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Experiential learning of U.S. presidents in the foreign policy decision-making context

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EXPERIENTIAL LEARNING OF U.S. PRESIDENTS IN THE FOREIGN POLICY DECISION-MAKING CONTEXT

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ABSTRACT

This dissertation examines U.S. presidential learning—defined as a change in presidential operational code beliefs due to their experiences in office—in the foreign policy decision-making context. These beliefs are teased out from presidents' representations of power relationships via verb usage in their speeches. A database of more than 4,000 foreign policy-related speeches obtained by the author was employed for this project, and with this data, I examine several potential dynamics of and influences on learning.

I look at trends in belief change over time, and examine the relative stability and interconnectedness of "core" versus "peripheral" beliefs. I then test the influence of factors in both the domestic and foreign realms and in various "policy domains" on monthly belief change. Additionally, I examine the impact of crises on belief change in both the short- and longer-terms. I follow this by an analysis of pre-existing beliefs and crisis-related factors as influences on belief change following crises. Finally, I look at the impact of belief change on policy behavior itself. Based upon the accumulation of evidence provided here, presidents do not appear to behave as "smooth transmission belts" between the political environment, belief change, and subsequent policy behavior as anticipated by structural realists.

CHAPTER 1: INTRODUCTION AND OUTLINE OF THE PROJECT

1.1 Introduction

Learning (defined as a change in "beliefs") is an important component of the systematic study of politics, as many lessons could be learned from any given experience. Understanding learning's form, as well as when and how it occurs or fails to occur, can tell us much about political reality. For instance, is elite-level, "experiential" learning very commonplace in the domain of international relations? Do certain factors tend to influence learning in a predictable way, and if they do, which factors matter more than others here? These are questions that have garnered extensive speculation by a number of well-known theorists in the fields of international relations and foreign policy analysis. However, despite this fact, much of the existing work on learning is primarily theory-based, often containing anecdotal or case study evidence of, at most, a small handful of examples to support the ideas promoted therein. As a result, we must often treat these theories and findings cautiously, as we cannot know the degree to which they are generalizable across cases.

This project is an attempt to provide large-scale, empirical tests to a number of hypotheses concerning the influences on, and processes of elite-level learning in the context of foreign policy decision-making. The theoretical frameworks referenced here stem principally from the works of Robert Jervis, Deborah Larson, Russell Leng, Jack Levy, George Breslauer and Philip Tetlock, Steven Walker, and Alexander George. Specific hypotheses examined concern analyses of learning: following from the influences of one's beliefs; following from the impact of both domestic and international factors; in the respective domains of conflict and cooperation and of similar and dissimilar states; and following crises and other conflict events.

The above factors are expected to systematically influence learning defined as the degree of change or stability of one's beliefs—the set of cognitive "schemas" that an individual uses in order to interpret his or her political reality—regarding foreign policy issues during an individual's time in office.

As the title to this project suggests, the focus of this study is that of learning, or the lack of learning, by U.S. Presidents engaged in foreign policy decision making. However, my operational definition of this phenomenon, following from the above discussion, is that of "belief change." I use the term *learning* instead of *belief change* two distinct reasons. First, learning is, conceptually, what I am interested in, as I am not simply interested in the change of one's beliefs. Though perhaps ninety-nine times out of one hundred, any belief change that occurs in foreign affairs can be attributed to learning as it is defined here, there might also be instances in which belief change results from other sources. For instance epiphanies, or major religious/philosophical shifts that result not from the influences of one's outside environment or logical thought processes, but rather from some "mystical," instantaneous realization, are not categorized here as "learning." Further, if a leader were to suffer trauma to the brain following an injury, or following from a degenerative disease such as Alzheimer's, then this might also lead to a change in one's beliefs, but this would not be considered as "learning" as evaluated here.

Secondly, given that the hypotheses tested are, for the most part, drawn from research that describes the phenomena I am testing as "learning," and as I hope that this work will contribute to this larger literature, my use of this term also stems from a desire to adhere to convention.

A study that focuses explicitly on learning defined as belief change, this project places itself in the company of works on the political psychology of political elites, as it affects foreign policy decisions and outcomes. Here, a wealth of work exists evaluating the psychological processes, structure, and content/make-up of political leaders. This includes examinations of how actual decision-making takes place versus how we might expect to see such in a perfectly "rational" world (Steinbruner 1974), given the impact of groupthink (Janis 1982), cognitive and motivated biases including "mirror images" (Bronfenbrenner 1961; Holsti 1967) and misperceptions broadly defined (Jervis 1976). Also included here is work evaluating the ways that leaders view the world, and peers and adversaries within it, and what this says about potential policy choice (George 1969; Walker 1977; Walker, Schafer, and Young 1998). Research has also focused on leaders' relative abilities to understand alternative viewpoints and "shades of gray" (Schroder, Driver, and Streufert 1967; Suedfeld, Guttieri, and Tetlock 2003), as well as the ways in which leaders with differential levels of political experience, interest, and ability are able to succeed or fail to succeed (Hermann 2003).

This project is not, however, a traditional exercise in evaluating political psychology, as this study draws on international conflict data, and a large database of quantitatively measured psychological constructs. As such, in addition to making an empirical contribution to research on learning, this project seeks to contribute to work in political psychology by expanding the notion of how psychological can be used, and the types of questions that it can address. In addition, this project contributes to the field of conflict studies, as it uses conflict data (the International Crisis Behavior database, Militarized Interstate Dispute data, and Gary King's events data) as explanatory and dependent variables, as well as for determining thresholds for and time periods during which learning will be evaluated.

1.2. Overview of the Dissertation

This dissertation is intended to address lingering questions regarding elite-level learning in the foreign policy decision-making domain concerning the nature of presidential belief change, as well as factors that impact belief change and stability. I begin. in the next chapter, by reviewing the literature on learning in the foreign policy decision-making context, and discussing the ways in which this project differs from existing works and helps to "fill in gaps" in the literature.

In chapter 3, I examine the major sources of data used in this project. In the process, I discuss the operational code—the measure of "beliefs" used here—including the way in which this information is obtained from leaders' speeches and how specific indices are constructed. I also discuss Gary King's 10 million dyadic events, as well as the International Crisis Behavior (ICB), and Militarized Interstate Dispute (MID) databases, and how I have used this data to address the questions posed in subsequent empirical chapters.

Chapter 4 is the first empirical chapter, and looks at the nature of presidential belief stability and change. For instance: how does each president fall relative to others on each of the 10 operational code belief indices, and which presidents experience more or less belief change than others during their respective times in office? In chapter 5, I develop a series of hypotheses from existing works evaluating the nature of belief "systems," (mostly based on the work of Robert Jervis) and test the degree to which these hypotheses hold when looking at U.S. Presidential operational code beliefs.

Chapter 6 examines the relative impact of various international, domestic, and international/domestic factors on presidential belief change. Do domestically-based factors impact presidential beliefs regarding the nature of the "self" and "others" in the international

political environment to the same degree that foreign-based factors do? Here I also examine the concept of "differential policy domains," and examine whether presidents are selectively and predictably influenced by specific components of their political world over others. In chapters 7 and 8, I examine the impact of crisis events on presidents, and test whether crisis exposure alone, or crises in conjunction with pre-existing belief levels, impact learning following crises. In chapter 8, I also look at the impact of crisis-related factors (such as crisis magnitude, territorial proximity of the crisis to the U.S., and the order in which a crisis is experienced by a president) on presidential learning.

Chapter 9 provides a preliminary examination of the impact of beliefs and belief change on U.S. policy actions. The ultimate goal of research on elite-level learning in political science is to understand its impact on policy, and I provide a preliminary examination of this here. Finally, chapter 10 is an overview of the findings in this dissertation, and a discussion of what these findings may mean, and where research can go from here.

Thus , through a fairly extensive analysis of U.S. Presidential beliefs, I provide empirical findings that will help to address some important questions regarding the nature of belief stability and change. In the process, I hope to promote different ways of thinking about research on both political psychology and conflict studies, by integrating the two in data-supported analyses of factors relating to U.S. Presidential learning.

CHAPTER 2: LITERATURE REVIEW ON LEARNING IN POLITICAL SCIENCE; DEFINITION OF THE TERM AS IT IS USED IN THIS PROJECT

In this project, I evaluate U.S. presidential learning and non-learning. But what is "learning," anyway? This is a concept that means different things to different people, both in- and outside of academia. As such, it is important to outline various definitions of learning and to further explore the specific definition adopted in this project.

2.1 The Everyday Usage of Learning

The first way one might conceive of learning is as "the everyday usage of the term as 'coming to know'" (Breslauer and Tetlock 1991, 9). That is to say, when one learns a new skill such as how to drive a car, or when one learns not to touch a hot stove or an electrical fence, we may say that we are using the term learning in this "common, everyday" sense. There is an assumption here that the person describing the act of learning holds the new belief or understanding gleaned from the "learning" process to be "valid, or true, or justified, or realistic" (6). At a basic level, this form of learning has some behavioral component, where an individual first learns "that" one component of reality works in a certain fashion, and then learns "how" to deal with this reality in some, typically useful or functional, way.

There is also a more complex, "everyday" usage of learning than the simple learning of "that" and "how." This additional form of "learning" has strong normative underpinnings. For instance, if we were to argue that Gorbachev "learned" that Communism was a failed ideology, with the implication that failing to learn this specific lesson equates to a failure to learn anything at all, then we would be applying a *subjective value* to the belief or knowledge that is to be learned (Breslauer and Tetlock, 1991: 7). The same could be said if we were to argue that Islamic extremists *should* "learn" that a liberal, democratic society is preferable to an autocratic theocracy. As Breslauer and Tetlock note, this form of learning is "based on both a value

judgment. . .and a theory of cause-effect relations. . .” and “entails an implicitly counterfactual claim about the state of the world” than we would otherwise see (7). Others, however, might not hold these same value judgments. The subjectivity inherent in this definition of learning makes it objectionable to many academics who, as self-perceived scientists, appreciate clearly defined constructs that can be understood and evaluated with a minimum of such subjective interpretation.

2.2 Alternative Definitions

While some academics, then, approach their evaluation of learning as it occurs in its “common” usage (or at least, as something approaching the “common” usage), many others do not. If we were to randomly select ten different articles evaluating “learning,” then we would likely see a number of more or less different phenomena, all labeled “learning.” Stern (1997) describes this problem in the following way:

> Learning is a concept which cuts across virtually all of the major theoretical and meta-theoretical cleavages in the social sciences. A broad range of positions on questions such as the locus of social learning (who or what learns?); the nature of and ‘motors’ driving such learning; developing corresponding criteria for distinguishing between learning and non-learning-based change phenomena; and the relationship between power and learning are visible in a diverse body of literature devoted to the concept (69).

Thus, in many ways, asking “what is learning” is akin to asking “what is politics,” or “what is power.” Learning is a concept that exists in many manifestations, and in each of these sundry forms attempts are made to explain an array of often very different phenomena related to politics. Given this fact, a comprehensive literature review of “learning” would require an entire book, and then some. Here I will briefly touch on some of the more utilized ways that learning is evaluated in- and outside of political science scholarship, with a focus on one particular learning type—the “cognitive psychological approach”—that is the approach to learning utilized in this dissertation.

Many conceptualizations of "learning" are discussed in what is the most comprehensive known collection of work on learning in foreign policy—the edited volume by Breslauer and Tetlock (1991), *Learning in U.S. and Soviet Foreign Policy*. Here Tetlock (1991), through an extensive review of the existing work on learning, provides a conceptual framework for understanding these various learning "types." These "conceptualizations of learning" consist of: 1) the neorealist conception of learning, which states that governments respond to objective stimuli in a rational sense, by changing and updating behavior and preferences following from one's position in the international hierarchy of power; 2) the cognitive psychological approach to learning, which argues that learning occurs within the minds of leaders, and that this learning is strongly influenced by the simplifications of reality that they make; 3) the cognitive structuralist approach to learning, which assesses cognitive/evaluative complexity or self-reflection/ metacognition as learning; 4) the efficiency definition of learning, which defines learning as occurring when policymakers have learned to match means and ends up efficiently; and 5) learning at the level of institutions and political cultures, which is not an evaluation of learning based on the influence of institutions or cultures (as in the usage of "institutional learning" by Rohrschneider, 1996), but rather the assumption that these large aggregations of individuals can, somehow, "learn" themselves. I will briefly discuss these forms of learning here.

2.2.1 The Neorealist View

Much of the debate over "learning" in international relations concerns "how" one learns, but there is also the "ontological" question discussed by Stern (1997): what or who is it that actually learns? In international relations work broadly, particularly that rooted in neorealist theory (see Waltz, 1979), the state is often viewed as the principle actor. From this perspective,

questions of behavior narrowly, or of broader systemic issues of war and peace and international stability or change, ultimately focus on the state.

The neorealist form of learning is thus applied to states rather than individuals, as from this perspective, the state and major decision-makers within the state are difficult to disentangle from one another. But beyond this, even if key individuals are viewed as largely constituting "the state," there would still be little reason for these researchers to focus on individuals and their predispositions or decision-making processes because--given the incredible constraints provided by international-level factors--individual leaders do not possess a great deal of agency in matters of importance. The "state" is viewed as the true, most noteworthy actor in international relations, and as such, a focus on "state behavior" is most appropriate.

Regarding the utility of state-level analyses of learning, Reiter (1996) argues that these are "the most powerful . . . in the sense of explaining most directly the phenomena of greatest interest in world politics" (18). Individuals and substate actors have limited influence in world politics generally. Reiter also argues that evaluating the state allows the researcher to empirically examine larger groups, which increases the validity and generalizability of results. Finally, he suggests that this type of analysis allows for comparison of predictions made by learning and that of "classical, state-oriented realist theory" (19).

The neorealist conception of learning, with its focus on state behavior, "black-box[es] the foreign policy-making process and simply look[s] for lawful regularities between international events and governmental responses" (Tetlock 1991, 24). Here, states respond to reward and punishment in a *reasonable* (if not wholly *rational*) manner, and if they fail to do so, are replaced by more *realistic* leaders (potentially originating in opponent states). Thus, learning

here is often not a real choice, so much as the difference between "life" and "death." Given the focus on states and the systemic level of analysis, this form of learning might be used most frequently by "traditional" or "conventional" international relations theorists.

However, Larson (1991) suggests that structural realists have a "limited" view of learning, questioning the degree of nuance that can be explained via this perspective. For instance, she notes that structural realism might have anticipated the coalition of the U.S. and China against the Soviet Union under Nixon, but cannot explain how or why Nixon would concurrently approach the Soviet Union in a cooperative manner. In his discussion of historical learning, Reiter (1996) echoes Larson's concerns, stating that "the bare-bones structure of realism is a good starting point for understanding international relations," but its "parsimony either limits the accuracy of its predictions or displays an indeterminacy that prevents the construction of falsifiable hypotheses" (11).

2.2.2 Liberal Theories of Learning

Larson (1991) additionally discusses learning as evaluated by neoliberal thinkers, and the "diffusion of consensual knowledge" by which these theorists believe states shift their "beliefs" toward more effective ways of dealing with one another (352). As an example of this type of research, Adler (1992) evaluates the manner in which epistemic communities (scientists, strategists, and other experts who are part of a "community" of largely like-minded individuals) came together to create the "international shared understanding and practice of nuclear arms control, which gave meaning to and helped coordinate expectations of superpower cooperation during the Cold War" (101).

Though fundamentally different from the neorealist conception in terms of the causes and types of learning that might take place, this view is similar to the neorealist view in that it, too

treats the state as the primary actor of interest, and focuses on the impact of international factors on state "learning." Larson (1991) criticizes this perspective as a means to evaluating learning as well, questioning the extent to which "consensual knowledge" really exists and reflects state behavior, given the reality of power politics, and the fact that different individuals with different goals and perceptions might have different motivations for behaving in similar ways to others.

2.2.3 The Cognitive Psychological Approach

The cognitive psychological approach conceptualizes learning quite differently than the neorealist or neoliberal approaches. This perspective looks not at states, but rather individual decision-makers within states. Advocates of this perspective argue that individual perceptions and ideologies need to be taken into account if we are to understand "learning" in foreign policy. Tetlock (1991) states that this perspective is based on two "simple functionalist premises:

> (a) The international environment is extraordinarily complex;
> (b) People—limited capacity information processors that we are—frequently resort to simplifying assumptions to deal with the complexity, uncertainty, and painful trade-offs inherent in foreign policy problems" (27).

George (1969) puts it this way:

> Efforts at rational decision-making in political life are subject to the constraints of the following kind: (1) The political actor's information about situations with which he must deal is usually incomplete; (2) his knowledge of ends-means relationships is generally inadequate to predict reliably the consequences of choosing one or another course of action; and (3) it is often difficult for him to formulate a single criterion by means of which to choose which alternative course of action is best (197-98).

Thus, it is not enough to simply look at the "incentive structures" at play in the international system to understand how and when individuals "learn," as might be expected in both the "neorealist" or "purely rational" perspectives (this latter perspective will be discussed below). Instead, the cognitive psychological perspective sees learning as occurring when the set of lenses that one uses to view some simplified form of reality changes in some way for some

reason. As a result, the world begins to be viewed differently than it appeared beforehand. The cognitive psychological perspective is that used in this project, and as such, will be discussed in greater detail later.

2.2.4 The Cognitive Structuralist Approach

The third perspective is the cognitive structuralist approach. This form of learning evaluates whether the perceiver can "learn" to see the world as more or less complex, as well as to better perceive the nature and role of the self. Tetlock (1991) breaks this category down into four "structural dimensions" that are of particular relevance for the study of foreign policy:

> (1) The cognitive complexity of the idea elements within a belief system, (2) the evaluative complexity [defined as "the degree of inconsistency or tension that exists among the considerations that a policy maker uses to judge events or make choices" (33)] of the idea elements, (3) the degree of interrelatedness or integration among idea elements, and (4) the capacity for self-reflection or metacognition (32).

From another "cognitive structuralist" perspective, Suedfeld, Guttieri, and Tetlock (2003) note that leaders' degree of "complexity" can be viewed as either a state- (integrative complexity) or trait- (conceptual complexity) level phenomenon, suggesting that evaluations here look not only at the degree of "differentiation" that leaders engage in when perceiving the outside world (or being able to perceive alternative viewpoints and "shades of gray"), but also "integration," which deals with making connections between occurrences and ideas, and "situates them in an overarching contextual structure" (247).

Tetlock and others have made some noteworthy observations regarding when and how learning is likely to take place from this perspective. First, Tetlock (1991) argues that "we should expect most learning in foreign policy to take the form of increases in cognitive, but not evaluative complexity" (34). He also argues that increased evaluative complexity can be dangerous, because "reality is sometimes simple" (35), and in the absence of cognitive

integration (by definition, possessing the ability to cope with evaluative tensions), evaluative complexity "can induce confusion, even paralysis, within a decision-making system (the Hamlet syndrome)" (34).

Suedfeld et. al (2003) further note that research evaluating state (in the sense of the "state/trait" debate) complexity shows that lower degrees of "value pluralism" and exposure to stressful situations (such as a limited time horizon, perception of threat, fatigue, and uncertainty) have a negative impact on "integrative complexity" (253-255). This can have a noticeable impact on outcomes, since leaders who demonstrate lower degrees of integrative complexity are more likely to attempt to resolve conflicts in a conflictual manner (255). In other words, crises tend to play a role in reducing leaders' "integrative complexity," which leads to an increased tendency to escalate conflicts, which further decreases in state-level complexity—a troubling spiral toward violence. From this perspective, however, it is unclear if leaders are truly "learning" to see the world as more or less complex at the "state" level, or whether this is an "automatic" response as could be extrapolated from the neorealist conception.

2.2.5 The Efficiency/Accuracy Definition

The efficiency definition of learning evaluates "whether governments are becoming more adroit or adept at achieving the goals they value" (Tetlock 1991, 35). Levy (1994) notes that there are three elements that are "individually necessary and jointly sufficient for efficiency learning: (1) a change in the content of one's beliefs that (2) is in the direction of greater accuracy about the world and that (3) facilitates the ability to achieve one's goals" (291). Levy refers to this form of learning as the "accuracy criterion." This is the approach that most closely approximates learning in its "common usage" as evaluated by political scientists. If one were to ask the person on the street "when or how do presidents learn?" their responses would probably

reflect the matching of behavior to the responder's normative evaluation of the type of behavior that *should* take place. In other words, this is the suggestion that leaders learn the "correct" or "incorrect" lessons from some experience or series of experiences, where the concepts of "correctness," or the "goals [that one] value[s]" would have to be inferred by the observer (Tetlock 1991, 35). That is to say, there is an assumption that some lesson exists, which is typically seen as being useful or adaptive to one's situation/goals,[1] and that "learning" takes place when this lesson "comes to be known." Note that even if a leader *attempts* to "learn" from his or her environment, and witnesses a change in beliefs as a result, this is not seen as "learning" if some "incorrect" lesson is learned, whereby inefficiency in his or her interpretation of reality remains.

From this perspective, learning occurs when means and ends match more efficiently or more effectively/accurately. Toward this end, "learning . . . *can take two very distinct forms*—one can discover more effective strategies for pursuing one's original goals, or one can redefine one's goals in more realistic ways" (Tetlock 1991, 35; emphasis in original). Obviously, determining when learning has occurred can be very difficult in this context, because it requires the creation of historical counterfactuals of some kind (that is to say, what *would have happened* if factor X had occurred differently), which can always be brought into question as inappropriate or implausible by critics.

Etheridge (1981) defines learning "not by behavior change or attitude change but by the dual criteria of increased *intelligence and sophistication of thought* and increased *effectiveness of behavior*" (6, emphasis in original), demonstrating a clear focus on increased "efficiency"

[1] This is noteworthy as there are exceptions when one may learn "non-adaptive" lessons—such as one learning to fear the outdoors because of a negative formative experience that is not representative of typical experiences.

alongside increased cognitive complexity (as such, Etheridge's form of "learning" is a hybrid of these two forms). Larson (1991) also defines learning as "change in the *cognitive content* of policy makers' beliefs that enables them to match ends to means more *efficiently*. Examples of learning might include abstraction of a new concept, or change in the image of the opponent" (350, emphasis in original).[2]

Stern (1997) also discusses "experience based" learning, and notably includes a category not explicitly discussed by Breslauer and Tetlock: "moral learning," or the further attainment of "wisdom" by a decision maker (82). This is a component of learning discussed at length by Etheridge (1981), but may be encapsulated by a form of the "efficiency" definition.

2.2.6 Learning by Institutions

Another area of political science work evaluating learning does so at the level of the organization. This, as with the focus on state learning, does not evaluate individual learning, but rather learning at the level of an aggregation of individuals. Schön (1978) discusses this phenomenon in the following manner:

> Organizations are not merely collections of individuals, yet there is not organization without such collections. Similarly, organizational learning is not merely individual learning, yet organizations learn only through the experience and actions of individuals (cited in Stern 1997, 70).[3]

Jervis (1976) evaluates this form of "organizational learning," and states that the lessons learned by organizations can become "institutionalized in textbooks, rules, and even language itself" (238).

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[2] Note that though Larson's definition of "learning" differs from that used here, her evaluation of "attitude" and "belief" change provides a number of useful and informative observations that have strongly contributed to the understanding of learning in political science broadly, and in this project specifically.

[3] Note: the Schön article/book from which this was taken is not included in Stern's bibliography. As such, I do not provide a direct reference to it in my bibliography.

Spiegel (1991) also evaluates organizational learning, and argues that learning in this conceptualization "is rare and occurs primarily via personnel shifts," nothing that "otherwise, change may involve a gradual revision of policy beliefs and preferences (a slow, cumulative process)" (264). Levy (1994) takes exception to the notion that learning can occur following a turn-over of personnel, a position adopted in this study's "cognitive psychological" perspective. The typically gradual nature of individual belief change will be further discussed later, but it is noteworthy that Spiegel observes that "government" learning occurs most notably when no actual "individual learning" takes place at all.

2.3 Learning as Psychological Change—The Definition Used in This Project

Ultimately, I depart from many of the above conceptualizations of learning, by evaluating learning as a change in a political leader's beliefs regarding the nature of the international political environment, following from his or her experiences in office (this falls under the "cognitive psychological" learning category described by Breslauer and Tetlock). My definition of learning follows directly from that developed by Levy (1994), whose theoretical assessment of such, alongside the work of Robert Jervis, provides the impetus for much of the work here. Levy defines "experiential learning" as "a change of beliefs (or the degree of confidence in one's beliefs) or the development of new beliefs, skills, or procedures as a result of the observation and interpretation of experience" (p. 283). Though this definition also accounts for "historical" learning, and learning that occurs prior to one's time in office, for this project I only examine learning as it occurs during one's time as political leader.

This project does not, then, examine the initial development of elites' beliefs and attitudes in childhood or adolescence. While a rich assortment of existing psycho-biographical

works examine factors related to the upbringing and formative experiences of politicians, the specific foci and implementation proposed in this study is fairly novel.

Levy's above definition clearly sets his conceptualization of learning apart from many of the others who evaluate learning in its assorted forms. For instance, for Levy, learning is a phenomenon that cannot be understood as a passive process that impacts individuals as if they were automatons within some mechanistic world of simple cause and effect. This is the conceptualization espoused by some neorealist scholars and many social psychological learning theorists. Instead, as Jervis (1976) discusses at length, prior beliefs and predispositions, the environmental context, and individuals' subjective interpretations of this context contribute to learning.

Further, in this analysis, actors are treated as "active learners" in that they search for evidence that they believe is relevant to interpreting the situation at hand, and act as "naïve scientists" in that they conduct "experiments" to test their expectations, and engage in trial and error actions that will affect learning (Levy 1994, 283-84). Breslauer and Tetlock (1991) note that this focus on learning as "belief system change" is a narrow one, focusing on a "very specific subset of change" (10). Specifically, they argue that:

> That subset is restricted in three senses: to the level of the individual; to change in cognition (beliefs and preferences), not changes in behavior; and to changes that do not require a judgment about correspondence with reality or improvements of performance (i.e. to *believing that*, not *knowing that* or *knowing how*) (10, emphasis in original).

At this point, it is useful to define the boundaries of this study. First, this project is not concerned with the "efficiency" definition of learning as examined earlier. Second, it is not concerned with "organizational" or "collective" learning, or the notion that groups, such as a bureaucratic organization can somehow "learn" from their experiences in the way that an individual does. Third, this study is not interested in learning defined as behavior. Following

from this, it does not treat as learning situations in which government turnover, following an election or coup for instance, leads to a change in government policy. Nor does it evaluate situations in which a change in governmental institutions, by solely altering the "rules of the game," leads to salient political changes. These processes in and of themselves are not learning in the cognitive psychological sense, as it is evaluated here.

Groups and institutions do not *learn* in the literal sense of the word, of course, as only individuals possess thoughts and perceptions that may change. Though governments or governmental organizations may change in response to the learning of individuals within it, these groups do not actually "learn." Further, policy change is not necessarily an outcome resulting from learning (though policy change *may* eventually occur as the result of learning). It may be that voters learn, leading to a turnover in government control that in turn leads to a sequence of changes in policy. But in this sense, the imposition of new individuals into the decision-making framework, and not actual, cognitive "learning," is the cause of change in policy.[4]

Levy (1994) takes issue with the view that states (rather than the individuals within states), can somehow learn, as well as with the "structural adjustment" expectation of some theories of realism, which anticipate "well-defined and predictable relationships between structural antecedents and actor perceptions and between perceptions and behavioral responses" (297). From this perspective, Levy argues, "learning is epiphenomenal," and thus is not worthy of serious analysis. Levy's definition treats any change in beliefs following experience or the observation and processing of occurrences as learning. However, he understands learning as part of a larger process; learning, for Levy, is not solely equivalent to environmental change.

[4] For more on this see Levy (1994), pages 287-289.

To reiterate the boundaries of this dissertation: it does not study attempts to more efficiently meet means with ends (as in Tetlock's "efficiency" criterion), as I do not make subjective evaluations of the "correct" or "incorrect" lessons that one might learn. I am looking at learning as belief change, and not necessarily behavioral change (except in terms of change in speech—the source of my "belief" data) or policy change. Thus, this study does not examine changes in military, political, or economic strategy (grand or otherwise), crisis management techniques, or attempts to sway or manipulate public and international opinion one way or the other. Instead, I evaluate changes in strategic preferences, perceptions of the world outside U.S. territorial boundaries, feelings of control over world affairs, and other broad "beliefs," as evaluated by the operational code (a concept that will be discussed in detail further below).

Etheridge (1981) precludes maturation from his definition of learning (6, referencing Hilgard and Bower 1975), along with fatigue and the influence of drugs. I, however, argue that maturation—conceptualized as the accumulated impact of one's experiences and perceptions over time on beliefs—is an important component of learning, and this is one component that I will explicitly examine.

Levy (1994), citing Jervis, conceptualizes the "political learning model" as part of a "two-stage process or causal change in which (1) the observation and interpretation of experience lead to a change in individual beliefs and (2) belief change influences subsequent behavior" (291). Though the purpose of evaluating learning is ultimately to understand the second component of this model, this project is primarily focused on the first. I agree with Levy that it is crucial to understand what learning is and how it manifests itself, as well as when it will or will not occur before we can take the larger step of mapping out the influence of learning on

policy change.[5]

Following from this, I am explicitly evaluating when leaders come to "*believe that*" the world works or exists in a certain manner (typically some changed understanding of cause-effect relationships) rather than "*learning how*" (defined as evaluating "improved performance"—this is a distinction made by Breslauer and Tetlock 1991, 13). As Breslauer and Tetlock note, "to see whether leaders have learned *how*, we must specify the goals by which performance is to be evaluated, determine that changes in belief drove the enactment of new policies, and evaluate the greater or lesser effectiveness of those policies" (13-14). In this sense, coming to *believe that* may be a prerequisite to understanding *learning how*, but evaluating the latter is far more complex, entailing evaluation of long- and short-term consequences of belief change, as well as the complex, "reciprocal" relationship between policy and the context within which policy is made.[6]

The final empirical chapter, in which I evaluate the impact of beliefs on policy change, is meant to be a very preliminary look at this relationship. I do not make judgments as to whether or not U.S. behavior "improved" as a result of belief change; rather, I evaluate whether the type and strength of presidential beliefs have a predictable, systematic influence on U.S. policy. A more comprehensive evaluation of the impact of presidential beliefs (and belief change) on policy is something that, I am interested in pursuing in later projects. First, however, I seek to establish some clear, empirically supported determinants of belief change.

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[5] Levy (1994) argues that those evaluating learning as "structural adjustment," or "adaptation," assume that the first component of this model does not have an impact on the second component. As such, theorists evaluating such will ignore that first step (297).

[6] It is possible that belief change itself may be an "active" attempt to strategically influence the beliefs that others hold of the "self's" beliefs. However, this possibility is not explored or examined in depth here.

Though the "cognitive structuralist" perspective seems similar to the "cognitive psychological" perspective discussed by Tetlock, Levy (1994) notes that there are issues that make the structuralist view problematic. First, he notes that this perspective "sneaks the accuracy [or efficiency] criterion through the back door" through the assumption that a more complex view of the world equates with a more efficient view of the world (this is particularly evident in Etheridge's analysis of "learning"). Levy notes that increasingly complex views of the world may actually hinder "desirable" decision-making processes, and that the degree of complexity or simplicity that an individual evinces is a function of one's environment and issue domain, making evaluation of this phenomenon both theoretically and methodologically problematic (294-296).

2.4 Views and Theories of Cognitive Psychological Learning

Starting from the perspective that learning in international relations (of the "experiential," belief change variety) is a change in a leader's "beliefs" following from experience or the observation of outside events, I ask, how and when does learning occur, or fail to occur? The existing literature provides a well-spring of ideas from which hypotheses may be drawn.

2.4.1 The Rational Actor Model

The most well known theory of how ideas, attitudes, and beliefs are developed (as well as of how decisions are made) is likely the "rational actor model." This theory is, in a manner, a theory of "experiential" learning. Though ultimately focused on how decisions are made, in the process, the rational actor model suggests that individuals will develop or change their preferences and ideas based upon the information that they encounter. That is to say, an individual's beliefs will change to reflect the impact of external stimuli. This is an extremely simplified view that is not expected to realistically represent human behavior. However, the

assumptions behind this model have been useful toward advancing other, more complex theories (including game theoretic/formal models) of voter behavior as well as foreign policy decision making and behavior.

