# RADICAL CHANGE BY ENTREPRENEURIAL DESIGN

***Nancy C. Roberts***

This article offers a conceptual framework to understand radical change. It opens with a typology that defines change in terms of its pace and scope, and defines radical change as the swift transformation of an entire system. How radical change in public policy has occurred in the past is then documented. We find examples of radical change by chance, radical change by consensus, radical change by learning, and radical change by entrepreneurial design. Radical change by entrepreneurial design then becomes the focal point, in order to acquaint the reader with the strategies and tactics of well-known entrepreneurs who have been successful in molding and shaping the radical change process. The implications of this conceptual framework to acquisition reform conclude the paper, along with some suggestions for follow-on action.

Explaining change and how it occurs has been a central theme in management and related disciplines. In a recent literature search using change and development as key words, researchers found more than a million articles on the subject in the disciplines of psychology, sociology, education, business, economics, as well as biology, medicine, meteorology, and geography (Van de Ven and Poole, 1995). We know from this research that concepts, metaphors, and theories used to investigate change have yielded a rich, diverse theoretical landscape. Yet, at the same time, such diversity often has confounded rather than enlightened. It is difficult to compare and contrast theories and their results, let alone work out the relationships among them, when different units, levels of analysis, time frames, and perspectives are employed.

Ideally, it would be useful to have a basic road map to guide us through the conceptual maze. While no map could possibly cover the entire terrain, one that puts the major elements of change into relief would be of advantage. That is the intention of this article. The goal is to provide an overview of change—its definition, scope, pace, and processes, with particular attention paid to radical change given the focus of this Special Issue. We seek to answer such questions as: "What is change? What are the types of change? How does change occur?" in order to inform the efforts to dramatically transform

acquisition policy and process. While acquisition reform is not in the foreground of this analysis, it certainly provides the impetus and rationale for this endeavor.

We begin with a conceptual framework that provides the backdrop for our understanding of radical change. We introduce four types of change that are differentiated by two dimensions—the pace and the scope of change. Building on these two dimensions, radical change is defined as the swift, dramatic transformation of an entire system. In the next section, we explore alternative explanations of how radical change occurs. Here the attention shifts to how change happens rather than what actually is changed. Four radical change processes are examined: radical change by chance, radical change by consensus, radical change by learning, and radical change by entrepreneurial design. We explore radical change by entrepreneurial design in the next section, since the overall focus in the symposium is how individuals can influence the radical change process. The intent is to outline various strategies and tactics that well-known public entrepreneurs have employed to affect radical change. The article concludes by identifying the conceptual framework's most important implications for acquisition reform, such as whether radical change in acquisition can be pursued and who would be the likely public entrepreneurs leading the charge.

## CONCEPTUAL FRAMEWORK

Change is an empirical observation of difference in form, quality, or state over time in an entity (Van de Ven and Poole, 1995). Entities can be such things as a product, a job, a program, a strategy, a person, a group, or an organization. Acquisition policy is one such example. Observing a difference in its form, quality, or state at different points in time, we would say a change had occurred. And note that we are not attributing a value to that change (whether it is good or bad)—only that it has happened.

Change is often examined in terms of its pace and scope. Pace refers to the speed at which change occurs. It is a relative concept that has to be embedded and interpreted within a particular context. The hundred years it took to change from an

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agrarian society to an industrial society (the Industrial Revolution in Britain) is a very short time if one examines it against the backdrop of thousands of years of geological, biological, and human history. Or in the instance of acquisition, a policy that emerges over multiple administrations can be characterized as slower when compared to policies that are put in place by the stroke of one presidential pen.

Scope delimits the range of possibilities in an entity. For example, are we examining the change of an entire organization or are we examining one aspect of change in the personnel department? Or in the case of acquisition policy, are we referring to the entire policy or only a subset that pertains to a particular regulation or routine? Thus, scope can be viewed in terms of parts or wholes. Are we attempting to change the whole entity or only one of its many subsystems?

Scope and pace, if treated as two dimensions of change, produce four different types of change (Figure 1). ***Element adaptation*** refers to minimal modifications in one part of the system to ensure that the part is in better alignment with the system's other elements. It is a movement of convergence rather than divergence for the purpose of improving the system's overall functioning and efficiency. The assumption is that unless all the system's parts are aligned with one another, the system will not be operating at its optimum level. Since the alignment evolves over time in continuous steps as modest adjustments are made to one part of the system and then another, the pace is characterized as slow rather than fast. This type of change is often referred to in the literature as first-order change (Watzlawick, Weakland, and Fisch, 1974), branch change (Lindblom, 1959), evolutionary change (Greiner, 1972), single-loop learning (Argyris and Schon, 1978), continuous change (Meyer, Goes, and Brooks, 1993), incremental change (Tushman and Romanelli, 1985), and momentum change (Miller and Friesen, 1980). It describes modest adjustments by small degrees to parts of an existing system which itself remains unchanged.

