints lodged by other workers. This is usually for purposes of substantiating the removal of the perpetrator, but can also be connected with lawsuits filed for harm done.

Less frequently, a professional is brought in to work with an identified perpetrator of toxic behavior. Either the behavior improves or the individual is removed from his or her position.

All of these processes are typical, but rarely are they done holistically. It is simply not the way that we are used to working in organizations.

Interestingly, the U.S. Army has in place a more proactive process for assessing problems at the unit level than most corporations. This is done through a Command Climate Survey. According to our research study in 2014, however, soldiers did not trust that the information they provided would be entirely confidential, nor that the problems raised would be addressed. As with any tool, its effectiveness was only as good as those using it. It would appear, then, that whatever forces allow toxic behavior to take place in organizations may work to keep the organization stable in spite of the toxicity.

## Toxic behavior in a global realm

The approach to learning and change described in this paper may not appear to be new or different in significant ways. Participatory Action Research (PAR) is certainly not new. The practice of modeling in science and other realms dates back centuries, if not millennia. The foundations for holistic thinking also date back many thousands of years, whether attributed to Greek thought, or to earlier civilizations in China, India, or even more ancient peoples.

Workplace bullying and toxic leadership are much more recent topics by comparison, but they follow a trend in the recognition and protection of individual civil rights in organizations which have been developing for decades.

What is different is an attempt to bring a truly holistic approach into the rigor of research and modeling (i.e. the formal presentation of ideas). It is no longer enough to select the variables and processes that fit our tools in advance, if those tools are not adequate for the problems at-hand. Nor is it acceptable to label problems as complex, simply as an excuse to dismiss them as being beyond our current capacities.

Given the gravity of that claim, the choice of toxic behavior as the example in this paper might appear to be extremely weak and inappropriate. If a holistic approach is that important, why not reference climate change, or the global economy, or changes in sources and uses of energy? It is a legitimate question.

This paper is being written in a time which has been marked by violent and tragic events. It is not the magnitude of the violence or death which seems remarkable, but more the pattern of social dissolution that it may represent. While dilemmas such as climate change, the global economy, and energy (among many others) are problems of grave concern, it is the rise of extreme individual toxic behavior, through mass killings of innocent civilians, which may pose the greatest short-term threat to our social structures.

In previous eras, there were rules of war. Major conflicts were carried out between recognized entities such as nation-states, or self-declared political factions. There have been civilian (non-combatant) casualties for probably as long as there have been organized battles, but those casualties were not the objective. Most importantly, once a truce was reached with the recognized entity, conflicts began to cease.

We have moved to an era in which individual toxic behavior can have significant, even global, impact. Military-grade weapons are now widely available, as are the components and information for making explosive devices. Transportation vehicles (jets, trucks, etc.) have become weapons. Social media now provides a global stage for any dramatic event. The more heinous and shocking (e.g. beheadings) the more impact it may have – in theory.

The point is not to further glamorize this behavior. The point is to begin to question ways of understanding it. What is the nature of the problem, and how can we begin to address it more effectively?

John Horgan is a professor of global studies and psychology at Georgia State University in the U.S. During a panel presentation hosted by the National Institute of Justice (2016), he summarized the current state of knowledge about radicalization in this way:

We cannot say, with any real confidence, who is more likely that not to become involved in violent extremism. Much of what we do know is verified only in hindsight and to further complicate matters, our understanding is constantly shifting... A recent report by some terrific researchers at the George Washington University on Isis in America essentially concluded that radicalization in the U.S. today is both diverse and complex. There are some who see that as a failure to understand the problem. I see it completely the opposite way. I see thus as the reality of the problems facing us. It refuses to fit into any of our analogies. It refuses to bend to our models. Its complexity sometimes threatens to overwhelm us. Because there so little systematic research on these issues, that situation is not going change anytime soon (par. 29).

Thinking back to the models already presented, it is important to see that neither the problems nor the solutions lie at the level of the individual. Many of the individual perpetrators of these mass killings have died during the events, therefore eliminating them does not eliminate the problem. In fact, their "successes" in terms of fatalities are used to inspire and recruit other perpetrators. This now seems to be happening indirectly as much as directly, meaning that perpetrators may have no involvement with formally organized groups beyond seeing messages and videos posted online. As evidenced recently in the U.S., this is also not just limited to jihadist movements, but is being replicated for most any cause in which a perpetrator can justify the use of violent extremism.

#### **SUMMARY AND CONCLUSIONS**

It is our contention that toxic behavior cannot be adequately understood or addressed, by strictly focusing on individual perpetrators. No amount of investigation or profiling will prevent or remedy these problems, whether in the workplace, the military, or in connection with violent extremism. There is a need to better correlate individual traits and experiences with organizational and social contexts and influences, in order to create a more holistic perspective. The model presented in this paper offers one approach to consider, including both actual and contextual phenomena.

The connection in the final section of this paper, between toxic behavior and violent extremism, is an extension beyond previous research. Other researchers involved in those realms may disagree strenuously. From a holistic view, the central question is about factors which lead perpetrators to target and harm other people, especially those seen to be vulnerable or in defenseless situations. That question seems relevant to settings which include, but also expand beyond, organizations. How do we make sense about what appears to be a rapidly growing phenomenon, and are there ways in which that understanding might help us to better address the problems?

From a systems perspective, this is simply a part of framing. As noted in earlier sections, that process is actually a question. How do we best understand the phenomenon in question? In what context does it make the most sense?

This paper proposes that the use of a model which brings together the most relevant types of factors, in relation to each other, may help us move beyond the typical, fragmented approaches used in the past. Different perspectives need not compete, but should complement each other in ways which help us to see more completely. If so, then this different way of seeing and modeling may move us closer to understanding the realities with which we struggle.

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## Acknowledgements

We wish to express our sincere appreciation to Sullivan University for the generous faculty research grant which provided funding for this project.