Robert Jervis (1976) evaluates rationality as a generally accepted manner of "good" decision making.[7] Specifically, he defines this as "those ways of interpreting evidence that conform to the generally accepted rules of drawing inferences. Conversely, irrational methods and influences violate these rules of the 'scientific method' and would be rejected by the person if he were aware of employing them" (119). Jervis notes that separate, contradictory inferences can both be equally rational, since there is no "absolutely" rational standard to judge something by, and thus there is some leeway in the details of how a more or less "rational" decision comes to be made (based on such factors as the type of information one might expect to gather, the amount of time and effort one can expect to devote to a given decision, or the different ordering of preferences based upon individual or organizational differences). Ostrom (1991) further argues that a theory of rational choice is normative, in that it prescribes ways in which individuals *should* act. However, this theory is not normative in the sense that the actions that individuals might make, or the motivations driving the decision-making process, may be "good" or "bad."

The "efficiency" model discussed earlier does, in some ways, approximate the degree to which "rational" belief and behavior change takes place in the real world. Further, works by Simon (1984), Kahneman and Tversky (1979) and others have made theories of rationality more useful by assuming that individuals may attempt to behave rationally, but are hampered by real-

[7] Note that engaging in "good" decision making and realizing "good" outcomes following from a given decision are two independent phenomena that may, but need not be, correlated with one another.

world influences, including the cognitive limitations of individuals.

Despite the popularity of "rational" evaluations of decision-making,[8] however, much work in political psychology exists to demonstrate how and why truly "rational" thought and decisions are impossible, given that all humans possess cognitive "deficiencies" that ultimately prohibit such. For this project, I do not postulate "rationally" based assumptions. Instead, I approach the evaluation of learning from the "cognitive psychological" perspective as espoused by George (1969, 197-198). I assume that humans must make decisions in the context of imperfect information, where certain influences will be more or less influential than they would be to an automaton without pre-existing beliefs, preferences, and biases generally. Below I evaluate a number of theoretical perspectives that take as their starting point this assumption.

2.4.2 Social Psychological Theories of "Experiential" Learning

Through an assessment of work in the field of social psychology, Deborah Larson (1985) presents an overview of the literature on "attitude change" as it relates to foreign policy, breaking this work down into five general categories.[9] Larson's categorization is useful in evaluating non-"rational" theories of learning, as most contemporary studies of learning in international relations use social psychological concepts (either explicitly or otherwise) as their starting points, and

[8] I would include here evaluations such as those of Raser (1965), who evaluate learning as a function of rewards, punishment, and the potential manipulation of these factors by other actors in the international environment.

[9] Larson seems to be treating "attitudes" as a concept equivalent to "beliefs" as they are evaluated here. She does not seem to clearly define or identify what an "attitude" is, as she uses the term. However, she treats both concepts as comparable when she uses the term "beliefs" to describe her phenomenon of interest on pages 16 ("beliefs change only in response to an onslaught of inconsistent data"), 32 (" . . . U.S. policymakers adopted Cold War beliefs . . . "), 21 (" . . . the Cold War beliefs identified in this study are idiosynchratic . . . "—note that she treats beliefs as sub-units comprising "ideologies"), and 60 (". . .each man changed his beliefs regarding the Soviet Union," and ". . .efforts to discover his 'true' beliefs, attitudes, or opinions"). Similarly, Jervis (1976) and Feldman (2003) interchangeably refer to both as the same concept at various points.

nearly all of these perspectives tend to fall within one or more of Larson's categories of evaluating such. I will note at the outset that though these are often competing theories, not all of them are mutually exclusive. In fact, the manner of learning evaluated in this dissertation borrows from a number of the theories that Larson evaluates.

2.4.2.1 Cognitive Dissonance

One of the major theoretical frameworks used here to interpret when learning is or is not likely to occur is cognitive dissonance. Larson labels cognitive dissonance a "formal theory" versus the informal, research-question-oriented nature of some other approaches (such as that of Carl Hovland, which will be discussed later). Cognitive dissonance was developed by Leon Festinger (1957), who suggests that inconsistencies within the cognitive system, stemming from incoming evidence that conflicts with one's pre-existing beliefs, cause an "uncomfortable state of tension that people are then motivated to reduce or eliminate" (Larson, 1985: 29). In this framework, one's beliefs are interconnected and in harmony, and dissonance occurs as the mind forces us, with the least amount of possible disturbance, to achieve a level of balance when something occurs that might disrupt this harmony.

Larson argues that the "magnitude of dissonance experienced at any time is a function of the discrepant cognitions and the ratio of dissonant to consonant elements" (p. 30). As individuals view dissonance as a "noxious drive," they are motivated to eliminate such, particularly when higher levels of dissonance occur. Dissonance is actively reduced by one of the following manners: "changing behavior associated with one of the dissonant cognitive elements; altering the psychological or physical environment; [or] adding consistent cognitive elements to change the ratio of consonant to dissonant cognitions" (Larson, 1985: 30). Regarding belief change in the Cold War as a result of cognitive dissonance, Larson (1985)

argues that:

> U.S. policymakers adopted Cold War beliefs after being forced by situational pressures to act contrary to strongly held, consistent beliefs in favor of Soviet-American cooperation, without adequate justification and in spite of their fear of negative consequences (32).

The notion that beliefs (particularly "core" beliefs) are largely "stable" and are only prone to change in certain situations is also echoed in many other works. Jervis (1976), for instance, realizes that individuals have a "tendency to maintain their images and beliefs in the face of discrepant information" (288). In Chapter 4 of *Perception and Misperception in International Politics*, he discusses at length the concept of "cognitive consistency," or "cognitive balance," and the notion that individuals are driven to maintain a consistency in their beliefs so that they are able to maintain pre-existing conceptions of reality, even in the face of information that runs counter to these existing beliefs. He notes that the need to maintain this balance is very strong, and that in order to maintain it, individuals will often "ignore information that does not fit, twist it so that it confirms, or at least not contradict, our beliefs, and deny its validity" (143). Thus, notable learning is *not* likely to occur in many situations, given the human need to maintain existing ways of thinking.

Following from this, Jervis (1976) does not expect an individual's beliefs to change in a predictable, purely "rational" sense, as automata might, to specific "inputs." In fact, when a person's expectations "mirror the stimuli he is presented with," he suggests that luck applies more often than many would like to think (180). He also argues that there are a number of psychological "defense mechanisms" by which attitudes are likely to change or remain stable (291-296). These include: 1) the tendency to ignore, or to fail to process, information that runs counter to one's existing beliefs (through active defense mechanisms); 2) the tendency to acknowledge discrepant information, but to simply dismiss its "validity"; 3) the tendency to

discredit the source of discrepant information; 4) the tendency to acknowledge and understand discrepant information, but to fail to understand how such information would be possible, and thus failing to update new beliefs (i.e. by "admitting puzzlement"); 5) the tendency to "bolster" one's existing beliefs by seeking out new information that supports these beliefs, despite the recognition that powerful discrepant evidence exists; 6) the tendency to seek out new information that weakens some discrepant argument, despite the fact that it is acknowledged and seen as potentially "valid"; and in extreme cases where discrepant information cannot be countered, 7) "differentiation," whereby some aspects of a previously held belief are retained, and those that cannot be made to fit in with discrepant information are removed from one's beliefs—note that this can include "creating exceptions to a generalization" (296).

So if learning is not likely to occur most of the time, when is learning likely to take place in the context of cognitive dissonance? Later in his book, Jervis (1976) poses the following questions: "how do people treat discrepant information? When do they change their beliefs? How do they change? What do they change? What beliefs are especially resistant to discrepant information?" (289). Drawing on the social psychological literature and his own observations, Jervis comes up with a number of premises and predictions regarding how and when belief change is likely to occur. I will relay a large portion of his text here, as it is key to his overall evaluation of learning, and is key to the way in which learning is conceptualized and evaluated in this dissertation:

> . . . people change as little of their attitude structure as possible. If they must change something, they will first alter those beliefs that are least important, that are supported by the least information, and that are tied to fewest other beliefs. If the discrepant information is ambiguous, slight, or unimportant it will be dismissed, assimilated, or put to one side. Thus the first mechanisms to be invoked preserve all of the person's original attitudes. If the amount and quality of the discrepant information renders these mechanisms inadequate, processes that involve minor or peripheral changes will have to be invoked. If these cannot cope with the contradictions, mechanisms that necessitate

> more far-reaching changes will be called into play. Because many of these beliefs are interconnected, large-scale changes can be avoided only if the person treats new information in a way that limits the implication of his initial response. These interconnections partly explain both the prevalence of incremental decision-making and the far-reaching changes that occur when central beliefs are finally altered (291).

Thus, when viewed in a foreign policy decision-making perspective, we get a clear picture here of a decision-maker who is quite stubborn. He has pre-existing beliefs that he dearly holds on to, and only in extreme cases are major changes to his beliefs or attitudes likely to occur.

Of course, as noted above, individuals are able to overcome all of these potential hurdles to learning, but Jervis notes that this is the exception rather than the rule. If individuals do allow themselves to truly acknowledge some understanding of other situations and perspectives, to treat them as valid, and if they can resist resorting to one of the above methods of discounting this information, then a whole-scale change in beliefs should still fail to occur. Instead, individuals will typically attempt to "fit" this information into their existing ways of thinking about things (or into their existing "frames" or "schemas"—I will more explicitly discuss "schemas" below).[10] As existing schemas are still maintained, this is a relatively minor form of learning, and is likely to occur far more frequently than is the replacement of existing schemas by new ones.

Larson (1991) argues that "people are more likely to learn a new concept through repeated, successive exposures to a phenomenon," (353) relating this to schema theory, as people have difficulties "rationally" interpreting and dealing with new information that runs counter to their existing ways of thinking. This again shows that cognitive dissonance suggests that beliefs

[10] Jervis (1976) suggests that incoming information is more likely to be assimilated into pre-existing "images" when: 1) the information is more ambiguous; 2) when the actor is more confident of the validity of his existing image; and 3) when he holds a strong commitment to his existing image (195).

tend to be fairly stable due to one's adherence to a given set of beliefs and values, but that they can change in certain instances.

Given the human tendency to engage in a habitual, often predictable set of behaviors, it is unsurprising that past behavior is amongst the single best predictors of future behavior (Budd, North, and Spencer 1984; Mittal 1988). But what is the impact of behavior on beliefs? Cognitive dissonance theory, as discussed above, suggests that humans do not like to encounter information that runs counter to our existing interpretations of the world. However, this is also a factor when evaluating one's own behaviors. Festinger (1957) and Festinger and Carlsmith (1959) argue that when individuals voluntarily perform a behavior running counter to a previously formed attitude, these individuals will engage in a process that may ultimately lead to a change in attitudes so that they coincide with this earlier behavior. Albarracin and Wyer, Jr. (2000) describe the process as such:

> [Individuals] attempt to rationalize their counterattitudinal behavior by convincing themselves that they had good reasons for engaging in it. This rationalization is likely to produce a change in their estimations of both the likelihood and desirability of the behavior's specific consequences and, therefore, a revision of the attitude for which these estimates have implications. The new attitude, in turn, may provide the basis for their future behavioral decisions (6).

This gives us another example of how the theory of cognitive dissonance can help to explain situations in which beliefs are more likely to change, as the human need to maintain a "cognitively consistent" view of the self thus helps to explain attitudinal change following a change in behavior.

2.4.2.2 Schema Theory and Historical Learning

Another theory of attitude change evaluated by Larson and important in the context of this project is that of Schema theory, which expects that individuals will not engage in a truly "pseudo-scientific" search as some forms of the rational actor model and attribution theory

(discussed later) might expect, but instead will act as a "categorizer" and "labeler" in order to interpret information, and to function within an incredibly complex world (Larson 1985, 50-51). Larson defines a "schema" as a:

> . . . generic concept stored in memory, referring to objects, situations, events, or people. It is a collection of knowledge related to a concept, not a dictionary definition; a schema describes what is usually the case, not necessarily true. Thus, the schema for bird includes variables for color, size, beak shape, and nesting patterns. As stored in memory, a schema has default values for all these variables, providing a prototype against which specific examples can be compared (51).

Regarding learning, schema theory takes this initial assumption that individuals are "cognitive misers" who create these "schemas" in order to interpret reality, and assumes that changes in attitudes/beliefs have to be understood in this context. Specifically, this theory argues that once schemas are developed, individual experiences are always "filtered" through these schemas, and people "assimilate" new information to fit into existing ways of thinking.

Larson suggests that schemas serve three important functions, which will be briefly discussed in turn. First, she argues that "schemas allow us to select what is important out of the flux of experience (51). The world is too complex to understand in its entirety, and as such, schemas tell us what is and isn't worthy of our attention, which makes functional existence possible. Secondly, "a schema is a means of storing memories of objects and events," or more specifically, a "partial copy of the schema," which helps to facilitate "recall because a simple, nonredundant memory structure is less susceptible to decay over time" (52). Third, "schemas enable a person to go beyond the information given and make inferences about an object or situation." This helps to determine our expectations in any given (potentially ambiguous) environment or situation, while also alerting us when something is "wrong." Finally, "schemas enable a person to envision and carry out a sequence of actions to achieve a particular goal," (52) such as how to make coffee, drive a car, behave diplomatically, etc.

Larson argues that there are three types of schemas. One type of which is the "metaphor," which includes the study of historical learning (I will examine historical learning separately following this overview). Larson labels her second type "cognitive scripts," which are "stereotyped sequence[s] of events characterizing a well-known situation" (54). Larson likens this to a set of scenes in a cartoon strip, where certain types of scenes lead to certain types of outcomes. Referencing Robert Abelson, she says that these scripts can be either "episodic," dealing with a single experience (e.g. the "Munich" script says that appeasing Hitler led to World War II), or "categorical," which are broader and more abstract extensions of the episodic forms of schemas (e.g. "appeasement only encourages aggressors to make more extreme demands"—54.[11]

Larson's third type of schema is related to judgments about other individuals, and is called the "persona." These are "cognitive structures representing the personality characteristics and typical behaviors of certain 'stock characters'" (55). For example, presidents may have specific conceptions of "terrorists" or of "leaders of democracies," or they may liken a specific individual to another specific individual that they had known in some way.

To give an example of how schemas manifest themselves, Larson tells the story of Truman mistakenly recalling having sent an ultimatum to the Soviets that they withdraw from Iranian soil following their incursion in 1946. Larson argues that sending this ultimatum matched up with Truman's "schematic" interpretation of how the U.S. should respond to potential Soviet threats (52). A more recent example is offered by the public response to U.S. preparations for war in Iraq. In 2002 and 2003 (and even afterward), the U.S. public largely believed that many, if not all of the 9/11 hijackers were of Iraqi descent

[11] Though examples of "historical learning" are probably the best demonstration of scripts, note that scripts do not have to be taken from politically or militarily historical examples.

(http://www.harrisinteractive.com/harris_poll/index.asp?PID=544). This belief remained firm--despite the fact that it was publicly revealed as false (all but one hijacker were from Saudi Arabia, and the remaining hijacker was from the United Arab Emirates)--because the U.S. targeting of Iraq soon after the 9/11 attacks developed and reinforced the widespread notion that Iraq was, in part, behind the attacks. Hence, much of the public's schematic interpretation of the 9/11 hijackers was that of a group of Iraqi extremists.

Of particular relevance to this project are the works of noted political psychologists who evaluate "beliefs" as a set of schemas, which essentially act as a prism through which reality is interpreted and acted upon. Jervis (1976) for instance suggests that individuals tend to accept "theories" of the way that the world works, and then evaluate the world through these theories. Changing these ways of thinking, as noted in the discussion on cognitive dissonance, is a difficult task, and this often occurs accidentally, in response to attempts to preserve one's existing beliefs (165-166).

In a later work, Larson (1991) makes an interesting observation regarding how learning might occur in the context of schemas, based upon the complexity of, and integration between the various schemas that one holds. She states that:

> Whether decision makers actually absorb new information requires attention and the ability to fit this data into their cognitive structures. People who have a complex, integrated set of schemas can better accommodate contradictory information *without* changing their beliefs, because they can formulate conditional generalizations or qualifications. By contrast, the nonexpert with a simple set of schemas is apt to change his mind readily, but these changes may not endure because there is little structure on which to fasten new concepts and data. This suggests that individuals with moderate knowledge of a policy domain are more susceptible to belief change (352-53).[12]

[12] It is noteworthy here that Larson's conceptualization of "belief change" is that of a fairly stable and long-term change, which appears to represent the same phenomenon referred to by others (Leng 2000; Levy 1994; Tetlock 1991) as "learning" (recall that Larson's actual definition of "learning" falls under the "efficiency" definition of such).

Related to the discussion by George and others on beliefs, C. Hermann (1990) argues that:

> . . . learning approaches suggest that major foreign policy change can occur when key policymakers who are confronting a problem restructure their mental models or schema of the problem. This can lead to a redefinition of the problem or to a new understanding of the relationship between it and their policies (11).

In this sense, C. Hermann also evaluates learning through changes in one's schema. Of the potential causes of this learning, he argues that while most changes in the international environment are easy to ignore and lead to very little "learning" of any kind, "external shocks are large events in terms of visibility and immediate impact on the recipient. They cannot be ignored, and they can trigger major foreign policy change" (12). Though, following from the work of Jervis, Alexander George and others, schemas might typically be expected to remain fairly stable, they are capable of both methodical and drastic change, and the most drastic change might be expected following major crises (as evaluated here in Chapter 7).

As the above discussion shows, cognitive dissonance and schema theory are very closely related, and can be difficult to examine in isolation. One's "schemas" often provide the context within which "dissonance" must be understood.

Also within the domain of "schema theory" is the concept of "historical learning." This falls under the "metaphor" type of schema (though it can also be viewed as a schematic "script" in some instances), which encompasses the notion that individuals will dictate current behavior by creating analogies or metaphors based upon perceived past events (Larson 1985, 55). This is likely the single most popular form of "learning" evaluated by political scientists, since policymakers often attribute the "lessons of the past" (the "Munich" analogy, the "Vietnam" analogy, etc.) as significant motivating forces behind contemporary action.

Note that this form of learning is a special case, in that it is not typically learning from one's own experiences, but rather learning from the experiences of one's state prior to one's taking office. Closely related to this is the type of learning that might occur within another state—either from contemporary cases, or lessons of the past—as a kind of diffusion of historical lessons of learning. However, as Jervis (1976) notes, leaders of a given state tend to be fairly short-sighted, and if they learn any lesson from the past, lessons from one's own past (or one's state's own past) are far more likely to be learned than that which occurs to others. If something happened to Russia for instance, then the president of the U.S. might see this as being due to the incompetence or character of the Russian people and/or leadership, rather than the result of specific "wrong" decisions that could also apply to a current case facing himself.[13]

Jervis (1976), who defines historical learning simply as the extraction of "lessons from a given event" (218), notes that "by making accessible insights derived from previous events, analogies provide a useful shortcut to rationality. But they also obscure aspects of the present case that are different from the past one" (220). As a result, "better" decisions might actually be made, in certain situations, with *less* knowledge/information of this type. In other words, more "fully informed" decisions are not always the best, given that humans are prone to use historical analogies and metaphors inappropriately as guides for behavior (227-230). Jervis also notes that in order to predict specifically which historical lessons will be learned is a very difficult task, given that we must take into account not simply the occurrence of interest, but also the predispositions of the perceiver encountering this occurrence (which is always a key factor in cognitive psychological evaluations of learning; 223-224).

[13] This example of viewing others' undesirable behavior as being due to their intrinsic faults, but applying situational explanations for the self's undesirable behavior is explained via attribution theory, which will be discussed in the next section.

Ultimately, Jervis suggests that in foreign policy decision-making, inappropriate lessons are often learned from what are, often, inappropriate cases. Summing up his observations regarding the prevalence of these instances, Jervis concludes:

> More important [than decision-makers' "lack of mental abilities" and "social science training"] are the complexity of the subject matter, the small and biased sample of cases available for study, the conditions under which learning takes place, and the decision-makers' failure to realize how much they are influenced by their views of the past (235).

Khong (1991), in his evaluation of learning from the Korean War, demonstrates the ways in which historical cases may be used to hinder or facilitate belief and policy change with respect to the international environment. For instance, he notes that the "lessons of Korea" provided the following "diagnostic tasks" for U.S. leaders regarding Vietnam: "(1) it helped condition the U.S. definition of the situation or problems in Vietnam; (2) it shaped the assessment of the political and (3) moral stakes; (4) it provided a prediction about the likelihood of success; and (5) it warned about the dangers of certain options" (303).

Regarding his methodology and justification for the importance for the Korean case as an influence on U.S. policy toward Vietnam, Khong performed a count of the use of historical analogies by U.S. officials by year through the 1960s, finding the biggest spike in usage prior to Johnson's escalation in 1965, and noticed that "the Korean analogy was by far the most frequently invoked 'lesson of the past'" (304). Among the more important analogies found here was that "external aggression" reflecting "international communism at work" was to be treated very seriously, and that early and direct "military action (on the part of the United States)" was the best way to deal with this threat given that this method was so effective in dealing with North Korean aggression (305-306).

Reiter (1996) defines historical learning as "the application of information derived from past experiences to facilitate understanding of a particular policy question," where he takes "the

behavioral approach to the question of learning, seeking to understand what kinds of lessons get drawn given certain experiences" (20). In his study of state alliance decisions, Reiter develops a theory of learning with three main propositions: 1) "lessons are drawn infrequently"; 2) "they are most often taken from high-impact, politically significant events"; and 3) "lessons reflect the desire to repeat past successes and avoid past failures" (3). He argues that decisions to, or not to engage in alliances is typically based upon historical experiences, arguing that "small powers learn about alliance and neutrality from their experiences in world wars, and these lessons determine their alliance choices in the peacetime years that follow these wars. World wars, then, serve as *crucibles* within which beliefs about international relations are forged" (emphasis added).

Dallin (1991), in his analysis of learning in U.S. foreign policy toward the Soviet Union, suggests that leaders are actually "relatively impervious to historical information (accurate or otherwise)" (404). Though history is often used by policy makers as a justification for action, he argues that these occurrences are not always the factor that leaders make them out to be, in terms of their impact on beliefs. Instead, Dallin argues that historical analogies are often used as a part of a "script,"[14] and are thus used selectively in order to justify one's behavior, rather than as a means to actually "inform."[15]

However, Khong (1991) counters this by suggesting that in certain instances at least, historical analogies are not only used in public speeches, but also in "the private deliberations of policy makers" (307) as well as in future memoirs and recounts of why specific policy

[14] Note: this is not the same as the script "schema" discussed by Larson.
[15] Going back to Larson's argument that one's behavior often affects future beliefs in important ways, we might then surmise that, on occasion, these leaders may begin to believe that these lessons actually work in the way that they initially suggest. However, when the analogy is initially used, it may only be in the means of justifying something that was not at all informed by the previous historical occurrence of interest.

preferences came to be made (308). If they are used in private discourse, Khong argues, then one might presume that they are more than just a rhetorical means of advocating some preconceived policy preference. Further, while he does not dispute that these examples might be used for "justification" and "policy advocacy," Khong suggests that it is quite possible that they may also be used for "diagnosis," suggesting that these three purposes may not be mutually exclusive. Defending this point further, he argues that a critic of the usage of these examples assumes deceitfulness and attempted manipulation by the policymaker. This is fairly difficult to prove, and in fact, may be more difficult to argue than the suggestion that historical analogies serve the purposes that they are claimed to by those using them. Finally, Khong brings in research from cognitive psychology, and argues that "analogical reasoning" is a "major way" in which humans make sense of reality. As such, it seems quite reasonable that the historical analogies used by policy makers are quite truthful representations of how they actually perceive the world (309).[16]

2.4.2.3 Attribution Theory

A third theoretical perspective evaluated by Larson (1985) lies in opposition to the cognitive consistency model, and is called "attribution theory" (34). This framework argues that individuals behave, not simply in an attempt to maintain cognitive "consistency," and to disregard dissonant information, but as "naïve scientists" (as opposed to "rationalizers" or "ego-defenders") who are "relatively open-minded in the search for truth, untrammeled by the need to maintain a favorable self-image or preserve a favored belief." It is "concerned with people's attempts to explain the events of everyday life, draw inferences about the unchanging properties of their social milieu, and make predictions about the behavior of other people" (35). Attribution

[16] For additional work on historical learning see May (1973), Ravenal (1978), Mefford (1991), Hybel (1991), Khong (1992), and Jarosz and Nye (1993).

theory differs from the pure, rational actor theory discussed earlier, in that it views individuals as limited in their abilities and imperfect, necessarily acting within a context of incomplete information and limited resources.

This perspective assumes that individuals actively seek out and causally evaluate information, as opposed to having communicated information passively influence their beliefs (as is the case in the "Hovland school"—40). Further, individuals espousing the attribution perspective explain the apparent stability of individuals' beliefs not as a "motivated" unwillingness or inability to change, but rather as the result of "errors in handling information," leading to a "cognitive" unwillingness or inability to change (41). For instance, individuals may confirm pre-existing beliefs by looking for consistent evidence as cognitive consistency theory suggests, or they may do so because it is simply less difficult to assume that one is already correct, than it is to critically evaluate this belief, which is the stance taken by attribution theorists. Other research programs that might be lumped in to the category of "attribution theory" include Stern's (1997) conception of "Explanation Based Learning."

One model of the attribution theoretical process states that individuals believe co-varying occurrences demonstrate causality (Larson 1985, 36). That is to say, if one event co-varies with another, then one of these two events may well cause the other. Another is the idea that individuals believe situational factors dictate the "self's" behavior, whereas dispositional factors dictate the "other's" behavior (37-38—this is often referred to as the "fundamental attribution error"). This is not due to the need to maintain one's self image from this perspective, but rather a natural strategy of simplistically understanding a complex world without applying too much critical thought to such. We know more about ourselves than others, and thus it is easier to understand the issues that limit our autonomy than it is to understand those of others, who it is

easier to view as solely acting "as they wish to." Larson conveys that research from this perspective has found that vivid and firsthand information will have more of an effect on people's "judgments and explanations," whereas inaction and non-occurrences are often ignored (38-39). This can be dangerous in situations where inaction should provoke concern.

Related to the earlier discussion on the impact of one's actions on learning, Fishbein and Ajzen (1975) have found that once a behavior occurs, individuals may engage in a type of "biased scanning" of their memory in order to find information that legitimizes this behavior (as Jervis notes, this is one potential response explained by cognitive dissonance). Then, this process may contribute to new attitude formation regarding the nature of both the behavior, and the occurrences leading up to the behavior, which impacts future behaviors and future attitudes regarding such. This is another manner of engaging in a "cognitive shortcut," but in the manner of behaving as a "naïve scientist" in order to interpret and understand reality.

2.4.2.4 Self-Perception Theory

"Self-perception theory" was developed by Daryl Bem (1967) and, instead of looking at how individuals perceive the motivations, and perceptions of others, looks specifically at how individuals view themselves. This is particularly the case in ambiguous situations, when individuals may strongly rely on how "I" would "typically" deal with such a situation, in order to interpret behavior in the moment. Stern (1997) defines this as "an individual's ability to respond differentially to his own behavior and its controlling variables" (184—note that this theory was developed as an alternative to cognitive dissonance theory). This suggests that an individual's attitudes may be based upon one's own fairly shallow evaluation of the self's, and others, behavior and experiences, more than upon attempts to "legitimize" one's behavior (as could be explained by cognitive dissonance theory).

From this perspective external cues, thinking of the "self's" past experiences, and trying to imagine the self in a given situation are more important than true "internal feelings," or predispositions. As such, Larson (1985) suggests that "self-perception theory radically revises the traditional concept of attitude" (43). She goes on to present numerous instances of empirical evidence for self-perception theory showing, amongst other things, that it is more likely to be realized when one's opinions are not fully formed. She later notes that "decision makers are rationalizing, rather than rational animals. They use their behavior as a guide to what they believe. Thus, policy change may precede and *cause* a change in policy makers' attitudes or beliefs" (Larson 1991, 353, emphasis in original). Note that this is different from the notion from cognitive dissonance that behavior may impact leaders' beliefs following psychological stress due to mismatching behavior and beliefs. From the perspective of self-perception theory, again, beliefs are shallow, and behavior often impacts beliefs because beliefs are ill-formed or indifferent as to the behavior/belief of interest.

Again evaluating the impact of one's own beliefs on attitude/belief change, individuals may behave in a much less complex manner when attempting to justify their actions than is suggested by "biased scanning" theory discussed in the "attribution" section. In this theory, many attitudes are fairly arbitrary, and small external cues may cause drastically different attitudes to develop (Bem 1967, 185-186). Bem shows that in a number of studies, "an individual's belief and attitude statements can be manipulated by inducing him to role-play, deliver a persuasive communication, or engage in any behavior that would characteristically imply his endorsement of a particular set of beliefs" (185). To reiterate, the argument here is that this results from the observation of the self by the self, which impacts attitudes/beliefs because the perceiver is cognitively lazy, and possesses ill-formed or shallow existing attitudes.

2.4.2.5 The Hovland School

Carl Hovland developed the notion that attitudes will change as part of an "affective reaction" based on exposure to a persuasive argument, with the degree of influence being based on "*who* said *what to whom* with *what effect*" (Larson 1985, 26—emphasis in original). Larson states that this is related to "learning" in the "efficiency" sense, since a message may be accepted based upon the incentives provided in the communication. She states that several hypotheses were derived from this theory by the "Hovland group," based upon the level of the communicator's credibility, the degree of the message's acceptability, and the personality of the perceiver (which may predispose him/her to being more or less susceptible to persuasion by the message: 27). As an example of a persuasive argument leading to foreign policy "attitude" change in this conceptualization, Larson points to George Kennan's "long telegram," which is considered by many to have had a critical influence on the development of the "containment" policy of the U.S.

However, Larson also notes that the impact of communication here is often in large measure mediated by the environment. Kennan's telegram would not have been nearly as effective had it not been written and disseminated at the precise point in time that it was. As such, if we are interested in understanding true causality in terms of influences on learning, we must take into consideration the context within which hypothesized influences on learning are experienced (as has been alluded to earlier, the "self in situation" is a key concept in much political psychological work).

In opposition to some of the other theories discussed here, learning from the Hovland perspective is a fairly passive process. Though individuals certainly may make calculations based upon the information transmitted to them, they do not actively seek out new or competing

evidence to challenge or support the information that they receive. As such, they do not act as "naïve scientists," as they do from the attribution perspective. Instead, learning is strongly affected by the degree and types of information to which individuals are exposed.[17]

2.5 Jervis's Speculations Regarding Influences on Learning

Now that I have covered the major "cognitive psychological" perspectives regarding how learning may occur, I want to address some of the other major findings regarding learning defined as belief change that cross some of the categories previously listed. Perhaps the best starting place here is Jervis, who in his work *Perception and Misperception in International Politics* (1976) provides many (if not most) of the ideas that have framed analyses of learning by political elites defined as belief/attitude change since its publication. To begin, Jervis argued that there are four variables that "influence the degree to which an event affects later perceptual predispositions." These will be discussed here in turn.

2.5.1 Firsthand Experiences

Jervis argues that first-hand experiences tend to contribute to "learning" to a greater extent than do second-hand observations of others' experiences. He uses the analogy that "a person who has been bitten by a snake will be predisposed to see ambiguous figures as snakes. He will be quicker to see snakes when they are present . . . His behavior will also be changed—he will take detours around snake-infested areas" (240). In other words, knowing something is one thing, but experiencing something is entirely different. Jervis describes experimental and case study evidence supporting this notion, but perhaps the strongest evidence is included in his statement, "we have found *no* instances of the reverse of our proposition—cases in which an

[17] Note: Though Larson discusses the Hovland School as the most basic school of thought regarding attitude change, I discuss it last amongst forms of learning as this is perhaps the least relevant manner of "learning" for this study.

event made more of an impression on bystanders than on the actor" (241, emphasis in original).

Regarding consequences of this finding, Jervis argues that when an individual meets someone else in person, a strong image is formed that would not exist otherwise. This image development can be problematic in that, as noted earlier, it is likely to be "maintained in the face of large amounts of discrepant information," and will therefore lead to a decreased ability to update one's beliefs based upon this "met" actor's current and future behavior. When President Bush first met Vladimir Putin and "was able to get a sense of his soul," for instance, a certain image may have been created in Bush's mind that inhibited any semblance of a rational evaluation of Putin's behavior after this point.

