Introduction

“Well, in our country,” said Alice, still panting a little, “you'd generally get to somewhere else - if you ran very fast for a long time as we've been doing.” “A slow sort of country!” said the Queen. “Now, here, I see. It takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!” – Lewis Carroll’s *Alice in Wonderland* (First Edition, 1865)

Theories of political change regularly portray governments as a clumsy Leviathans with “strong thumbs, no fingers” (Lindblom 1977) unable to adjust large scale plans to local conditions (Scott 1998) and relying on standard responses despite variation in challenges (Kitschelt 1986). Others argue that important policy changes come from enormous exogenous shocks (Skocpol 1979, Kasza 2002). Further, many suppose that in conflict with contentious politics, it is the social movements, not the state, who develop innovative strategies (Sumner 1997). Nonetheless, states can adjust the intensity, timing, and methods of their responses to challengers. Under certain conditions, governments can be flexible, agile, and adaptive, choosing from a variety of tools, setting the strength of those tools, and applying them selectively. Another paper will discuss the variety of strategies available to democratic governments in their tool kits, ranging from repression and coercion to co-optation and absorption, when dealing with citizens who challenge state policy.

This paper outlines an alternative pattern of state response in which governments, like Lewis Caroll’s character the Red Queen, selectively adapt to a changing environment. The Red Queen model of state response involves the *measured response*
via institutional or policy change by central governments to contentious citizens who challenge state policy. Unitary state actors with clear institutional goals who engage in close monitoring of sustained high salience, highly contested issues are most likely to respond to such conflict with proportionate institutional and policy change. Instead of continuously using the same techniques or strategies against social movements and citizen groups, these agencies display flexibility and proportionate shifts in their responses. While models like punctuated equilibrium posit that institutional and policy changes come about only because of enormous exogenous shocks like wars, the Red Queen has the state closely monitoring its opponents. Movement from the state is not merely reactive to challenges, but also proactive. Hence even small shifts in social movement strategy trigger changes in institutions and instruments. The government’s reaction forms a dialectic with protest groups which in turn may alter their own strategies in response to the state’s actions.

Lichbach has underscored the well known examples of “dissidents learning from their mistakes and changing their tactics in response to unsuccessful experiments” such as socialists, terrorists, and revolutionaries (Lichbach 1995: 54). While conventional theories of state-citizen interaction note the innovativeness of the contentious citizens, the Red Queen model shifts the focus to calculated moves by the state. Under the Red Queen, even subtle alterations in strategies on the part of contentious challengers can bring about a reaction from state authorities. Social movement literature envisions citizens being molded by the political structures, however it overlooks how citizens shape the state. The Red Queen depicts the state as malleable, able to adjust its institutions and strategies to meet its environment. Many theorists have seen the state as regularly responding to citizen challengers with institutionalized reactions, ranging from police
repression to deliberate oversight of challengers. Under the Red Queen approach, state actors modulate their response to meet the challenge of the moment instead of relying on established past practice. States able to respond in such a fashion can create new institutions, vastly increase the intensity of existing policies, or build new frameworks for future encounters. The Red Queen should warn us against easy generalizations about the (lack of) flexibility of state authorities vis-à-vis their citizen opponents. This paper will lay out the existing literature on state response, discuss the characteristics of the Red Queen model, and then set out the conditions under which adaptive development is most likely.

Immobilist Approaches

Some analysts have argued that when confronted with opposition to their policies, central governments in effect may not respond at all. At the core of the immobilist model sit states which do not react when confronted by citizen challengers. Herbert Kitschelt’s case study of French, German, United States, and Swedish central government responses to anti-nuclear protests adopts this approach (Kitschelt 1986). Kitschelt argues that a political opportunity structures, comprised of “specific configurations of resources, institutional arrangements, and historical precedents for social mobilization” influence the “choice of protest strategies and the impact of social movements on their environments” (ibid. 58). His model does not allow for reverse or feedback effects, in which the choice of protest strategies by social movements alters the institutional arrangements of the state itself. Instead, he argues that central governments are “relatively inert over time,” and “[w]hile they are not immutable…respond only slowly to new policy demands” (ibid. 62). Kitschelt concludes that “governments do not
necessarily engage in a reactive process of learning when faced with unexpected opposition to a policy” (ibid. 84). His article reinforces the common belief that in state-citizen interaction, citizens movements instigate new and innovative policies while states merely engage in “holding operations” against them (Sumner 1997).

The strong determinism within Kitschelt’s approach has been discussed elsewhere (see Kriesi, Koopmans, Duyvendak, & Giugni 1995: 243; also Joppke 1993: 11, 199) as have more flexible understandings of political opportunity structures (cf. Tarrow 1989: 82). Critics have argued that Kitschelt’s description of a static central government overlooks the innovative responses that it can generate. He does not consider the possibility that a state might move rapidly to shut or alter its political opportunity structures.

Despite these criticisms of the immobilist approach, studies of decision heuristics support the argument that in many cases organizations such as state bureaucracies may not attempt to counter even strong citizen demands for change. State authorities may not respond because they are not aware of strong opposition, which is to say that the challenge itself may have been dysfunctional, or because of a perceived lack of popular support combined with spatial or emotional distance from the opposing citizens. State authorities may judge that a small number of protestors gathered around a banner in a public place does not warrant an official response. Further, a number of studies posit that even if bureaucrats wished to change existing programs, ambiguity and a lack of clear feedback (March and Olsen 1976), along with risk and loss aversion mechanisms (Tversky and Kahneman 1992; Taylor, Tversky, Kahneman, and Schwartz 1997) would push them toward maintaining the status quo. Organizations like state bureaucracies regularly fall into competency traps in which “favorable performance with an inferior
procedure leads an organization to accumulate more experience with it, thus keeping experience with a superior inadequate to make it rewarding to use” (Levitt and March 1988: 322). Competency traps constitute a sub category of the outcomes resulting from path dependence, a theory which postulates that that once an institution or policy has been in place it is highly unlikely that it will be significantly revised or altered. Political scientists have recently begun to emphasize the ways in which path dependence creates reluctance on the part of authorities to change procedures at work because of self reinforcement and increasing returns even from inefficient structures (Pierson 2000, Pierson and Skocpol 2000, for a critique see Schwartz 2002).