***System adaptation*** refers to a change in the system itself rather than a modification in one of its parts. It often is characterized as a discontinuity or a jump from an initial system to a new one. Representing

| | | Scope of Change | |
|---|---|---|---|
| | | **Part** | **Whole** |
| **Pace of Change** | **Slow** | **Element Adaptation** | **System Adaptation** |
| | **Fast** | **Element Transformation** | **System Transformation** |

Figure 1. Typology of Change

a qualitative rather than a quantitative shift in the way things are done, it is marked by divergence rather than convergence. Instead of a focus on the alignment of a system's part to improve system efficiency, as in the instance of element adaptation, the purpose is to realign the parts to form a new whole in order to achieve system effectiveness. However, since this new system emerges in continuous steps over a longer period of time, its pace is also characterized as slow rather than fast. The Industrial Revolution provides one example. Subsystem changes in production, agriculture, education, urbanization co-evolved and emerged over a period of years, and ultimately yielded a dramatic reconfiguration of society as a whole.

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***Element transformation*** refers to a dramatic shift in a system's part in a relatively short period of time. The system itself does not undergo a radical reconfiguration, but only a subsystem or element. Evidence of element transformation can be seen in the introduction of a radically new computer system to an organization. Expected to enhance the organization's ability to handle information flow and to increase its efficiency, the new computer system is not intended to have a spillover affect in the rest of the organization. The plan is to have the organization's other elements continue to operate as they always have. Thus, the radical change is localized in one element of the organization and does not extend to all of its parts or the whole.

***System transformation*** represents a dramatic break from one system to another in a very short period of time. It is characterized by a change in the system itself rather than a modification of one of its parts. Recent examples at the national level come from New Zealand's dramatic transformation from a command economy to a market economy and the Soviet Union's shift from a totalitarian to a democratic state. The literature refers to this type of change as root change (Lindblom, 1959), radical change (Tushman and Romanelli, 1985), revolutionary change (Gerlach and Hines, 1973) transformation (Hernes, 1976), double-loop learning (Argyris and Schon, 1978), paradigm change (Sheldon, 1980), quantum change (Miller and Friesen, 1980), and discontinuous change (Nadler, Shaw, and Walton, 1995). Throughout the rest of this article we will refer to this type of change as radical change.

These four types of change drawn from the above typology are not necessarily mutually exclusive. It is possible to combine types of change into an overarching theory of change. For example, the theory of "punctuated equilibrium" views change as the alternation between long periods when stable infrastructures permit only incremental adaptations (as in element adaptations), and relatively brief periods of revolutionary upheaval marked by discontinuous change (as in system transformation) (Gersick, 1988; 1991; Kuhn, 1970; Prigogine and Stengers, 1984; Tushman and Romanelli, 1985). Baumgartner and Jones (1991) found evidence of punctuated equilibrium when they examined public policies from a historical perspective. Many policies went through long periods of stability punctuated by short periods of dramatic change. The "grand lines of policy" are often settled, sometimes for

decades, during these critical periods of disequilibrium when old policy values and assumptions are challenged and displaced by radically new ones. Thus, as in the case of punctuated equilibrium, one type of change can combine with another to yield a more complex theory of change.

## The Process of Radical Change

Thus far we have examined change from the vantage point of pace and scope and defined radical change as a swift, dramatic transformation of an entire system. Change also can be explored in terms of its dynamics (how it occurs rather than what actually happens.) From a process perspective, the interest is in the sequences of events and the generative mechanisms that drive the process to explain how change unfolds. Our unit of analysis for this inquiry will be the domain of public policy rather than any one organizational entity since acquisition reform spans multiple organizations and contexts.

When we examine the dominant models to explain changes in public policy, we find that most are devoted to the exploration of slow, adaptive changes rather than radical, transformational changes. Instead of focusing on major shifts in a system, or the dramatic turn of policy events, attention is drawn to explaining the continuity of public policy and the relatively small adjustments made to the status quo (Lindblom, 1959; Cobb and Elder, 1983; Ripley and Franklin, 1991). The emphasis is not surprising. As Herbert Kaufman reminds us, "the logic of collective life has a conservative thrust; it lends authority to the system as it stands" (1971, p. 10).