Further, Jervis notes that the predispositions created and lessons learned by a certain firsthand experience will often be applied to other situations and actors in the future. Additionally, he suggests that the desire for leaders to "learn for themselves" will "often be a mistake if the problem is complex and the visit short" (245). Thus, though learning disproportionately from one's experiences can be a good thing, in that the tendency to take inappropriate lessons from inappropriate cases may be reduced (as often occurs in instances of "historical learning"), the above demonstrates that there are certainly drawbacks to this phenomenon as well.

Finally, Jervis suggests that "an actor will learn most fruitfully from events that he knows well enough to analyze in some detail, but that are not so close that they dominate his future perceptions" (246). In this sense, he prescribes that leaders should read more about history and spend more time actively observing others, despite the fact that the knowledge gained is expected to be minor in relation to that experienced first-hand.

2.5.2 Early Experiences and Generational Effects

Early experiences and generational effects are sub-sets of the "first-hand experiences" that one encounters, but Jervis suggests that these have "an especially great impact on [a person's] perceptual predispositions" (249). Regarding early experiences, one's childhood often provides the foundations for how this person will perceive the world and behave for the rest of his life (249-251). Though these beliefs and ideas might not directly predict specific future beliefs about world politics, early perceptions regarding the nature of power and control, right and wrong behavior, and the essential "nature of man" may well have a critically important influence on one's future beliefs regarding world politics, and his place in it. Perhaps more important than this, however, are one's early experiences that help to establish "the person as an autonomous and valued individual" (250), and those that lead to early successes as a youth or young adult in problem solving.

Regarding generational effects (also known as cohort effects), Jervis notes that these are "the values and beliefs that dominate the climate of opinion at the time when [individuals] first begin to think about politics" (253). These are ideas that permeate society, and affect all individuals who grow up in a certain time under certain circumstances. Jervis argues that these are often "the source of the basic political ideas that a person holds." He suggests that these events can happen either early in one's life, or early in one's adulthood (though he suggests that the latter are more influential), and can help to explain "generational differences" between the beliefs and attitudes of younger and older policymakers (even controlling for the impact of age).

2.5.3 Events Important to the Person's State or Organization

Additional occurrences of particular salience to individuals' beliefs regarding international politics are revolutions (due to their overwhelming influence on society), and the

"last" war, (which may be as, if not more influential than some revolution occurring in the distant past, because they are still so salient in leaders' minds). Regarding the last war, Jervis notes, "what was believed to have caused the last war will be considered likely to cause the next one" (267). He then notes that the last "major" war is the most influential of all, and gives the example of the first and second World Wars. The first World War was followed by the creation of the League of Nations, and an attempt to "cool off" international politics with the idea that war could have been avoided by "intelligent and conciliatory diplomacy" (267). However, once this period failed to prevent the onset of World War II, the "status quo" states of the world became much more cautious, and placed much less stock in the feasibility or utility of removing conflict from the world through the means of diplomacy alone. Thus, Russian behavior was generally viewed as far more hostile following World War II than it might have been had it occurred in the post-World War I time period.

I should note that much of the work by Russell Leng (1983, 1988, 2000) evaluating learning from "crisis bargaining" follows from Jervis's hypotheses regarding the "last war." Leng expands this by suggesting that repeated crisis confrontations between two states will further reinforce the lessons that are learned from the previous engagement between these states. In his research along these lines, Leng (1983, 1988) initially uses empirical observations and the framework of "A Theory of Moves" to demonstrate this. However, he expands on Jervis's speculations by demonstrating how the lessons learned by states tend to occur following the last "loss," since there is little incentive to change behavior if a state comes out on the winning side of a conflict. Further, the type of change that will occur following losses, Leng argues, will typically be in the manner of increased belligerence, following expectations derived from realist theorizing where the use of "threats and commitments to demonstrate resolve" are key

components of coercive diplomacy (Leng 1983, 381).

In his later work, Leng (2000) goes on to suggest that though all actors evaluated in his work (the U.S., the Soviet Union, India, Pakistan, Israel, and Egypt) learned following expectations derived from "realpolitik" theorizing. However, he finds that this learning did not necessarily lead to more effective crisis management. Instead, he specifically states that the factors that led leaders to follow the tenets of realpolitik, along with "misapplied analogies . . . led to learning that was dysfunctional in all but a few instances" (279).

2.5.4 Range of Available Alternative Analogies

The final "variable" that helps to account for when individuals learn is "the presence or absence of alternative analogies (i.e. the extent of knowledge of different kinds of actors and situations)" (Jervis, 1976: 270). In other words, how simplified or complex is one's view of the world? This factor helps to mediate the impact of other factors. For instance, if a leader perceives reality in a fairly simplified way, then he or she is likely to fit events (both historical and contemporary) into a few, basic categories, which will affect the interpretation of these events. Jervis likens this to academics who, when encountering something outside of one's conception of how things work, are likely to "adjust the data to the theory" (270).

2.5.5 Lessons and Types of Learning

Regarding the four variables outlined above (first-hand experiences, early experiences and generational effects, important events, and the range of alternative analogies), Jervis notes that when more than one variable appears to be "positive," then "the event will have especially great salience" (239). However, he notes that when this occurs, it is often very difficult to tease out the relative influences of one factor over another.

Having discussed the primary ways that he believes policy-makers might learn important lessons regarding world politics, Jervis then evaluates the lessons that people learn following from these events. The most common "lessons" that he found will be discussed here in turn. The first category he evaluates is that of the lessons learned following the impact of "constant factors." This is related to the earlier discussion of the need for "cognitive balance" by individuals, and concerns the fact that individuals' "perceptual readiness" to see things in a particular way can often make adjustment and learning from new and different circumstances difficult (271). In other words, current events tend to be filtered through a "constant" historical context, and the lessons learned from these events will thus tend to be mediated by the lessons learned from earlier events. Further, current occurrences will be perceived as following earlier patterns experienced. Of course, this may prohibit "rational" or "pseudo-rational" decision-making processes.

The second category here concerns lessons learned about specific actors. Jervis argues, again, that early and important experiences with others will tend to filter how future interactions with these actors are interpreted, often through inappropriate overgeneralizations. The third category of lessons learned stems from reactions to failure. Specifically, Jervis argues that leaders tend to avoid policies that have failed in the immediate past (similar to Leng's expectations regarding learning from conflicts). He argues that "high and even medium-level goals are not altered but tactics that are the opposite ends of these that failed are tried" (275). Again, Jervis suggests that leaders tend to over-generalize from their past experiences here, which will often lead to undesirable, overly irrational decisions.

The fourth category discussed by Jervis concerns former incidents of success. He suggests that, in opposition to the 3rd lesson (learning following failure), successful policies will

often be applied to future situations. Not surprisingly following from earlier discussions, a given leader will tend to "overestimate the degree to which his policy was responsible for earlier success" and "will be especially insensitive to variation in the situation" (278).

What one gathers from Jervis's overall discussion is that because of the human need to simplify reality, and in the process, to rely on previous experiences, expectations, and beliefs to interpret the present, humans do not "learn" as completely rational decision-makers would (if they learn anything at all). Human learning is imperfect, and when evaluated, should be understood as being strongly influenced by predispositions created at earlier points in time.

In addition to Jervis's categorization, "learning," as it is defined here, can be of the "causal" or "diagnostic" varieties (Levy 1994, 285), where "causal" learning "refers to changing beliefs about the laws (hypotheses) of cause and effect, the consequences of actions, and the optimal strategies under various conditions." Conversely, "diagnostic" learning "refers to changes in beliefs about the definition of the situation or the preferences, intentions, or relative capabilities of others." Though there is not a perfect correlation, one might say that changes in leaders' "instrumental" operational code beliefs reflect "causal" learning, and changes in leaders' "philosophical" operational code beliefs reflect instances of "diagnostic" learning (these different types of operational code beliefs will be discussed later in this chapter). Levy attributes learned lessons that are applied to states generally as "causal," and those applied to specific states as "diagnostic."

Levy also notes that learning can be evaluated in "simple" and "complex" varieties. Nye (1987) argues that "simple learning uses information merely to adapt the means, without altering any deeper goals in the ends-means . . . complex learning, by contrast, involves recognition of conflicts among means and goals in causally complicated situations, and leads to new priorities

and trade-offs" (380). He notes that complex learning is more difficult to assess than simple learning, due to the need to look at a larger scope of belief change.

2.6 Findings Regarding Learning from the Operational Code

In terms of empirical evidence beyond the anecdotal and qualitative, work on the operational code has provided a number of quantitative tests regarding the dynamics of belief change. For instance, Walker, Schafer, and Young (1998), who re-evaluated the previously held notion that operational codes were global (i.e. not object- or agent-specific) and very stable, found that Jimmy Carter's operational code changed significantly following exposure to the crises of the Soviet invasion of Afghanistan and the taking of U.S. hostages in Iran. This project's author (Robison 2006) similarly found that George W. Bush's belief system was significantly altered following the 9/11 terrorist attacks, shifting his beliefs from those of a "dove" to those of a "hawk" (a finding replicated by Renshon 2008). The above findings presumed, and found evidence to support the hypothesis that crises may provide a "shock" toward one's previously held beliefs, leading to notable changes.

Walker and Schafer (2000) examined Lyndon Johnson's beliefs over an eight month period (from late 1974 through 1975), ultimately leading up to Johnson's decision to commit ground forces in South Vietnam. Findings demonstrated notable shifts in Johnson's "general" operational code beliefs toward his feeling significantly less control over world events, and his seeing chance as playing a significantly greater role as the decision to send "troops on the ground" into Vietnam approached. Crichlow (2000) examined Shimon Peres and Yitzhak Rabin in two time periods—during the 1970s and the 1990s, with expectations that factors and constraints in the domestic and international landscapes over the intervening time period would lead certain beliefs to change, and others to remain stable. He found that, regarding their

"philosophical" beliefs, both leaders saw the world as more cooperative, felt more optimistic regarding realization of political values, saw the world as more predictable, and felt a greater potential to shape political events in the 1990s than they did in the 1970s. However, on the "feelings of control" philosophical belief, Rabin did not change much (maintaining fairly high feelings here during both periods), whereas Peres did feel greater control in the 1990s than he did in the 1970s. Further, these leaders differed in terms of changes in their "instrumental" beliefs, with Rabin maintaining fairly stable beliefs of this kind over time, and Peres experiencing more variation.

Feng (2005) examined the effect of the Korean War on Mao Tse Tung, and finds that he shifted from a "defensive realist" to an "offensive realist" over this time. She suggests that Mao experienced a significant change in war-time so that he ultimately saw the world as more hostile, more strongly preferred conflict over cooperation, viewed the future as more predictable, felt greater control over historical development, and felt that chance played a lesser role. As will be discussed further in chapter 2, these are all "philosophical" belief changes, and interestingly, Mao's "instrumental" views of the world held fairly constant across the time periods evaluated.

The above works generally suggest that belief change helps one to deal with the world in what the "self" believes to be the most functional/adaptive way.

2.7 Other Findings from Social Psychology

Perhaps work in political science can also learn something from the empirical work in psychology and social psychology on learning. For instance, Hogarth, Gibbs, McKenzie and Marquis (1997) examine learning from feedback, evaluating the degree to which the severity of punishment for errors made (or incentives for correct behavior) contributes to learning. They run an experiment, and find that the degree of exactingness/leniency experienced in a given decision-

making context interacts with the provision of incentives toward predicting how individuals will learn. Regarding these constructs, higher exactingness means that there are more severe penalties for errors made by subjects (Ss) on some task, whereas higher degrees of leniency indicate that there are less severe penalties given for errors made by Ss. Generally, their study shows that those who encounter environments with moderate penalties learn the most. Both Ss who are exposed to highly exacting and highly lenient environments fail to learn very much. Further, those Ss who find themselves in lenient environments learn more when also given incentives than do those in the intermediate or exacting groups. Those in the intermediate group do not learn more or less based upon the provision of incentives, and those in the exacting group actually learn less when incentives are provided.

Hogarth et al. also give evidence to suggest that "positive feedback reinforces the use of existing strategies, negative feedback encourages the search for other strategies that might work better" (275), supporting Jervis's and Leng's findings. Evidence for this comes from the fact that, generally, those Ss in highly exacting environments yield a higher degree of inconsistency in strategic choice than do those Ss in highly lenient environments.

These findings are relevant to political decision-making in that, at certain times and in certain situations, decision-makers might find themselves in environments where punishment for a given type of behavior is more or less severe. Further, the incentives leaders gain from success might also vary based upon the situation. From this, we may well be able to anticipate the degree of "learning," in a normative or technical sense (in terms of learning how to perform a specific task), that might take place.

Hogarth and Kunreuther (1997) evaluate decision making "under ignorance," or instances when a decision maker does not have complete information. Their general argument is that,

since individuals cannot make "economically rational" decisions, they will "determine choices by using arguments that do not quantify the economic risks and may reflect concerns that are not part of standard choice theory" (482). For instance, individuals will likely rely on the reputation of others that are associated with their decision (e.g. if you are buying a car, do you trust the company?), the desire for peace of mind, a fear of being taken advantage, or other such factors. Thus, individual differences and predispositions may influence decision-making in such situations. Further, these authors find that though one might expect individuals in situations of ignorance to take great care in making their decisions, they actually may be swayed by "the availability of simple arguments that serve to resolve the conflicts of choice" (503). This manner of learning might be understood under the "biased scanning" theory of learning.

2.8 Other Findings from Political Science

Larson (1991) evaluates the degree of learning (defined as a change in cognitive content to more efficiently match ends to means) that occurs in the minds of Kissinger and Nixon during the "détente" period from 1969-1973. Larson's ultimate conclusion here is that these leaders' "fundamental beliefs about the Soviet Union [and] world order" (388) did not change in any significant way over time. However, in the process of examining these leaders, she does come to realize that "learning cannot be explained without focusing on individuals. People differ—in their receptivity to new information and ability to incorporate new data into their belief systems" (388). Kissinger's beliefs remained stable because he was able to integrate new information into his existing, deeply held belief structure. Nixon, on the other hand, is viewed by Larson as a "chameleon" with very few enduring beliefs. As a result, she states that "his beliefs changed readily, but the changes did not last" (389). Thus, each policy-maker's respective lack of significant change occurred for a different reason, based upon individual differences.

Larson also notes that the foreign policy-related belief change that was experienced by these leaders was more the result of domestic political factors than "environmental rewards and punishments" stemming from the international system (390). This seems to fly in the face of realist theory, which suggests that the drive for survival and power in the international system should (and typically will) over-ride that of domestic influences (this question will be further examined in chapter 4).

Dallin (1991) additionally evaluates learning in U.S. foreign policy toward the Soviet Union, and finds that the reality of international politics was sufficient to shift the beliefs of Reagan and many of his core advisors away from those of ideological opponents, and more toward those of pragmatic peers. Given the shift in Soviet behavior toward openness and cooperation, in conjunction with their significant decline in economic power in the 1980s, Dallin argues that the Reagan Administration could not hold its previous view of the Soviet Union as the "Evil Empire." He calls this shift a "paradigm change," and suggests that its occurrence required "the muting of beliefs and attitudes that administration ideologues had held dear, and was resisted by some and misunderstood by others" (420).

Reiter (1996) argues that the "representativeness heuristic" provides a hindrance to "rational" or "naïvely rational" learning. This is the typically subconscious strategy whereby "individuals . . . associate an event and a model based on how well one characterizes the other. The degree of representation can emerge from physical, personal, or other types of similarities" (25). This can lead to systematic biases, including "insensitivity to prior probability of outcomes, insensitivity to sample size, misconceptions of chance, insensitivity to predictability, the illusion of validity, and misconceptions of regression," citing experimental research. Thus,

echoing Jervis's speculations on the matter, individuals will give more credit toward individual, unrepresentative events than they *should*.

Following from findings by Jervis and Larson noted earlier, Reiter also suggests that more vivid events will help to provide another shortcut by which individuals may learn. He defines vividness as "the extent to which it is (a) emotionally interesting, (b) concrete and imagery-provoking, and (c) proximate in a sensory, temporal, or spatial way" (cited on page 26). Vivid information can be easier to recall not only because of "emotional affect and the greater amount of sensorily interesting detail associated with vivid information but also because a vivid experience can mean the recruitment of entirely new schemata" (for this and the above Reiter cites Nisbett and Ross--*Human Inference,* 45).

Reiter states that the experimental evidence for the impact of "vividness" on recall and perception is mixed (27), but suggests that in societies where constituents are important, this may have a strong impact on decision-making (28). He also suggests that in some instances, the vividness effect may be stronger than other factors. As an example here, he cites Khong's evaluation of the 1965 decision to escalate the Vietnam war, where the vividness experienced by Johnson, Rusk (both related to their experiences in the Korean conflict), and Ball (who worked with the French in Southeast Asia in the 1950s) contributed to their decisions (29).

Leng (2000) undertakes one of the most extensive evaluations available looking at learning defined as a change in strategic preference following a crisis experience (or repeated crises with the same actor). As noted earlier, he suggests that leaders often learned "dysfunctional" lessons from these experiences, and attributes this largely to the intensity of the rivalries examined in conjunction with these states' leaders' adherence to the "realpolitik belief systems of key policymakers" (300). Further, he argues that "within-crisis" learning is far rarer

than "between-crisis" learning, and that whenever either type of learning occurs, it typically leads to "diagnostic" learning (as opposed to "causal" learning), representing "changed views of the rival state's intentions or capabilities" (281).[18]

2.9 This Project's Contribution to the Existing Literature

What does this project contribute to the above works on elite-level learning in the foreign policy domain? First, despite the wealth of theoretical suppositions and small-n evidence that has accumulated regarding "experiential" learning, there has been very little in the way of a "large-n," quantitative analysis of such. Russell Leng's work has examined multiple cases of learning across countries, but these still constitute a fairly small sample of observations. Research on the operational code (and, notably, the work of Khong) have provided a number of quantitative analyses, but these studies are typically focused on one to a very small sample of leaders, and have not previously examined monthly changes throughout a leader's entire term in office. Most others are primarily qualitative in nature, and despite the important thoughts and observations resulting from such, may reference only a small handful cases in support of a given hypothesis.

This study differs from those by looking at 42 years and 504 separate months worth of quantitatively-based belief data stemming from 4,320 speeches for 9 separate presidents. Further, I examine thousands of events, and numerous conflicts and crises encountered by these presidents as an influence on their beliefs. As such, I am able to test existing hypotheses (along with some new ones) with a large store of data in a way not previously attempted. Then, this is a study that provides a level of quantitative evidence regarding belief change that has not yet been

[18] A more extensive summation of Leng's findings can be found in Chapter 6 of his book.

seen. In addition, it provides the largest-scale evaluation known of the operational code, based on the single largest existing collection of operational code belief data.

However, the contributions of this project are not simply in terms of sample size. This project also attempts to bridge gaps between the work of political psychology and conflict studies in ways rarely attempted, due to either theoretical or methodological differences, or to the fact that these two areas of study tend to ignore one another. No known work in the area of conflict studies has included operational code data in a large-scale quantitative analysis, and only a very few works on the operational code (Marfleet and Simpson 2006; Robison 2006) have integrated any data at all from conflict studies, something that this work hopes to promote and move forward.

Further, from a theoretical standpoint, this data allows me to examine widely held assumptions regarding, notably, the nature of belief stability and interconnectedness and of the impact of international versus domestic influences on belief change. Additionally, I provide a number of new hypotheses and perspectives regarding learning that will help to further advance our understanding of this phenomenon. This project makes a novel and useful contribution to our understanding of learning by elites in the domain of foreign policy decision-making, setting it apart from previous works and filling in important gaps in the literature, particularly from a methodological standpoint.

CHAPTER 3: THE OPERATIONAL CODE AND OTHER MAJOR SOURCES OF DATA USED IN THE DISSERTATION

3.1 The Operational Code

The principle variables used in this project are the operational code beliefs of U.S. Presidents. Though utilized at times in this project as both the independent and dependent variables, it is of particular note that the values of these variables are primarily used, in both instances, to delineate learning behavior—the central conceptual phenomenon explored in this project (recall that the definition of learning used focuses on "belief change"). The operational code was created by Nathan Leites (1951, 1953) in order to evaluate the "rules of conduct" and "norms of behavior" of the Soviet Politburo (George 1969, 194). However, this construct was adapted as a generalized method for systematically evaluating political leaders by Alexander George (1969). George (1969) suggests that the operational code is "a set of general beliefs about fundamental issues of history and central questions of politics as these bear, in turn, on the problem of action" (191). He further argues that "the 'operational code' is a particularly significant portion of the actor's entire set of beliefs about political life," but that it does not included "the actor's ethical and normative beliefs" (197).

The operational code, as it is currently conceptualized, is a framework that assesses political leaders' "cognitive belief systems" in terms of their "self in situation" (Walker, Schafer, and Young 1998). This construct is a way of tapping into a leader's schematic reasoning process, or how an individual's private and subjective principles order his relationship with the social environment (George 1979). This is measured in terms of leaders' "philosophical" and "instrumental" beliefs. George (1969) defines "philosophical" beliefs as the "assumptions and premises [a leader] makes regarding the fundamental nature of politics, the nature of political

conflict, the role of the individual in history, etc." (199), and he defines "instrumental" beliefs as a leader's "beliefs about ends-means relationships in the context of political action" (199).

The operational code reflects the "cognitive psychological" approach to evaluating learning. The assumption behind the operational code is that, as no one is all knowing, actors' "philosophical" perspectives in the form of heuristic beliefs frame their understandings of and expectations about the world, "bounding" it to their perceptions. Additionally, an actor's "instrumental" beliefs reflect an actor's chosen methods of dealing with a given situation (George 1979). The philosophical and instrumental categories are further broken down into ten indices (five philosophical beliefs and five instrumental beliefs) that measure: perceived hostility/friendliness, or image perception, of the international system; conflictual or cooperative orientations; the kinds of tactics preferred for achieving these ends; risk orientation; perception regarding the potential realization of political values; the perceived predictability of the political future, perceptions of control over others; and the role of chance regarding political outcomes (Walker, Schafer and Young 1998).

Measures of these beliefs of political leaders are based on their rhetoric, assessed via verb usage through the "Profiler Plus" program's (Young 2001) Verbs in Context (VICS) system of content analysis (Walker, Schafer, and Young 1998). Regarding the theory and process behind the content analysis of leaders' speeches by the VICS system, Walker et al. (1998) note that there are "four features that inform the scoring system as a whole and provide its substantive, methodological, and theoretical orientation" (177). These are: 1) the "substantive focus" of the operational code, which examines how the role and use of power is perceived (both regarding the self and others); 2) the methodological focus on the use of verbs in political leaders' speech, "which indicate the balance, central tendency, and dispersion of these forms of power attributed

to the self and others as descriptions of self-other relationships" (177); 3) the focus on "positive" and "negative" verb attributions, indicating "the direction of affect associated with the forms of power" (177); and 4) the theoretical "scope" of the operational code is to evaluate the "steering" influence of political leaders' influence over a state's foreign policy (177).

It is important to note that here I am looking at the *generalized* operational code beliefs of U.S. leaders, focusing on all types of foreign actors and phenomena. This follows convention, as the operational code typically is viewed as structuring one's broad, overall assessment of the political world (George 1969), rather than one's perception of any specific actor or set of actors.

3.1.1 The Assessment of Verbal Behavior as a Reflection of Psychology

The vast majority of psychological research on political leaders necessarily occurs "at-a-distance," as we cannot sit presidents and prime ministers down on a couch to engage in traditional, clinical psychological probing. This "at-a-distance" process typically employs the methods of either "psychobiographical" interpretations of historical and first-hand accounts of individuals, or of direct evaluations of leader behavior. Included in the latter category is the use of verbal material as a window into leader psychology. This has become a fairly conventional means to tapping into political leader psychology, employed by those studying leadership style including self-confidence and conceptual complexity (Hermann 2003), motives such as the need for affiliation and power (Winter 2003), and broad leader personality traits such as shyness and competitiveness (Weintraub 2003), in addition to the cognitive beliefs of the operational code.

The rationale behind the analysis of verbal material is that leader psychology can be teased out from what they say, despite the often strategic use of verbal material as an impression management technique. Weintraub (2003), for instance, looks for the relative use of qualifiers, retractors, expressions of feeling, etc. (143-148) in order to evaluate individuals on various traits.

For the operational code, the focus is on the use of transitive verbs in speech. Walker, Schafer, and Young (1998) state that "the substantive focus of operational code analysis is on diagnosing the use of power by others in the political universe and on the leader's own propensities for exercising political power" (177).

There are certain advantages and disadvantages to verbal analysis versus psychobiographical research, which I will discuss briefly. Both methods must include some level of subjective evaluation . However, analysis of life-history has an advantage over analysis of verbal behavior in allowing for a fuller, richer evaluation of the roots and development of psychological characteristics of interest over time than can be gathered simply from speech. On the other hand, verbal material has the advantage of increased reliability. Many accepted methods of verbal analysis contain clear, objective coding rules and procedures that help to reduce the roles of intuition and subjectivity in evaluating the occurrence of psychology, promoting the scientific virtues of replicability and reliability. The evaluation of the operational code employs such rules and procedures, as will be discussed below. These trade-offs are undesirable but necessary concessions, and though this author prefers and engages in operational code analysis over psychobiographical examinations, this decision does not indicate a lack of appreciation for psychobiographical works. Both works serve different, albeit equally important functions in the advancement of our scientific understanding of leader psychology. And ultimately, if we are to have a complete understanding of these phenomena of interest, then these works should be evaluated in concert. Next, I discuss the method of evaluating and coding the operational code.

3.1.2 Verbal Material Examined

I examine the operational code beliefs for all presidents from John F. Kennedy (1961) through George W. Bush (2003). Ultimately, I evaluate 4,320 speeches, all read, restricted for appropriate content (as will be discussed below), and prepared for analysis by the author. Speeches are the verbal material used here to assess the operational code, as has become the convention (though other work has shown that spontaneous, interview responses are also an effective way of assessing the "opcode"—see Schafer and Crichlow 2000). More specifically, I only use speech-acts that are focused on foreign policy-related matters. Parts of speeches concerning "pleasantries"[19] or referencing exclusively domestic groups (such as the Congress) or policy related issues (such as domestic educational funding) were not coded, as they do not tap into foreign policy-related information of interest and would skew findings.[20] These speeches were taken from relevant presidential library, as well as the Public Papers of the President, web sites. Remarks assessed include State of the Union addresses, isolated statements, radio addresses, prepared remarks spoken prior to press conferences and photo sessions, and speeches to foreign governing bodies, interest groups, "town hall" meetings, and the United Nations, among others.

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[19] An example of such pleasantries would be the following, spoken by Bill Clinton on November 23, 1994:

> It's nice to see all of you here. I want to especially welcome the fifth graders from Murch Elementary School. I'm glad you're here and hope you're having a good time. And I'm glad the sun is shining down at least on some of you. I want to thank Larry Fanella, the chairman of the National Turkey Federation, and say a special word of thanks to Robert Strickler and to Shawn Arbogast, the 10–year-old boy who raised this year's turkey in Dayton, Virginia. Let's give him a hand.

[20] Note that references to Congress were not included, as they would have been coded by Profiler Plus as both references to the "self" as spoken by the president, and as an "other," depending on the context within which they were referenced. Given that the Congress is typically neither of these things as it concerns the president's operational code, from a foreign policy perspective, all such references were left out.

Note that all of the speech material examined was prepared prior to their being spoken. "Off-the-cuff" responses were not coded. The selection criteria for the data was to collect as many of these speeches as possible given their concern with foreign policy matters, be they in the security, trade, diplomatic, or general policy realms. No systematic sampling was attempted beyond this, as the largest possible "population" of speeches was desired for the purposes of creating a rich database for this and future analyses. Such a collection of data allows for time series analysis at various temporal levels (yearly, monthly, weekly, etc.), as well as for analysis of speeches beginning or ending on a specific date.

The fact that I am looking at the "generalized" operational code dictates the data gathering process described previously, where I do not focus on any specific actor, actor-type (such as "terrorists," "allies," or "revisionist states"), or region. Analyses focusing on specific actors or types of actors could be attempted by disaggregating the speeches gathered here in some manner (see Schafer and Walker, 2006a for an example of this approach), given that the current conceptualization of the operational code as laid out by Walker et al. (1998) allows for evaluation of beliefs focused on specific components of the political world. However, excluding times of crisis or certain "enduring rivals" such as the Soviet Union during the Cold War, we very rarely see the president referring to any specific actor or actor-type (in terms of anything more specific than "allies" or "enemies") more than a handful of times, at most, in a given month. As such, systematic analyses of this type would likely require aggregation of speeches to the level of the quarter, half-year, or even year in order to obtain enough speech information to make analysis justifiable (that is, to obtain enough relevant verbs being used in speech-acts focusing on these specific actors to appropriately develop belief measures).

Once speeches were collected, they were converted by the Profiler Plus program into operational code measures. The manner of this conversion will be discussed below. Refer to Appendix A for an additional discussion regarding speech material sampling and coding decisions

3.1.3 Are Speeches Appropriate Sources of This Data?

But the reader might ask the question: how can we say that by evaluating leaders' speeches, we are tapping into their psychological beliefs? After all, speeches are often more rhetoric than substance, and perhaps more importantly, they are typically written by speech-writers, rather than the president himself. Thus, the argument could be made that speeches do not truly tap psychological phenomena, but instead assess rhetoric that may or may not have a bearing on an individual's "psychology" per se, given the impact of impression management strategies.[21]

In response, Rosati (2002) argues that operational code beliefs are "those beliefs to which an individual subscribes *as an actual decision maker*" (p.142-emphasis added), reflecting the "self in situation" component of the operational code, in terms of the individual's role. What this means is that the operational code may only be in part a reflection of private, personally held attitudes. However, it *is* explicitly an evaluation of overt, cognitive beliefs associated with political decision making. Following from this, even if a speaker does not write a speech word for word, as long as the speech reflects the gist of the subjective orientation of a given administration from that speaker's point of view, then this is a reflection of that speaker's operational code.

[21] This is discussed by Tetlock (1991) on pages 50-51.

Despite the fact that U.S. Presidents may speak with a surplus of spin, it is doubtful that a president would speak words incompatible, broadly-speaking, with his ultimate beliefs about the nature of the political world and his preferred policy outcomes. The most obvious reason for this is that if a leader says that he will do something or represents another actor in a certain way, but then acts counter to these pronouncements, then these remarks could come to haunt this leader, as those in both the domestic and international spheres may hold him accountable. Public support for a leader who does not "practice what he preaches" may dwindle. Similarly, if foreign observers view a leader as someone who acts tough but does not back up his words with action, then they may take advantage of this by acting in an undesirable manner without fear of repercussions.

Despite the fact that speeches are not typically written by the president, the president can have as much influence on the speech writing process as he wants, and always has the option of choosing what to say or what not to say before actually saying it. If the president wants to place a stronger focus on allies over adversaries or vice versa, or wishes to speak in a more or less confrontational manner, then we can expect that his speeches will reflect this, irrespective of the actual speech writer, and reinforcing the argument that presidents will not say what they do not *believe*.

The expected correlation between rhetoric and belief may also be explained as less a calculated political move, and more a purely psychological phenomenon. Recalling Larson's (1985) evaluation of self-perception theory from the previous chapter, she argues that attitude change may occur following initial changes in leaders' actions, as "it is easier to alter one's private opinions than to deny actions witnessed by others" (30). The discussion there on "learning from previous behavior" gives further support to this notion. Given that the nature of

the beliefs evaluated here are presidential speeches, we may thus expect that even if speeches contain a degree of rhetorical flourish that may not actually represent leaders' "deep seated" views of how the world functions, we might expect that their beliefs will come to better reflect the speeches given over time, for the reason laid out by Larson.

Thus, on the aggregate, we might expect to see a leader's "political personality" come through their speeches, particularly in comparison to others, even if this would not be expected from any given speech. As I am evaluating thousands of speeches, we might expect a great deal of rhetorical "static" from one speech or leader to another, but within this static, we might also expect a systematic trend suggesting tendencies toward one psychological preference or another for a given speaker. Following the above, speeches, despite their drawbacks, are seen here as an appropriate measure of the operational code. Given that previous research has shown that coding spontaneous remarks lead to divergent results from that from coding prepared speeches (Schafer and Crichlow, 2000), the former were not coded here.