International relations scholars have similarly posited that states interacting with each other in the global arena often deliberately ignore or overlook information on their opponents’ activities and strengths. Snyder has explored why major powers believe inaccurate “myths of empire” which justify over expansion (not stopping when their adversaries are counterbalanced) and entrance into wars which they are likely to lose (Snyder 1991). Other researchers have pointed out the consequences when decision makers reason by often inaccurate analogy (Khong 1992). In domestic political arenas, Sabatier and Jenkins-Smith argue competing advocacy coalitions regularly struggle to alter each others’ and popular beliefs about solutions to policy problems and hence bring about new policy outcomes. Despite these interactions, only the peripheral, non-core beliefs held by the participants will change through the interaction (Sabatier 1993). In short, theorists have argued that “sticky” ideas and institutions combined with organizational and institutional myopia often impede governments from paying attention or responding to their opponents.
The conjectures that states cannot respond quickly to demands placed upon them and that political opportunity structures remain more or less unchanged over the lifetime of a social movement, if not for longer periods of time, form the core qualities of immobilist approaches. While occasional empirical examples provide counter arguments to this model of state response, decision making models and historical examples from international relations lend some solidity to its arguments.

Incrementalism

A second common approach by political scientists when studying states’ policy processes has been incrementalism. Defined by Dahl and Lindblom (1953: 82) as the “method of social action that takes existing reality as an alternative and compares the probable gains and losses of closely related alternatives by making relatively small adjustments in existing reality,” incrementalism forms perhaps the oldest and best known of these approaches. Incrementalism involves small, step like alterations in existing policy. Incrementalists have argued that due to bounded rationality and a lack of complete information about the outcomes of alternatives, decision makers prefer conservative searches for solutions in a process often called “satisficing” (Simon 1966, Simon 1997). Argyris and Schon label this sort of limited solution-search “single loop learning” (Argyris and Schon 1978). In Peter Hall’s typology of social learning and policy change, these sorts of incrementalist alterations comprise first order change (Hall 1993). Incrementalism moves beyond immobilist approaches by allowing for conditions in which state decision makers have become aware of a challenge from citizens and wish to respond to it. They can do so by building up or reducing existing programs in small steps, such as increasing budgets for compensation measures to affected local citizens by
five to ten percent each year or slowly cutting back on the publication of pro-nuclear waste brochures.

The incrementalist approach sits upon a myriad of empirical case studies of government policy making in which decision makers have altered policies only slowly, through trial and error methods (Lindblom 1959, Wildavsky 1964, Lindblom 1979, Fischer and Kamlet 1984). The most oft-cited example of incrementalism is American Congressional budget making, with the budgets of individual institutions or programs undergoing on only small percentage of change per year, either up or down (Wanat 1974, for a critique of the use of the category “incrementalism” in the budgetary process see Berry 1990, and for another critique see Jones, Baumgartner, and True 1998). Observers have illuminated similar incremental processes in taxation in Britain (Rose and Karran 1987) and in Japan (Campbell 1977). Organizational behaviorists have regularly argued that routines in organizations “adapt to experience incrementally in response to feedback about outcomes” (Levitt and March 1988: 320). Interestingly, after analyzing the prevalence of incrementalism within American public policy and the failure of attempts at non incrementalist policies, some analysts have argued for incrementalism and against non-incremental decision making as normative practice (Hayes 1992).

Studies of interactions between states and contentious citizens have rarely applied the term incrementalism to policies in their fields, but studies have found very similar trial and error patterns in policy making. Governmental strategies to deal with contentious citizens often develop through slow single loop processes. Timothy George’s study of the process by which the horrifying mercury poisoning in Minamata, Japan became a domestically and internationally recognized issue of environmental damage shows a slow, conservative pattern on the side of government bureaucrats (George 2001).
Critics, especially of normative attempts to promote incrementalism, have argued
that major, well-carried out policies often begin in non incremental ways. The American
government’s policies of social security, Medicare, and the Marshall plan, for example,
have been cited by scholars as policies which began sui generis. As one reviewer argued,
incrementalist studies “reflect a general tendency of political science accounts to discover
the rules of political actors rather than the ones they break, and to elucidate theories that
transcend the talents, virtues, and sins of individual political actors” (Klass 1993: 525).
Despite such criticisms, incrementalism remains the most often cited model of policy
response to exogenous shocks and citizen challenges. As one team of researchers argued,
“[m]odels of policymaking are generally based on the twin principles of incrementalism
and negative feedback” (Posner, Conlan, and Beam 2002).

Punctuated Equilibrium

The third type of model of state-citizen interaction is known as punctuated
equilibrium. The term itself originated in modern macroevolutionary theory under
theorists Niles Eldredge and Stephen Jay Gould to describe how species in the fossil
record seem to remain static for long periods of time rather than continuing to evolve
after undergoing core morphologic change (Eldredge and Gould 1972, Gould and
popularized in political science by Baumgartner and Jones (1993), the social science
model of punctuated equilibrium involves periods of non-incremental shifts in public
policy over time. Characterized as “alternating between periods of relative gridlock and
periods of dramatic change” (Jones, Baumgartner, and True 1998: 1), such shifts usually
rate as a third order change within Hall’s typology of order (Hall 1993).
A variety of causes can cause states to abandon incrementalist changes and undertake policy upheaval, ranging from a regime shift (such as a newly elected president or politically appointed department head, see Wood and Waterman 1994) to friction generated by altered incentives, ideas and new political opportunities (see Lieberman 2002). One analyst has postulated more generally that “extraordinary circumstances (depression and war), the margins of political life (local politics, collapsed peripheries, and autonomous public spheres), [and] stateless situations (revolutions and the international system)” all provide environments which allow for non incremental policies (Dryzek 1992: 528).

Whatever the cause of major shifts in policies and institutions, recent scholarship has found both qualitative and quantitative support for theories of punctuated equilibrium. Analysts using stochastic process analysis have shown that many of the American policy processes display considerable stability interrupted only occasionally by major policy changes. Viewed graphically, much of the change in American policy processes has “tall central peaks” (showing the stability of the policies) along with “thick tails” (showing policy fluctuation and change). Kurtosis, as this condition is named, has been found not only in American budget data, but election results and stock market results as well (Jones, Sulkin, and Larsen 2003).

Using qualitative methods, political scientists have shown that major but uncommon events lead to drastic alterations in policy processes and institutions. Kryder argues that “elections and national security” explain cyclical state responses to disruptive citizen groups (Kryder 2000: x). Tilly contends that the Vendée rebellion came at a time when the government was preoccupied with external wars (Tilly 1964) and that states shift organizational structures to fight wars (Tilly, Tilly, & Tilly 1975). Greg Kasza
argued that “[t]he Pacific War (1937 – 45) marked the most innovative period in the
development of public welfare in Japan, comparable to the 1880s in Germany, the 1908 –
1914 era in Britain, and the 1930s in the United States... It is a cruel paradox, but war,
despite its immediate, catastrophic effects on human well being, has played a major role
in the evolution of the welfare state” (Kasza 2002: 417).