Yet we do find instances of system transformations occurring in public policies. British and Swedish welfare policy was fundamentally altered during the first several decades of this century (Heclo, 1974). During the mid-1970s in the United States, there were major policy shifts under way concerning clean air (Jones, 1975), tobacco (Fritschler, 1989), deregulation (Derthick and Quirk, 1985), pesticides (Bosso, 1987), and nuclear power (Campbell, 1988). The question we now turn to is how these system-wide transformations occur. How is the stability of the old policy order broken and a new, qualitatively different policy put in place? In this section, we summarize four processes taken from the policy literature that attempt to explain the dynamics of radical policy change: radical change by chance, radical change by consensus, radical change by learning, and by radical change by entrepreneurial design. Of particular interest is the design perspective, which treats political actors as capable of taking strategic, transformative actions and managing the change effort.

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## Radical Policy Change By Chance

Using a revised version of the Cohen-March-Olsen (1972) garbage can model of organizational choice, John Kingdon

(1984) conceives of three process streams to describe the policy arena. There are streams of problems, policies, and politics, each largely independent of one another and each developing according to its own dynamics and rule (p. 20). Policies are generated whether or not they are solving a problem; problems are recognized whether or not there is a solution; and political dynamics move along at their own pace. The greatest policy changes occur when the three streams (policy problems, policy ideas, and proposals) are joined through a choice opportunity, or "coupled into a package" (p. 21). This serendipitous linkage often relies on policy entrepreneurs "for coupling solutions to problems and for coupling both problems and solutions to politics" (p. 21). Indeed, "the appearance of a skillful entrepreneur enhances the probability of a coupling" (p. 217). While not completely random, dramatic policy changes rely on "considerable doses of messiness, accident, fortuitous coupling, and dumb luck" (p. 216). They are often prompted by dramatic shifts in the socio-political-economic context that alter constraints and opportunities for policy actors. We have examples of such shifts in the Arab oil boycott of 1973–1974 and the passage of California's Proposition 13.

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While radical change by chance keeps us humble in any change effort, ever aware of the limits to human management and control of a very complex process, the accidental, serendipitous nature of transformational change that Kingdon describes leaves little room to explore how participants might take advantage of "windows of opportunity." We are left wondering how to couple the streams of policy problems, ideas, and politics for radical change. On these aspects, the theory is mute. Thus we turn to the next theory of radical change to understand how participants might be more directly involved in the change process.

## Radical Change By Concensus

According to Wildavsky, in the United States there are three political cultures: "different shared values justifying social relations...[that] orient people to political life" (Coyle and Wildavsky, 1987, p. 3). The three are hierarchical collectivism, competitive individualism, and egalitarian collectivism (Wildavsky, 1982; Coyle and Wildavsky, 1987). Radical policy change occurs when the elites of these three political cultures find an integrative solution that meets their preferences. (They do not need to agree on exactly why the radical change meets their desires, only that it does).

Hierarchical collectivism asserts that human nature is fundamentally flawed. As a consequence, this political culture promotes the establishment of "good institutions to prevent the Hobbesian 'war of all against all'" (Coyle and Wildavsky, 1987, p. 4). Central authority is supported in all social, political, and economic spheres, since differentiation and subordination is expected to produce stability. And to ensure this stability, hierarchical collectivism promotes equality before the law.

Using the example of poverty, one would explain poverty as resulting from "failing to follow rules of proper conduct and the advice of expert authorities" (p. 5). Hierarchs, therefore, would support paternalistic social policies (e.g., food, clothing, and moral guidance to the needy) since the poor could not be trusted to look after their own interests (pp. 4–5).

Competitive individualism posits that human nature depends on circumstance. Benefits flow when human nature is allowed to be free and flourish. Thus, authority is minimized and self-regulation is promoted. Equity of opportunity is important to support competition and bilateral bargaining is viewed as the mechanism to achieve growth. From this perspective, again using the example of poverty, one could explain poverty as stemming from either personal incapacity or interference from central authorities who dampen individual initiative. Individualists maintain that it is the responsibility of each person to escape poverty; the government should not intervene to tell people how to do it (pp. 4–5).

Egalitarian collectivism maintains that "human nature is fundamentally good except when corrupted by evil institutions" (p. 4). It follows that authority is rejected in favor of giving each person equal influence. Equal influence derives from equal conditions to support equal outcomes. And substantive equality is achieved through persuasion and group unanimity. Thus, egalitarians would blame "the system"(bad institutions) that oppresses the poor in the case of poverty. They would find paternalism offensive because it implies that some are wiser than others and therefore should have more power than others. Ultimately, they would support policies that seek to redistribute incomes and resources (pp. 4–5).

One example of a radical change by consensus can be found in the Reagan administration's ability to win acceptance of a broader based, lower rate personal and corporate income tax in the 1980s (Coyle and Wildavsky, 1987). In terms of acquisition policy, we would expect radical policy change to occur if and when the elites of these three political cultures were able to develop an integrative solution or consensus on policy that met the value preferences of hierarchical collectivism, competitive individualism, and egalitarian collectivism.

