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Ethics of Innovation for Public Service Professionals

Gerald Andrews Emison

Associate Professor, Political Science and Public Administration

Mississippi State University

Starkville, Mississippi, USA

Phone 1-662-325-7865

emison@ps.msstate.edu

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ABSTRACT

Professionals in public service today face special ethical challenges. They must act in concord with established standards of their profession, yet this action concerns conditions never encountered in previous settings. These professionals must adhere to ethical standards; this is a core professional duty. They must also alter their behavior when innovation demands new behavior. In short, professional standards imply a need for stasis, but innovation yields change. How to accommodate this conflict is the subject of this article. It describes how the core attributes of public service and professionalism relate to unique ethical circumstances faced in the conflicts derived from change in public affairs. By drawing on pragmatism and complex adaptive systems, the article examines principles that individuals in such circumstances may use to select an ethical course of action. The article discusses how a pragmatic, adaptation-driven approach enables simultaneously meeting changes while retaining values of enduring professional worth. The article concludes by considering the possible consequences of such an approach.

Key Words: Professionals, Innovation, Pragmatism, Complex Adaptive Systems

Introduction

Professionals in the public sector face growing conflicts today. These conflicts derive from preferences for conventional, familiar approaches in the face of relentless change. These conflicts stem from three related elements, inertia, politics and preferences, all of which concern interaction of change and bias for the conventional.

The first element, inertia, involves the lack of congruence between actual conditions and public sector predilections. Relentless change is a verity of modern public service. Values, politics and technologies routinely change. As a result, professionals face conditions today that are consistently changing. Market failures lead to regulation which leads to market expansions which leads to market failures; Republicans succeed Democrats who are succeeded by Republicans; science is consistently unrelenting. This environment prompts the need for innovation based upon adaptation and adjustment. Yet it has long been established that government bureaucracies are defined by their adherence to stability (Weber, 1996). As a result in the public sector there is often a caution that prefers previously employed courses of action.

The second element, politics, concerns the nature of innovation and political incentives in the public service. Innovation depends upon the introduction of the novel. But this innovation is regularly accompanied by failure. There is no such thing as consistent trial-and-success; it is called trial-and-error for a reason. Yet political oversight of public activities fosters a bias against such risk. It is politically irresistible to criticize failures and politically attractive to avoid mistakes. There is no political constituency for mistakes, yet such risk is the essential corollary of the innovation necessary to find improvements.

The third element, preferences, stems from the nature of professionalism. Application of distinctive competence undergirds professionalism (Schon, 1983). This special competence regularly draws upon previous experience, predisposing practitioners towards established approaches. This is especially challenging when matters of ethics concern novel conditions. As current conditions diverge from earlier ones, previous experience may have only limited value to guide professionals. What worked before may not apply today, but professionals frequently prefer tried-and-true approaches.

These elements interact to yield conflicting circumstances. Inertia, politics and preferences push professionals to stick with tested approaches, but innovation pushes professionals into unexplored territories beyond their comfort zones. Static ethical prescriptions, such as those found in deontology, are ill-fitted for professionals under such conditions. This article draws upon the philosophy of pragmatism combined with the insights from complex adaptive systems to address this situation. The paper concludes by suggesting actions necessary to employ this new approach.

The Problem: Static Prescriptions and Dynamic Conditions

Ethical decisions in the public sector face wicked conflicts today (Rittel & Webber, 1973). The prescriptions professionals draw upon to guide their actions frequently conflict with the conditions they face. This stems both from the character of today's public service and from the nature of modern professionalism applied to serve the public.

The character of public service is changing rapidly; but policy prescriptions for meeting those conditions are frequently ones that have been employed previously. For example, the emergence of new forms of financial derivatives is generally viewed as prompting the 2008-2009 recession. Novel financial instruments employed by newly-enabled institutions produced an over-leveraged condition that had disastrous economic consequences when the economic bubble burst. The nation's response has revolved around altering government regulations, yet implementing legislation is generally viewed as incompletely addressing the causes of over-leveraged conditions (Palletta & Lucchetti, 2010). This mismatch between new problems and conventional solutions characterizes much of public service today. We have only to look at global warming and the war on insurgency in Iraq to find examples of novel conditions being addressed by yesterday's methods. A truism in international affairs is that the military is always prepared to fight the previous war. The use of the tried-and-true in public service has roots in a number of fundamental properties of modern institutions.