Pempel’s recent study of alterations in Japan’s political economy explicitly links
regime shift in Japan, a condition he characterizes as a move away from the immediate
postwar socioeconomic system toward a more deregulated and international one, to
theories of punctuated equilibrium. His definition of punctuated equilibrium as “mixtures
of long continuities followed by dramatic shifts” (Pempel 1998: 3) matches the work of
Kent Calder, who also defines his core argument about change in Japan’s political
economy as one involving punctuated equilibrium. Calder argues that crisis, which he
defines as “a prospect of major loss or unwanted change that threatens the established
order,” shakes up the long ruling Liberal Democratic Party’s balance and forces it to
deviate from status quo policies (Calder 1988:37). Under pressure from both interest
groups and fellow politicians, conservative LDP politicians move to compensate their
challengers through redistribution and other strategies.

These theorists have recognized that standard incremental patterns of state policy
making loosen as the institutions themselves change in response to their external
environment, but believe these environmental alterations to be uncommon. Those large
scale shocks trigger searches for new, drastic solutions and may result in paradigm shifts
(a la Kuhn) in state policy. The theories of governmental and institutional mimesis
follow in this genre: they posit that organizations in their early stages look elsewhere for
an understanding of how to act and structure themselves. In Japan, for example, police,
postal system, and newspaper organizations radically altered their institutional structure and practice in the late 19th century as they deliberately adopted and modified Western models (Westney 1987). Once these institutions were reformulated during the period of opening to the West, Japanese administrators from then on carried out only incremental changes. Organizational behavior researchers have postulated that institutions make major changes at the beginning of their life course to mimic the structures and practices of other organizations in their field (mimetic isomorphism), and thereafter utilize only minor adjustments in policy and structure (Powell and DiMaggio 1983).

Quantitative and qualitative evidence provide support for the model that state organizations usually carry out small level adjustments and only occasionally, often at the beginning of their life course or due to a major shock, make major adjustments in policies and institutions. Once the shocks pass, states return to status quo procedures.

The Red Queen: Institutional Coevolution

Immobilist, incrementalist, and punctuated equilibrium models of state response cover many common scenarios involving state responses to challengers, from ignoring protestors, to trial and error experimentation with new policies, to major departures from and upheavals in standard practice due to rare exogenous shocks (followed by a return to status quo). But lacking from the literature in political science on policy adaptation is a model which focuses on a measured and sometimes continuous adaptation and co-evolution of strategy and policy on the state side because of transformation of such practices on the challenger side. Recent works on the struggles between states and protest movements hint at this interaction.
McAdam, Tarrow, and Tilly (2001) make a case that governmental authorities can develop responses to counterbalance moves on the challenger side, but provide only examples of such processes in history, not theory on the interaction itself. Tarrow argues that “changes in political opportunities and constraints create the most important incentives for initiating new phases of contention” (Tarrow 1998: 7). These two observations suggest a more dynamic and iterative model of action and reaction between the state and its challengers. Francisco’s model of protest and coercion in Northern Ireland and Germany incorporates a polimetric predator-prey simulation drawn from evolutionary biology but draws few general conclusions from that exercise (Francisco 1996).

Joppke illustrated how the federal government in Germany passed the licensing reform act in 1982 to allow for a “convey system” in which a number of reactors could be approved simultaneously, as opposed to the old system of serial approval. This move restricted the access of anti nuclear citizens groups who used the licensing procedures as arenas for delay and obstruction. He also illuminated how the Länder state in Wyhl, Germany, faced with continuous pressure from anti-nuclear activists, altered the licensing procedure for the proposed nuclear power plant so that anti-nuclear activists would have no arena in which to voice their opinion and attempt to stall or end the siting procedure (Joppke 1993: 98). Tarrow has described how the Italian political elite successfully responded to challenges by protestors during the 1970s with a speed “that few would have predicted” (Tarrow 1981: 50). These initial works provide non static models of interaction but lack a theoretical foundation for further expansion.

One subsection of political science, focusing on the coercive and social control approaches of the state, has captured an iterative dialectic between states and their
opponents in individual cases but has not searched for such behavior elsewhere nor labeled the phenomenon as such. Kryder has shown how police departments wishing to avoid providing provocative media clips to civil rights demonstrators learned from initial experiences. While some police departments met protestors with hoses, barking dogs, and truncheons, those that adapted to the protestors’ strategy instead lined up all available African American patrolmen to line the streets of the march. When the protestors arrived, there were no dramatic encounters or violent scuffles, and the media did not pick up the story (Kryder 2000b). German police who encountered fierce resistance during various sit-ins at nuclear power sites altered tactics to avoid future injuries and began dropping tear gas from helicopters (Joppke 1993). Japanese police learned to handle Molotov-throwing anti-Narita airport activists by using cranes to lift metal grates around the towers in which activists stood and then dousing them with high pressure water (Asahi Shinbun 5 December 1989). Several other studies of American policing strategies (Noakes 2001) and comparative policing institutions (Della Porta and Reiter 1997, 1998) have shown that civil authorities have regularly altered their methods of dealing with protestors over time through adaptation and co-evolution. As protestors have altered their tactics over time, police forces have changed their strategies in response.

Among the immobilist, incrementalist, and punctuated equilibrium models, none of them focus on the ways in which the state can gain information from and adapt new institutions to transformation on the side of citizen challengers. Organizational behaviorists have long argued that inter-firm and inter-organizational interaction provides necessary information for successful firm behavior. In their analyses, competition and interaction between firms in the market place drive much of the actions of businesses. In one study of 560 radio stations, for example, a scholar showed the strategy of
abandonment, in this case the termination of Easy Listening programming, to be contagious. Through interaction with other firms, radio stations began to imitate those who pulled out of the market for adult contemporary music (Greve 1995). Organizational behavior and business school scholars have developed numerous interorganizational evolution models illuminating the role of interaction and, more importantly, competition among firms (Barnett and Sorenson 1998, Argote and Ophir 2002).

Known in organizational behavior literature as interorganizational learning, or organizational coevolution, and in business school circles as the Red Queen phenomenon, this phenomenon has strong crossover value for political science. The core of this model is the concept that “an organization exposed to competition is likely to learn as a consequence” (Barnett and Burgelman 1996: 13). The competitive learning referenced here involves a search for a successful new strategy or institution which can assist the organization towards its goal. “When successful, this search results in learning that is likely to increase the organization’s competitive strength, which in turn triggers learning in its rivals” (Barnett and Hansen 1996: 139). The interaction and resulting learning process are not singular events; rather, as environmental conditions shift around firms, they regularly search out and update their information so that they can apply their knowledge to new strategies and institutions. Applied to citizen-state interaction, if social movements opposing state policy make no move for some duration, their opponents within the government may also take no action for that period. On the other hand, if opposition to a policy increases dramatically, state actors will move quickly to try to handle the resistance.