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While there is more play for individual actors in this theory of radical policy change, especially among the political elites, the focus is on the reconciliation of their ideas and the compatibility of their values preferences rather than the management of the change process per se. The theory presumes that as long as value preferences among the elite are compatible, the execution of any policy would not be problematic, an assumption that the implementation literature has successfully challenged (Bardach, 1977). To understand the contributions of others in the policy change process, in addition to the activities of the elites, and to take a fuller view of the en-

tire policy process, we have to turn to the next theory of radical change.

## Radical Change By Learning

Radical change by learning comes about through the interaction of advocacy coalitions—people "who share a particular belief system (i.e., a set of basic values, causal assumptions, and problem perceptions and who show a nontrivial degree of coordinated activity over time") (Sabatier and Jenkins-Smith, 1993, p. 25). Members can include researchers, analysts, journalists, administrators, interest group members, and elected officials. An advocacy coalition can produce radical change through policy-oriented learning, defined as "belief system modification" (Sabatier and Jenkins-Smith, 1993, p. 49), by generating technical information and conducting formal policy analysis. The learning process involves research and analysis on the seriousness of a problem, the search for its causes, the collection of evidence to challenge or support alternative causes, and proposed solutions that will address the problem without politically unacceptable costs. Although interaction between advocacy coalitions often produces a "dialogue of the deaf" (p. 48), it is possible for different advocacy coalitions to have a productive analytical debate and learn from each other. Learning tends to occur when there is an intermediate level of informed conflict between advocacy coalitions, when policy issues have a greater analytical tractability (i.e., have "widely accepted theories and quantitative indicators"), and when a professionalized forum exists in which "experts from competing coalitions must justify their claims before their peers" (p. 55).

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Thus, learning by an advocacy coalition may demonstrate such deficiencies in another advocacy coalition's core beliefs such that it is possible for a system-wide shift to occur, usually at the instigation of system-wide leaders. One such change occurred when economists demonstrated over a period of 20 years the inefficiencies of government regulation of airline fares, which eventually led to the abolition of the Civil Aeronautics Board and airline deregulation. It also should be noted that such change will not come about solely due to the learning activities internal to the policy subsystem. Changes of this magnitude are usually accompanied by an exogenous shock that alters the resources and opportunities of the various coalitions (Sabatier and Jenkins-Smith, 1993, p. 220).

The studies of advocacy coalitions gives much more guidance on the process of radical change compared to the previous two process theories. The approach recommended is analytical problem solving between specialists in advocacy coalitions who have acquired the skills and knowledge of the policy domain in question. The theory is silent, however, on a number of other issues. For example, it does not specify how one is to deal with

the political dynamics that are likely to be provoked in a radical change process, especially change involving ideas and issues that are not tractable and lack a forum where experts can justify their claims among their peers. The microlevel activities also are not addressed because the unit of analysis is the coalition rather than the individual actor. For advice on how individual actors influence the political dynamics of the change process, we must turn to the theory of radical change by entrepreneurial design.

## Radical Change By Entrepreneurial Design

Entrepreneurial design begins with conscious, deliberate activities of policy actors who have a radically new idea that they want to see implemented. It is a "teleological approach to change" because individuals are assumed to be capable of purposeful and adaptive behavior; by themselves or in interaction with others, they are able to envision an end state and take action to reach it, while monitoring their progress along the way (Van de Ven and Poole, 1995).

Policy entrepreneurs, as these policy actors are often called, are similar to analysts in that they seek to determine the nature of a problem and its cause, the potential range of solutions, and the most important strategy to achieve their desired outcome or idea given the available resources. However, policy entrepreneurs move well beyond the rational analytic approach to be effective agents of radical change. Ever mindful of the political realities, they are concerned with framing their ideas in the best possible light in order to attract and expand their base of support. Their strategies and tactics are designed to overcome resistance, undermine the strength of the opposition, and sell power holders on the merits of their ideas. Building a coalition and keeping it focused on their policy objective is a priority, not just through policy formulation, but also through implementation and evaluation.

We have an excellent example of radical change by entrepreneurial design in the case of choice in the Minnesota schools (Roberts and King, 1996). The idea of public school choice was initiated and designed by six policy entrepreneurs, and championed by Gov. Rudy Perpich. It was viewed as the solution to the "problem" of a bureaucratic educational system that was unresponsive to student and societal needs. "Open enrollment," as it was called, was expected to create a modified market within the public school system by enabling students to choose which public school district they wanted to attend. To push the ideas forward, the policy entrepreneurs developed an elaborate structure of activities that enabled them, over a period of four years, to convince others of the merits of their innovative idea. Although criticized as radical educational change, choice was eventually implemented and extended throughout the K–12 system in Minnesota and is now under consideration in other states as well.