3.1.4 The Coding of Speeches by Profiler Plus

Regarding the methodological evaluation of the operational code from speech material, transitive verbs are coded in a two-step process.[22] First, transitive verb references in speeches are identified as referencing either the "self," or the "other." There are a set of generic self and other references that the Profiler Plus program, by default, contains a "dictionary" for, and thus will automatically code. These generic references will include *self* terms such as "me," "us," and "I," and *other* terms such as "them," "you," and "they." In addition to these generic references, however, the program evaluates actor-specific references.

[22] Note: More detailed information regarding grammatical parsing, sentence building, token reduction, and other coding processes, can be found in Young (2001).

Profiler Plus initially has no way to differentiate "self" versus "other" actor-specific references of this type. As such, by default, it will treat all actor-specific references as "others." Thus, the user must specify which actors are a part of the self's "in-group," and then any others being referenced will be treated by the program as "others." The user can prepare Profiler Plus in this manner by entering in frequently used self-references and associating them with a leader's name.[23] When a speech is first entered into the program, it must be tagged with the speaker's name (spelled identically to its spelling in the "self-reference dictionary") and saved as the file type recognized by Profiler Plus. Then, when the speech is coded (if set up to do so—Profiler can also be set up *not* to search for actor-specific self-references at all), Profiler will search the dictionary of manually entered self-references, and code any self-references associated with the appropriately labeled speaker's name as references to the "self." Again, all others references (not including generic self references) will be identified and coded as references to "others."

This identification of transitive verbs as referring to the "self" or "other" comprises the first step of Profiler Plus's method of coding speech material. The second step is identifying the *type* of reference being applied to either the "self" or "other." This reference can be one of six separate types, which fall on a Likert-type, 6-point scale. The six points here range from -3 to +3, and do not include a neutral (0) point. These values are: -3 = Punish (most extreme, "negative" reference); -2 = Threaten; -1 = Oppose/Resist; +1 = Appeal/Support; +2 = Promise; +3 = Reward (most extreme, "positive" reference).

Thus, Profiler first determines if a given transitive verb reference refers to the "self" vs. the "other," and then determines the direction and severity of the reference being made. If a

[23] For a U.S. President, this typically includes references such as U.S., US (note that spelling is important to take into account, as Profiler can only judge these references based upon the spelling of words as entered into the program), America, United States, etc.

reference receives an "Other -2" value, then it is a reference to an action taken by an "outgroup," and reflects a threat that has been made. For example, "Iraq threatened to gas the the Kurds," if spoken by the president, would yield this value. Conversely, if a reference received a "Self +1" value, then this would reflect a reference to an action by the "self," demonstrating verbal support for others, without explicitly making a serious commitment. An example here might be "the United States stands behind the freedom fighters in Afghanistan."

Operational code indices are all constructions of these basic, raw values. I will evaluate each belief index in terms of what they theoretically represent, and how they are methodologically constructed in the next section. Note that I will pay special attention to the image of the other (P1), feelings of control (P4), and strategic orientation (I1) indices, as they are of particular importance to the rest of the dissertation.

3.1.5 P1: The Image of the External Political Environment

This variable evaluates political leaders' perceptions of the "nature of the political universe." Forecasting the methodological construction of this belief index, Walker, Schafer, and Young (1998) argue that:

> The key assumption here is that beliefs about how others approach and pursue their goals in the political universe define the nature of politics, political conflict, and the image of the opponent for the leader. That is, the more cooperative the leader's diagnosis of the nature of the political universe, the higher the net frequency of cooperative attributions to others in the political universe (178).

Walker et al. (1998) then note that this index is specifically calculated in the following way: "% Positive Other Attributions minus % Negative Other Attributions," where values range from -1 (most conflictual perception) to +1 (most cooperative perception). Thus, this index examines the balance of total negative versus positive attributions toward "the Other"—are they spoken of (in terms of their actions) in a more positive or negative light, and to what degree is this the case?

3.1.6 P2: Realization of Fundamental Values

The second "philosophical" indicator is really a measure of "optimism/pessimism," regarding the perceived short- or long-term nature of conflict in the world (Walker, Schafer, and Young, 1998: 178). Whereas the image indicator looks at the *frequency* of "negative" to "positive" references to others, this indicator looks at the "net *intensity*" of each president's rhetoric targeting "others." In other words: are the "other" references more or less intense, and in a negative (more pessimistic) or positive (more optimistic) direction? The assumption here, derived from Ole Holsti's work (Walker et al. 1998, 178), is that political leaders' degree of optimism/pessimism for realizing political values will be reflected in their perception of the intensity (or duration) of international conflict. Thus, if the world is represented as being fairly intensely hostile in nature, then leaders will have a strong, negative score on this indicator; if the world is seen as more intensely friendly, then a more positive score will result (this scale, as with the "P1" index, ranges from -1 to +1).

3.1.7 P3: Predictability of the Political Future

The third belief is concerned with the leader's "tendency to assign different types of conflict and cooperative actions to others" (Walker et al. 1998, 179). Walker et al. (1998) state that this belief indicator—as measured by the VICS-calculated operational code—evaluates the degree to which leaders believe that the actions of others (both cooperative and conflictual in nature) are stable or variable. If a leader believes that others' actions are fairly uniform (being in the same "category" of actions), then we may infer that this leader holds the political future to be fairly predictable. If, however, a leader believes others' actions to be inconsistent, then we may infer that this leader will expect the political future to be more unpredictable. This index is calculated as "[1 minus IQV], where IQV equals the Index of Qualitative Variation" (Walker et

al. 1998, 179). Watson and McGraw (1980, 88 as cited in Walker et al. 1998, 179) note that the IQV is "a ratio of the number of different pairs for a distribution with the same N [number of cases] and the same number of variable classifications]. The mathematical calculation[24] taken place here results in a scale ranging from 0 (most diversity across the six verb categories/least perceived predictability of the political future) to +1 (least diversity across the six verb categories/highest perceived predictability of the political future—Schafer and Walker 2006b, 34).

3.1.8 P4: Control Over International Events

The P4 index is based on "locus of control" research, and evaluates "*the extent to which the leader can control historical developments and political outcomes*" (Walker, Schafer, and Young 1998, 179). Walker et al. (1998) state that the assumption behind the measurement of feelings of control is that "if the leader attributes more words and deeds to others, for example, then the locus of control is in others rather than in the self. The greater the leader's control over political outcomes compared to the control by others, the higher the net attributions assigned to the self" (179). Thus, Walker et. al created this index to be evaluated in the following manner: "Self Attributions divided by [Self Attributions plus Other Attributions]" (179). Scores fall on a scale from 0 (control is completely held by "others") to +1 (control is completely held by the "self").

[24] Referring back to the construction of the operational code indices—Where D = a raw operational code entry for "self + 3"; E = an entry for "self + 2"; F = an entry for "self +1; G = an entry for "self – 1"; H = an entry for "self -2"; and I = and entry for "self -3", the calculation of this measure is as follows: 1-(((F2*E2)
+(F2*D2)+(F2*G2)+(F2*H2)+(F2*I2)+(E2*D2)+(E2*G2)+ (E2*H2)
+(E2*I2)+(D2*G2)+(D2*H2)+(D2*I2)+(G2*H2)+(G2*I2)+(H2*I2))/ (15*
((D2+E2+F2+G2+H2+I2) /6) *((D2+E2+F2+G2+H2+I2)/6)))

3.1.9 P5: The Role of Chance

The fifth and final "philosophical" belief measure is a composite of the predictability of the political future (P3) and feelings of control (P4) indices, and is calculated as: 1 minus [P3 value multiplied by P4 value] at a given point in time. The logic here is that "if both the predictability of others and the leader's control over political outcomes are relatively low, then the role of chance is relatively high" (Walker, Schafer, and Young 1998, 179). Conversely, if the world is perceived to be very predictable, and if the leader feels high levels of control, then the role of chance would be relatively low. Since the "predictability of the political future" and "feelings of control" values both range from 0 to +1, this index also ranges from 0 (lowest role of chance) +1 (highest role of chance).

3.1.10 I1: Strategic Orientation

The first instrumental belief is the I1 "master" belief, or the president's strategic orientation/preference for cooperation or conflict. This measure evaluates:

> . . . a leader's *strategic approach to political goals* (I-1) and assumes that the more cooperative the leader's strategic approach to political goals, the higher the net *frequency* of cooperative attributions to the self. This reasoning does not specify how the leader selects goals or what goals s/he selects. However, it does identify the strategic direction the leader adopts in approaching them. (Walker, Schafer, and Young, 1998: 179; emphasis in original)

This index is measured in a fashion similar to the image index, but focuses on the "self" rather than the "other." Specifically, it is created by subtracting the percentage of negative *self* attributions from the percentage of positive *self* attributions, with the clear difference again being that this index evaluates how political leaders refer to themselves (and the "in-groups" of which they are a part), rather than to "others." Similar to the image index, values here can theoretically range from -1 (the self most strongly prefers conflict) to +1 (the self most strongly prefers cooperation).

3.1.11 I2: Tactical Orientation

Walker et al. (1998) note that "whereas strategy refers to the direction of a leader's approach to political goals, tactics refers first of all to the intensity with which the leader pursues the strategy" (180, citing Snyder and Diesing 1977; and Leng 1993). This second "instrumental" belief indicator is measured by evaluating the "net *intensity* of cooperative self-attributions" (Walker, Schafer, and Young 1998, 180, emphasis in original), and as such is evaluated in the same manner as the realization of political values (P2) philosophical measure, except that the I2 index evaluates whether the references to the "self," rather than references toward the "other," are more or less intense. The scale ranges from -1 (strong tactical orientation toward conflict) to +1 (strong tactical orientation toward cooperation). If self references are more intense in the cooperative direction, then we may infer that this leader holds a more intensely cooperative tactical orientation (thus, the leader not only more strongly prefers cooperation over conflict, but more strongly prefers more extreme levels of cooperation over more moderate alternatives). If this leader's self references are more intense in the direction of conflict then we may infer that this leader holds a more intensely conflictual tactical orientation.

3.1.12 I3: Risk Orientation

The I3 belief indicator evaluates the "diversity in the types of acts attributed to the self across several categories" (Walker et al. 1998, 180). This index is evaluated in the same way as its respective "philosophical" index—the predictability of the political universe (P3)—and as such, the "IQV" index is used in its construction. The main difference between the "I3" and "P3" indices, as with the previous index examined, is that the former focuses on the self whereas the latter focuses on the other. Thus, if the self's self-described actions are fairly uniform (fitting into the same self-referenced categories of action), then we might say that this leader sees

himself as more risk acceptant. Conversely, if the self describes himself as more variable in terms of his references to the self, then we can say that he is more risk averse. The values here range from 0 (extremely risk averse) to +1 (extremely risk acceptant).

3.1.13 I4a: Timing of Conflict vs. Cooperation

The I4 belief index is broken into two parts. The first of which is "I4a," or the timing of conflict vs. cooperation. This belief is, according to Walker et al. (1998), "the leader's position *on the matter of the timing of action*" (181, emphasis in original). This belief is measured as the degree to which "self" transitive verb references shift between the broad conflictual and cooperative categories. The assumption here is that when the timing of behavior "in assessing the risk of political acts" is more important for a political leader, there will be a higher degree of fluctuation between these beliefs. Conversely, if these beliefs are more stable, then the assumption is that "the strategic approach to goals [as evaluated in the "I1" index] is more likely to be the dominant strategy no matter what others in the political universe say or do" (Walker et al. 1998, 181). In other words, this measure evaluates the degree to which the self's strategic preference is dictated by the self's own pre-existing preferences, irrespective of the context, versus the actions that take place in the external political environment, irrespective of the self's pre-existing preferences. This index is calculated as "1 minus Absolute Value of [% Positive Self Attributions minus % Negative Self Attributions]," and values range from 0 (low shift propensity; timing relatively unimportant) to +1 (high shift propensity; timing more important).

3.1.14 I4b: The Timing of Words vs. Deeds

The next instrumental belief (I4b) is similar to the previous one, in that it examines "timing" shifts, but this belief focuses on "words vs. deeds" instead of "conflict vs. cooperation." This taps into "the way a leader calculates, controls, and accepts the risks of political action"

(Walker et al. 1998, 181). The assumption is that a leader who is less likely to shift between words and deeds will be "relatively acceptant regarding the risks associated with the direction of the distribution" whereas those with higher shift propensities possess "a more risk-averse orientation toward the undesirable outcomes of submission and deadlock." This index is calculated as "one minus the absolute value of [the percentage of *word* self utterances minus the percentage of *deed* self utterances (Schafer and Walker 2006b, 36).

3.1.15 I5: Utility of Means (Punish, Threaten, Oppose/Resist, Appeal/Support, Promise, Reward)

The next and final set of instrumental beliefs evaluated here are the "utility of means" (I5) indicators. There are six of these, evaluating means for most effectively pursuing goals and objectives, with the narrow purpose of affecting others' behavior. These means include "Punish, Threaten, Oppose/Resist, Appeal/Support, Promise, Reward" (Walker et al. 1998, 180), reflecting the fact that both positive and negative sanctions (in the form of either words or deeds) can be used as a means toward some end. As such, each "I5" belief has a suffix associated with the specific mean to which it refers (e.g. "I5re" is the indicator for "I5 reward"). Each utility of means belief is calculated as the percentage spoken of a certain transitive verb category.[25] As such, each belief here can possess a value ranging from 0 (the relevant category of verbs contains 0 percent of all self references) to +1 (the relevant category of verbs contains 100% of all self references), and if you were to add up all "I5" beliefs for a given president at a given point in time, the sum of all belief values would be 100%. In other words, an increase in the level of one index here necessarily entails a decrease somewhere else.

[25] Recalling the discussion on how the operational code is evaluated from raw indicators, the most extreme categories deal with actions [raw "self" indicator of -3=punish; +3=reward]; the middle categories deal with threats (-2) and promises (+2); and offers of opposition/resistance (-1) or support or the use of appeals (+1) are the least extreme categories

For the remainder of this chapter, I will discuss the other major databases used in this dissertation.

3.2 Gary King's Events Data[26]

In Chapter 6, I examine events data as an influence on presidential beliefs. The events data used come from Gary King's 10 Million International Dyadic Events database (http://gking.harvard.edu/events/). International dyadic "events" are actions initiated by actors in one state toward actors in another.[27] These could range from anything as innocuous as a scientist or artist in one state congratulating a peer in another for receiving an award, to an all out declaration of war by one government towards another.

Gary King's specific database includes dyadic events as gathered from the first sentence (or "lead") of *all* Reuters news stories from 1990 through 2004 (thus, the data includes actions initiated by every state in the world, as well as many non-state actors). Events are then automatically coded from these news stories via the Virtual Research Associates (VRA) content analysis program, through a manner described in King and Lowe's (2003) *International Organization* article. This process involves the VRA computer program content analyzing these news leads by picking out and coding "events" as well as the target and source of these events, then organizing this information into a format that can be used for statistical analysis.

From the above raw data, I engaged in a process of filtering out only that data that I am interested in (the step-by-step details can be viewed in Appendix B). To summarize these steps, I first filtered out all data to that originating in a foreign country and targeting the U.S. Then, I

[26] Note that specific variables and statistics used in analysis for each dataset will be covered in relevant chapters.
[27] Note: King's database also includes domestic events [those initiated by actors within a given state and targeting actors in this same state], but these intranational events are not of interest in this project.

recoded the Integrated Data for Events Analysis text data ("IDEA"—the form of data output given in King's database) into numerical format, and then recoded this into data falling on the Goldstein (1992) conflict-cooperation scale.

The purpose for doing the above is that, first, I needed to evaluate quantitative data, and the King data exists in its raw form as text (the "Event Form" column of data in his database). Thus, these text entries had to be recoded into IDEA numerical format. Secondly, I needed to evaluate events on a scale ranging from most conflictual to most cooperative, but the IDEA data format (even in its numerical incarnation) is a nominal-level scale. The Goldstein (1992) scale is a roughly interval-level conflict-cooperative scale, developed for the purpose of allowing interval-level analysis of World Event/Interaction Survey (WEIS), categorical data. IDEA data is an extension of WEIS data, and as such, shares many categories with WEIS. I converted the IDEA numerical data into the Goldstein scale, following Goldstein's conversion rules. In the Goldstein coding scheme, scores range on a scale from -10 (war; military engagement) to +10 (merging or integration of political entities), and a 0 value indicates neutral actions (explain position; comment).[28]

Note that in the process of determining which "events" were actually actor-based events and which weren't, I discovered that many IDEA categorized phenomena were not actually actor-initiated events at all.[29] I removed these phenomena from the analysis, since they were not "events" of interest, and thus had no associated Goldstein value.

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[28] For other Goldstein values, and their associated WEIS values, see "Modified WEIS Codes" from the Kansas Events Data website—available: http://web.ku.edu/keds/data.dir/KEDS.WEIS.Codes.html, accessed 10/15/08. For the Goldstein association with IDEA values, see King and Lowe (2003, 622-623).

[29] Examples of non-actor-initiated-events coded here include "cognitive state," "animal attack," "natural disaster," "economic status," etc.

3.3 International Crisis Behavior

In chapter 6, I examine international "crises" as an impact on leaders' beliefs. These crises were taken from the International Crisis Behavior (ICB) database. Brecher and Wilkenfeld (2000) define a crisis as:

> . . . a situation with three necessary and sufficient conditions deriving from a change in the state's internal or external environment. All three are perceptions held by the highest level decision makers of the state actor concerned: a *threat to one or more basic values*, along with an awareness of *finite time for response* to the value threat, and a *heightened probability of involvement in military hostilities*. (3, emphasis in original)

They go on to emphasize that the probability of war, in the mind of the crisis actor, must be "*qualitatively higher than the norm* in the specific adversarial relationship," and that a change in the probability of conflict, rather than the absolute level of conflict probability, is a crucial component of crisis occurrence (3). Thus, even if the probability of war with a state is very high, this only qualifies as a crisis if this probability is an increase from some prior point in time.[30] In chapter 6, I will spend some time differentiating this definition of "crisis" from other popular definitions, and will discuss the rationale for using this definition and data over others. Decisions and processes regarding the choice and coding of cases can be found in Brecher and Wilkenfeld's *A Study of Crisis* (1997), pages 39-64.

Crisis characteristics here include the actors involved in a crisis, the date and location of the crisis, the crisis triggering event, the type of decision-making unit involved, the intensity of violence experienced by the state experiencing the crisis, and the outcome of the crisis, among other factors (Brecher and Wilkenfeld 2009). Specific variables from this dataset used for analysis will be discussed in chapter 6. Included in this database are 434 crises across 956 states (http://www.cidcm.umd.edu/icb/info/project_information.asp).

[30] Note: Brecher and Wilkenfeld (1997) also develop a definition for "international crisis" (i.e. crises which threaten the structure of international politics), but as this is not the focus of this project, this type of crisis will not be addressed here.

3.4 Militarized Interstate Disputes

In chapters 6 and 8, I include Militarized Interstate Dispute (MID) data as a means to evaluate the influence of sub-"crisis"-level conflicts on presidential belief change. Jones, Bremer, and Singer (1996) note that the MID database was created in order to fill a gap in the literature on the causes of conflict and peace, by examining "sub-war interstate conflicts that are serious enough to become militarized" (164). They argue that these events are important, as they are the precursors to war, and are distinct from events data (which are focused "on all interstate events" [164]), as MIDs are an intentionally narrowed "scope of inquiry," that "provide a manageable, operationally defined subset of state interactions [allowing] for the creation of historically unified cases of conflict events . . . from which analysis can proceed" (165).

MIDs are operationally defined by Jones and colleagues (1996) as "united historical cases in which the threat, display or use of force short of war by one member state is explicitly directed towards the government, official representatives, official forces, property, or territory of another state (168). As such, this database leaves out "non-militarized" disputes or conflicts that would be included in many events databases. It also leaves out non-state actors. "Dispute" is defined here as "the engagement in argument, the call into question, or the contestation over one or more unresolved issues between two or more actors" (168).

Militarized "incidents" are the component parts of a "militarized disputes," and are explicit (i.e. non-ambiguous), "non-routine" actions occurring among two states, engaged by the "official" government and military by one state toward another (Jones et al. 1996, 169-70). Other notes regarding the categorization of militarized incidents and aggregation of events into disputes can be found in the article by Jones and colleagues (1996). Cases were determined based upon analysis of various source materials (government documents, newspapers, etc.—

180), including documents in non-English languages, and checks were employed to help ensure data validity inter-coder reliability (181-182).

MID characteristics included in this database are the time and place in which the MID took place, the type of threat, display, or use of force employed in a dispute, dispute outcome, method of settlement, number of fatalities in a dispute, and various other factors that can be found in the “Codebook for Militarized Interstate Dispute Data” (Ghosn and Palmer 2003).

CHAPTER 4: PRELIMINARY DESCRIPTIVE ANALYSIS AND SUMMARY OF PRESIDENTIAL BELIEFS

In this chapter, I empirically evaluate the nature of operational code beliefs of U.S. Presidents, in terms of their absolute and relative values, as well as change and stability, following from analysis of the quantitative data described at the end of the previous chapter. In the process, I will descriptively evaluate these processes both within and across presidents.

4.1 Cross-Presidential and Individual Summary Descriptive Analysis

To begin, I will examine broad, general trends for all U.S. Presidents from 1961 to 2003 on each belief index. In this section, I examine 3 month "moving averages" in order to account for months in which there was too little speech data to acquire an acceptable sample size for comparison (resulting, in some instances, in outliers). These moving, or "rolling" averages, are the average belief values for the two months prior to a given "observation" month, along with the current "observation" month. In other words, the first month that I examine is March of 1961 (instead of the first observation month, January), and the value examined is the average of all January, February, and March operational code values on a given index. For April, I examine the average for the months of February, March, and April, and so on. As such, I do not examine the first two months of each presidency except as they contribute to the "moving average" value of the third month that one is in office.

Going back to the methodological discussion of the operational code from the previous chapter, recall that all operational code values are calculated based upon the 12 raw "self" and "other" counts for a given speech (i.e. "self +3," "other -2," etc.). Typically, if one examines the operational code at the level of the month, then he would first add up all raw "self/other" counts across all speeches for a month, and calculate operational code measures from these

summations.[31] In essence, this treats all speeches in a month as a single "super speech," and controls for speech size by allowing larger speeches to more strongly influence operational code index calculation than weaker speeches do. If each speech were coded separately for its operational code score, then this would not be the case, as smaller speeches containing little relevant information would be treated as equal to larger speeches with more information, and averages across these speech calculations would thus be deceptive.

For the "moving averages" examined, I engage in this same basic process that I describe in the previous paragraph. However, instead of treating all speech material within a given month as if it were a single speech for the purpose of analysis, I sum up the raw indicators for each three month period, creating a single "super speech" for each "moving," three month period. From this summation, I calculate operational code belief indicators.

4.1.1 "Philosophical" Beliefs

First I will examine the "philosophical" or "diagnostic" operational code beliefs. The first "philosophical" belief is that of the "fundamental nature of politics/image of the other" ("P1"), evaluating perceptions of friendliness or hostility in the outside world. Recall that this index can range, theoretically, from -1 to +1, with a -1 indicating an extreme perception of hostility and a +1 indicating an extreme perception of friendliness. Presidential "3 month, moving average" trends on the "image" variable can be found in Figure 4.1. In these figures examining presidential trends, each data point signifies the average operational code "belief" value for a given president for a given 3 month period, as described earlier.

[31] For example, if there were three speeches in a month, with one having a "self + 3" raw indicator value of 3, the second with a value of 2, and the third with a value of 1, then relevant operational code beliefs would be calculated based upon the single "self +3" measure of 6, instead of calculating operational code indices for each speech.

The "moving" 3 month mean P1 value for all presidents (as can be found in Table 4.1) is .397, and the standard deviation is .111. This suggests that in general, U.S. Presidents tend to view "the other" as more friendly than hostile in nature, as more friendly than hostile "other" attributions account for positive values on this index. The minimum "3 month moving average" value for any president is 0 (indicating an equal number of "other" conflictual and cooperative action references), and the maximum value is .67.

Table 4.2 contains mean z-score comparisons for individual presidents, based upon the mean and standard deviation values contained in Table 4.1. These z-scores are calculated in the following manner: [*presidential observation value* (i.e. the mean "3 month rolling average value" for a given president) minus *the mean of all presidential observation values* (i.e. the mean of the cross-presidential mean "3 month rolling average" values)] divided by [*the standard deviation of all presidential observations values* (i.e. the standard deviation of the cross-presidential mean "3 month rolling average" values)]. Z-scores greater than positive 2 or less than negative 2 are considered "highly significant," z-scores greater than positive 1 or less than negative 1 are considered "moderately significant," and z-scores in-between positive 1 and negative 1 are considered "insignificant."

For the image of the other (P1) index, the most positive value is held by Gerald Ford (z=+1.844), whereas the lowest image value is held by George W. Bush ("Bush 43"; z=-1.886). This suggests that amongst those presidents examined, Ford held the friendliest perception of "others" in the world, whereas Bush 43 held the most hostile perception of "others."

In addition to examining the mean differences between of presidents, I am also interested in the standard deviation differences between presidents. If across-month belief variation is high, then this could indicate general psychological instability, or a greater tendency to learn,

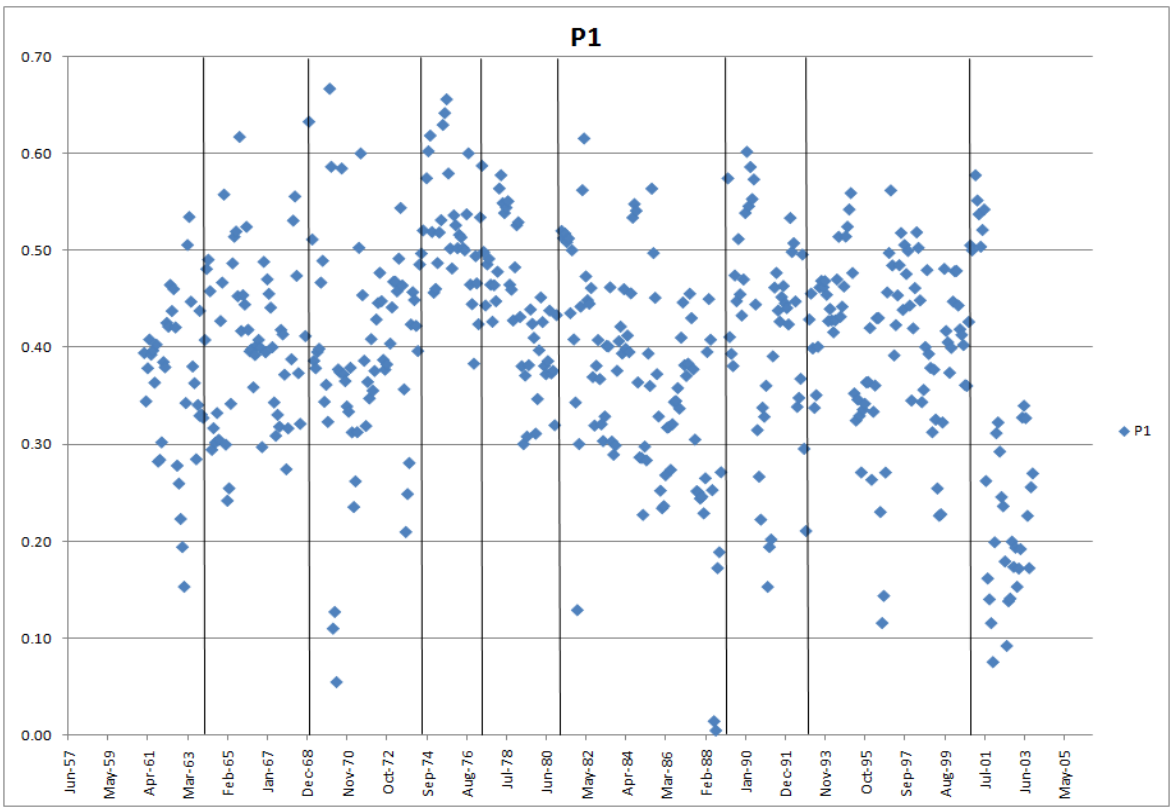

Figure 4.1: Monthly "Image of the Other"/P1 trends for U.S. Presidents, 1961 through 2003*

*Note: These are technically "3 Month, Moving Averages"; vertical lines approximately represent the termination/onset of presidential administrations. The lines refer to, in sequence from left to right, the onset of the Johnson, Nixon, Ford, Carter, Reagan, George H.W. Bush, Clinton, and George W. Bush Administrations.

potentially resulting from a more uncertain political environment. I evaluate these differences in the same manner that I evaluate mean differences—by constructing z-scores. Except here, I replace the "observation means" with the "observation standard deviations," and calculate the z-scores in the following way: [*presidential observation value* (i.e. the standard deviation of the "3 month rolling average values" for a given president) minus *the mean of all presidential observation values* (i.e. the mean of their standard deviation "3 month rolling average" values)] divided by [*the standard deviation of all presidential observations values* (i.e. the standard deviation of their standard deviation "3 month rolling average" values)]. As with the "mean

standard deviations," these values could be calculated solely with information contained in Table 4.1. Results here are found in Table 4.3.

Table 4.1: "Philosophical" Belief Descriptives

President		P1	P2	P3	P4	P5
Kennedy	Mean	0.3627	0.2243	0.0912	0.254	0.9768
	N	33	33	33	33	33
	Std. Deviation	0.08588	0.0682	0.01732	0.02449	0.00537
	Minimum	0.15	0.11	0.07	0.21	0.96
	Maximum	0.53	0.41	0.15	0.3	0.98
Johnson	Mean	0.4065	0.2282	0.1047	0.3089	0.9677
	N	60	60	60	60	60
	Std. Deviation	0.08728	0.07303	0.01911	0.04014	0.00706
	Minimum	0.24	0.09	0.08	0.23	0.94
	Maximum	0.63	0.42	0.19	0.41	0.98
Nixon	Mean	0.3965	0.199	0.1101	0.3333	0.9632
	N	64	64	64	64	64
	Std. Deviation	0.11032	0.08336	0.02553	0.04772	0.0103
	Minimum	0.05	-0.04	0.06	0.24	0.94
	Maximum	0.67	0.42	0.18	0.5	0.98
Ford	Mean	0.5277	0.3346	0.126	0.3459	0.9564
	N	28	28	28	28	28
	Std. Deviation	0.06483	0.05449	0.02202	0.03276	0.00883
	Minimum	0.38	0.19	0.07	0.26	0.94
	Maximum	0.66	0.43	0.16	0.4	0.98
Carter	Mean	0.4441	0.2607	0.1022	0.3174	0.9673
	N	47	47	47	47	47
	Std. Deviation	0.07382	0.05322	0.01998	0.03328	0.00805
	Minimum	0.3	0.15	0.06	0.25	0.95
	Maximum	0.59	0.36	0.14	0.41	0.98
Reagan	Mean	0.3648	0.1928	0.1002	0.2558	0.9741
	N	93	93	93	93	93
	Std. Deviation	0.11131	0.09015	0.02067	0.0341	0.00753
	Minimum	0	-0.08	0.05	0.16	0.95
	Maximum	0.62	0.38	0.17	0.34	0.99
HW Bush	Mean	0.4179	0.2506	0.0997	0.2834	0.9714
	N	46	46	46	46	46
	Std. Deviation	0.11099	0.08556	0.02082	0.03763	0.00852
	Minimum	0.15	0.03	0.06	0.23	0.95
	Maximum	0.6	0.42	0.14	0.4	0.98
Clinton	Mean	0.4085	0.234	0.1062	0.2863	0.9695
	N	95	95	95	95	95
	Std. Deviation	0.08574	0.07239	0.01253	0.02379	0.00499
	Minimum	0.12	-0.01	0.08	0.22	0.95
	Maximum	0.56	0.37	0.13	0.36	0.98
W Bush	Mean	0.2688	0.1463	0.0847	0.2881	0.9753
	N	34	34	34	34	34
	Std. Deviation	0.14424	0.11259	0.02567	0.03347	0.00896
	Minimum	0.08	0.01	0.05	0.23	0.95
	Maximum	0.58	0.38	0.16	0.35	0.99
Total	Mean	0.397	0.2242	0.1031	0.2934	0.9694
	N	500	500	500	500	500
	Std. Deviation	0.11149	0.08823	0.02172	0.04504	0.00916
	Minimum	0	-0.08	0.05	0.16	0.94
	Maximum	0.67	0.43	0.19	0.5	0.99

Table 4.2: Mean Z-Scores for "Philosophical" Belief Indices

	P1 mean	P1 z-score	P2 mean	P2 z-score	P3 mean	P3z z-score	P4 mean	P4 z-score	P5 mean	P5 z-score
Kennedy	0.363	-0.533	0.224	-0.110	0.091	-0.994	0.254	**-1.231**	0.977	**1.153**
Johnson	0.407	0.098	0.228	-0.036	0.105	0.165	0.309	0.484	0.968	-0.265
Nixon	0.397	-0.046	0.199	-0.596	0.110	0.629	0.333	**1.247**	0.963	-0.966
Ford	0.528	**1.844**	0.335	**2.007**	0.126	**1.993**	0.346	**1.641**	0.956	**-2.026**
Carter	0.444	0.639	0.261	0.588	0.102	-0.050	0.317	0.750	0.967	-0.327
Reagan	0.365	-0.503	0.193	-0.715	0.100	-0.221	0.256	**-1.175**	0.974	0.732
HW Bush	0.418	0.262	0.251	0.394	0.100	-0.264	0.283	-0.313	0.971	0.312
Clinton	0.409	0.126	0.234	0.076	0.106	0.294	0.286	-0.222	0.970	0.016
W Bush	0.269	**-1.886**	0.146	**-1.608**	0.085	**-1.552**	0.288	-0.166	0.975	0.919
Total	0.400		0.230		0.103		0.293		0.969	
St. Dev.	0.069		0.052		0.012		0.032		0.006	

Table 4.3: Standard Deviation Z-Scores for "Philosophical" Belief Indices

	P1 st dev	P1 z-score	P2 st dev	P2 z-score	P3 st dev	P3z z-score	P4 st dev	P4 z-score	P5 st dev	P5 z-score
Kennedy	0.086	-0.464	0.068	-0.475	0.017	-0.765	0.024	**-1.309**	0.005	**-1.376**
Johnson	0.087	-0.406	0.073	-0.214	0.019	-0.321	0.040	0.811	0.007	-0.393
Nixon	0.110	0.542	0.083	0.344	0.026	**1.270**	0.048	**1.838**	0.010	**1.493**
Ford	0.065	**-1.330**	0.054	**-1.216**	0.022	0.400	0.033	-0.189	0.009	0.638
Carter	0.074	-0.960	0.053	**-1.285**	0.020	-0.105	0.033	-0.118	0.008	0.184
Reagan	0.111	0.582	0.090	0.711	0.021	0.066	0.034	-0.007	0.008	-0.119
HW Bush	0.111	0.569	0.086	0.463	0.021	0.103	0.038	0.471	0.009	0.457
Clinton	0.086	-0.470	0.072	-0.249	0.013	**-1.952**	0.024	**-1.404**	0.005	**-1.597**
W Bush	0.144	**1.937**	0.113	**1.923**	0.026	**1.305**	0.033	-0.093	0.009	0.713
Total	0.097		0.077		0.020		0.034		0.008	
St. Dev.	0.024		0.019		0.004		0.007		0.002	

For the image belief, based upon the z-scores in Table 4.3, the president with the most stable beliefs is Ford (z=-1.330), whereas the president with the most variable beliefs is Bush 43 (z=1.937). Thus, not only is Ford the president who views the rest of the world in the most positive light, he is also the president who holds the most consistent view of the outside world. Conversely, Bush 43 not only holds the most negative view of the world, on the aggregate, but he also holds the most unstable views regarding it from month to month.