In short, the Red Queen model of state response is the measured response via institutional or policy change by central governments to contentious citizens who
challenge state policy. Aspects of the Red Queen model first arose in political science in an article on deterrence between nuclear weapon holding American and Soviet forces during the height of the Cold War. In that article, Lambeth argues explicitly that the Red Queen “could hardly be a more appropriate metaphor to describe the current pace of East-West strategic interaction…As each superpower has sought new levels of security through new breeds of weaponry, it has invariably provoked its opponent…to counteract in kind” (Lambeth 1972: 235). A year later an evolutionary biologist proposed a new hypothesis bearing the same label inferring that organisms in existence for long periods of time must struggle to avoid extinction just as those around for shorter periods of time (Van Valen 1973).

According to Van Valen, plants, animals, and even microbes, no longer how long their duration of existence as a species, must continually work on their skills of evasion, camouflage, or hunting to maintain their survival; a long term presence as a species provides no protection from new predators and new environmental hazards. In the language of mutual funds, past performance is not a guarantee for future success. Cybernetic systems theorists have labeled this interaction the “arms race” model, and regularly depict interactions between predators (e.g. a fox population) and prey (e.g. rabbits living near the foxes) as an iterative, interactive process. Recent biological empirical studies support the existence of coevolutionary theory; researchers studying hummingbirds and their favorite food source flowers in the Caribbean have shown that the beaks of female and male birds evolved with the shape of their “lobster claw” plants (Temeles and Kress 2003). Known as coevolution due to the simultaneous change of the bird’s beak and the blooms of the plant, this finding confirms Darwin’s theoretical propositions about such synchronized changes in nature.
The Red Queen model of measured, adaptive change presented here entails organizational competitive learning, with the state adapting new practices or creating new institutions because of its encounters with recognized challengers. Organizational coevolution “involves the processes through which organizational units…change as a result of experience” (Argote and Ophir 2002: 2). This type of competitive adaptation would not match the definition of learning held by scholars like Levy, who argues that “learning is not definitionally equivalent to policy change” and defines it instead as “a change of beliefs…or the development of new beliefs, skills, or procedures as a result of the observation and interpretation of experience (Levy 1994: 289, 283). Under Levy’s definition, for example, a state organization managing the siting nuclear power plants could “learn” about effective strategies through focus groups, opinion polls, or newspaper editorials, but would not necessarily adapt policy to either alter citizens’ preferences toward a more favorable stance towards nuclear power or alter policy to fit with their demands. Under the Red Queen model, state actors and bureaucrats may alter assumptions and gain knowledge but most importantly alter strategy and institutional structure due to interaction with citizens who oppose their policies.

Unlike punctuated equilibrium models, in which enormous and rare exogenous shocks are required for policy makers to move beyond incremental improvements, the Red Queen model posits a much lower “barrier” to adaptation and change. A move by citizens movements, even as slight as filing a lawsuit which wins a delay for a proposed project, can trigger government authorities to search for a solution (for example, punishing judges who support anti-state petitions, cf. Ramseyer and Rasmusen 2001). Public opinion poll shifts against nuclear power can cause state authorities to begin new
pubic relations campaigns. The Red Queen model, unlike punctuated equilibrium approaches, allows states to constantly change or upgrade their institutions and strategies when dealing with protestors and opponents who transform their strategies. Further, unlike incremental models (and a priori unlike immobilist approaches) the Red Queen allows for unpredictable and various-sized changes in policy and institutions based on the strategies of contentious challengers. If protestors rally hundreds of thousands of opponents to a state policy in a series of marches, state actors involved in the controversial policy may be pushed to immediately enact new, large scale measures.

It is important to emphasize that Red Queen responses do not necessarily bring with them effective policies. State policy makers can respond to the threat of a march by immediately placing core leaders of the movement under arrest, but that move in itself may lead to even a greater backlash from anti-state protestors. Authorities seeking to promote dam siting might create new dam centers to diffuse pro-dam information about such projects, but no citizens may visit them. Hence Red Queen interactions are not necessarily more successful than other types of approaches. That is, state strategy may succeed or fail equally whether it was an immobilist, incrementalist, punctuated equilibrium, or Red Queen approach. In fact, in situations where a state has shown comparatively more flexibility, adaptation, and innovation in dealing with challengers to its anti-nuclear program than other advanced democracies, it has been equally helpless to alter the outcomes (see Aldrich, forthcoming).

To best illustrate the differences between the four modes of state-citizen interaction, I have constructed a two axis diagram based upon the maximum frequency and maximum amplitude of policy change. The figure illustrates that infrequent and small scale policy changes best fit the immobilist pattern, which involve at best very
small percentage (if any) alteration in current policy. Small scale but frequent change matches the incrementalist approach. Large scale, radical but infrequent change meets the punctuated equilibrium and mimesis models. Finally, the Red Queen model allows for large, radical and frequent changes (although their size and frequency will depend upon the activities of their challengers).

[Figure 1 about here]

The same idea can be represented graphically, using time and level of policy change, as I have done in Figure 2.

[Figure 2 about here]

Some might argue that the oft-posited approach in positive political economy known as Bayesian updating or Bayesian learning already captures this Red Queen approach, and hence a new theory of the iterative, interactive process is unnecessary. In the Bayesian universe, as information on a phenomenon, more specifically a prior belief, becomes available, individuals alters their probabilistic assessment of the phenomenon in question. However, this approach differs from the Red Queen model. First, Bayesian updating as such is a theoretical concept, that is, a rational choice or public choice model of decision heuristics built upon assumptions about information processing and cognition. The Red Queen model, on the other hand, derives its core tenets from actual measured, empirical behavior. Studies of individual human behaviors rarely show such types of Bayesian learning; rather, inaccurate and illogical heuristics capture much of observed individual reasoning (Tversky and Kahneman 1992, etc). Additional, the Bayesian updating approach assumes the presence of perfect information, another assumption unlikely to play out in empirical and experimental testing. In the Red Queen, state
planners and bureaucrats may only have access to “noisy” or inaccurate picture of what their opponents are doing.

States can be agile and able to respond to contentious political movements with proportionate change, but are not always so. A variety of factors revolving around the characteristics of the state and its competitors determine the mode of interaction between the two. Having argued for the existence of the Red Queen mode of interaction between states and contentious citizens in the previous section, this section first sets out in more detail the differences between the Red Queen and existing models of state response and provides a framework for explaining variation in state response to challengers.