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Thus, of the four theories of radical change, only the fourth really explores

how individuals can influence and mold the change process. The next section explores the range of entrepreneurial activities and demonstrates how successful entrepreneurs are able to create opportunities and minimize constraints as they fight their way through the change process.

## Policy Entrepreneurs As Agents of Radical Change

Research has uncovered a wide-ranging set of activities in which policy entrepreneurs and change agents engage. They employ rhetoric, symbols, and analysis to frame the policy problem in a way that promotes their views and their preferred solution (Baumgartner and Jones, 1991; Riker, 1986; Stone, 1980). They are students of the policy process and the way bureaucracies, courts, legislatures, and interest groups function so they can introduce and promote their ideas in different institutional arenas (Schneider and Ingram, 1990). They seek out the most favorable venues for their ideas to give them the most leverage for change (Baumgartner and Jones, 1991; Schneider and Ingram, 1990). They develop and choose particular strategies that assist them in building support for their innovative ideas, including changes in institutional rules and norms to further their cause (Baumgartner and Jones, 1991). They try, whenever possible, to avoid opposition. But when that is not possible, they develop strategies and tactics to overcome resistance, including active participation by the media (Gifford, Horan, and White, 1992). They build coalitions, drawing support from elites who are effective in persuading others to participate (Baumgartner and Jones, 1991). And they select tools designed to induce policy-relevant behavior (Salamon, 1989).

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Conducting a fine-grain analysis of six policy entrepreneurs, Roberts and King (1996) found that policy entrepreneurs operate in all policy phases, from policy initiation through policy implementation and evaluation. Their direct and long-lasting involvement enables them to protect and shepherd their innovative ideas all the way through the policy process, leaving less to chance in the hands of legislators, administrators, implementors, and evaluators.

Policy entrepreneurs also tend to operate in teams or groups in order to better support and coordinate the complex activities involved in radical change. Their logic is as follows. Since radical ideas deviate from existing practice, the more radical the idea, the more resistance is likely to be engendered, and the more resistance, the greater the need for collective entrepreneurship to protect the fledgling ideas and to overcome the opposition. Such a collectivity also needs to learn how to work together as a team and to attract resources in their press for radical change. Creative ways to finance and support the team's change efforts prompts them to develop an ecology of organizational support to sustain their entrepreneurial ventures over time. In pursuing these ventures, they must be careful to attract grassroots support, not just elites, in the pursuit of radical change.

Figure 2 ("Activity Structure of Policy Entrepreneurs") identifies the activity structure of six policy entrepreneurs uncovered in this longitudinal study of radical policy change (Roberts and King, 1996). "Creative and intellectual activities" are an important point of departure for policy entrepreneurship. Policy entrepreneurs generate new ideas and frame policy issues in such a way to demonstrate how their new ideas are the best solution to current policy problems and how they stack up against competing alternatives. They can invent these new ideas de novo or they can borrow or adapt them from other policy domains and settings. Once identified, the new ideas have to be disseminated in whatever form is appropriate (e.g., books, articles, conversations, speeches, news coverage) to reach the broadest audience. Attracting support among politicians and various elites often requires a good showing in opinion polls, and convincing the public requires

**Creative and Intellectual Activities**

Generate ideas
- Invent new policy ideas
- Apply models and ideas from other policy domains

Define policy problem and select solution
- Define performance gap
- Identify preferred solution alternative

Disseminate Ideas

**Strategic Activities**

Formulate grand strategy and vision
Evolve political strategy
Develop heuristics for action

**Mobilization and Execution Activities**

Establish demonstration projects
Collaborate with high-profile individuals and elite groups
Cultivate bureaucratic insiders and advocates
Enlist support of elected officials
Form lobby groups and coordinate efforts
Cultivate media attention and support

**Administrative and Evaluative Activities**

Facilitate program administration
Participate in program evaluation

Figure 2. Activity Structure of Policy Entrepreneurs

countless hours of work to get the message out and have it accepted.

Strategic activities are very important for policy entrepreneurs, first to formulate what their ultimate vision for radical change is, and second to develop strategies and tactics to deal with changing political realities. Unless the radical change agents are very clear about what they want, it is too easy to get deflected an pushed off course by others' goals and objectives. Political strategies and tactics are essential too because opposition is expected to run high, and countering it requires careful planning on how to deflect attacks likely to come their way. Developing heuristics for action are also important to guide policy entrepreneurs through the daily battles and to help them cope with the disappointments and reversals that are the natural consequence of pursuing radical change. The change heuristics developed by a team of six policy entrepreneurs are listed in Figure 3 below ("Change Heuristics That Have Stood the Test of Time"). They evolved these heuristics over years of experience in working toward radical change in different policy domains.