Today's public service involves reinvention, inadequate resources, uncertainty of outcomes and low tolerance for errors (Berquist, 1993). Professionals in public service, whether engineers, attorneys, social workers, military officers or physicians, face a persistent demand to meet challenges as resources decline, interventions falter and the public criticizes government. In addition, new conditions appear. Mapping the human genome, employing new construction materials, use of nanotechnology and development of networked computation are examples of novel conditions that require public policy development and action by professionals.

The nature of professionalism is also challenging. These challenges spring from the characteristics of public service clients, the sources of professional skill and the inevitability of errors arising from innovation.

Professionalism rests upon meeting a client's requirements. And in the public service profession, this is where ambiguity arises. Who is the client? If the professional is the agent, who is the principal for whom the agent exercises his/her unique skill? Is it the individual mayor, executive or legislator? Or is it the larger public interest? Professionals have an ethical obligation to apply their skills to the benefit of the public. But how does the public interest get defined and by whom? The orientation to serving clients has even further problems. Clients engage professionals to provide answers, but how do they provide stable answers in such a changing world? New challenges, conditions and methods alter the public policy agenda for the public sector professionals. This is especially vexing for ethical concerns on matters of the public interest. Interaction between a client's definition of public interest and the emergence of new conditions can yield new problems that defy previously successful solutions.

Possessing a specialized skill repertoire is itself a source of conflict for these professionals. They are obligated to innovate in order to succeed under conditions of change. However, the value of their repertoire may weaken as conditions change. Innovation is needed but innovation implies the novel, the never-before-seen which can contradict established specialized professional skills and methods.

When novel conditions occur, uncertainty abounds and errors are certain to occur. Behn (2006) identified intolerance of errors as an important feature of today's public service. Experimentation in the face of novelty is essential, but if the public sector punishes errors, how likely are professionals to pursue the necessary trial-and-error actions that can lead to successful action under these new conditions? Professionals must persistently adapt in order to craft solutions to never-before-seen conditions. But punishing errors steers professionals to take few risks and, hence, stick to tried-and-true approaches. Such a mixture of signals leads to extraordinary professional conflict.

Uncertainties in the face of such situations, accompanied by a bias for previous solutions, create perilous times for public service professionals. How to address such conflicts is a major theoretical and practical challenge professionals in public service face today. The philosophy of pragmatism and complex adaptive systems offer related frameworks for meeting such wicked problems.

Sources for a New Professional Response

These challenges that professionals in public service face stem from the need to adapt to change. This colors ethical responses. We know these professionals must innovate, but how can such innovation occur in a manner that appropriately builds upon established knowledge and experience? Put another way, how can professionals who face ongoing change adapt while retaining the skills and viewpoints that define their profession? There are interlocking concepts that can be drawn upon in such situations. These concern pragmatism and complex adaptive systems.

Pragmatism and Professional Ethics Decisions

Pragmatism as a distinct philosophy was developed by Dewey, James, Holmes, Peirce and others in the late nineteenth and early twentieth centuries in response to the extensive changes pressing on America and the need to address the dissonant sources of epistemology of the period (Menand, 2001). Rorty (1982), West (1989) and Blanco (1994) updated pragmatism as a straightforward means of addressing the postmodern world's conflicting circumstances. At its core pragmatism emphasizes the value, importance and essentiality of dealing with specific, actual conditions as a requisite for a responsible, informed and fulfilled life. Knowledge and practice, theory and expression, the conceptual and the tangible co-evolve and exist simultaneously. It is impossible to have one without the other. "Knowledge is a by-product of activity." (Menand, 2001) According to James (1990) "(p)ragmatism favors the nominalist's preference for particulars, the utilitarian's stress on what is useful and the positivist's dislike of metaphysical speculation and merely verbal solutions to problems."