The previous section defined the Red Queen model of state response as the adaptive, measured response via institutional or policy change by central governments to contentious politics. What characteristics differentiate it from immobilism, incrementalism, and punctuated equilibrium responses? The Red Queen differs from other models in terms of the timing, intensity, and flexibility of state response to challenge.

Timing of Response

The lag between an initial set of challenges to the state and the state’s response can be enormous. During the period of contention between the Solidarity movement and the Polish government in the early 1980s, for example, the state initially responded with prima facie capitulation to the Gdansk shipyard strike, but within weeks resorted to standard “strong arm” strategies of coercion, suspending the free unions, making Solidarity illegal, and stopping overt protest. The government’s eventual negotiation with
Lech Walesa and his movement took place almost 10 years later in the late 1980s; analysts looking to tie in the collapse of the Communist government in Poland to the protest activities of union activists would need to include a decade of action and interaction to fully capture the events in Poland (Senser 1989).

Therefore even though major contentious political challenges took place at some time, $T_0$, the timing of the government’s response will depend upon the mode of interaction (and a variety of factors already discussed, including the level of contestation, surveillance, etc.). Immobilist, incrementalist, punctuated equilibrium, and Red Queen models depict a variety of speeds of reaction. Under an immobilist world model, a government facing a challenge at time $T_0$ would continue under its old instruments and policies, $Y$, even at some later time ($T_0+1$, $T_0+2$, etc.). Here, the government may feel insulated enough from challenge to not need to respond, as in the Solidarity case, or the state may be unable to do so for a variety of bureaucratic, procedural, and cognitive reasons. Immobilist approaches posit a “de-linking” of the timing of state responses and moves by contentious political movements; there is essentially no connection between the two.

Incrementalism models would have the state at time $T_0+1$, a short period later, move to instruments and policies $Y + 1$, with only a small shift from the previous status quo. Under the single-loop learning of incrementalism, state planners base their movements primarily on regular, predictable changes. The timing link between the movement by the citizens groups and the response by the state is somewhat tenuous; regular, scheduled incrementalist changes may not be set aside in many cases. On the other hand, seen through the lens of punctuated equilibrium, once hit by a shock sufficient to alter standard policy making procedures, the state would move to implement
a drastically different policy or create new institutions $Z$ at time $T_0+1$. The timing link between the social movement and the state’s response is quite linked; in the language of causality, the shock of the SMO’s movement triggered the response by the state. In all three conventional models of state interaction with challengers, the state response is at best reactive, if there is a response at all.

In a Red Queen mode of interaction, the state has been paying close attention to the actions and statements of its challengers. It may be that even before the last protestor has gathered on the green in the front of the Capital building, police and army forces have already mobilized to respond due to information provided by informants who had penetrated anti-state organizations. State actors may have a variety of other ways to gain insight on and predict the upcoming activities of protest groups, so that their response may even be pre-emptive, if not immediate. Israeli authorities, for example, have often been able to intercept suicide bombers before they are able to detonate their explosives against civilian targets due to warnings received, in some cases, from the family of the bomber him/herself. Newspaper accounts report that the FBI and other domestic institutions have used the atmosphere of post-9/11 to begin to conduct wide ranging surveillance on a broad variety of “anti-state” groups, including peace movements, to better predict their actions in the future.

The lag time between the actions of the contentious challengers and the response, if present, from the state, is smallest in the Red Queen, where action may be taken to cut off the protest event. In the cases of punctuated equilibrium and incrementalism, the state requires an overt, large scale shock or event to push it slightly or radically away from the status quo.
Intensity of Response

Peter Hall’s typology of change orders provides a starting point for identifying and linking the intensity of the state’s response to various modes of interaction. Hall (1993) uses Thomas Kuhn’s scientific paradigms as a basis for understanding the levels of policy, instrument, and goal shifts. Hall understands first order change as primarily incremental, with future policy strongly linked to recently completed policy. Hall, like many other analysts, identifies budgetary politics as a paradigm of first order change. Second order changes, less frequent than first order changes, involve alterations of policy instruments, but with a maintenance of overall policy goals. Hall argues that the most intense shifts in government policy, third order changes, come about when the state reorients its goals and alters not only the procedures but also its overall policy paradigm. These rare alterations comprise a disjunctive process in which past working assumptions.

Immobilist models envision the state as staying with existing policy; the intensity of such a response is quite low. In Kitchselt’s (1986) description of state response to anti-nuclear contentious political groups, regardless of the level of demonstration, protest, or challenge, the intensity of the state’s response remains the same. Although Hall does not explicitly refer to such an immobilist scenario, we can envision that such a situation would not be uncommon. Here, when confronted by a delegation of 50 anti-nuclear power activists who have come to Kasumigaseki, the “belt way” area of Tokyo in which most bureaucrats are located, with petitions from local citizens, state authorities may not even agree to meet with them.

Under incrementalist models of interaction the state, in spite of varying levels of contention, alters its policy making or institutions only slightly. The intensity of these reactions rates in Hall’s typology as a first order change. Hence in reaction to a slew of
protests against the planned nuclear waste repository in Nevada, the federal government in the United States can provide minimally increased funding to certain programs in an attempt to mollify their concerns.

Punctuated equilibrium models involve large scale, very intensive reactions to strong shocks. Hence these might be second order or more likely third order changes in Hall’s typology. When terrorists struck on 11 September 2001, using jet liners to attack the World Trade Centers in Manhattan and the Pentagon in Washington DC, the United States government radically altered a number of its procedures and policy goals. Under President Bush, the United States began campaigns in Afghanistan and Iraq, closed borders, tightened surveillance, introduced legislation making it easier for law enforcement agencies to closely monitor and hold suspected terrorists, and created a new agency, the Transportation and Security Agency on 19 November 2001, to oversee these efforts.

The intensity of state response in a Red Queen model varies with the strength of contestation, allowing a moderated response matched to the level of opposition. States may completely terminate existing programs to yield to challenge, as was the case with the resignation of ex-President Gonzalo Sanchez de Lozada of Bolivia. “Goni,” as he is known, was elected to his second five year term of office in August of 2002, but stepped down in mid-October 2003 due to massive, violent protests which killed an estimated 74 people. Similarly, the Japanese state canceled initial plans for a nuclear reactor upstream from the city of Kyoto in the early 1960s due to massive local protest against fears of radioactive contamination and health hazards. In other cases, when protest is moderate, the state can move to meet the strategies of protestors. When German anti-nuclear groups discovered that they could exploit the hearing procedures for nuclear power plants
through stalling, deliberate obfuscation, and the introduction of expert witnesses, the
German state responded by shutting down the access point. By closing off the hearings to
all but a few concerned parties, and altering procedures from serial applications for new
plants to parallel ones, the central government maneuvered to smooth out the siting
process.