In addition to these heuristics, the policy entrepreneurs were keen observers of other radical change processes. They followed the events in New Zealand with great interest, where radical change has been under way since 1984. One policy entrepreneur provided a *Wall Street Journal* article titled "The Politics of Successful

1. Know where you want to end up and don't lose sight of where you are headed.
2. Don't play the "Washington game" by trading away the fundamental elements of the plan. Compromise may yield bad policy: Say "no" rather than give up the fundamentals of what you really want.
3. Wait for the "background conditions" (political context) to change, thus necessitating the kind of change that you want.
4. Mature bureaucracies like education rarely initiate meaningful change from within, so outside pressure is needed to force them to respond.
5. Change never comes through consensus. Get the key leadership to back your ideas and the "pack will rush to follow."
6. Money is needed to make change....Get the elites involved.
7. Stay with issues where you have the advantage.
8. Keep the establishment (education in this case) talking about change and structural issues, and you'll change some minds.
9. Destabilize the opposition by co-opting one of the establishment groups.
10. Be willing to be bold.

Figure 3. Change Heuristics That Have Stood the Test of Time

Structural Reform" (Douglas, 1990, p. A20) to illustrate the similarity between their change heuristics and those of the radical reformers in New Zealand. The purpose of the article, written by New Zealand's former finance minister (1984–1988), was to challenge assumptions people had of radical change. We highlight some

1. Structural reform (radical change) requires quality people. Good government in democratic countries needs politicians who can "get their minds around complex issues and have the guts to adopt policies" that result in real reform.
2. Define objectives clearly and implement reforms quickly. Speed is essential. If you move too slowing the consensus supporting reforms will likely collapse before results become evident. "It is uncertainty, not speed, that endangers structural reform programs."
3. Package reforms in "large bundles." Real reform is systems reform, not an unrelated "collection of bits and pieces." It is important to see linkages among system parts and use them to enhance all action.
4. Keep the momentum going and do not stop until you have completed the total effort. You are vulnerable to attack when challenging vested interests, but a rapidly moving target is much harder for opponents to hit. Stay in front to lead the debate and remove privileges evenhandedly to reduce opposition.
5. Maintain confidence and credibility through consistency of policy and communications. Avoid *ad hoc* decisions and do not waiver from your objectives. "People are unable to cooperate with real reform unless they know where they are going." When feasible, spell out intentions in advance. "Successful structural reform (radical change) is not possible until you trust, respect, and inform the electors." Tell people and keep telling them what the problem is, how it surfaced, what damage it is doing, what the objective is, how you will achieve the objective, what the costs and benefits will be, and why your approach is better than other options.
6. "Don't blink; public confidence rests on your composure." Structural reform (radical change) demands major changes in attitudes and beliefs. It causes real concern and discomfort. People will be "hypersensitive to any signs of similar anxiety" in those responsible for reforms. If people do not understand the argument, they will judge its merits on their assessment of your mental and emotional state.
7. When the pressure becomes extreme and there is temptation to accept an easy *ad hoc* compromise, remember why you are in politics. In a democracy, holding power forever is not the point. Best use the time to do something worthwhile. Genuine reform, without compromise, achieves greater gains than other approaches to decision making.

Source: Douglas, 1990.

Figure 4. Radical Change Heuristics From New Zealand

of the major points in Figure 4 ("Radical Change Heuristics from New Zealand).

Mobilization and execution activities expand the entrepreneurial repertoire beyond thinking and strategizing to actual doing. This comprehensive list of their activities opens up a whole range of options that can be considered by others. First, demonstration projects that test new ideas on a limited basis can provide some evidence that the radical ideas will work as predicted. Since evidence to support policy entrepreneurs' claims are often limited (radical change by definition has not been experienced before and finding evidence to support its merits is difficult), these demonstration projects, if successful, can lend some credence to their ideas. Yet demonstration projects cost money, which many policy entrepreneurs, operating on a limited budget, do not have. By necessity, they have to turn to others who do have the resources, usually elite groups, foundations, and think tanks that specialize in policy ideas and change. In the instance of the six entrepreneurs, they established a 501© (3) nonprofit corporation to serve as the fiscal agent for those foundations and associations who wished to support their ideas. A total of $1.2 million was eventually collected and funneled through the nonprofit, including a foundation grant to support one policy entrepreneur's research.

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To gain even greater credibility for their ideas, policy entrepreneurs often work with and through other organizations, especially those with high visibility and prestige within the larger community. Their linkages to high-profile organizations are particularly useful when these organizations can be influenced to issue position papers supportive of the policy entrepreneurs' views, as was the case in Minnesota with the reports from the Minnesota Business Partnership and the Citizens League.