Bernstein (1992) identified five properties of pragmatism: 1. Anti-foundationalism: No unchanging conditions or principles exist to guide human choices 2. Fallibilism: Under the proper circumstances it is likely that any choice may be in error 3. The Social Character of Self: Human choices and decisions depend upon and are informed by individuals embedded in a social matrix from which these choices and decisions draw meaning 4. Contingency: Any choice depends upon the particular circumstances of the setting in which the choice is made 5. Pluralism: Divergent views and values provide the ground from which the flower of knowledge and experience grows. In short, "(p)ragmatism whether of the paleo- or the neovariety, stands for a progressively more emphatic rejection of Enlightenment dualism as subject and object, mind and body, perception and reality, form and substance, these dualities being regarded as the props of a conservative social, political and legal order." (Posner, 1997)

For professionals facing ethical choices in a changing world, pragmatism presents a number of characteristics that can assist in engaging conflicts. Pragmatism stresses the interdependence and contingent nature of choices such as found in complex adaptive systems. A proper course of action given one set of facts may not be the proper course of action under a different set of facts. The circumstance must inform the choice, with the practical consequences of the particular situation guiding. As a result, knowledge derives from experience and the reflection based upon this experience. Knowledge that is not grounded in actual experience is judged false and misleading. Such a context-based philosophy views effects of choices rather than intentions as mattering most. By grounding judgment in reality, pragmatism acknowledges the importance of knowledge as being social in that knowledge is dependent upon the specific, society-based circumstances and not some theoretical, conceptual abstraction (Bernstein, 1992).

These characteristics can inform ethical choices of professionals in a number of ways. First, choices would be guided by the specific, actual consequences as the gauge of ethical measure. It is the importance of uniqueness of the choice that draws our attention first. "Morals are ways of acting invented to meet specific situations." (Dewey, 1990) Second, it is the attention to consequences that devolve from the specific situation that inform the ethical decision: "To act morally is to act in the best or wisest way. Such a course of action requires deliberation." (Dewey, 1990) The emphasis on using the practical to inform the ethical also plays to professionals' strong suit: "Values have to do with resolution of problems, the adaptation of means to ends, the securing of enjoyments that emerge in the course of experiences reflectively controlled." (Dewey, 1990) Such emphasis on the practical also draws from relational experience that places choices in a specific consequence: "Value judgments, then, like their counterparts in science, are relational in nature. They, too, are instrumental and never final and are thus corrigible." (Dewey, 1990)

Pragmatism may be contrasted with traditional forms of rationality. Instrumental rationality requires a transcendent and stable value framework under all circumstances and depends upon optimization as a stable choice criterion. In procedural and administrative rationality, stability of processes is valued, however it can become unwise adherence to specific procedures regardless of circumstances. Communicative rationality requires constantly clear communication irrespective of the unique fact situation. Across these other forms of modern rationality, the imperative of constancy of a dominant aspect is challenged by pragmatism. Pragmatism looks to human action and will as the motivating feature, with all else appropriately in play: "Everything James and Dewey wrote on pragmatism boils down to a single claim: people are the agents of their own destinies." (Menand, 2001)

For professionals facing the choices of an ever-changing world, pragmatism can help. It suggests that judgment and action co-evolve. They are inextricable; hence one must inform the other, and there is no substitute for individual judgment in the particular decision circumstance. Professionals must use action and reflection. "What a man really believes is what he would be ready to act upon and to risk much upon." (Peirce, 1990) Pragmatism instructs professionals to cease searching for a single, immutable principle and jump in, think, then act. "The actual dilemma is what, in the particular case staring you in the face, the right thing to do or the honest thing to say really is." (Menand, 2001)

Professionals must constantly consider responsibilities in the actual interplay of practice and knowledge advancement so that specific circumstances guide the ethical choices they are required to make. Managing this interplay and directing the profession's response is the substantive ethical challenge public service professionals face for such complex situations. Pragmatism offers an experience-based, outcome-oriented approach for choosing ethically amid complexity.