Among the four modes of interaction, immobilism and incrementalism involve
the lowest levels of intensity of response, while punctuated equilibrium usually results in
the highest. The Red Queen reaction, due to its adaptive, measured level of response, can
be at either end of the spectrum or someplace in between.

Flexibility of Response

When the government confronts contentious political movements, they have at
their disposal a broad array of instruments and strategies. Numerous studies of social
movement categorize state approaches into two broad categories, absorption or
repression. Nonetheless, state authorities have much more nuanced tools in their
repertoire, ranging from policy tools and institutions created to alter the preferences of
citizens in order to pre-empt or dampen such contention to co-optation strategies in which
anti-state activists are not absorbed into the state, but merely blunted as leaders of their
movements. Bureaucratic authorities may target a charismatic leader with a smear
campaign or provide opponents with information to use against him thus reducing his
efficacy as a leader. More generally, through close feedback the state can identify
incentives which could shift citizen feelings from opposition towards acceptance and
move to provide those. A full discussion of this repertoire of tools takes place in the
following paper. The four modes of interaction bring with them certain flexibilities in tool and institution selection on the part of the government.

In an immobilist world view, the government has the least amount of flexibility in terms of responding to contentious challengers. Even if government officials are aware of tools which could dampen or counter resistance, they are either unable to uninterested in utilizing them. Under this approach, governments which had previously undertaken coercive responses to contentious social movements would continue employing that strategy.

Incrementalist approaches posit that state actors generally favor implementing a strategy which deviates only slightly from the previous status quo. This local search for solutions to contention, authorities believe, allows for predictable outcomes and the lowest resource drain. In terms of flexibility, incrementalist approaches have only slightly more than under an immobilist view; actors in the state can to some extent alter a policy up or down, increasing or decreasing a budget, for example, but cannot radically shift tools.

In a punctuated equilibrium condition, if the shock or challenge from the contentious challengers is sufficiently large, the state has much more flexibility in choosing its response. When events like civil wars, regime shifts, and catastrophes take place, state authorities often move beyond established institutions and procedures and even previously accepted goals to respond to the event. As Skocpol (1979), Kasza (2002), and other analysts have documented, such events often result in a sea change from existing procedures; these new institutions and targets allow the state to better respond to the crisis. The level of flexibility in the punctuated equilibrium model tops the scale.
In a Red Queen mode of interaction, government actors chose from among a broad repertoire of available responses to find the instruments and policies which best fit the challenge. As in a punctuated equilibrium situation, a large scale shock, such as a the ability of the Falun Gong to hold organized exercises outside the Zhongnanhai leadership compound in Beijing on 25 April 1999, may force the state to respond strongly. PRC government officials, previously unaware of the scope of the movement and concerned about its abilities to organize such a display without tripping its surveillance of such groups, responded by banning the Falun Gong as an “evil cult,” imprisoning and torturing many of its members, and sending out teams of experts to counter claims of miraculous physical results of the meditation. In other cases, if the contentious political groups adopt more moderate policies, the response will be geared to counter that level of resistance.

Having verbally described the core differences among immobilist, incrementalist, punctuated equilibrium, and the Red Queen modes of interaction, Chart 1 captures the differences in timing, intensity, and flexibility among the four modes of state response to challenge.

[Chart 1 about here]

Explaining Variation in Patterns of State Response

Advanced states rarely stay within a single mode of interaction to challengers, primarily because of the fluidity of their environment, that is, the state of their opponents and their internal goals and resources. This section details the conditions under which we expect to find the Red Queen response along with the factors that strongly influence the mode of interaction between states and contentious political movements.
Characteristics of both the state and its challengers play a role in determining the mode of action and response. Variation in state response to contention depends on 1) issue salience, 2) level of surveillance, 3) centralization and professionalization of bureaucracy, 4) goals of state, and, perhaps most importantly 5) level of contentious politics. When these five factors are highest (i.e. high issue salience, close surveillance, high centralization, etc.), the Red Queen mode of interaction is most likely. Conversely, in situations in which more of the factors are absent, the moderated, tightly linked response pattern will be less likely. Absence of high levels of contestation, despite the presence of other factors, result in the Red Queen response being very improbable. The following section details the conditions which make the appearance of the Red Queen most probable.

1) When the policy areas under contention have higher issue salience vis-à-vis other simultaneous problems.

High issue salience translates into a stronger interest for the government to respond to the challenge, and hence a larger pool of resources available to the bureaucracy for handling the problem. Formulating new plans, transforming old ones, or surveilling contentious political groups, require hours of work for government officials. Furthermore, creating or altering institutions requires financial resources, such as funds for loans, pay packages for new bureaucrats, compensation programs for citizens, jobs for co-opting anti-government groups, along with maintenance for the physical structures, such as the office space for the new or modified bureau.

Given their resource constraints, state officials must select which issues on which they will concentrate their resources. Dysfunctional or small scale contention, such as
contentious political groups struggling for issues considered by most to be less than critical, will find it difficult to provoke reactions from the government (and perhaps also the public). For example, when Crayola decided in 1990 to end production of a number of its colors, citizens formed RUMPS (Raw Umber and Maize Preservation Society) in an attempt to stop the implementation of the program. Such “non serious” issue groups, no matter how sincere their participants, will have a difficult time bringing their issue into a larger public sphere. Nonetheless, contentious political groups often form around what are initially minor issues that attract little, if any, attention from the government. Timothy George (2001) has spelled out how mercury poisoning and other forms of environmental degradation were all but ignored by the central Japanese government despite the deaths of a number of citizens in Minamata and other localities. Only after years of pressure and contentious did the issue of the environment reach a high level of salience, at least as high as that of economic growth, which had dominated the focus for most politicians and bureaucrats.

Issues of national importance, such as energy security or national security, are more likely to have high issue salience for the national government than local issues. In conditions where the issue is taken seriously, and resources are dedicated to it, moves by contentious groups are more likely to be met by Red Queen responses from the state.

2) When the bureaucracy engages in police patrol, not fire alarm surveillance of citizens group activities.

States cannot afford to keep tabs on all groups which challenge their policies or even their sovereignty; given the multiplicity of such groups and the limited resources mentioned above, authorities often only learn of a challenge once it has occurred.
McCubbins and Schwartz (1984) describe two types of Congressional oversight: “police patrol” and “fire alarm.” Under the police patrol model, organizations closely monitor their jurisdiction, trying to quickly detect, remedy, and discourage violations of goals (McCubbins and Schwartz 1984: 166). In fire-alarm oversight, officials learn of violations or problems not necessarily through direct surveillance, but from interested citizens and interest groups who keep tabs on the situation more closely. Of the two, police patrol approaches require more resources and dedicated staff, while fire alarm is less costly. I separate issue salience from patrol-type because it is possible that an issue will have high salience of state authorities, but nonetheless still only requires fire alarm oversight because of a lack of recent activities or disturbances.