The second belief examined is the "prospects of realizing fundamental political values," (P2) and trends can be observed in Figure 4.2. The mean value across all "moving," 3 month

periods for all presidents is .224, with a standard deviation of .088. As with the image measure, values on this belief range, in theory, from -1 to +1, with a -1 indicating an extremely pessimistic appraisal of one's likelihood of realizing fundamental values, and a +1 indicating an extremely optimistic appraisal of such. The positive mean on this index suggests that presidential perceptions of the "other" lean toward an optimistic appraisal. As seen in Table 4.2, the president with the most optimistic perception on this measure is Ford (z=2.007), and the president with the most pessimistic perception is Bush 43 (z=-1.608), similar to the findings regarding the "image of the other."

Regarding the variation of belief values on this index in Table 4.3, President Carter (z=-1.285), who holds a modestly optimistic feeling regarding the realization of political values, holds the most stable view, though Ford (z=-1.216) also holds a modestly significant, stable view. Again, Bush 43 (z=1.923) not only holds the most pessimistic view on this index of all those presidents examined, but also the most unstable.

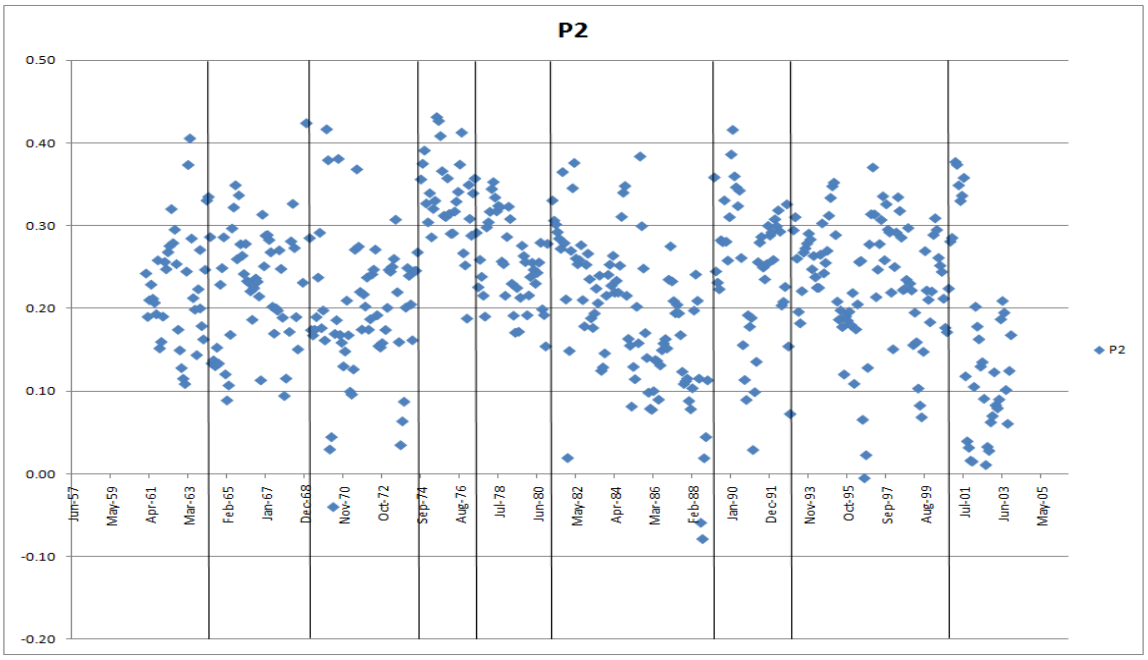

Figure 4.2: Monthly "Prospects for Realizing Fundamental Political Values"/P2 trends for U.S. Presidents, 1961 through 2003

The next index evaluated is the third "philosophical" belief (P3) evaluating the "predictability of the political future." These monthly presidential beliefs are plotted in Figure 4.3.[32] Recall from the previous chapter that this index is calculated using the "IQV" index, which essentially captures variation across the "other attributions" used by leaders. In opposition to the "image" and "possibility of realizing fundamental values" beliefs, values here can theoretically range from 0 to +1, with a 0 indicating an extreme perception that the universe is unpredictable, and a +1 indicating that the political universe is extremely predictable. The mean value on this index is .103, with a standard deviation of .022. Though I do not have non-presidential leaders to make a comparison with (and as such, I cannot say where they fall relative to others), the low mean value here suggests that presidents tend to see the world as a fairly unpredictable place.

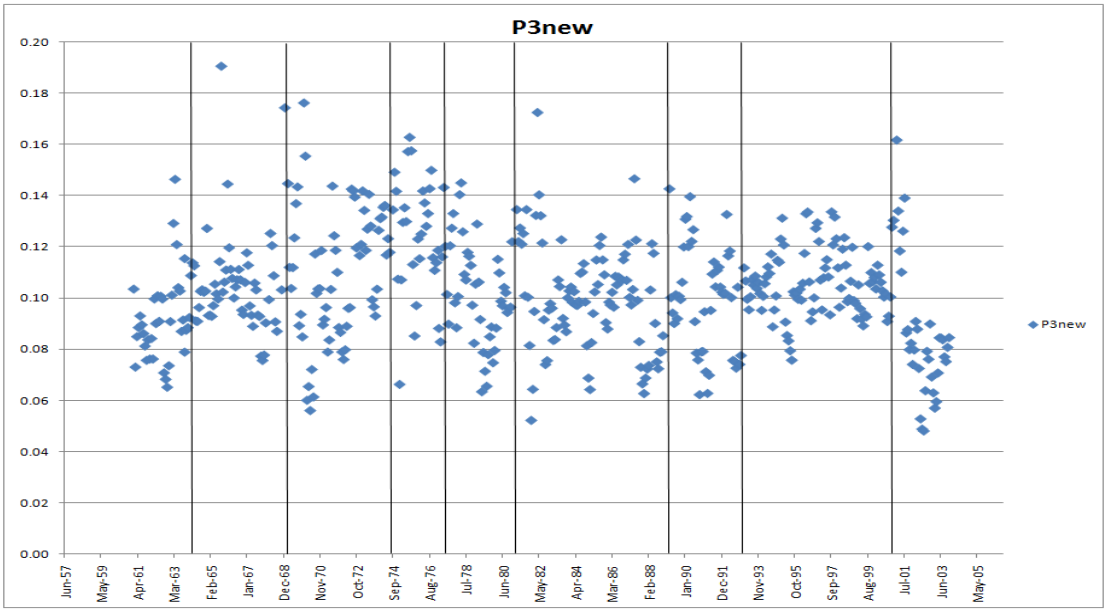

Figure 4.3: Monthly "Predictability of the Political Future"/P3 trends for U.S. Presidents, 1961 through 2003

[32] Note that one outlier measure, occurring during Nixon's last month in office (+1) was left out of this chart, as its inclusion provided for too much empty space in the chart, and thus made the evaluation of the trends here more difficult to see.

The president who sees the world as the most predictable is Ford (z=1.993), and the president who sees the world as least predictable is George W. Bush (z=-1.552). It is of note here that the two presidents with the most extreme values on the first three "philosophical" beliefs are Ford and Bush 43. The president with the most stable views here is Clinton (z=-1.952). The president with the most unstable views are Bush 43 (z=1.305), who again demonstrates that he is quite different in relation to his fellow presidents in many ways. He is followed by Nixon (z=1.270).

The third belief evaluated here is P4, or feelings of control relative to others, and the monthly scatterplot can be found in Figure 4.4. This belief can theoretically range from 0 to +1, with a 0 indicating an extremely low feeling of control relative to others, and a +1 indicating an extremely high feeling of control. The "feelings of control" scatterplot is striking in comparison to that of the P1-P3 index plots due to the very clear, relatively tight trend lines *across* presidencies. There is a noticeable upward trend suggesting increasing levels of control as time goes on, from the onset of the Kennedy Presidency through the end of the Ford Administration. Then this belief value trends downward from the Carter through the Reagan Administrations, suggesting decreasing levels of historical control as time goes on. During the George H.W. Bush Administration, this belief value trends upward again and then flattens out, reaching a stable level of control that lasts throughout the Clinton Administration and the beginning of the George W. Bush Administration. This nearly seamless trend suggests that feelings of control *between* presidents may be related in some way, which is an observation that may warrant further future attention.

The cross-presidential, mean of the "3 month moving average" values is .293, and the standard deviation is .045. This mean suggests that U.S. presidents tend to view the "other" as

having slightly more control over events than does the "self." If both the "self" and the "other" held an equal degree of control in the president's eyes at a given point in time, then the "P4" value would be .5 (as this would signify an equal number of self and other references). Thus, U.S. presidents may not be as filled with hubris as they are sometimes given credit, and the impact of international events may be of particular importance to their decision-making.

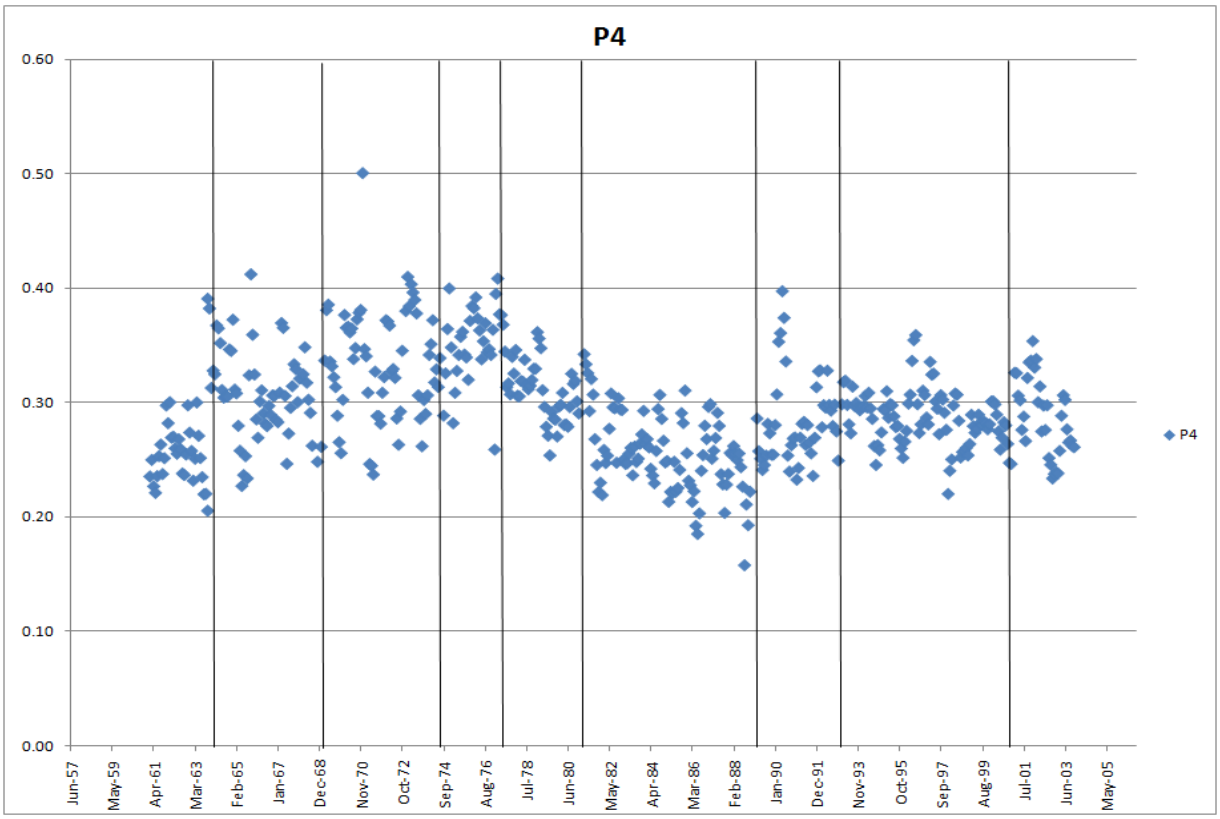

Figure 4.4: Monthly "Feelings of Control"/P4 trends for U.S. Presidents, 1961 through 2003

The president who most strongly feels that "control" lies with the "self" is Ford (z=1.641), though Nixon (z=1.247) also has a moderately significant, positive value on this index. The president who most strongly feels that "control" lies with "others" is Kennedy (z=-1.231), though Reagan (z=-1.175) also yields a moderately significant, negative value on this index. The president with the most stable "control" beliefs is Clinton (z=-1.404), followed

closely by Kennedy (z=-1.309). Conversely, the president with the least stable "control" beliefs, again, is Nixon (z=1.838).

The fifth philosophical belief (P5) evaluating the "role of chance" is evaluated next. Results are shown in Figure 4.5. The mean value on this index is .969, and the standard deviation is .009. This index could theoretically range from 0 to +1, where "higher scores indicate a higher role assigned to chance and lower scores indicat[ing] a lower role," and the mean value here demonstrates that presidents generally see chance as playing a very strong role. Recalling from the previous chapter that the "role of chance" index is calculated based upon values on the "predictability of the political future" and "feelings of control" indices, the high "role of chance" value reflects generally low feelings of control and perceptions of a fairly unpredictable political future across presidents. Thus, on the whole, it appears that U.S. presidents see the world as a place in which the unpredictability of others and random occurrences are more salient influences on the political sphere than is self-imposed order.

The president who perceives chance as playing the strongest role is Kennedy (z=1.153), and the president who perceives chance as playing the weakest role is Ford (z=-2.026). Once again, Clinton (z=-1.597) and Kennedy (z=-1.376) hold the most stable beliefs on the "role of chance" indicator, whereas Nixon (z=1.493) once again holds the most variable beliefs. In the next section, I examine "instrumental" or "choice" beliefs.

4.1.2 "Instrumental" Beliefs

The first "instrumental" belief examined is the I1 "master" belief, or presidential strategic orientation/preference for cooperation or conflict. Similar to the image belief, values on this index can range from -1 to +1 where higher values indicate a more cooperative orientation, and lower values indicate a more conflictual orientation. The scatterplot with monthly values on this

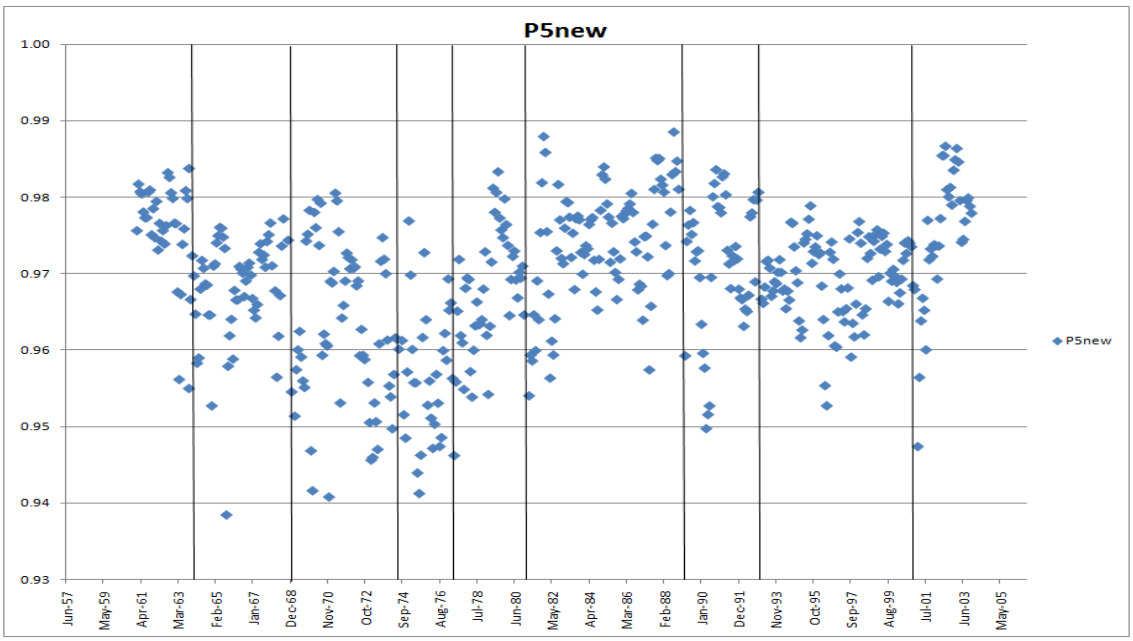

Figure 4.5: Monthly "Role of Chance"/P5 trends for U.S. Presidents, 1961 through 2003

belief index can be observed in Figure 4.6. Table 4.4 contains individual president and aggregate means and standard deviations for the "3 month moving average" values of the first five "instrumental" beliefs. The mean value for the "strategic orientation" belief is .605, and the standard deviation is .119. The slightly high value suggests that U.S. presidents tend to attribute more cooperative than conflictual behaviors to the self.

Though it is difficult to compare changes from one belief value to another (given how they are methodologically constructed), there may be exceptions in the case of beliefs such as the "image" and "strategic orientation" beliefs, which are calculated in the same way, albeit based on "other" references in the case of the "image" belief and "self" references in the case of the "strategic orientation" belief. Based upon the mean findings across these two beliefs, it appears that presidents see themselves and their policy preferences as being of a more cooperative nature than are those that they attribute to "others." This is not surprising, given Jervis's examination of cognitive dissonance, as well as attribution theory (both discussed in the literature review in

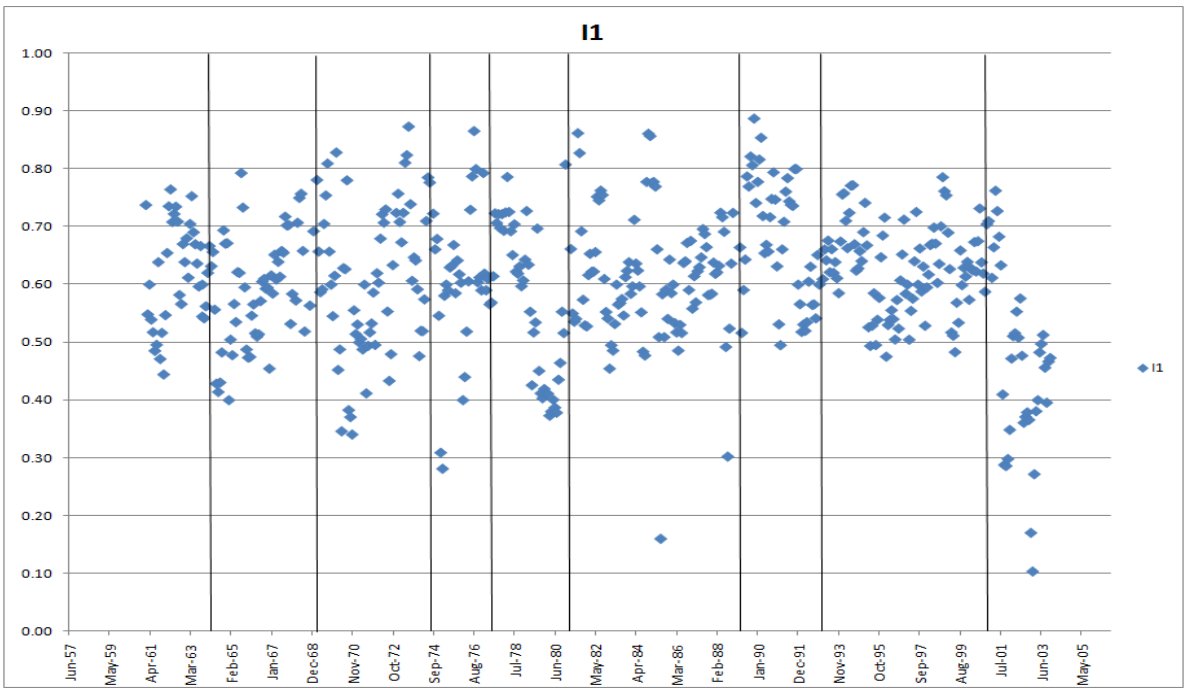

Figure 4.6: Monthly "Strategic Orientation"/I1 trends for U.S. Presidents, 1961 through 2003

Table 4.4: "Instrumental" Belief Descriptives Part I

President		I1	I2	I3	I4a	I4b
Kennedy	Mean	0.625	0.284	0.280	0.375	0.514
	N	33	33	33	33	33
	Std. Deviation	0.090	0.065	0.079	0.090	0.136
	Minimum	0.444	0.176	0.106	0.235	0.222
	Maximum	0.765	0.421	0.444	0.556	0.790
Johnson	Mean	0.590	0.277	0.213	0.410	0.578
	N	60	60	60	60	60
	Std. Deviation	0.091	0.061	0.064	0.091	0.084
	Minimum	0.400	0.133	0.105	0.207	0.414
	Maximum	0.793	0.402	0.417	0.600	0.750
Nixon	Mean	0.611	0.284	0.233	0.389	0.579
	N	64	64	64	64	64
	Std. Deviation	0.129	0.095	0.076	0.129	0.131
	Minimum	0.341	0.092	0.050	0.127	0.379
	Maximum	0.873	0.457	0.446	0.659	0.946
Ford	Mean	0.611	0.328	0.185	0.389	0.607
	N	28	28	28	28	28
	Std. Deviation	0.135	0.062	0.063	0.135	0.107
	Minimum	0.281	0.177	0.076	0.134	0.396
	Maximum	0.866	0.468	0.332	0.719	0.787
Carter	Mean	0.577	0.308	0.166	0.423	0.604
	N	47	47	47	47	47
	Std. Deviation	0.127	0.094	0.048	0.127	0.120
	Minimum	0.373	0.141	0.085	0.192	0.383
	Maximum	0.808	0.577	0.256	0.627	0.892

Figure 4.4 (cont.)

Reagan	Mean	0.612	0.293	0.227	0.388	0.527
	N	93	93	93	93	93
	Std. Deviation	0.108	0.075	0.066	0.108	0.091
	Minimum	0.160	-0.033	0.107	0.138	0.377
	Maximum	0.862	0.500	0.389	0.840	0.769
HW Bush	Mean	0.678	0.342	0.233	0.322	0.514
	N	46	46	46	46	46
	Std. Deviation	0.107	0.051	0.080	0.107	0.096
	Minimum	0.495	0.184	0.106	0.113	0.282
	Maximum	0.887	0.424	0.452	0.505	0.771
Clinton	Mean	0.628	0.302	0.237	0.372	0.558
	N	95	95	95	95	95
	Std. Deviation	0.074	0.041	0.048	0.074	0.094
	Minimum	0.475	0.204	0.124	0.214	0.390
	Maximum	0.786	0.403	0.349	0.525	0.901
W Bush	Mean	0.453	0.209	0.122	0.547	0.680
	N	34	34	34	34	34
	Std. Deviation	0.149	0.101	0.054	0.149	0.144
	Minimum	0.103	-0.018	0.044	0.238	0.311
	Maximum	0.763	0.383	0.250	0.897	0.919
Total	Mean	0.605	0.293	0.217	0.395	0.566
	N	500	500	500	500	500
	Std. Deviation	0.119	0.078	0.073	0.119	0.116
	Minimum	0.103	-0.033	0.044	0.113	0.222
	Maximum	0.887	0.577	0.452	0.897	0.946

chapter 2), which would suggest that *the self* is often perceived as a "good" person who generally wishes for positive outcomes for both the self and others, whereas *others* are often seen as less trustworthy and more exploitative, acting only out of their own, narrow self interest.

Presidential mean z-scores for the first 6 "instrumental" beliefs (I1 through I4b) can be found in Table 4.5. The president with the strongest cooperative orientation is George H.W. Bush ("Bush 41": z=1.301), and the president with the strongest conflict orientation is his son, George W. Bush (z=-2.369). Bush 43's score here is particularly low, being more than 2 standard deviations from the mean. No other president yields a z-score less than -1 or greater than +1. Presidential standard deviation z-scores for the first 5 "instrumental" beliefs can be found in Table 4.6. On the strategic orientation measure, the president with the most stable "strategic orientation" beliefs is Clinton (z=-1.551), whose mean value on this index is fairly

average, whereas the most unstable beliefs are held by Bush 43 (z=1.503) who, as noted above, has a very conflictual orientation overall.

Table 4.5: Mean Z-Scores for "Instrumental" Belief Indices Part I

	I1 mean	I1 z-score	I2 mean	I2 z-score	I3 mean	I3 z-score	I4a mean	I4a z-score	I4b mean	I4b z-score
Kennedy	0.625	0.438	0.284	-0.200	0.280	**1.490**	0.375	-0.438	0.514	**-1.112**
Johnson	0.590	-0.133	0.278	-0.383	0.213	0.052	0.410	0.133	0.578	0.077
Nixon	0.611	0.208	0.284	-0.200	0.233	0.491	0.389	-0.208	0.579	0.098
Ford	0.611	0.195	0.328	0.953	0.185	-0.557	0.390	-0.195	0.607	0.632
Carter	0.577	-0.348	0.308	0.428	0.166	-0.955	0.423	0.348	0.604	0.563
Reagan	0.612	0.220	0.293	0.033	0.227	0.345	0.388	-0.220	0.527	-0.862
HW Bush	0.678	**1.301**	0.342	**1.319**	0.233	0.483	0.322	**-1.301**	0.514	**-1.103**
Clinton	0.628	0.487	0.302	0.256	0.237	0.560	0.372	-0.487	0.558	-0.290
W Bush	0.453	**-2.369**	0.209	**-2.207**	0.122	**-1.909**	0.547	**2.369**	0.680	**1.997**
Total	0.599		0.292		0.211		0.401		0.573	
St. Dev.	0.061		0.038		0.046		0.061		0.054	

Table 4.6: Standard Deviation Z-Scores for "Instrumental" Belief Indices Part I

	I1 st dev	I1 z-score	I2 st dev	I2 z-score	I3 st dev	I3 z-score	I4a st dev	I4a z-score	I4b st dev	I4b z-score
Kennedy	0.090	-0.902	0.065	-0.339	0.079	**1.179**	0.090	-0.902	0.136	**1.106**
Johnson	0.091	-0.869	0.061	-0.491	0.064	-0.005	0.091	-0.869	0.084	**-1.244**
Nixon	0.129	0.675	0.095	**1.117**	0.076	0.940	0.129	0.675	0.131	0.885
Ford	0.135	0.924	0.062	-0.472	0.063	-0.082	0.135	0.924	0.107	-0.223
Carter	0.127	0.616	0.094	**1.078**	0.048	**-1.294**	0.127	0.616	0.120	0.395
Reagan	0.108	-0.179	0.075	0.146	0.066	0.093	0.108	-0.179	0.091	-0.935
HW Bush	0.107	-0.215	0.051	-0.981	0.080	**1.297**	0.107	-0.215	0.096	-0.711
Clinton	0.074	**-1.551**	0.041	**-1.448**	0.048	**-1.276**	0.074	**-1.551**	0.094	-0.777
W Bush	0.149	**1.503**	0.101	**1.389**	0.054	-0.852	0.149	**1.503**	0.144	**1.503**
Total	0.112		0.072		0.064		0.112		0.111	
St. Dev.	0.025		0.021		0.012		0.025		0.022	

The second "instrumental" (I2) belief examines leaders' tactical orientation, or "the tactics for *how goals and objectives can be pursued most effectively*" (Walker, Schafer, and Young 1998, 180, emphasis in original). These "I2" beliefs are plotted in Figure 4.7. The mean tactical orientation score across presidents for all periods examined is .293, and the standard deviation of these scores is .078. Given that this index ranges from -1 to +1, this mean value

suggests that presidents generally hold a more cooperative over conflictual tactical orientation. The president with the most cooperative orientation is Bush 41 (z=1.319) and the president with the most conflictual orientation is Bush 43 (z=-2.207), similar to the findings for the strategic orientation belief index. The most stable "tactical orientation" beliefs are held by Clinton (z=-1.448), whereas the most unstable beliefs are held by Bush 43 (z=1.389), Nixon (z=1.117), and Carter (z=1.078).