A Science of Change and Experience

Complex adaptive systems theory also draws upon description, characterization and observation as a source of insight into situations in which nonperiodic patterns and emergent structures and functionalities predominate (Kiel & Elliott, 1997; Mainzer, 1994). Research into meteorology, ecosystems and evolutionary biology offer insight into how large systems sustain effectiveness and adapt to new conditions (Kauffman, 1995). Although initial work in complex adaptive systems involved the behavior of such natural systems, a number of social scientists (Axelrod & Cohen, 2001; Brown, 1994; Harvey & Reed, 1996) have applied this theory to systems such as those that professionals encounter**.** This work has been characterized as exhibiting diversity, connectivity, interdependence and adaptation among a system's actors (Page, 2009).

Today's professionals in public service act in situations in which diverse actors are highly connected to each other. For example, as part of routine work a city attorney is connected to a diverse population of elected officials, public employees, other attorneys, the press and many others. In a complex adaptive system not only are actors diverse and connected, they are interdependent. Few professionals in the public sector function in a vacuum. They depend upon a wide range of inputs to carry out their jobs and others likewise depend upon them. The director of a state environmental agency employs feedback from the state legislature, the governor and interest groups in making regulatory decisions, and these actors also need the director's perspective to make decisions with a valid scientific basis. They are all interconnected. One actor's action alters the other actors' behaviors which, in turn, alter the first actor's subsequent behavior. Lastly, adaptation characterizes complex adaptive systems. Adjustments by actors are mutual and on-going. Even in public personnel decisions where rules abound, mutuality of adjustments is ever-present. A public water authority's personnel director must administer rules on a principled basis, but the transformation of motivational values from Baby Boomers to Generation Xers is a fact of life that must be adjusted to even for such rule-driven professionals.

This combination of diversity, connectedness, interdependence and adaptation informs the world of public service professionals under conditions of innovation. By acknowledging complex adaptive systems' relevance to such situations, professionals may take advantage of the high information content of such settings and regular but not predictable conditions that routinely arise.

There are two properties of complex adaptive systems that are particularly relevant to these professionals' situations: Diversity and adaptation. Page (2009) attributes diversity to multiple causes. Positive feedback in a complex adaptive system prompts further action. In the public sector, nothing succeeds like success. Page also holds that when there is weak selective pressure diversity grows. This condition occurs frequently in the political terrain of interest groups that public professionals must navigate (Gray & Lowery, 1996). Diversity may also result from the high number of interconnections among players discussed above. Further when the rules and relationships of such systems simultaneously change, termed "dancing landscapes" (Page, 2009), diversity is strengthened. These conditions are often typical of the settings in which public service professionals find themselves. In fact conditions of innovation foster such diversity even more. As a result of such diversity, creation of new structures and functionalities, termed emergence, occurs (Holland, 1999). The Department of Homeland Security is emblematic of such emergence.

With much of public service professionals engaged in innovation while embedded in complex adaptive situations, it is worthwhile to consider lessons drawn from such experience. They can provide insight into actions for coping with novelty and innovation in the public sector.

Due to the high potential for complex adaptive systems to shift dramatically with little warning, Page (2009) recommends avoiding over-emphasis on pursuing small, marginal efficiency gains. It is quite possible under such conditions to overlook game-changing shifts that occur while emphasizing pursuit of small incremental improvements. Managing diversity to prompt a variety of viewpoint and experiences seems wise also. Diversification of investment portfolios is a staple of financial advice. Resilience to changes by complex adaptive systems may explain why this approach is relevant to public sector activities also.

These insights can lead to public service professionals being better prepared to meet challenges emerging as conditions change due to innovation. In brief, experience with complex adaptive systems suggests that while change may not be predictable, it can be anticipated and adapted to so that resilience is improved (Ruhl, 1996). Public service professionals can find in complex adaptive systems experience that may guide in establishing ethical resilience.