When the state actively monitors its challengers, dedicating bureaucratic time and capital to monitoring such groups, pre-emptive or certainly quick reactive work to contentious groups is quite possible. Following the horrific devastation of 9/11, American intelligence services revealed that they had known of the presence of several of the hijackers in the country because of regular monitoring of some of them. Thus it was only a matter of days before police and law enforcement officials had assembled itineraries for many of the terrorists and linked them to other active terror organizations. Israeli intelligence officials keep close tabs not only on the leadership of terrorist groups like Hamas, but also on the rank and file members to be better prepared and able to respond.

3) When the policy network within the government is centralized, unitary, highly professional.
Bureaucrats may, due to the high salience of an issue, have access to resources necessary for a response, along with close surveillance provided by a police patrol type of oversight, but still be unable to respond in a Red Queen manner because of a lack of unity and centralization, and low levels of professionalization. Those bureaucrats who remain in office for long periods of time due to high levels of professionalization and have strong control over decision making processes are more likely to engage in Red Queen modes of response.

Unitary states like Japan and France have bureaucratic cadres recruited through meritocratic examinations from a restricted set of institutions; the so-called Grandes Ecoles of L’Ecole Polytechnic, L’ Ecole Normale Superieure, and L’Ecole d’Administration in France, and Tokyo University (Tōdai), Waseda, and Keio Universities in Japan. Bureaucrats produced from these systems see themselves as sharing a concern for the well being of the nation and usually spend their entire professional lives in positions directly related to their bureaucratic positions. It is no surprise that in both nations, bureaucrats, upon retirement, leave their government posts to entire private industry or think tank positions often directly related to their previous job in government. Called *pantouflage* in French and *amakudari* in Japanese, this “descent from heaven” provides businesses with strong ties to the government and guarantees for the bureaucrat of long term maintenance. Bureaucrats in these nations remain in power through regime changes and new leadership. These practices and images contrast strongly with the bureaucracy of America, for example, where a change in the office of the president from one individual to another can cause an enormous turn over in bureaucracies.
The reputations of these bureaucracies, while perhaps slightly tarnished in recent years, nonetheless remained strong for much of the postwar period. French and Japanese bureaucrats for most of the post War period were seen as above the petty practices of politicians and focused instead on higher, national priorities. Both Japanese and French bureaucracies are highly centralized, with a concentration of offices in their capital cities, and local offices of the government acting as branches of the center due to their unitary governmental structure. The presence of such professional bureaucrats ensures not only the retention of organizational memory but also the benefits of experience and dedication, factors which may be more difficult to find in non professional bureaucracies.

4) When the issue area under contentious is managed by government bureaucrats who have clear, strong institutional goals

A strong centralized bureaucracy with dedicated staff and a large pool of resources may still only respond in incrementalist or immobilist ways because of a lack of clear goals in their issue area. In some policy areas, politicians and bureaucrats alike may lack a clear vision of desired outcomes for the policy. For example, in Japan in the early 1990s, bureaucrats and decision makers had long been ambiguous in their visions of Japanese foreign policy vis-à-vis allies like the United States and trading partners like Kuwait and Saudi Arabia. Despite enormous resources, a well equipped and trained army, and theoretically strong interests in the oil rich region of the Middle East, bureaucrats and politicians were unable to quickly articulate a unified vision of Japanese involvement in the first Gulf War and soon came under criticism for their “checkbook diplomacy.”
For nations like France and Japan, bureaucrats working in the field of nuclear power have a strong and clear vision of their nation free from dependency on foreign oil and able to sustain indigenous and autonomous energy production through atomic reactors. When confronted by anti-nuclear contentious political groups, authorities in these nations can more easily respond in attempts to diffuse and co-opt protest than their counterparts in America. The United States government, despite initial support for nuclear power, soon backed away from unequivocal assistance as the economics and social conditions surrounding nuclear power moved towards paralysis.

When planners with a strong vision of the policy encounter resistance from citizens, they are better equipped to respond not in immobilist or incrementalist ways, but with Red Queen responses because of their desire to maintain their goal and ensure the success of their program. Bureaucrats and state authorities with hazy objectives will be more easily paralyzed and unable to respond in a moderated way.

5) When there is strong sustained contention from anti-project or anti-policy citizens groups who have access to veto points.

Of the five conditions detailed above, this factor is perhaps the most important in determining a clear Red Queen policy response from state authorities. Governments facing challenges from weak or dysfunctional protest are less likely to respond in a Red Queen mode than those opposed by a persistent, strong, coordinated challenge. Strong over time opposition itself can justify expanding the available resources for a bureaucratic agency dedicated to overseeing and absorbing such conflict, and can force state authorities to more clearly articulate their goals and visions in an attempt to define their
strategies. Further, resistance from contentious political groups raises the issue salience of the policy arena in question and pushes the state to respond.

Many political scientists view “contestation” purely in terms of electoral environments, while economists may understand the same term to mean pricing pressures created by a multiplicity of firms in a market such that no single firm can alter prices without triggering a response from its peers.

In terms of the Red Queen, however, contestations involve non-electoral, non-market pressures on states and bureaucratic authorities to alter their practices and policies. Even theoretically insulated bureaucrats can be moved to act by a variety of pressures from citizens and organized protest groups despite their non-elected status. Next, I identify at least five types of pressures from contentious political groups that even non-elected state actors must handle.

First, bureaucrats, especially in democratic nations like France, Japan, and America, where their post-career job is often tied to their long term government post, must factor in the possible consequences if they display incompetence in handling challenges to state policy. Because these actors regularly “descend from heaven” into jobs with businesses and groups that they regulated or interfaced with regularly while working for the government, failure to carry out successful policy can damage their post-career income. Government employees handling arms contracts are less likely to find jobs with arms manufacturers once they have retired if opposition from citizens brought an end to war and hence terminated lucrative contracts with the companies. In a sense, then, bureaucrats seeking to promote both their own and the state’s interest compete with social movements who seek to halt those goals.
Second, anti-state policy groups and SMOs directly compete with state actors in the field of agenda setting. That is, groups like Greenpeace, World WildLife Fund, the Million Mom March, the Christian Coalition seek to introduce bills and legislation into local and national legislative arenas. State actors seeking, for example, a continued emphasis on nuclear power must manage attempts by these NGOs to introduce stricter controls on nuclear waste or raise the environmental standards necessary for nuclear power plant siting. Bureaucrats who wish to continue to implement pro-nuclear policies must seek to counter such moves or risk the derailment of national level plans for energy sources.