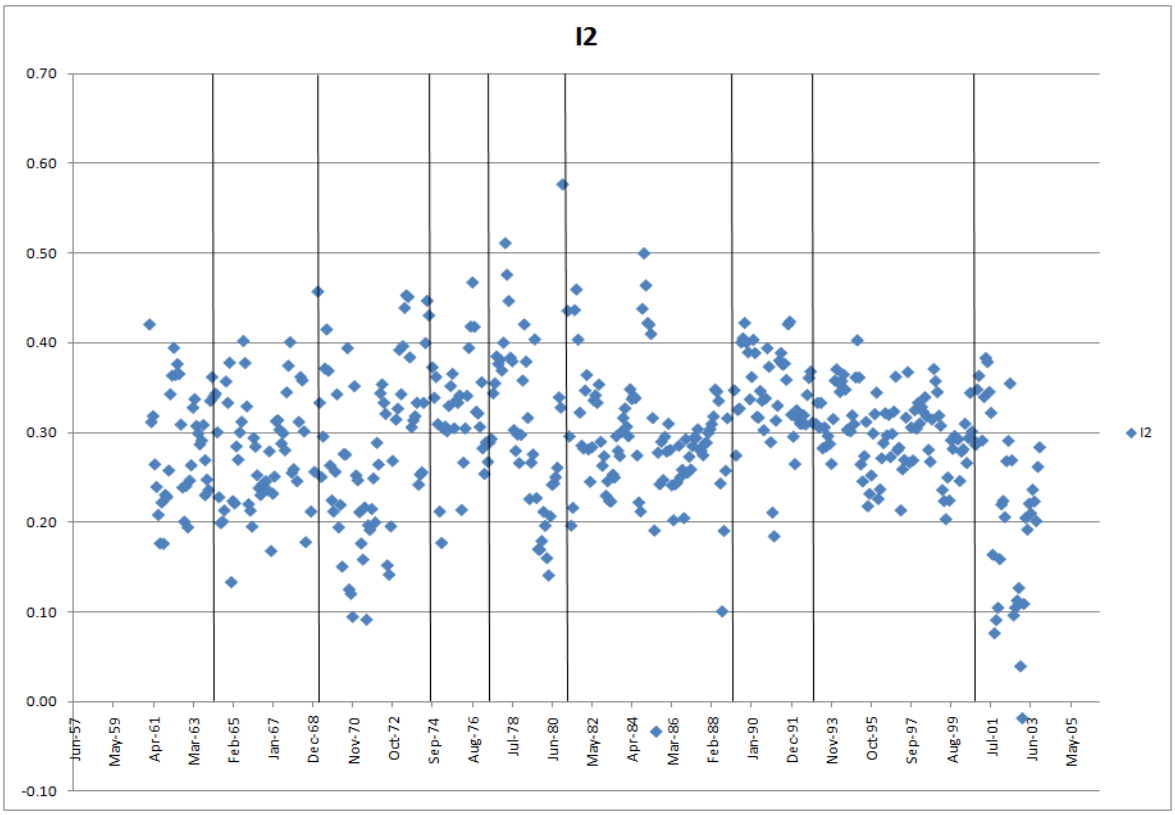

Figure 4.7: Monthly "Tactical Orientation"/I2 trends for U.S. Presidents, 1961 through 2003

The third "instrumental" index (I3) is a leader's risk orientation. This belief index is calculated similar to the P3 index using the IQV score, but again, is based on self versus other references. Values here fall on a scale theoretically ranging from 0—indicating a fairly unpredictable set of self behavioral references and thus an extremely "risk averse" president—to +1—representing a fairly predictable set of self references and thus an extremely "risk

acceptant" president. These beliefs are plotted on Figure 4.8. The mean "3 month rolling average" value across presidents is .217, and the standard deviation is .073. The fairly low mean score suggests that presidents tend to be more risk averse than risk acceptant through their demonstration of a fairly inconsistent, unpredictable range of self references.

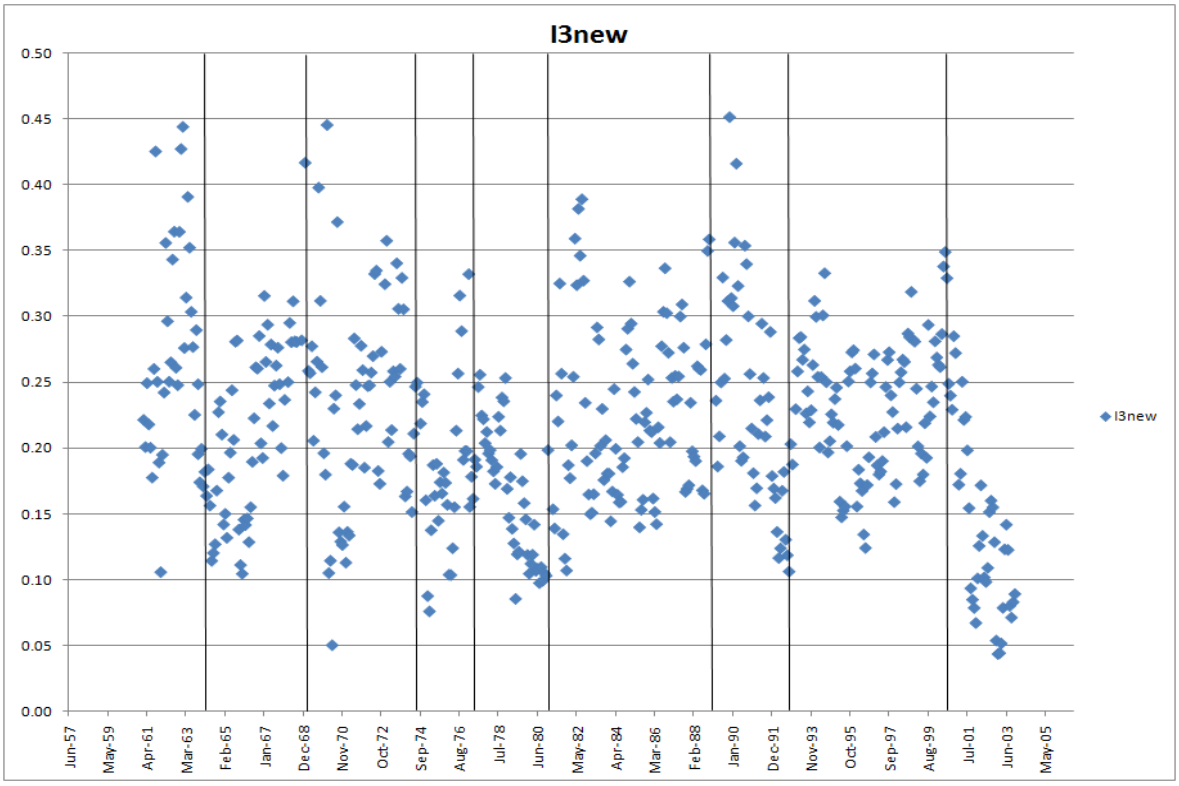

Figure 4.8: Monthly "Risk Orientation"/I3 trends for U.S. Presidents, 1961 through 2003

The president who is most "risk acceptant" in this sense is Kennedy (z=1.490), and the president who is more "risk averse" is Bush 43 (z=-1.909). The most stable "risk acceptant" beliefs are held by Carter (z=-1.294) and Clinton (z=-1.276), and the most unstable beliefs are held by Bush 43 (z=1.389) and Nixon (z=1.117).

The next "instrumental" index (I4a) examines the "timing of conflict vs. cooperation." Recall that belief values on this index range from 0 to +1, where lower values suggest a low propensity to shift between cooperative and conflictual actions, and higher values indicate a

higher shift propensity. The scatterplot for this belief index can be found in Figure 4.9. The mean on this index is .395, and the standard deviation is .119. The president with the highest shift propensity is Bush 43 (z=2.369) and the president with the lowest shift propensity is Bush 41 (z=-1.301). In other words, for Bush 43, "the timing of action in assessing the risk of political acts" is relatively important, whereas for Bush 41 "the strategic approach to goals is more likely to be the dominant strategy no matter what others in the political universe say or do" (Walker, Schafer, and Young, 1998: 181). Clinton (z=-1.551) is most stable regarding his propensity to shift between the use of cooperation and conflict, whereas Bush 43 (z=1.503) is, once again, the most unstable president.

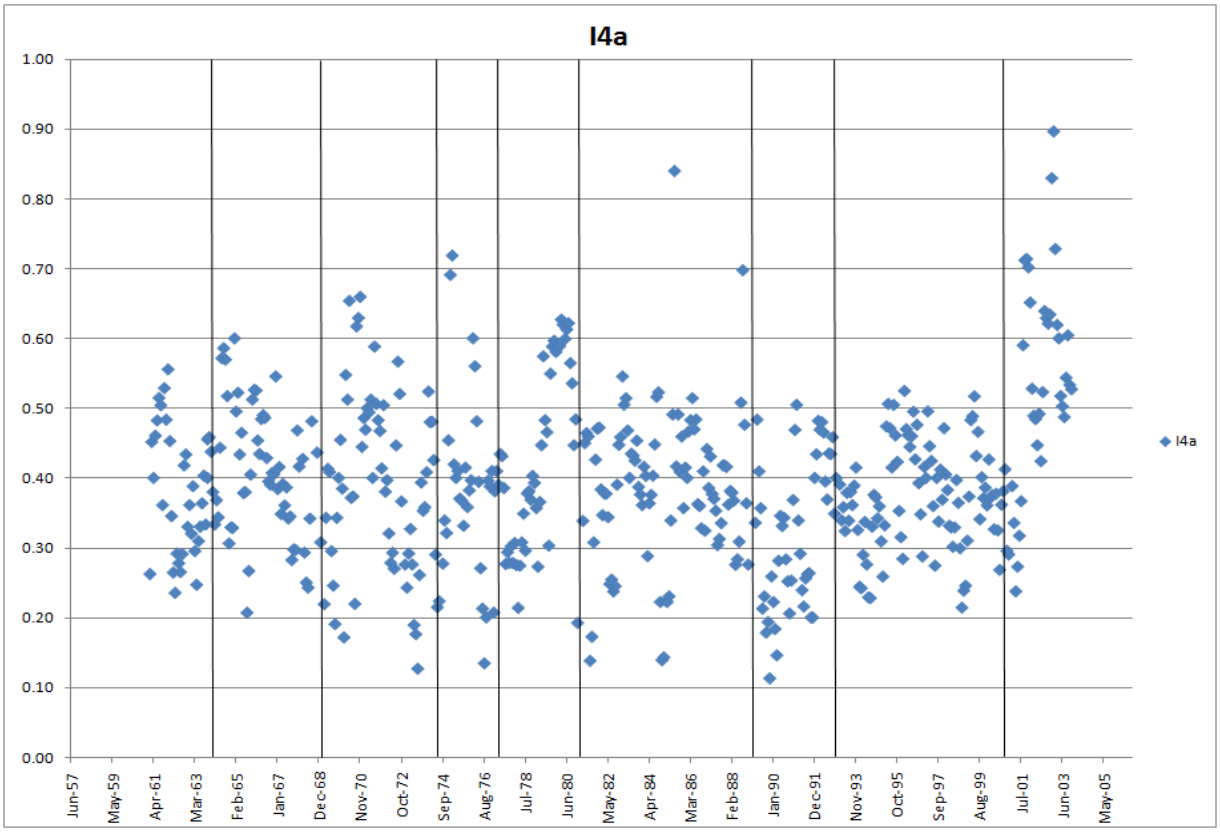

Figure 4.9: Monthly "Timing of Conflict Vs. Cooperation"/I4a trends for U.S. Presidents, 1961 through 2003

The second "I4" belief examined is the I4b index, or the "timing of words vs. deeds." Similar to the "timing of conflict vs. cooperation" belief index, this index ranges from 0 to +1. Here a 0 indicates an extremely low propensity to shift between words and deeds, whereas a +1 value would indicate the other extreme of a high shift propensity. The scatterplot can be found in Figure 4.10. The cross-presidential mean, "3 month rolling average" value on this index is .566, with a standard deviation of .116. Bush 43 yields the highest propensity to shift between words and deeds (z=1.997), whereas Kennedy (z=-1.112) and Bush 41 (z=-1.103) yield the lowest shift propensity. That is to say, Bush 43 demonstrates "a more risk-averse orientation toward the undesirable outcomes of submission or deadlock" whereas Bush 41 and Kennedy are "relatively acceptant regarding the risks associated with the direction of the distribution" (regarding the use of either words or deeds: Walker et al., 1998: 181).

Johnson (z=-1.244) is the most stable amongst the presidents examined regarding his tendency to shift between words and deeds from month to month, whereas Bush 43 (z=1.503) and Kennedy (z=1.106)—the two leaders with most extreme, opposing mean scores on this index—are the most unstable.

The final beliefs examined are the "I5," or "utility of means" beliefs. Recall from the previous chapter that these include both normatively "positive" and "negative" self-attributed actions. Descriptive data for and across presidents regarding this second set of "instrumental" beliefs can be found in Table 4.7. All "utility of means" belief values can theoretically range from 0 (extremely low utility for a given belief) to +1 (extremely high utility for a given belief). Recall from the previous chapter that these beliefs are all calculated as a percentage of all "means" usages. That is to say, if a leader only states that he will "punish" others, then his "punish" preference (I5pu) value would be a 1, and all other belief values will equal 0. If he uses

"punish" verbs half the time and "reward" verbs the other half of the time, then each of these beliefs (I5pu and I5re, respectively) will yield a value of .5, and all other belief indices will yield a 0 value. Scatterplots for these beliefs can be found in Figures 4.11 through 4.16.

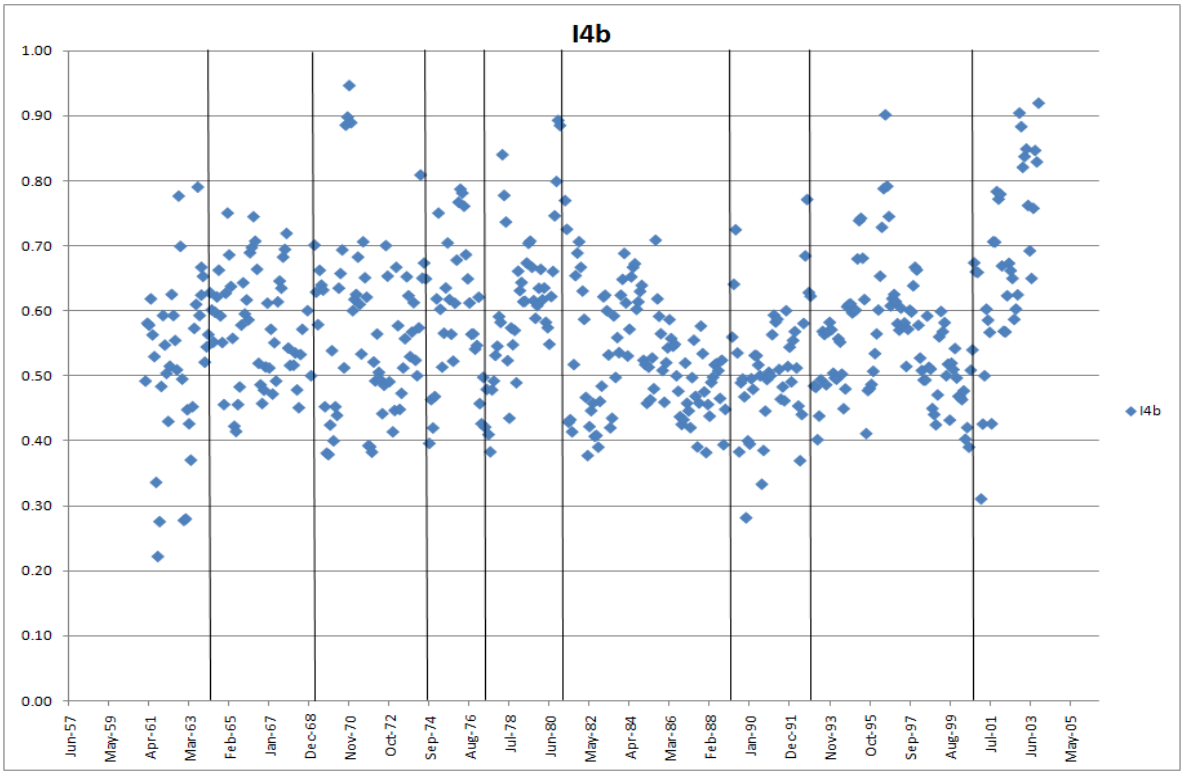

Figure 4.10: Monthly "Timing of Words Vs. Deeds"/I4b trends for U.S. Presidents, 1961 through 2003

Table 4.7: "Instrumental" Belief Descriptives Part II

President		I5ap	I5pr	I5re	I5op	I5th	I5pu
Kennedy	Mean	0.583	0.052	0.177	0.088	0.019	0.080
	N	33	33	33	33	33	33
	Std. Deviation	0.069	0.029	0.058	0.032	0.011	0.037
	Minimum	0.417	0.012	0.042	0.036	0.000	0.016
	Maximum	0.720	0.120	0.269	0.161	0.042	0.181
Johnson	Mean	0.526	0.076	0.193	0.081	0.028	0.096
	N	60	60	60	60	60	60
	Std. Deviation	0.062	0.028	0.034	0.029	0.019	0.034
	Minimum	0.421	0.000	0.128	0.019	0.000	0.034
	Maximum	0.692	0.135	0.289	0.152	0.091	0.200
Nixon	Mean	0.537	0.076	0.193	0.071	0.026	0.098
	N	64	64	64	64	64	64
	Std. Deviation	0.077	0.040	0.057	0.028	0.023	0.054
	Minimum	0.333	0.000	0.095	0.000	0.000	0.020
	Maximum	0.714	0.173	0.389	0.143	0.107	0.268

Table 4.7 (cont.)

President		I5ap	I5pr	I5re	I5op	I5th	I5pu
Ford	Mean	0.485	0.092	0.229	0.094	0.026	0.075
	N	28	28	28	28	28	28
	Std. Deviation	0.071	0.025	0.034	0.049	0.015	0.030
	Minimum	0.328	0.058	0.158	0.000	0.000	0.019
	Maximum	0.621	0.168	0.289	0.236	0.060	0.141
Carter	Mean	0.466	0.104	0.218	0.101	0.026	0.084
	N	47	47	47	47	47	47
	Std. Deviation	0.061	0.035	0.064	0.033	0.018	0.035
	Minimum	0.339	0.033	0.107	0.046	0.000	0.017
	Maximum	0.576	0.219	0.423	0.204	0.067	0.141
Reagan	Mean	0.540	0.079	0.187	0.084	0.034	0.076
	N	93	93	93	93	93	93
	Std. Deviation	0.064	0.027	0.046	0.031	0.018	0.030
	Minimum	0.400	0.019	0.060	0.029	0.000	0.012
	Maximum	0.678	0.163	0.338	0.186	0.080	0.180
HW Bush	Mean	0.539	0.105	0.195	0.075	0.024	0.062
	N	46	46	46	46	46	46
	Std. Deviation	0.077	0.036	0.040	0.041	0.014	0.025
	Minimum	0.354	0.024	0.113	0.010	0.000	0.011
	Maximum	0.718	0.172	0.302	0.160	0.070	0.146
Clinton	Mean	0.549	0.069	0.197	0.082	0.021	0.082
	N	95	95	95	95	95	95
	Std. Deviation	0.051	0.022	0.035	0.022	0.011	0.021
	Minimum	0.376	0.013	0.131	0.037	0.000	0.037
	Maximum	0.650	0.133	0.307	0.140	0.070	0.144
W Bush	Mean	0.418	0.110	0.199	0.080	0.052	0.141
	N	34	34	34	34	34	34
	Std. Deviation	0.078	0.029	0.046	0.022	0.025	0.055
	Minimum	0.276	0.073	0.117	0.038	0.021	0.039
	Maximum	0.563	0.194	0.311	0.131	0.110	0.255
Total	Mean	0.524	0.082	0.197	0.083	0.028	0.086
	N	500	500	500	500	500	500
	Std. Deviation	0.077	0.034	0.047	0.032	0.019	0.040
	Minimum	0.276	0.000	0.042	0.000	0.000	0.011
	Maximum	0.720	0.219	0.423	0.236	0.110	0.268

The first "utility of means" belief is "support" (I5ap)[33], and the cross-presidential "3 month moving average" mean is .524, with a standard deviation of .077. Given that a high mean value on one indicator suggests low mean values on the other "utility of means" belief indices, this is a fairly notable finding. This suggests that, of all the possible means categories from

[33] This indicator has traditionally been referred to as "I5ap," following from its previously being considered a measure of "appeal/support." However, in the most recent theoretical update of the operational code, Schafer and Walker (2006b 32, 37-38) simply refer to this measure as indicating "support." As such, I will maintain convention by referring to this indicator as "I5ap," but will discuss it as referring to the provision of support by the speaker to "others."

which a leader might choose, the means of offering verbal "support" is used, on average, more than half of the time.

Individual presidential mean z-scores for the "utility of means" instrumental beliefs can be found in Table 4.8. The president who uses support most frequently, and thus finds the most utility in the offering of support, is Kennedy (z=1.338), whereas Bush 43 (z=-1.941) uses support least frequently, and thus finds the least amount of utility in this means. Standard deviation z-scores for these beliefs are found in Table 4.9. The president who maintains the most stable use of support over time is Clinton (z=-1.857), whose mean value is fairly average compared to other presidents. The presidents with the most unpredictable usage of support are Bush 43 (z=1.124), Nixon (z=1.010), and Bush 41 (z=1.001). Monthly I5ap values are plotted out over time in Figure 4.11.

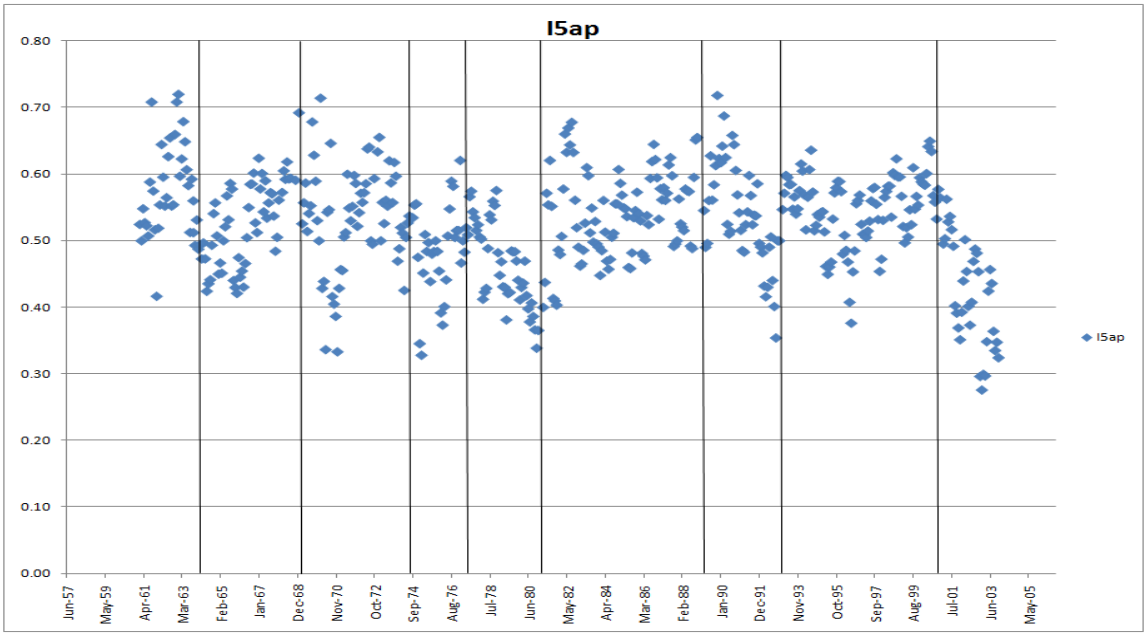

Figure 4.11: Monthly "Appeal"/I5ap trends for U.S. Presidents, 1961 through 2003
Note: All "I5" indices evaluate the utility of various specific means "in the exercise of power" (Walker, Schafer, and Young, 1998).

Table 4.8: Mean Z-Scores for "Instrumental" Belief Indices Part II

	I5ap mean	I5ap z-score	I5pr mean	I5pr z-score	I5re mean	I5re z-score	I5op mean	I5op z-score	I5th mean	I5th z-score	I5pu mean	I5pu z-score
Kennedy	0.583	**1.338**	0.052	**-1.685**	0.177	**-1.379**	0.088	0.451	0.019	-0.938	0.080	-0.373
Johnson	0.526	0.203	0.076	-0.437	0.193	-0.379	0.081	-0.344	0.028	-0.053	0.096	0.345
Nixon	0.537	0.414	0.076	-0.478	0.194	-0.334	0.071	**-1.374**	0.026	-0.297	0.098	0.416
Ford	0.485	-0.621	0.092	0.380	0.229	**1.923**	0.094	**1.031**	0.026	-0.236	0.075	-0.585
Carter	0.466	-0.987	0.104	**1.021**	0.218	**1.243**	0.101	**1.868**	0.026	-0.226	0.084	-0.204
Reagan	0.540	0.473	0.079	-0.301	0.187	-0.725	0.084	0.011	0.034	0.517	0.076	-0.528
HW Bush	0.539	0.465	0.105	**1.047**	0.195	-0.238	0.075	-0.998	0.024	-0.460	0.062	**-1.152**
Clinton	0.549	0.656	0.069	-0.837	0.197	-0.129	0.082	-0.193	0.021	-0.735	0.082	-0.266
W Bush	0.418	**-1.941**	0.110	**1.291**	0.199	0.019	0.080	-0.451	0.052	**2.430**	0.141	**2.347**
Total	0.516		0.085		0.199		0.084		0.029		0.088	
St. Dev.	0.050		0.019		0.016		0.009		0.010		0.023	

Table 4.9: Standard Deviation Z-Scores for "Instrumental" Belief Indices Part II

	I5ap st dev	I5ap z-score	I5pr st dev	I5pr z-score	I5re st dev	I5re z-score	I5op st dev	I5op z-score	I5th st dev	I5th z-score	I5pu st dev	I5pu z-score
Kennedy	0.069	0.137	0.029	-0.262	0.058	**1.084**	0.032	0.053	0.011	**-1.306**	0.037	0.114
Johnson	0.062	-0.673	0.028	-0.368	0.034	**-1.031**	0.029	-0.339	0.019	0.381	0.034	-0.134
Nixon	0.077	**1.010**	0.040	**1.761**	0.057	0.964	0.028	-0.412	0.023	**1.159**	0.054	**1.597**
Ford	0.071	0.372	0.025	-0.868	0.034	**-1.044**	0.049	**1.978**	0.015	-0.394	0.030	-0.489
Carter	0.061	-0.688	0.035	0.822	0.064	**1.592**	0.033	0.167	0.018	0.098	0.035	-0.098
Reagan	0.064	-0.425	0.027	-0.492	0.046	-0.027	0.031	-0.140	0.018	0.182	0.030	-0.515
HW Bush	0.077	**1.001**	0.036	0.963	0.040	-0.547	0.041	**1.021**	0.014	-0.629	0.025	-0.882
Clinton	0.051	**-1.857**	0.022	**-1.444**	0.035	-0.953	0.022	**-1.119**	0.011	**-1.174**	0.021	**-1.219**
W Bush	0.078	**1.124**	0.029	-0.111	0.046	-0.038	0.022	**-1.208**	0.025	**1.683**	0.055	**1.626**
Total	0.068		0.030		0.046		0.032		0.017		0.036	
St. Dev.	0.009		0.006		0.012		0.009		0.005		0.012	

The second "utility of means" belief is that of "promise" (I5pr). The scatterplot of monthly values on this belief are found in Figure 4.12, and cross-presidential mean value is .082, with a standard deviation of .034. Note the discrepancy between the high mean value for the "appeal" belief and the low mean value for the "promise" belief, where the latter is not used nearly as much by presidents as the former. The presidents who find the most utility in making promises are Bush 43 (z=1.297), Bush 41 (z=1.047), and Carter (z=1.021), whereas the president who finds the least amount of utility in promising is Kennedy (z=-1.685). The president with the most stable "promise" preference from month to month is Clinton (-1.444), and the president with the most unstable "promise" preference is Nixon (z=1.761).

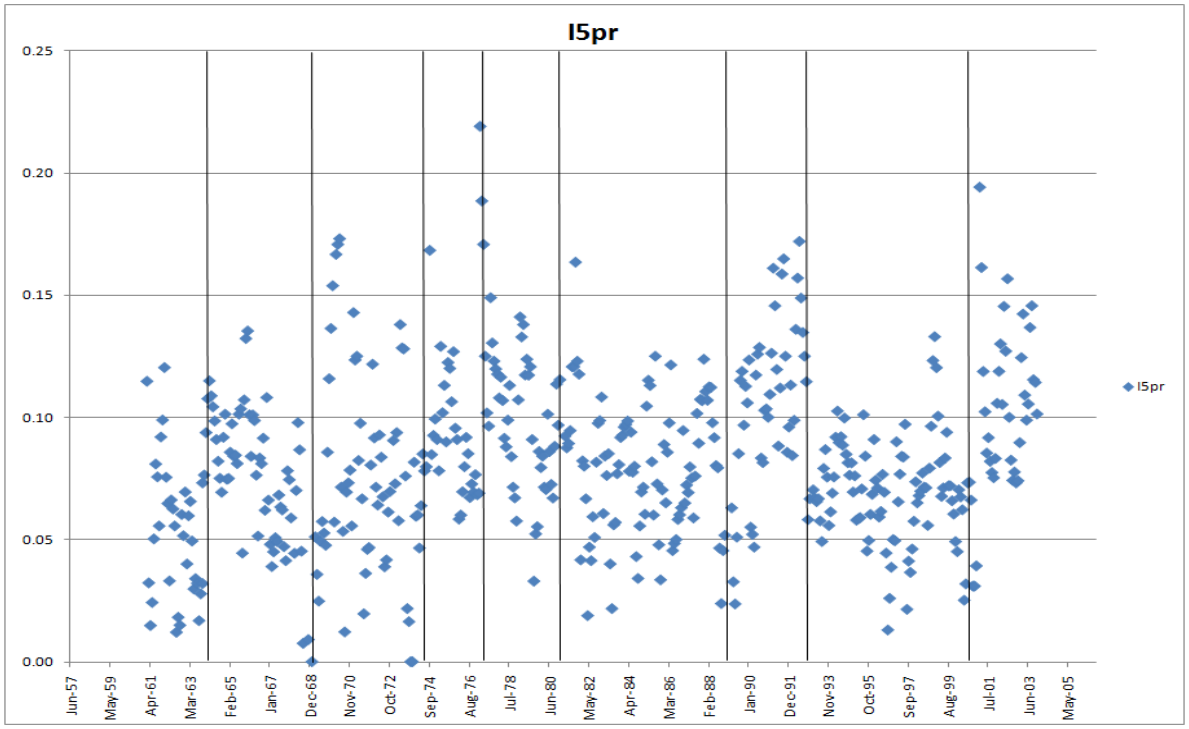

Figure 4.12: Monthly "Promise"/I5pr trends for U.S. Presidents, 1961 through 2003

The third "means" belief examines the use of rewards (I5re), and the cross-presidential mean value is .197, with a standard deviation of .047. The scatterplot of monthly I5re beliefs can be found in Figure 4.13.

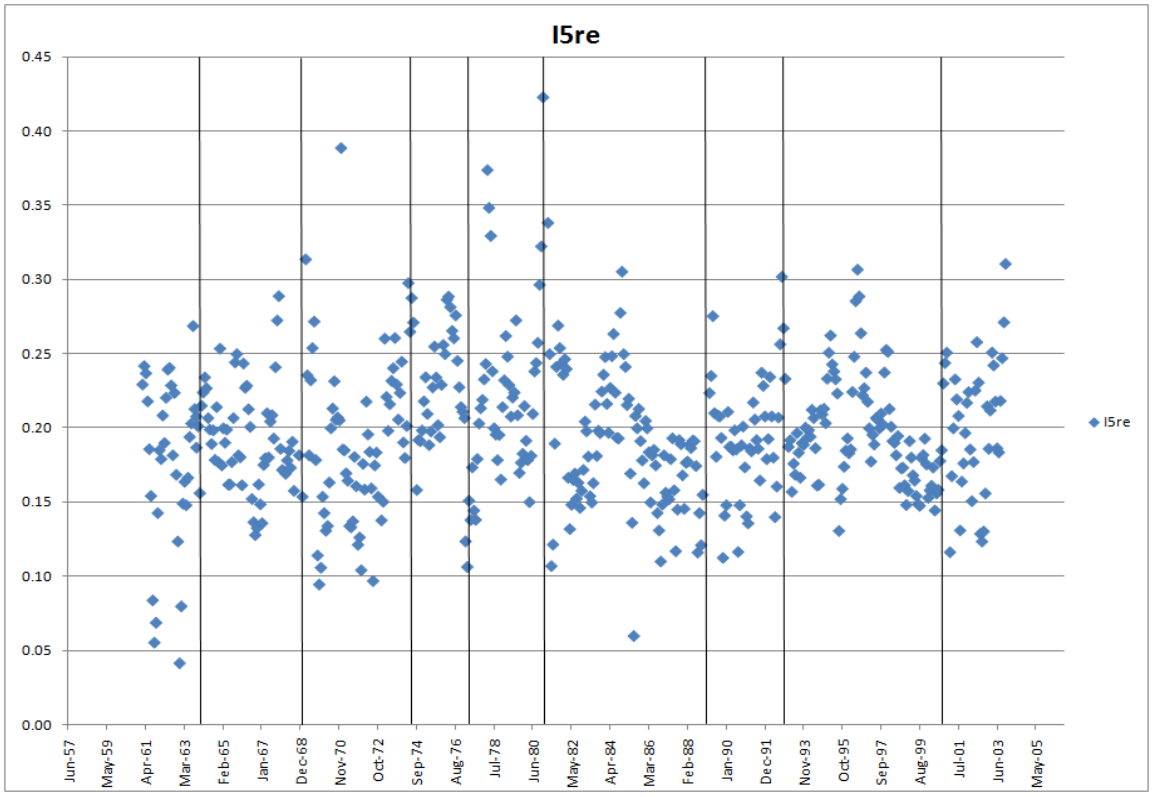

Figure 4.13: Monthly "Reward"/I5re trends for U.S. Presidents, 1961 through 2003

The presidents who most prefer the use of rewards are Ford (z=1.923) and his successor Carter (1.243), whereas the president who least frequently used rewards in his self-attributions is Kennedy (z=-1.397). The most stable reward beliefs are held by Ford (z=-1.044) and Johnson (z=-1.031), whereas the most variable reward beliefs are held by Carter (z=1.592) and Kennedy (z=1.084).