Policy entrepreneurs also have to be careful to cultivate people who are policy system "insiders," especially those in government bureaus. To undertake radical change requires institutional memory and domain knowledge, insights that often only come from insiders who know the details of legislative history, preferences among the players, and how issues evolve and develop over time. The policy entrepreneurs in Minnesota credited a key insider whose advice at critical junctions made the difference in moving the ideas forward through the legislative process. Elected public officials need to be added to the policy entrepreneurs' network of contacts and supporters as well. Radical change does not occur without their sponsorship. Politicians play their part by moving ideas beyond the discussions among policy intellectuals and specialists and onto the agenda for legislative and execution action. Their careful cultivation and eventual championship is the sine quo non of the radical change process. Without Governor Perpich's active support in Minnesota, for example, public school choice most likely would still be a topic limited to policy debates rather than law to be implemented and evaluated.

Lobby groups also have a role to play. They demonstrate a visible and broadened base of support for the radical ideas. As

an added bonus, members can work to keep attention focused on the ideas and provide supporters to do the legwork (leafleting, testifying at hearings, preparing briefing notes and speeches, writing letters to the editor, and meeting with legislators. In the case of the six policy entrepreneurs, they not only attracted other lobby groups to support their cause, but they built their own lobby group that, by all accounts, was very effective during legislative sessions. Press coverage for all of these activities is also a must. Keeping the radical ideas before a public often distracted by the latest crisis and scandal requires a sophisticated understanding of the news business and a dedication to keeping reporters and their editors intrigued by the radical ideas and their implications for the general public. Coverage does not happen automatically, at least in any consistent way. It too must be managed.

Finally, influencing radical policy change requires effort beyond policy formulation. Without regard for the administration of radical policies—their implementation and evaluation—ideas embodied in the legislation are particularly vulnerable to bureaus that translate the laws into practice. The danger here is that bureaus, operating from difference frames of reference and beliefs, may well view the new ideas that initiate system-wide transformation as too disruptive of their current operations. They well may work to water down the changes or to resist them altogether, making implementation problematic. Alliances and advance planning with administrators and evaluators can anticipate some this resistance and work to overcome it, as the Minnesota policy entrepreneurs found. Well connected with the commissioner of educator and evaluation specialists, they were able to provide administrative and evaluative support to the Department of Education as it prepared to implement and evaluate choice in the public systems throughout the state. Their vigilance during the last two phases of the change process gave the radical ideas a fair hearing and kept the ideas from being subverted by school districts that were not enthusiastic about the new legislation.

"Radical change is defined as the transformation of a system in a relatively short period of time."

## IMPLICATIONS

Radical change is defined as the transformation of a system in a relatively short period of time. System transformations can occur by chance, by consensus, by learning, and by entrepreneurial design. Thus far we have focused on radical change or system transformation by entrepreneurial design and highlighted some of the major activities that enable policy entrepreneurs to be successful. Having introduced this conceptual framework, now let's turn to some specific implications for acquisition reform.

When considering radical changes in acquisition, we first need to define the system. Is acquisition considered to be the system or is acquisition a subsystem embedded in a larger system called the "defense system"? The distinction is an important one. It means the difference between considering radical change in acquisition policy as an element transformation or a system transformation. Element

transformations are very difficult to pursue successfully if the larger system in which they are embedded are not fully supportive or compatible, especially if the element is tightly linked to the larger system. In the case of acquisition, a good argument can be made that it is a critical element within the larger defense system. Decoupling it from other important system elements such as doctrine, structure, and technology might be difficult given the centrality of acquisition to the Defense Mission. If that situation obtains, then the pursuit of radical change in acquisition without consideration of the larger system with which it must interface would doom the effort to failure or at best limit its impact.

"...the pursuit of radical change in acquisition without consideration of the larger system with which it must interface would doom the effort to failure or at best limit its impact."

To illustrate the point, let us assume that a policy has been put in place to empower program managers and program executive officers (PMs/PEOs) and enable them to change and streamline the acquisition process (e.g., depend on stable funding, adopt commercial practices, take risks), or to empower Contracting Officers (KOs) to relax acquisition regulations for greater efficiency. Following the above argument that considers acquisition tightly linked to other elements within the defense system, we would understand that PM/PEO dependence on stable funding is restricted because Congress controls defense funding, and program funding is inextricably tied to the PPBS (Planning, Programming, and Budgeting System). Adopting commercial practices is also constrained because industry would be required to behave as a "market," and this raises questions about the role of profit and the purpose of the defense system. Relaxation of acquisition regulations for KOs is also limited. Congressional authorization is required in many cases (executive delegation in all), and some key questions regarding control would have to be addressed: Under what circumstances can regulations be relaxed? For all KOs? For all acquisitions, from paper clips to aircraft carriers? And in a deregulated process, how can fairness across defense acquisitions be ensured?