Action for Progress in Emergent, Ambiguous Situations

Pragmatism affirms the need to experiment under conditions of changes, and complex adaptive systems draw professionals to observe emerging conditions in a systems framework. How shall professionals act ethically when new conditions have yet to be clearly established but still require action? How can pragmatism and complex adaptive systems be deployed by public service professionals as they move into the ambiguous areas occasioned by new conditions? These approaches suggest professionals in public service seek ethical choices of a specific nature that reflects concrete circumstances. In short, such ethical choices should acknowledge that actual conditions require partial, proximate rather than categorical, *a priori* decisions. This places a high value on collecting, observing and interpreting information in near-term, related circumstances. There are three principles that need attention under such circumstances.

The first principle concerns locus of attention. Long term solutions are unlikely to be ones that are accurate. Doing the best for right now may be all that can be reasonably expected. We know from complex adaptive systems that unexpected results often are the consequence of interaction of fairly simple elements. Anticipating very long term results has a low likelihood of success. Consequently, professionals need to focus on the proximate. Useful ethical choices need to focus on the near term consequences and avoid the fiction of anticipating long range outcomes.

The second principle concerns the value of information. Accurate and timely information is essential for professionals to adapt to emergent conditions. This places a high priority on identification and collection of quality data. And its corollary is that professionals in such situations must pay attention. There is no such thing as deciding and then leaving affairs to function on autopilot. Howard (1994) points out that one of the limitations of modern government regulatory policy is the myth of self-executing policies. He holds that it is impossible to anticipate major future consequences. This precludes designing policies that do not require adjustment. To act according to actual conditions, it is essential for professionals to pay attention. Considering in advance the necessary data and constantly scanning for additional relevant information acknowledges the reality of fast-emerging situations.

Professionals need not only to possess information, they must relate the information in useful ways to the circumstances they face. This requires cultivation of the third principle of self-reflection. The process of active engagement and questioning of emergent situations can equip public service professionals to be intellectually nimble (Schon, 1983). This property will advance successful adaptation as novel circumstances emerge. The trait of critical thinking actualizes self-reflection. Under conditions of rapid and enduring change, critical thinking becomes an essential habit. The information gathered and reflected upon will be of little value absent the steps of critical thinking (Schon, 1983). Reasoning between cause and effect in a logical manner becomes necessary under conditions of rapid, enduring change.

There are two pitfalls for which public sector professionals must be particularly on guard. These are formidable future challenges and persistent questions professionals are likely to confront.

When confronting novel situations in which ethical choices must be made, what standard of principle must be employed? Dewey and others suggest that relying upon what works, upon the 'cash value' of a choice is the reliable approach. Yet, to whom is this 'cash value' to be accounted, and how shall the impacts be measured?

Another question concerns rationalization. If long term situations do not provide a useful context for choices, how can the danger of rationalization be confronted? Professionals must take care to ensure that attention to proximate conditions not become a justification for ignoring real, but inconvenient consequences.

Public service professionals today face a unique set of challenges as they innovate in a world that adapts and evolves. They need approaches for ethical decision making that acknowledge the unavoidable fact of enduring change. Pragmatism and complex adaptive systems offer approaches that can improve such choices.

About the Author:

Gerald Andrews Emison is an associate professor of political science and public administration at Mississippi State University. His research concerns environmental management and city planning/growth management. He is the author of *Practical Program Evaluations: Getting from Ideas to Outcomes* (CQ Press 2006) and the co-editor of *Speaking Green with a Southern Accent* (Lexington 2010). Prior to joining MSU he served for over twenty years in the Senior Executive Service of the U.S. Environmental Protection Agency, where he directed national air quality planning and the Pacific Northwest Regional Office. His undergraduate work was in civil engineering, and he holds graduate degrees in political science, engineering management and city planning. He is a diplomate of the American Academy of Environmental Engineers, a registered professional engineer, and a member of the American Institute of Certified Planners.

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