Third, similarly, contentious state actors are competing with contentious groups to control the way that the issue is framed. Hence anti-abortion and pro-abortion groups carefully choose their rhetoric as either pro-choice or pro-life (while anti-choice or anti-life would bring far more negative connotations). Bureaucrats handling nuclear waste storage seek to avoid terrifying images of cancer and invisible pathogens which cause irreparable harm and instead adopt images and languages of safety and reassurance. If a sufficient percentage of the public feels that an issue is unworthy, or begin to pressure the state, NGOs and SMOs opposing that policy will find it far easier to meet their goals.

A fourth type of contestation between contentious political groups and state actors is the struggle for the “hearts and minds” of veto players, those subgroups whose support or lack thereof can bring plans to a halt. For example, in the Japanese nuclear power arena, three subgroups: fishermen, farmers, and local politicians, all must agree to the siting process for nuclear reactors or they cannot be built. Hence anti-nuclear groups regularly target their talks and demonstrations to these groups in an attempt to have them say “no” to plans for new reactors. To counter these moves, pro-energy government
bureaucrats must provide these groups with incentives and side payments, along with reassuring information, in an attempt to prevent them from exercising their veto powers.

Fifth, and finally, even non-elected government authorities compete with contentious political groups in the arena of their own reputation. In many cases, if the reputation of even non-elected officials becomes poor enough due to scandal or images of incompetence or malfeasance, they may step down (or be forced to do so) from their posts. This has been the cause with financial regulators in South American and North American countries, and also with bureaucratic authorities in Japan and Europe. If bureaucrats handle contestation from citizens poorly, or if the contentious political groups themselves can damage or distort the image of that authority sufficiently, he or she may see allies in government and civil society desert quickly. SMOs may deliberately provoke authorities into inappropriate actions and responses not only for the media coverage it brings to their actions but also because of the possibility of the withdrawal of that authority from the arena.

I have laid out five basic ways in which even non-elected state officials and bureaucrats are affected by contestation from contentious political groups. Having identified the ways in which even non-elected state officials face contestation from SMOs and NGOs, I now seek to lay out the profiles of different levels of resistance.

The level of opposition from a social movement organization can be defined by a variety of indices: the locus of the contentious political movement’s activities (local, regional, or national), its abilities to organize and distribute information to the public at large, the support or lack thereof of well known national political figures, and the creation or absence of broad coalitions with other organizations with similar goals. However, states face conflict not only with organized SMOs and NGOs, but also with the public as
When the majority of citizens, for example, oppose a state policy, SMOs and NGOs dedicated to resisting that policy find their work far easier. Thus social movements always seek publicity, support from high profile individuals like actors and politicians, and news coverage. By changing the preferences of average citizens, NGOs can multiply the strength of their contestation by bringing in thousands of new letters, marchers, and signatures on petitions, along with new funding sources and members. Some NGOs deliberately seek to bring pressure on their own government through allies in other nations, a process known as the “boomerang effect” (Keck and Sikkink, 199X).

The profile of a highly competitive issue would involve NGOs fighting the issue at national level, district, and local levels; widely distributed and highly professional materials; coalition or umbrella groups; widespread societal knowledge and opposition to the policy; and national level politicians or advocates as spokespeople. Hence anti-nuclear power groups in the United States in the mid 1970s found it easy to recruit new members and gather petitions as typical citizens learned about the possible dangers of nuclear reactors. With high profile activists like Ralph Nader and well covered accidents like that at Three Mile Island, anti-nuclear groups were able to pressure authorities at all levels of government to end their economic and political support for nuclear power plant siting.

On the other hand, an issue area with a low level of contention would have protest and resistance organizations solely at local levels, few publications which are distributed primarily to local individuals, localized knowledge of the issue, and few allies or coalition members at either regional or national levels. Chart 2 summarizes the profiles of highly competitive through poorly competitive issue areas.

[Chart 2 about here]
Conclusions: Why does it matter?

The current theoretical literature on state – social movements interactions does not accurately capture the full range of models of empirically observed state responses. Immobilist, incrementalist, and punctuated equilibrium models cover much, but not all of the dynamics of government – citizen relations. This paper argues for the necessity of the Red Queen model, which involves a moderated, measured response from state authorities due to movement from contentious challengers. No single model dominates state reaction; rather, as argued above, depending on conditions such as government structure and contestation levels, governmental response will move between them.

Institutional and policy coevolution provides several important lessons for social scientists. This Red Queen pattern of state response to citizen activists underscores the importance of viewing states as active manipulators of opportunity structures, able to move and react to citizen groups under certain conditions. States can be agile. Hence investigators should look closely to be sure that what have been seen as rigid or immobile state structures are really so. Many of the strategies and institutions used by Japanese governmental authorities in their drive to push facility siting forward fit under the category of the “coral reef” or “iceberg” type policies described by scholars of American political development (cf. Howard 1997, Hacker 2000). These sorts of policies may not be immediately visible even to participants in the struggle such as politicians and anti-facility citizens, and outside observers looking for signs of state response could easily overlook them (Interviews with Japanese anti-facility activists, 2002-2003). Unlike publicly debated policies, such as health care in America, or revision of Japan’s constitution, siting issues often remain within the private domain of central government bureaucrats.
The model showcases the ability of states to respond with measured and flexible responses even without enormous exogenous shocks like war or revolution. In high salience, high stakes issues state authorities can alter strategies as citizen challengers discover new venues of opposition and create new tactics to stall state plans. While wars and other rare events may trigger drastic changes, smaller level shifts on the parts of citizen opponents can also bring about alterations in government policy and structure. Hence political scientists should look beyond obvious, large scale shocks to investigate smaller level alterations in the strategies and tactics of social movements.
Figure 1: Patterns of Interaction based on Frequency and Amplitude of Change

Maximum Level of Change → Infrequent Change Frequent Change

Maximum Scale of Change

↓

None/Small Scale Change Immobilist Incrementalist

Large Scale /Radical Change Punctuated Equilibrium Red Queen
Figure 2: Graphical Representation of the Four Models

- **Rigidity / Immobilist**
- **Incrementalist**
- **Punctuated Equilibria**
- **The Red Queen**
Figure 3: Facility Siting Categorized by State Structure and Contestation Level

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<th>High State Centralization</th>
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<td>Japanese Airport siting</td>
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<td>Japanese Dam Siting</td>
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