Thus, acquisition policies are not independent elements to be transformed. In these instances, radically changing acquisition policy and using PMs, PEOs, and KOs as agents of change would require us to focus not only on acquisition but also on all the other elements within the larger defense system that would have to be compatible and mutually supportive of the people who were to champion and implement the changes. In other words, defense system transformation, not just acquisition transformation, would be the goal. Fortunately, recent reform initiatives (e.g., Secretary Cohen's Defense Reform Initiative) acknowledge the importance of taking a system's perspective and have announced a more comprehensive approach to change.

Another implication for acquisition reform concerns people who will function in the role of policy entrepreneur. Thanks to a growing body of research within this country and throughout the world (Douglas, 1990; Roberts and King, 1996; Eggers, 1997), we have a greater understanding of the strategies and tactics that successful radical change agents employ.

But within the acquisition or the defense system, whom do we see functioning in this capacity? Is it reasonable to expect radical policy change from PMs and PEOs who are central players within the acquisition system?

Research to date suggests that radical policy change is not initiated from system insiders. As many have noted, in the press for radical change, it is too easy for radical ideas to die on the inside (Roberts and King, 1996, p. 178). Insiders have the advantage of system knowledge, but they are usually limited and confined by existing organizational responsibilities and roles. Their daily organizational routines often drive out the time and activities needed to cultivate and develop radical ideas. Thus, the best vantage point for pursuing radical change is outside the target system. Outsiders often have more freedom to focus their attention and their energy. Their organizational detachment enables them to pay allegiance to the radical idea and not to any institution or its supporting structure. Better to be on the outside cultivating ties with well-placed insiders than it is to be on the inside suffering from restrictions imposed by bureaucratic constraints (Roberts and King, 1996).

Other studies support this preference for outsider status. Entrepreneurs in government in nonleadership positions as well as those in appointed leadership positions tend to be incrementalists (Levin and Sanger, 1994; Sanger and Levin, 1992). Their approach has been described as evolutionary tinkering. They combine old and familiar things in new ways, but do not offer fundamental breakthroughs. Most often, their innovative ideas develop through trial and error and evolve as adaptations to existing practice. Using the conceptual framework introduced above, they engage in element adaptation rather than element or system transformation.

We find evidence of element adaptation and incrementalism in the Office of the Deputy Under Secretary of Defense (Acquisition and Technology) (OUSD [A&T]). While the OUSD (A&T) is a relatively high-level position in terms of grade (ES-xx) and is charged with leading acquisition reform, the incumbent arguably has limited purview and authority. The use of credit cards for purchasing, and the emphasis of electronic commerce/electronic data interchange (EC/EDI), two reforms sponsored by the Deputy Under Secretary, serve as an example. Although each policy represents positive change, neither is considered a fundamental breakthrough. Both innovations have been used in the industry sector for two decades and neither affects the larger defense system as a whole.

"Research to date suggests that radical policy change is not initiated from system insiders."

Appointed executives tend to view their roles as limited by the legislature, which sets broad directions and makes choices about fundamental issues, new expenditures, and major policy changes. As one summarized, "For what it's worth, I think major new policy initiatives have to come from elected officials. I mean staff can have ideas, maybe bounce and buzz off them. But, ultimately, if you're going to affect large segments of your public, either in offering a new service or taking something away that has been there before...that's the legislature's call" (Zegans, 1992, p. 149).

Thus, if this initial research and its logic holds, radical changes in acquisition

policy would mostly likely be launched by outsiders to the acquisition system, even by outsiders to the defense system. Policy entrepreneurs have to be unencumbered by the status quo and be willing to take risks to change the whole system (Roberts and King, 1996). Returning to the above example, we would not expect the OUSD (A&T) or PMs and PEOs to initiate element or system-level transformations. As insiders, they are more likely to be incrementalists far more interested in tinkering around the edges of current policy.

So the question still remains: How does one launch radical reform of acquisition policy if acquisition is tightly linked to other defense system elements and cannot be treated as a separate entity, and insiders are likely to opt for incremental adaptations rather than element or system transformation? The answer, drawn from this conceptual framework, suggests that radical change has to be pursued from the perspective of the defense system, and it has to be led by policy entrepreneur outsiders whose allegiance is to the system and its integrity rather than to any system part or element. Finding those individuals and unleashing their potential will become the next important step on the way to radical reform. Their active involvement does not guarantee success; we have learned that they are one among many factors at play in the pursuit of radical policy change (Roberts and King, 1996). But policy entrepreneurs can and do make a difference. Reform springs from their initiative and drive. The process of radical change cannot begin without them.

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