Fourth is the "oppose" (I5op) belief. The monthly scatterplot can be found in Figure 4.14. The mean I5op belief value is .083, with a standard deviation of .032. The presidents who most strongly prefer the use of the "oppose" attribution are Carter

(z=1.868) and Ford (z=1.031), and the president who finds the least amount of utility in the "oppose" belief is Nixon (z=-1.374). Though it may seem strange that Carter and Ford are listed as having the highest values across presidents on "conflictual" measure, keep in mind that this belief taps into the least aggressive form of a normatively "negative" statement made to others. As such, the use of an "oppose" attribution, as opposed to the use of a "threat" or referencing actual "punish" acts might be perceived as a leader taking a relatively dovish approach. The most stable "oppose" beliefs are held by Bush 43 (z=-1.208) and Clinton (z=-1.119), and the most unstable "oppose" beliefs are held by Ford (z=1.987) followed by Bush 41 (z=1.021). Note that this is the only belief in which Bush 43 yields a significantly stable monthly belief value.

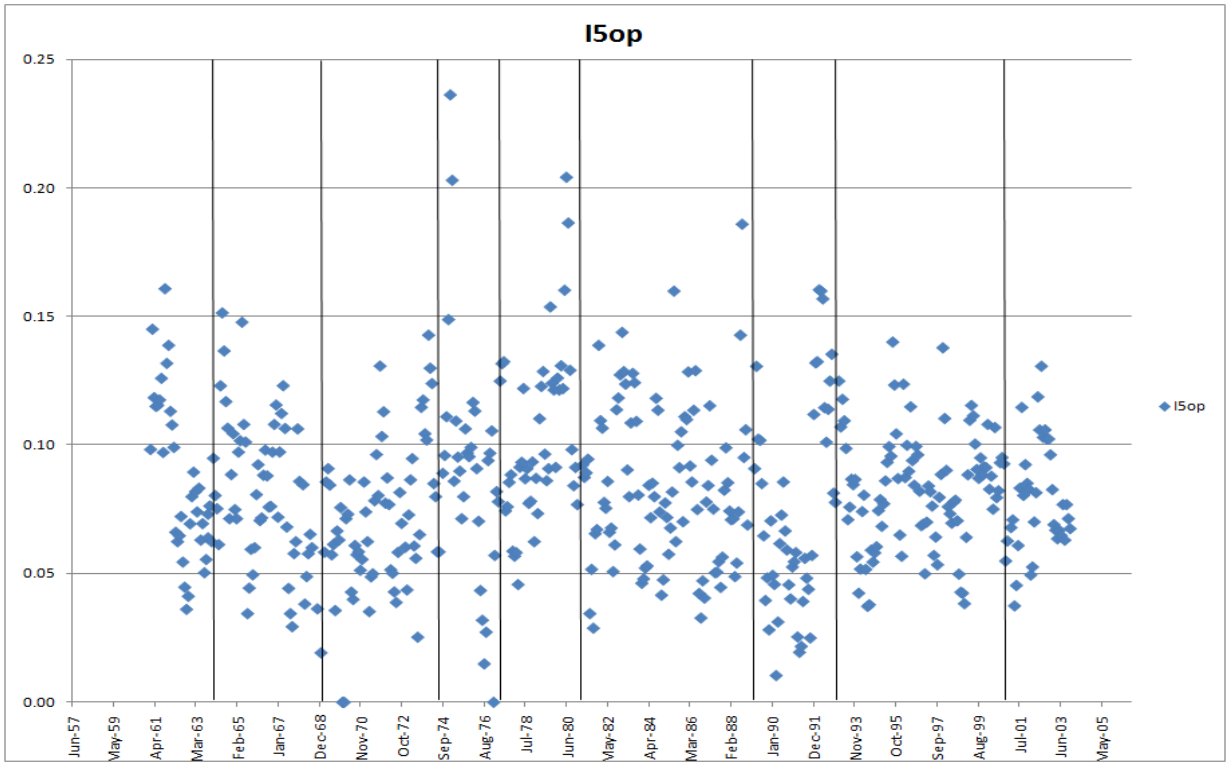

Figure 4.14: Monthly "Oppose"/I5op trends for U.S. Presidents, 1961 through 2003

Fifth is the "threat" (I5th) belief, which has a mean value of .028, with a standard deviation of .019. This belief is notable for holding the lowest mean of all "utility of beliefs" means, and thus being the least used reference amongst those examined for these presidents. The president who most strongly prefers the use of threats is Bush 43 (z=2.430), and though no president yields a "significantly" negative mean z-score (less than -1), Kennedy comes closest, demonstrating the lowest utility in the use of threats (z=-.938). The most stable threat beliefs are held by Kennedy (z=-1.306) and Clinton (z=-1.174), and the most unstable threat beliefs are held by Bush 43 (z=1.683) and Nixon (z=1.159). The monthly scatterplot of I5th belief values can be found in Figure 4.15.

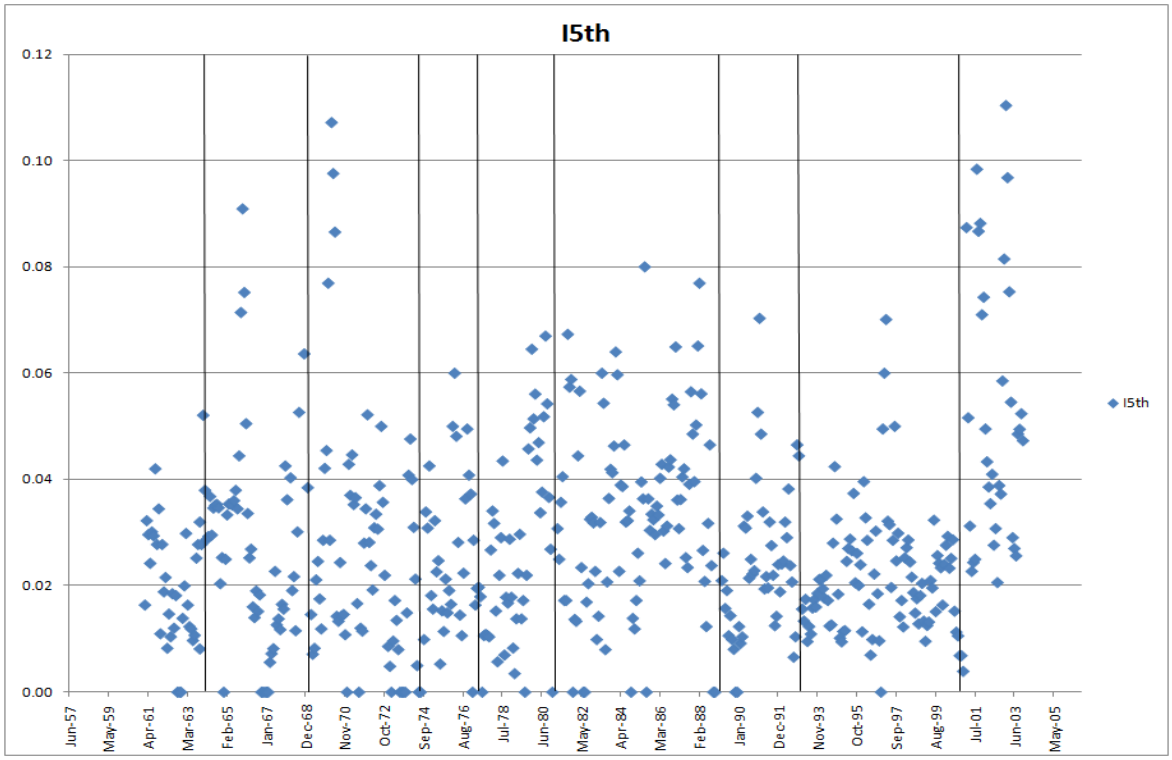

Figure 4.15: Monthly "threat"/I5th trends for U.S. Presidents, 1961 through 2003

The final "utility of means" belief is the "punish" belief (I5pu). The scatterplot can be found in Figure 4.16. The mean value on this index across presidents is .086, and

the standard deviation is .040. The president viewing the most utility in punishing is Bush 43 (z=2.347), whereas the president viewing the least utility in punishing is Bush 41 (z=-1.152). The most stable punish beliefs are held by Clinton (z=-1.219), and the most unstable beliefs are held by Bush 43 (z=1.626) and Nixon (z=1.597).

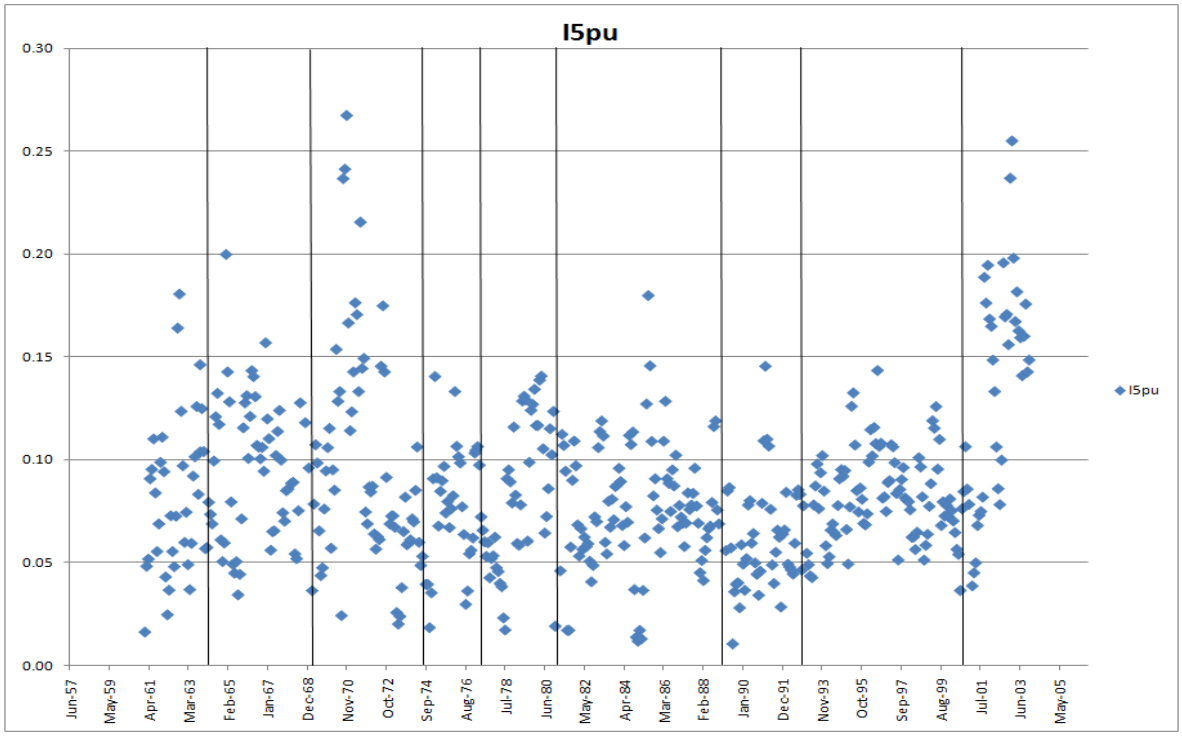

Figure 4.16: Monthly "punish"/I5pu trends for U.S. Presidents, 1961 through 2003

4.2 Discussion

On the whole, there are a few notable findings in the above analyses. In terms of cross-presidential mean values, as mentioned earlier, it is difficult to make cross-belief comparisons for methodological reasons. However, it is notable that presidents tend to view themselves in a more positive light than they do others. This follows Jervis's expectations regarding self- versus other-perceptions via the lens of cognitive dissonance. Further, the extremely high role of chance held by presidents is striking, suggesting that in general, presidents believe that the self has a fairly limited role in world affairs, given

the unpredictability of others and the self's fairly low level of control. Given feelings of control specifically, it is also notable that presidents tend to pick up where their predecessors leave off, which is not something that I test statistically here, but is fairly evident from the plot in Figure 4.4. Why this happens and what this means for expectations regarding presidential beliefs is something that may require additional future attention.

Regarding instrumental beliefs, presidents tend to be fairly risk averse, behaving in a stable and predictable manner at a given point in time. Further, as discussed previously, presidents tend to place far more emphasis on the use of "support" versus any other "means" category examined, employing these means the majority of the time. Support is the weakest form of a "cooperative" gesture examined via the operational code, suggesting that the "default" approach that presidents will take in a given situation is to present oneself as cooperative with others, but only as modestly cooperative, not going so far as to make promises or to actually provide reward incentives to others' behavior.

Regarding individual presidential differences, George W. Bush seems to be a true outlier. Not only does he demonstrate one of the most extreme mean values on 12 of the 16 indicators examined, but he also demonstrates the most monthly variation in beliefs on 10 indicators. Bush 43's mean belief values suggest a reflection of a hostile world, where conflict is a fairly permanent phenomena and unpredictability is the norm. He also strongly prefers conflict over cooperation, and to respond to international unpredictability with in-kind unpredictability. Taken together, these beliefs seem to color Bush 43 as a hard-line "realist" president.

In terms of mean "philosophical" belief values, at the other end of the spectrum from George W. Bush is Gerald Ford. Ford's scores reflect a perception of the "other" as friendly, a belief in the temporary nature of conflict, and a perception of the "other" as being predictable, all while feeling high levels of control over events and seeing chance as only playing a relatively minor role in international outcomes. Further, Ford yields significant mean values on the "reward" and "oppose" utility of means "instrumental" indices, suggesting a leader who prefers the use of the tastiest carrots, and the least painful sticks. Thus, based upon their belief scores, Ford appears to be more of a "cooperative internationalist" in relation to the "militant internationalist" George W. Bush (Wittkopf 1994).

Regarding instrumental beliefs, Bush 43's opposite appears, interestingly, to be his own father. George H.W. Bush yields significant "instrumental" belief values indicating a preference for cooperation over conflict, and a tendency to maintain a fairly stable "shift propensity" regarding the use of conflict vs. cooperation and words vs. deeds. In contrast to Bush 43 in terms of belief variability is Clinton, who for 12 of the 16 belief indicators yields extremely stable beliefs from month to month.

CHAPTER 5: HIERARCHICAL BELIEF CHANGE AND THE INTER-RELATIONSHIP OF U.S. PRESIDENTIAL BELIEFS

In addition to the broad trends evaluated in chapter 4, existing works on political attitude and belief change have generated a number of testable hypotheses regarding how and why beliefs behave the way that they do. However, as discussed in chapter 2, these works have provided little in the way of large-scale, empirical support for these hypotheses. Starting here, and throughout the remained of the dissertation, I will focus on testing these types of hypotheses using, amongst other things, the tool of the quantitatively developed operational code measures outlined previously.

5.1 Hypotheses

5.1.1 The Nature of Learning for Central Versus Peripheral Beliefs

Jervis (1976) notes that the centrality of one's beliefs plays an important role in terms of learning. He argues that if a given belief is central to one's identity, then despite exposure to potentially disconfirming information, this belief will be much more likely to remain stable than will a belief that holds a more marginal level of importance to the self's identity (297). He likens this to the way in which science works, where small, marginal changes in a prevailing hypothesis are the most likely changes to occur. Only when "large amounts of intractable data" exist do we completely replace "important hypotheses" and theories (297-298). Treating "core beliefs" as analogous with "important hypotheses," more peripheral beliefs may shift and change far more easily, akin to lesser hypotheses that have not been fully established, while the more crucial hypotheses remain unaltered. He further argues that this fact does not reflect a "pathological attempt to protect a psychologically satisfying view of the world," so much

as a rational means of understanding and interpreting changes in reality, given that we behave as "naïve scientists" in this process.

To provide an example, Jervis notes that "a person's view of himself is usually highly central and will be maintained at the cost of altering several other elements. People usually believe that they are just and fair. If evil has been done, they cannot have done it. And if they did it, it cannot be evil" (299). Jervis argues that this tendency "helps explain why people often fail to see the basic causes of undesired events and instead focus on the supposedly idiosyncratic acts of a few individuals," and also explains the prevalence of conspiracy theories amongst policymakers (300). Following from this, people may come up with very strange justifications for perceived occurrences, yet still be acting somewhat "rationally."

Tetlock (1991) sums up much of the work on "belief systems," and similarly suggests that some beliefs are more central than others, and that these central beliefs serve different purposes from, and behave differently than do less important beliefs. He argues that "foreign policy belief systems are organized hierarchically with fundamental assumptions and policy objectives at the apex of the system, strategic policy beliefs and preferences at an intermediate level, and tactical beliefs and preferences at the base of the system" (28).[34] Regarding learning, following from Jervis's discussion, Tetlock suggests that "most learning takes place at the level of tinkering with tactics. Policy makers rarely have the time or the inclination to start questioning the fundamental premises of policy;

[34] Though Tetlock refers to strategic beliefs as "second order" beliefs on the belief hierarchy, they are certainly more important than the tactical beliefs that Tetlock refers to, or any number of other potential beliefs that are examined by the operational code. As such, I include them here as relatively "central," following from Walker and Schafer's (2006) discussion, though perhaps as somewhat less central than one's fundamental view of the outside world.

they are, however, willing to make frequent tactical adjustments to cope with unforeseen events."

From the above, I expect that core, or central beliefs of political leaders will be more stable than will other types of beliefs, and from this, the first hypothesis that I test is the following:

H1: Beliefs more central to policy-makers (image of the other [P1], strategic orientation [I1], and Feelings of Control [P4] beliefs) are more stable than are less central beliefs.

The current re-formulation of the operational code *does not* treat this construct as an intrinsically "hierarchical and internally consistent belief system" as George (1969) and Holsti (1977) had originally theorized (Walker, Schafer, and Young 1998, 177).[35] However, it does hold that these beliefs "are related in a hierarchical order." At the top of this hierarchy, according to Walker et al., are one's strategic orientation (I1) and one's view regarding the fundamental nature of politics, or the "image of the other" (P1). As such, in the automated content analyzed version of the operational code, all other indices are "disaggregations of these two indices into different measures of central tendency, balance, and dispersion" (Walker et al. 1998, 177).

Beyond these two indices, the feelings of control (P4) measure is additionally seen to be of key importance, as this belief evaluates the self's perceptions concerning the "locus of control" in international politics (does control lie with the self [ego] or with the other [alter]?), which is of critical importance in determining one's preference ordering of potential conflict outcomes, as evaluated, for instance, through game theoretic models

[35] Note that I assume, and later in this chapter will test the idea that one's operational code belief system may be more or less "internally consistent" depending on the psychological pre-dispositions of the individual and one's specific experiences in office.

(see Marfleet and Walker 2006). Walker and Schafer (2006) conceptualize these three indices (P1, I1, and P4) as the "master beliefs" (12). Following from this convention, here I also treat: 1) the fundamental nature of politics/image of the external political environment (P1); 2) strategic orientation (I1), and 3) feelings of control (P4) as policymakers' "central" or "master" beliefs. I do this as these beliefs are, amongst the 17 operational code indices, hypothesized to be the most central and important to political leaders' overall belief systems, and thus best reflect the "central beliefs" as discussed by Jervis, Tetlock, Levy, and others.

A problem in evaluating learning, Tetlock (1991) notes, is deciphering when "fundamental learning" occurs, versus more secondary forms of learning. He states that "debates over levels of learning are unresolvable," and that "there is ultimately no well-defined evidential standard for distinguishing among levels of learning" (31). However, for the purposes of analysis here, we will treat notable changes in "central" operational code indices from month to month as more an indication of "fundamental learning" than that of similar changes in other indices. I will thus use this distinction in order to interpret the types of learning that are being evaluated in hypothesis H1. If noticeable changes occur in leaders' "master," or "central" beliefs, then I will say here that "fundamental" learning has occurred. Conversely, if we see notable learning evident in more peripheral beliefs, then I will say that "secondary" learning has resulted.

5.1.2 The Relationship (or Lack Thereof) between Leaders' Beliefs

Jervis also notes that "if a person's attitude structure is to be consistent, then incremental changes among interconnected elements cannot be made. Change will be inhibited, but once it occurs it will come in large batches. Several elements will change

almost simultaneously" (170). Thus, for those with "consistent attitude structures" (which might be expected to include most people, given the powerful drive of the mind to maintain consistent beliefs), there appears to be a kind of "tipping point," either reached due to a particular experience, or due to the culmination of a number of experiences, which initiates a comprehensive shift in one's belief *system*. Individual beliefs are not likely to change by themselves then, but concurrently with other, related beliefs. One analogy here might be a "religious awakening," whereby a fundamental shift in many areas of an individual's secondary beliefs (such as beliefs on specific "social" and moral issues) may be altered following the shift of a single, significant, core belief (one's belief in a supreme being, or in some other underlying order guiding existence).

Following the theorized importance of "central" beliefs to one's overall belief system, it makes sense to expect that changes in one's more "marginal" beliefs will require a change in at least one of one's "central" beliefs alongside these more peripheral beliefs. Though it is possible that there are instances in which only peripheral beliefs will change while core beliefs remain stable, these more secondary beliefs are hypothesized to be less independent, more variable and less permanent than more central beliefs (partly following from the expectations in hypothesis H1). And thus, I expect that:
H2: When notable changes occur in "central" beliefs, it will concurrently occur for secondary beliefs.[36]

Following from his observations, Jervis (1976) additionally argues that "compromises involving central beliefs are likely to be unstable" (304)—that is to say,

[36] Note that hypotheses H1 and H2 are not competing, or mutually exclusive. It might be that we see more stability for central beliefs than more "secondary" ones, while at the same time seeing a correlative relationship between fundamental and secondary change when central beliefs do change.

previously held central beliefs may not hold if they run counter to changes in other central beliefs, as the newly changed beliefs may require the dismissal or change of previous beliefs in order for one's overall belief system to remain "consistent" or "balanced."[37] Thus:

H3: The central "fundamental nature of politics" (P1) and "strategic orientation" (I1) beliefs evaluated in hypothesis H1 are more likely to remain stable when they do not run counter to one another.

Note that these two "master" beliefs, and not the "control" belief, are evaluated because they have a similar directional "affective valence" relationship. An increase in one of these two measures is similar in type to an increase in the other (leading to similar types of "positive affective valence shifts" in both). Further, both are expected to be related, as stronger perceptions of friendliness should tend to coincide with stronger preferences for cooperation, and stronger perceptions of hostility should coincide with higher levels of conflict.

5.2 Methods for Hypotheses Tests

Here, I will describe the methods used to evaluate each hypothesis in turn. Before discussing specific methods, however, it is important to make a general comment regarding cross-belief analysis via the operational code. Recall the previous discussion regarding the image (P1) and strategic orientation (I1) "master" beliefs, and the idea that these beliefs "summarize the balance between the leader's attribution of cooperative and conflictual properties to self and others," (Walker, Schafer, and Young, 1998: 177)

[37] Jervis notes that the subsequent change of the central belief or beliefs may be an unexpected consequence of developing new beliefs that occurs much later than the initial belief change (304), but I will not test this possibility here.

whereas the other indices are disaggregations of those indices. Given this, and the fact that all operational code beliefs are based on the same 12 raw self/other values (as discussed in chapter 3), there is a methodological consequence to the theoretical assumption that the operational code operates in a particular way.

Note that though many of the "philosophical" and "instrumental" beliefs are related to one another in that they are constructed from the same "raw" indicators, each belief is calculated as a different mathematical function of a different constellation of indicators. As such, these indices will not necessarily change in a given way in relation to another based upon their methodological construction. That is to say, it is possible for certain beliefs to be more or less closely related to one another based upon the words spoken and coded by a given speaker, and not simply based upon their mathematical calculation. In this sense, whether the operational code indices as evaluated by Profiler Plus are in fact independent of one another is, to some extent, an empirical question—one which is addressed here in a fashion, in hypothesis H2.

Further, all hypotheses here are primary concerned with cross-presidential correlations or change on similar constellations of beliefs, or of the degree of cross-belief change, rather than comparisons of raw, cross-belief values. As such, I am not making a direct comparison of certain raw belief values against others, which would be a more questionable means of evaluating the nature of operational code beliefs, but rather, I am making comparisons that generally control for issues regarding the nature of raw belief calculations.

Thus, it is appropriate to test the hypotheses outlined here as if these were at least partially independent belief constructs, most of which (with the notable exception of the

"role of chance" belief, which is based directly on the values of two other belief indices) could theoretically vary quite a bit from others in terms of their degree of inter-connectivity. However, some beliefs are intrinsically more inter-related than are others based upon their mathematical calculations, which should be taken into account. These are: 1) the "image" (P1) and "realization of political values" beliefs (P2); and 2) "strategic orientation" (I1) and "tactical orientation" (I2) beliefs.

H1: Beliefs more central to policy-makers (image of the other [P1], strategic orientation [I1], and feelings of control [P4] beliefs) are more stable than are less central beliefs.

For this hypothesis, I look at monthly change in each belief index of interest. However, in a trend that will continue throughout this chapter, I do not look at change defined simply as the belief value at time t minus the change at time t-1. If I were, this would be an evaluation of "directional change," which would be useful for analyses evaluating whether or not the values on a given belief index, in their raw calculated state, increase or decrease. In other words, this would be an evaluation of change in a *directional* sense, and of the magnitude of this *directional* change from one time to another (for instance, discretely toward seeing the world as more friendly *or* as less friendly)—this is a manner of change that will be used in later parts of this dissertation.

Instead, for this hypothesis, I first calculate out this "directional change" value, but then evaluate the *absolute value* of this measure. By looking at "absolute change," though we lose some information regarding the direction of change being evaluated, we gain an understanding of the *general* robustness, or magnitude of change that occurs at a given time. For this and other hypotheses in this chapter, I am most interested in this form of change. To give an example, with the "strategic orientation" variable, a

"directional change" model would examine whether belief changes led to increased preferences for conflict or toward increased preferences for cooperation. Conversely, an "absolute change model" would evaluate whether a leader experienced *greater or lesser change* in his strategic orientation beliefs, broadly defined, from one point in time to another. In other words, "absolute change" models allow for an examination of "belief stability." Given that I am interested here in the relative "robustness" of belief change, and not in the direction of this change, I evaluate "absolute" belief change.

Note here that rather than looking at the simple, monthly belief value for each month, for each monthly period I employ the use of the "3 month, moving averages" as described in the previous chapter, so that I can control for months in which there is not enough data to adequately evaluate operational code values (I use these "3 month, moving average" values as the basis for all analyses in this chapter).

Specifically for hypothesis H1, I first calculate the "directional" belief change from one month to the next on each belief index (value at time t minus the value at time t-1). My second step is then to determine the average "absolute belief change" value for each belief. Recall from the previous chapter that the image (P1), realization of fundamental values (P2), strategic orientation (I1), and tactical orientation (I2) beliefs have larger scales—ranging from -1 to +1—than do the other operational code beliefs. All other measures range from 0 to +1. As such, a .1 change on the indices ranging from 0 to +1 would be equivalent to a .2 change on the four beliefs with broader value ranges. Thus, I re-calculate those four beliefs with broader ranges by dividing their "absolute change" values by 2. In this sense, I standardize these values to make them comparable when evaluating "change" in belief indices from one point in time to another.

For the third step, I construct z-score values for each belief, in order to determine the degree of "absolute" monthly belief change experienced for each respective belief relative to others. I determined z-scores for "philosophical" beliefs in relation to other "philosophical" belief values only, and determined z-scores for "instrumental" beliefs in relation to other "instrumental" belief values only. In this sense, I am testing belief stability or variability of each "philosophical" belief relative to all other "philosophical" beliefs only, and am testing belief change levels of each "instrumental" belief relative to all other "instrumental" beliefs only. Given that I am examining the relative change of more versus less "central" beliefs, I believe that this calculation gives me a better measure than that using all belief values (philosophical *and* instrumental) as the basis for these z-score indicators. By comparing beliefs in this way, I test "peripheral" philosophical beliefs versus the "core" philosophical beliefs of the "image of the other" and "feelings of control," and "peripheral" instrumental beliefs versus the "core" instrumental belief of "strategic orientation."

Z-scores are calculated as: [(observed value – mean value) / (standard deviation value)]. The "observed" value here is the average monthly absolute belief change value on a given belief index. The "mean" value is the mean of all "observed" values for each belief category (i.e. philosophical and instrumental). The "standard deviation" value is the standard deviation of all "observed" values for each belief category. I operationally define as a "notable" difference those that are 1 standard deviation (i.e. 1 z-score) above or below the across-belief mean variability value.

H2: When notable changes occur in "central" beliefs, it will concurrently occur for secondary beliefs.

I expect that other "philosophical" beliefs will be most likely to change when one's image of the external environment (P1) and feelings of control (P4) beliefs change, and that other "instrumental" beliefs will be most likely to change when one's strategic orientation (I1) beliefs change. However, it may be that there is a relationship between philosophical and instrumental beliefs of some kind, which I also evaluate.

I test hypothesis H2 by determining months in which a "notable change" occurs for central beliefs from their previous months' values (note that I am again treating the "3 month, moving average" values here as monthly values). Then, I test whether or not notable changes also occur for more "secondary" beliefs during the same time periods.[38] "Notable changes" are determined by first subtracting each month's belief value from the prior month's belief value for each month on each belief index, and then taking the absolute value for each observation. This yields a measure of "absolute belief change" in the same way that it was done for hypothesis H1, for similar purposes (i.e. I am interested in the magnitude of belief change, not in directional changes).

For the second step, I determine the mean and standard deviation of these "absolute change" values for each belief across all months. Then, based on this information and each month's mean belief value, a "z-score" is calculated for each belief index value for each month. Thus, I create a standardized measure of the distance of each monthly mean "absolute change" belief observation value from the overall mean for all months on each belief index.[39] For all months in which this change yields a z-score value

[38] Given that Jervis seems to treat this as an almost instantaneous (rather than "incremental") change process, these dynamics are expected to be evident in a one-month observation period.

[39] Though for hypothesis H1, I create a single z-score for each belief index, here I create a z-score for each month on each index.

greater than +1 (or one positive standard deviation shift from the mean degree of "absolute" belief change), I categorize this as an instance of notable belief change. I examine z-scores in this manner for all belief indices.

Following this, I restrict out data to only those months in which each of the "core" beliefs witnesses a mean "absolute change" of +1 z-score or greater (again, a 1 z-score shift = a 1 standard deviation shift), and create a separate data file for each "core" belief for months where only "notable belief change" occurs for the image (P1), strategic orientation (I1), and feelings of control (P4) values, respectively.[40] Also included in these files are associated belief information for all other beliefs during these same monthly time periods, including "absolute belief change" z-score values across these other beliefs, and a dichotomous measure signifying if the z-score for this month on these other indicators was a +1 or greater.

Finally, for each of these files (again, there is one for each "core" belief), I run a frequencies test, evaluating the percentage of time that each belief (apart from that used to restrict out files)[41] yields a "notable" z-score "absolute change value" of +1 or greater. This value is an indication of the correlation between the months of highest "absolute" belief change for each "core" belief of interest and months of high "absolute" belief change for each other belief. For the purposes of hypothesis testing, I operationally define correlations (frequency percentages) of greater than .50—when one of the "master" beliefs of interest and a corresponding belief being compared with it both yield

[40] For instance, there are only 61 months out of a 40+ year period where the strategic orientation "absolute belief change" values yield a z-score of +1 or greater, and only the data for these months are evaluated as a separate file for analysis.
[41] I do this as 100% of these months are identified as yielding a "significant" absolute belief shift on this index.

a “notable” absolute change of a greater than a one standard deviation shift from the mean during the same month in over 50% of the months in which the “central” belief of interest yields a notable belief shift—as notable correlations.

To give an example, assume that the “feelings of control” variable yields a notable “absolute change” value (in relation to the mean value) only in January, February, and March of one given year, and does not yield a notable change at any other time. Further, assume that this belief is being compared with the less central “predictability of the political future” (P3) belief. If the “predictability of the political future” belief also yields a notable “absolute change” value (in relation to the mean “predictability of the political future” absolute belief change value) in January and February of this same year, but not in March, then the frequency percentage of interest here would be 2/3, or 66.66%. That is to say, for all of those months where the “feelings of control” variable yields notable change, the “predictability of the political future” measure also yields a similar change level 66.66% of the time. If the degree of “predictability of the political future” belief change was notable in all other months of the year (April through December), but not in 1 of the 3 months in which the “feelings of control” measure yields a notable change, then the percentage result here would still be 66.66%, because I am only interested in those months in which the “master” belief of the “feelings of control” yields a notable change, and the *corresponding* percentage of time that other beliefs yield a similarly strong degree of belief change. To reiterate, I engage in this process for all three “master” beliefs—the “image of the other” (P1), “strategic preferences” (I1), and “feelings of control” (P4) beliefs, across all months for all presidents examined.

H3: The central "fundamental nature of politics" (P1) and "strategic orientation" (I1) beliefs evaluated in hypothesis H1 are more likely to remain stable when they do not run counter to one another.

For hypothesis H3, I first evaluate, in a given month, the degree to which the "image of the other" (P1) and "strategic orientation (I1) beliefs find themselves in a greater or lesser "affective spatial distance" from one another (i.e. do they "run counter" to one another or don't they, in relation to what might be expected by chance?). When these beliefs are highly different from one another for a given month, I expect that one or both of these two beliefs will be more likely to change in the following month so that the individual will view the world in a more "cognitively consistent" manner across these beliefs (e.g. at least one of these beliefs will shift so that the individual will: a) both place more utility in the use of conflict and view the world as a more hostile place; b) both place more utility in the use of cooperation and view the world as more friendly; or c) both prefer a moderate strategic approach, and see others as possessing a similarly moderate disposition). If the belief experiencing the "notable shift" is indicative of a new overall shift in beliefs, then I expect that the previously stable beliefs will follow suit. If, however, this shift was a fluke, or was indicative of a temporary shift that did not last over a month long, then I expect the belief that initially shifted to shift back toward that of the more stable "central" belief.

In order to test this, here I look only at the two "central," or "master" beliefs of interest—the image and strategic preference beliefs. Recall from the earlier discussion of this hypothesis that it is derived from the expectation that "central" beliefs will tend to match up—existing and behaving similarly—and that when they don't, belief systems

will adapt themselves so that they do.

Methodologically, I first determine instances in which these beliefs run "counter" to one another by looking at the difference between the values on these two indicators during a given ("3 month moving average") month ("image" value – "strategic orientation" value). This is the only instance in this chapter when I am concerned with "directional" belief change values. As both of these beliefs operate in a similar "directional" manner (positive value increases=more positive "affective valence" shifts, and negative value increases=more negative "affective valence" shifts), and since both indicators fall on a -1 to +1 scale (where a "one unit" change in one belief value is equivalent to a "one unit" change on the other), no standardization of values is required. Even though leaders' "strategic orientation" values tend to be higher, on the aggregate, than are their "image" values (as discussed in the previous chapter), the relative difference is of most interest here, which is not influenced by this fact.

These beliefs are said to "run counter" to one another when the magnitude of the difference between them for a given month is "high." I identify this, following the convention used for the rest of this chapter, as a one standard deviation shift away from the mean difference between these beliefs for a given month (note that it does not matter if this is a negative or positive standard deviation shift, as either indicates that they are notably different from one another). Once these months of "high belief difference" are identified, I create a dummy variable, where a 1=months of high belief difference (either a z-score greater than +1, or less than -1), and a 0=months of less extreme belief differences.

The second component evaluated in this hypothesis is the dependent variable of the "stability" of these beliefs. Stability is calculated here as the magnitude of the absolute change, for each belief, from month t to month t+1, or from "this" month to "next" month. This is similar to the values used previously in this chapter. However, it is important to note here that I am interested in the change from this to *next* month, as I expect the notable change in one of these beliefs reflecting an attempt to maintain or achieve "cognitive consistency" to happen in the month *following* instances in which the P1 and I1 beliefs "run counter" to one another. Months yielding a lower absolute, monthly shift are considered to be more "stable" months than are those months in which higher absolute, monthly shifts occur.

Then, I run two ANOVAs, one examining change on each belief index of interest (image and strategic orientation), with the dichotomous "belief difference" values (high or not high) as the factors of interest, and the "absolute monthly belief change" level (from time t to time t+1) on each belief as the dependent variable. Thus, the first ANOVA tests the stability of "image" beliefs for the months in which these two beliefs run counter to one another versus when they don't run counter to one another, and the second tests the stability of the "strategic orientation" beliefs for the months when these beliefs run counter to one another versus when they don't run counter to one another.

5.3 Results

Here, as will become convention throughout the rest of this project, I will re-state each hypothesis of interest, and will test each in turn. Thus:

H1: Beliefs more central to policy-makers (image of the other [P1], strategic orientation [I1], and Feelings of Control [P4] beliefs) are more stable than are less central beliefs.

Results are shown in Table 5.1. Recall from the methods section my expectations here—each of the "core" beliefs (image, strategic orientation, and control) are expected to hold notably greater monthly "absolute belief change" values than will the other, more "peripheral" beliefs (where significance is determined by a belief falling one z-score [standard deviation] above or below the across-belief mean belief change score). Notable values (as defined by a z-score of greater than +1 one or less than -1) are in bold in the table, and again, are calculated based upon comparison only with relevant beliefs (philosophical z-scores are based upon mean values across philosophical beliefs only, etc.). Note that presidential mean absolute belief change values are included in this table, but are not used for data analysis. They are only included for the reader's benefit, should he or she have an interest in these values, and to demonstrate how mean and standard deviation values of interest are calculated.

To begin, I look at the "philosophical" beliefs. Expectations are that belief change z -score values on each of the "master" belief indices will be notable and negative, but in direct opposition to expectations, the image belief (P1: mean absolute change value = .028, z-score = +1.147) yields notably *more* monthly belief change, on the average, than does other "philosophical" beliefs.

This suggests that presidential perceptions of the "fundamental nature of politics" or the "image of the opponent" are quite variable. The belief change values for the "master" belief of feelings of control (P4: mean absolute change value = .019, z-score = +.191), on the other hand, are fairly average here. Neither of these values are even negative, and thus are far from approaching the expected z-score value threshold of -1.

Table 5.1: Variability of Belief Z-Scores; Based on "Absolute Belief Change" Values (monthly level of analysis)[a, b]

[a]Note that the basis for these values, and all other analyses in this chapter are the monthly "3 month, moving average" values discussed in the previous chapter, employed in order to account for months in which insufficient data would lead to outlier values.

[b]Bold and italicized beliefs are the "core" beliefs of most interest here, and in other tables.

[c]Note that these standard deviation values are based off of the above "Overall Mean" scores alone, and are not an average of the average standard deviation scores in this column.

Presidential Absolute Change Means												
Belief	Kennedy	Johnson	Nixon	Ford	Carter	Reagan	HW Bush	Clinton	W Bush	Overall Mean	Overall St.Dev.	Z-Scores
Philosophical												
P1*	0.025	0.033	0.035	0.021	0.023	0.028	0.030	0.024	0.026	0.028	0.005	**1.147**
P2	0.022	0.026	0.029	0.020	0.017	0.022	0.024	0.020	0.021	0.023	0.004	0.616
P3	0.011	0.013	0.015	0.016	0.014	0.012	0.012	0.009	0.010	0.012	0.002	-0.552
P4	0.018	0.024	0.027	0.025	0.014	0.019	0.021	0.013	0.017	0.019	0.005	0.191
P5	0.004	0.005	0.006	0.007	0.005	0.004	0.004	0.003	0.003	0.004	0.001	**-1.402**
Instrumental												
I1	0.032	0.030	0.042	0.041	0.026	0.033	0.029	0.026	0.032	0.032	0.006	0.071
I2	0.018	0.021	0.029	0.021	0.022	0.022	0.017	0.016	0.024	0.021	0.004	-0.532
I3	0.064	0.034	0.057	0.037	0.022	0.038	0.045	0.028	0.025	0.038	0.014	0.494
I4a	0.064	0.060	0.084	0.083	0.052	0.066	0.057	0.052	0.064	0.063	0.012	1.941
I4b	0.095	0.058	0.083	0.061	0.055	0.054	0.065	0.042	0.066	0.061	0.016	1.519
I5ap	0.056	0.034	0.056	0.042	0.027	0.036	0.042	0.027	0.038	0.038	0.011	0.313
I5pr	0.020	0.016	0.026	0.017	0.017	0.018	0.022	0.013	0.018	0.018	0.004	-0.834
I5re	0.032	0.025	0.035	0.017	0.029	0.027	0.029	0.016	0.031	0.026	0.006	-0.351
I5op	0.015	0.019	0.018	0.027	0.020	0.021	0.018	0.014	0.013	0.018	0.004	-0.834
I5th	0.008	0.009	0.012	0.012	0.011	0.013	0.008	0.007	0.014	0.010	0.003	-1.196
I5pu	0.026	0.022	0.029	0.020	0.019	0.018	0.018	0.013	0.023	0.020	0.005	-0.592
Overall Philos.										0.017	0.009[c]	

Table 5.1 (cont.)

	Overall Mean	Overall St.Dev.
Overall Instrum.	0.031	0.017
Overall All	0.027	0.016

The only "philosophical" belief that yields an extremely *stable* value in relation to other philosophical beliefs is the perception of the "role of chance," (P5) which is based solely on values for the "predictability of the political future" and "feelings of control" beliefs. Recall from the previous chapter that the average raw value on this indicator is extremely high. As such, presidents tend to consistently see the world as a place in which chance plays a significant role.

Next, I examine instrumental beliefs. The instrumental "master" belief of strategic orientation yields an unremarkable, positive z-score (I1: mean absolute change value = .032, z-score = +.071). As such, as with the image and feelings of control beliefs, I fail to find support for hypothesis H1 with the strategic orientation belief. There are two instrumental beliefs that yield notably *more* variable belief values than the average instrumental belief, and these are the two "shift propensity" beliefs—the timing of conflict versus cooperation (I4a: mean absolute change value = .063, z-score = +1.941) and the timing of words versus deeds (I4b: mean absolute change value = .061, z-score = +1.519). This suggests that, from month to month, leaders are prone to yielding either more or less variability in terms of the types of self-references used (across the categories of conflict versus cooperation and word versus deed references) in a fairly inconsistent manner. In other words, in some months presidents appear much more consistent in preferring one strategy over the other (be it a focus on conflict or a focus on cooperation, and of the use of words or the use of deeds), and in other months they are much less consistent.

In terms of instrumental belief stability, the perceived utility in the use of threats (I5th: mean absolute change value = .010, z-score = -1.196) is very stable in relation to other instrumental beliefs. Recall from the previous chapter that presidents tend to place fairly low utility in this means generally (in relation to others), and this lack of utility appears to be fairly

stable over time.

Again, this evidence does not support the expectation that "central" beliefs are more stable than others. In fact, in the case of the "image of the other" belief, it demonstrates quite the opposite. Thus, I fail to find support for Hypothesis H1, as the data seems to call into question the notion that more "central" beliefs are more stable than more "peripheral" beliefs, as hypothesized by Jervis, in terms of operational code beliefs.

Further, if presidents *are* constantly re-evaluating and adapting their core perceptions of others, this would seem to fit into a "realist" interpretation of how foreign policy decision-making should occur. This is in opposition of the idea that presidents might hold relatively stable beliefs toward the world, irrespective of changes in the international context. In this sense, this finding suggests that presidents are at least willing to "learn," in a fundamental sense, as it is operationally defined in this project (a change in beliefs following the observation and interpretation of experiences).

H2: When notable changes occur in "central" beliefs, it will concurrently occur for secondary beliefs.

Results for the data used to test this hypothesis can be found in Table 5.2. Recall from the methods section that here I determine instances of "notable, absolute" monthly changes in beliefs on the "master" or "central" belief indices (image/P1; strategic orientation/I1; feelings of control/P4), and the corresponding notable changes for other beliefs. The first column here ("Percentage of all notably high months") gives the percentage of months examined where each belief yields a "notable, absolute" shift from one month to the next.

The columns in Table 5.2 with the "belief models" titles (e.g. "Strategic Preference models") give the percentage of months in which a notable change (i.e. a z-score greater than +1)

Table 5.2: High Monthly Absolute Change Correlations (as Percentages)

	Percentage of all notably high months	Strategic preference models	Strategic Preference - all	Image models	Image - all	Control models	Control - all
Instrumental Beliefs							
I1	12.8	---	---	39.7	26.9	25.8	13
I2	12.2	**63.9**	51.7	29.3	17.1	25.8	13.6
I3	12	45.9	33.9	39.7	27.7	19.4	7.4
I4a	12.8	**100**	87.2	39.7	26.9	25.8	13
I4b	19.5	29.5	10	20.7	1.2	27.4	7.9
I5ap	17.3	44.3	27	39.7	22.4	22.6	5.3
I5pr	16.3	27.9	11.6	25.9	9.6	17.7	1.4
I5re	13.2	24.6	11.4	15.5	2.3	19.4	6.2
I5op	16.5	47.5	31	31	14.5	24.2	7.7
I5th	11.4	37.7	26.3	34.5	23.1	22.6	11.2
I5pu	10.4	47.5	37.1	19	8.6	25.8	15.4
Philosophical Beliefs							
P1	11.8	37.7	25.9	---	---	21	9.2
P2	13.4	37.7	24.3	**87.9**	74.5	19.4	6
P3	13.2	34.4	21.2	**53.4**	40.2	22.6	9.4
P4	18.3	26.2	7.9	22.4	4.1	---	---
P5	13	31.1	18.1	41.4	28.4	33.9	20.9
n	348	61		58		62	

on each relevant "core" belief of interest coincides with a notable change on each additional belief. The columns titled "belief– all" are a measure of the value in the belief columns minus the value in the "Percentage of all notably high months" column. A positive value in these columns indicates that when the core belief of interest yields a notable, absolute change in beliefs from one month to the next, the belief of interest, as indicated by row labels, yields a higher percentage of months in which similar, notable changes occur than is the case generally. A negative value would indicate the opposite.

First, I look at the strategic orientation (I1) index. Again, following from the process described in the methods section, my expectation for the "Strategic preference models" is that there will be multiple "peripheral" beliefs, particularly of the "instrumental" variety, that yield a

notable absolute change in over 50% of the sample of months where the strategic orientation measure also yields a notable, absolute change. The correlation of 50% was chosen as it would be a strong, though not insurmountably high threshold.

This threshold is met, in relation to the strategic orientation belief, for the tactical orientation (I2; 63.9%) and timing of conflict vs. cooperation (I4a; 100%) beliefs. However, there is a correlation of over 40% for four other instrumental beliefs. Thus, for the strategic orientation belief, I find a very modest degree of support for hypothesis H2, but this must be tempered with the knowledge that the strategic and tactical orientation beliefs are similarly constructed. As such, this correlation is not as notable as that with other beliefs would be. No philosophical belief yields a notable, monthly shift in beliefs in the strategic orientation model.

For the image (P1) index, I find a notable frequency correlation for the realization of political values (P2; 87.9%) and predictability of the political future (P3; 53.4%) beliefs. For the feelings of control variable, I do not find any notable correlations. As such, I find modest support for the strategic preference and image beliefs on hypothesis H2, but I find no support regarding feelings of control, given the criteria that I use to evaluate such.

Further, recall that I also include columns here evaluating correlative belief percentages for notable, absolute changes in relation to months in which "core" beliefs experience a notable shift *in relation* to what is seen in the general sample. Though I do not attempt to engage in hypothesis testing using these numbers, it is notable that there is not a single instance, across any of the beliefs examined, where the "overall" percentage of months yielding an absolute belief change is higher than that of the percentage following similar shifts on the "core" beliefs (since every value here is positive in each "belief – all" entry). Thus, though less important beliefs may not always yield a "notable" shift following similar "notable" shifts by more central beliefs,

these shifts do occur here more frequently than they do generally. In fact, the difference here is typically much greater than 10%, and is frequently greater than 20%. Thus, this finding suggests that changes in core beliefs do tend to have an impact on "notable" changes in other beliefs, supporting the general expectations behind hypothesis H2.

H3: The central "fundamental nature of politics" (P1) and "strategic orientation" (I1) beliefs evaluated in hypothesis H1 are more likely to remain stable when they do not run counter to one another.

Recall from the hypothesis section that I first determine when beliefs "run counter" to one another by evaluating the difference between the image and strategic orientation values for a given month. When they do, I test whether these "core" beliefs experience more belief variability from month t to month t+1 than would be expected by chance on both belief indices. Results are shown in Table 5.3.

Table 5.3: ANOVA for Absolute, Monthly Belief Change by Degree of Similarity of Image and Strategic Preference Beliefs

		Image Change	Strategic Preference Change
Similar Beliefs	Mean	.055	.061
	Std. Dev.	.057	.059
	N	364	364
Dissimilar Beliefs (counter)	Mean	.060	.071
	Std. Dev.	.056	.074
	N	135	135
	F-Score	.558	2.387

**prob<.05
***prob<.001

The first model here examines the "philosophical, master belief" of the "image of the external political environment." Findings show that in those months when these beliefs and

those of one's strategic orientation are dissimilar to one another, presidential "philosophical" beliefs do experience a greater shift from this month to the following month (mean=.055) than is the case in those months when the "P1" and "I1" beliefs are more similar (mean=.060). However, this difference is not statistically significant at the .05, two-tailed level. As such, I do not find much support to the idea by Jervis, whereby beliefs cannot stand to run counter to one another, and will change in instances of disparity so that cognitive balance can be maintained.

The same is also observed for the "strategic orientation" belief, where greater absolute shifts in this belief occur following months when the disparity between the "P1" and "I1" belief values are larger (mean=.071), than when they are more moderate (mean=.061). However, this difference is not statistically significant (F=2.387). Thus, I do not find support for hypothesis H3.

5.4 Discussion

To summarize the findings of this chapter, first, I do not find support for hypothesis H1, as the "image" and "strategic orientation" beliefs are not more stable, on the average, than are more "peripheral" operational code beliefs. On hypothesis H2, I find modest support, as two more "peripheral" beliefs yield a noticeable change alongside changes in both the "master," "instrumental" belief of one's strategic orientation, and "master," "philosophical" belief of one's "image of the external political environment." However, I find no support for this hypothesis regarding "feelings of control," and the findings for the other measures have to be tempered by the recognition that the I2 and P2 beliefs are more closely inter-related with their respective "master" beliefs of interest, from a methodological standpoint, than are others.

And finally, on hypothesis H3, I do not find support for the notion that presidents' "core" "image" and "strategic orientation" beliefs are more likely to experience change when they "run

counter" to one another than when they are more similar.

Ultimately, these results bring into question some fairly accepted ideas, and find support for others that previously were only argued on the merits of a handful of case studies, largely driven by subjective analysis. The rest of this dissertation will also be concerned with questions of this type, and will be addressed in a similar means, and I will begin in the next chapter to evaluate factors outside of beliefs themselves as a potential influence on beliefs and belief change.

CHAPTER 6: FOREIGN AND DOMESTIC INFLUENCES ON U.S. PRESIDENTIAL LEARNING IN THE FOREIGN POLICY DOMAIN

We have established that U.S. Presidents' beliefs are malleable and prone to change. But what is it, beyond predispositions and general psychological tendencies, that accounts for systematic change in leaders' beliefs? What roles do factors external to the individual play toward influencing presidential learning? As discussed in the introductory chapter, this question is at the core of much research on learning. Here and for the following two chapters, I empirically address this broad and challenging question. To start off, I will look at the "everyday" influences on leaders—such as the mood of the public and Congress, the state of the economy, and the degree of conflict in the international system at a given time—as potential influences on belief change. In the process, I will evaluate some ways in which leaders might conceptualize the international environment at a given point in time, and how perceptions regarding these different "domains" might play a role in influencing beliefs.

6.1 Toward a Multi-Dimensional Approach to Foreign Policy Analysis

We have seen a fair amount of scholarly work explicitly evaluating the impact of international and domestic factors on foreign policy decision-making and outcomes. For instance, conventional international relations research is often based on the assumption that state behavior is determined primarily by one's own capabilities relative to others, in concert with other influences stemming from the international system. Included here are debates over whether states constantly expand and maximize their relative position in an always dangerous international system (Mearsheimer 2001), or whether they do so only in certain instances and generally act more cautiously, given that the international context may be one that promotes "defense" over "offense" at a given point in time (Van Evera 1998; Taliaferro 2000/2001). Additionally, there are the debates over whether states tend to "balance" against, versus

"bandwagon" with powerful states or state alliances over the causes of alignment, and over the instances in which these processes are likely to take place (Duncan and Siverson 1982; Walt 1985).

Conversely, from the "Innenpolitik" (or "domestic policy") school, we see a focus on the impact of the domestic factors and characteristics of states on political behavior and outcomes in the foreign policy sphere. Included here are works evaluating the democratic peace (Ray 1998; Russett and Oneal 2001), and public (Risse-Kappen 1991; Downs and Rocke 1994; Collier and Sullivan 1995; Page and Barabas 2000; Sobel 2001) and Congressional (Olson 1976; McCormick and Wittkopf 1990; Meernik 1993; Schraufnagel and Shellman 2001; Marshall 2003) support levels for the president.

The above works have, in each of these respective areas of interest, helped to promote a rich understanding of the various "external" influences on foreign policy-decision making and the results of such. However, no one perspective is enough to fully explain the process by which the perceptions, decisions, and outcomes *broadly* associated with the foreign policy process and foreign policy outcomes develop and change. When an interest group has a disproportionate influence on a given piece of foreign-policy-related legislation, or when a state's interests are unambiguously threatened by a foreign military force, then the aforementioned, singular foci may well be appropriate to evaluating foreign policy. However, if we wish to evaluate this from a broader, more comprehensive perspective (for instance, toward evaluating broad policy *trends*, and the *overall impact* of external factors on foreign policy at a given point in time), then such a narrow perspective may be insufficient.

These narrow foci are understandable. After all, many (perhaps most) political scientists are interested not in describing reality in all its complexity and nuance, but rather in explaining

and/or predicting important political phenomena in an *intentionally simplified*, albeit useful, realistic, and systematic manner. That is to say, given all the complexities of our political world, how can we systematically tease out and evaluate important phenomena, as well as the most relevant causes and effects associated with these phenomena? As such, it makes some sense to focus on only one factor or level of analysis in the process of providing a simple story regarding foreign policy processes and outcomes.

However, perhaps we go too far when we attempt to explain foreign policy decisions as primarily being the function of one given factor, without systematically taking into account additional potential causal factors (including those from other relevant "levels of analysis"). This project attempts to address this situation, in part, by looking at the influences of a number of potentially relevant influences from different "levels of analysis" on one critically important component of the foreign policy process—the beliefs of key political leaders.

6.2 The Potential Importance of Psychology

In addition to the above, one other, often significant drawback to many analyses of foreign policy is that they are often rooted in international relations and political science theory that downplay or ignore psychology. This type of scholarship either by-passes psychology altogether ("assuming" it away), and/or treats psychological factors principally as a function of a powerful, mechanistic process whereby exogenous factors have a fairly direct impact on policy decisions and outcomes. To give an example, the argument for ignoring psychology, from many evaluating "systemic" phenomena, is that foreign policy occurs within the international system, within which leaders have to behave as the international system dictates, or risk suffering the consequences of non-compliance to some expected range of behavior given their position in the international order. Therefore, leaders are expected, on the aggregate, to behave in a very

circumscribed, predictable way. Kenneth Waltz's (1979) *Theory of International Politics* actively claims not to be a theory of foreign policy, but its strict focus on relative state capabilities and broad shifts in the distribution of power in the international system provides the theoretical basis for much of the work in this area.

On the other hand, the argument from the "Innenpolitik" view is that foreign policy influences from domestic interests are powerful, because they largely determine a leader's ability to effectively lead his or her country. If leaders act against the will of the public and important interest groups, then their ability to remain in power may be threatened, as may their likelihood of retaining the policy support of other viable, domestic social and political groups (such as the public broadly, as well as the legislature and the military). Of particular interest are certain prominent interest groups, media outlets, and even individuals who are able to influence leaders by framing debates, and by making certain interests and ideas much more salient to leaders than they would otherwise be. The often implicit argument against psychology here is that, similar to the above argument, leaders are so constrained by the various forces threatening to reduce or remove their power and influence, that subjective perceptions and preferences are relegated to having an influence only in those policy areas where the public and interest groups do not hold a clear interest, or in areas where competing groups may hold opposing interests.

As such, many of the above works tend to by-pass evaluation of leaders and their beliefs, attitudes, and general biases and predispositions. Political psychologists, however, argue that this is problematic in the evaluation of foreign policy, as leaders' psychological characteristics are critically important. Even if they don't actively dictate state (or even individual) behavior at all times, these perceptions and tendencies are argued to act as a kind of buffer between externally-occurring events and resulting state behavior. This argument states that leaders'

perceptions provide a kind of filter, or lens, through which "external" phenomena are viewed. This filter then restricts leaders' policy preferences and behavior to those phenomena seen as more important in their subjective, "schematic" interpretations of reality. Certainly, these filters may be strongly influenced by external factors from both the international and domestic political realms, but political psychologists would argue that these psychological factors certainly play an important intervening role between the outside world, and policy behavior.

One perspective that has recognized this issue in the broader international relations literature is based out of a school of realism called "neoclassical realism." As noted earlier, it is assumed by many "structural" realists that the beliefs and perceptions of key decision makers provide a type of "smoothly functioning mechanical transmission belt" between relative material capabilities and U.S. policy (Rose 1998, 158). But neoclassical realists argue that this is not necessarily the case. This line of thought starts out similar to that of most other realists: relative power capabilities and the makeup of the international system are the primary driving forces behind international outcomes, and more narrowly, states' foreign policies. From here, however, neoclassical realists diverge from others in that they dismiss the "smooth transmission belt" concept, instead arguing that flesh-and-bone humans often misread, ignore, or pay selective and potentially "irrational" attention to factors that might be expected to impact foreign policy decisions (Ibid., 156-61). Neoclassical realists argue that over the long-term, foreign policy behavior will lead to relatively predictable patterns and outcomes. However, in the short- to middle-term (and specifically in the day-to-day decisions of decision-makers and interactions between states), the smooth, universal patterns espoused by systemic theories of international politics may be far from evident.

6.3 The Impact of Domestic and Political Factors on Foreign Policy Learning

From this perspective, learning can be viewed as a change in one's filter, or lens, through which they view the world and, as already suggested, external events may well lead to changes in one's perceptual filter. But what kinds of events lead to this change, and what do these changes look like? This chapter attempts to address both of the broad issues discussed above, in that I am attempting to evaluate both international and domestic influences on one critical component of foreign policy—the evaluation of U.S. presidents' psychological beliefs toward the international political world. As such, I hope to provide some systematic, preliminary evidence of how foreign policy preferences develop and change while one is in office. Though I do not here address the impact of these various domestic and international factors on actual policy behavior, this chapter assumes that the evaluation of presidential learning may be an essential pre-condition to providing more fully specified models that might do so. As such, work in this area might help to provide the foundations for improved work evaluating the impact of factors on foreign policy decision making, and foreign policy outcomes.

But what does political psychological scholarship have to say about these questions? Some early elite-level political psychological works laid out "maps" for understanding the relationship between factors at these different analytical levels, belief change, and policy decisions and outcomes (illustrative of this type of work is that of Brecher, Steinberg, and Stein 1969). Further, as discussed at length in the literature review chapter, there are works that focus on the influence of domestic factors alone, foreign factors alone, or a mix of these factors on leader psychology (e.g. Jervis 1976; Breslauer and Tetlock 1991; Walker, Schafer, and Young 1998). What is somewhat surprising, however, is that we have not seen much at all in the way of a systematic, theoretical or empirical assessment of the *relative influences* of factors in the

international and domestic domains on changes in leaders' psychology. Instead, the broad concept of psychological change itself has only been studied sporadically, often implicitly, and almost always without systematically focusing on the relative impact of domestic and foreign factors.

This chapter attempts to provide a preliminary answer to the question of what causes belief change, by examining factors emanating from both the domestic and international spheres, through various "policy contexts" or "domains," which tap into the way that U.S. leaders may organize and interpret their conception of international politics. Here, as with the rest of this dissertation, I focus on U.S. Presidents. Due to data constraints, however, I only evaluate Presidents George H.W. Bush, Bill Clinton, and George W. Bush in this chapter.

6.4 Hypotheses/Variables Examined

I evaluate learning here as a *directional* change in beliefs. That is to say, does some specified change in values on the independent variables tested lead to a directional change in leaders' beliefs.[42] An example of this kind of analysis would be examining whether or not leaders in more hostile international environment are more conflict-oriented regarding the international political world. Conversely, an evaluation of "absolute" change (not tested in this chapter) could test whether exposure to a hostile international environment would contribute to a leader shifting his beliefs toward *either* an increased preference for conflict or cooperation rather than maintaining his pre-existing beliefs, irrespective of the directionality of this shift. Thus, I expect a specific, directional change in presidential beliefs following from the directional influence of the explanatory variables of interest.

[42] This is in opposition to an evaluation of "absolute" changes in beliefs, or changes in belief values irrespective of the directionality of this change, as I have examined elsewhere (Robison, Forthcoming) and in the fourth and fifth chapters here (when I examine belief "variation," narrowly).

6.4.1 International Determinants of Belief Change Hypotheses:

The first set of hypotheses is concerned with foreign-based factors. As suggested earlier, realists and many other types of international relations scholars who study foreign policy might argue that internationally-based factors more strongly impact leaders' beliefs than do their domestically-based counterparts. If we find that this is the case, it would give some credence to the idea that in the modern political age, politics still "stop at the water's edge" to a large extent, and that domestic factors are not allowed to trump foreign influences. Conversely, finding that domestic factors impact leaders' beliefs to a greater extent than do their foreign counterparts would bring into question the degree to which the international political realm is still the principal influence on U.S. presidential beliefs (assuming that this was ever completely the case).

6.4.1.1: Overall Level of World Conflict (MIDCount)

The first international-level factor that I examine is the amount of conflict existing in the world at a given point in time. For this, I evaluate the number of militarized interstate disputes (MIDs) that occur in a given year. For years in which there are more disputes, I infer that there will be more international conflict perceived by the president. In years in which there are fewer MIDs, I infer that the president will perceive lower levels of international conflict.

Expectations for this variable are that the president will "learn" to see the world as more hostile, to be more strongly oriented toward conflict, and to feel lower levels of control over events in a more hostile, conflictual world. The "hostile image" expectation assumes that change on this belief is a direct function of changes in the international landscape, and the "conflictual strategic orientation" expectation is a reflection of the "realist" expectation that leaders are likely to view conflict elsewhere as a potential threat to both the security of the state, and to the self's ability to achieve or maintain control over others. Within this context, "realists" might argue that

a failure to respond to conflict with a readiness to engage in in-kind conflict (due either to passivity or due to an "idealist" philosophy that peace can be used to reduce conflict) could be dangerous. As such, a preference for conflict would be the most likely response to existing conflict.

Regarding feelings of control, I expect that the president will feel decreased levels on this indicator when conflict in the world is higher. High levels of conflict should suggest to the self that he was unable to prevent the onset of conflict through the use of persuasion/diplomacy, or through the implicit or explicit threat of the use of sanctions. As such, the self's feelings of control might change to reflect this "reality." This expectation is specific to the United States and other powerful states, as leaders of weaker, or less internationally active states might not presume to have enough influence to single-handedly prevent the onset of conflicts.

Hypothesis H1: Periods of higher conflict in the world will result in the president shifting his beliefs toward seeing the world as more hostile, as more strongly preferring conflict, and as feeling less control over events than is the case in periods of lower conflict.

6.4.1.2: Relative Power Capabilities

To reiterate, the tenets of realism state that relative power capabilities largely dictate state action. Further, the more "structural" strands of realism suggest that leaders' beliefs will necessarily be a "smooth transmission belt" between important external phenomena such as this and state action. The "relative power capabilities" variable is examined in order to test this expectation.[43] Though I am not testing the notion that there is a direct relationship between U.S. relative power and U.S. behavior, I am testing the impact of U.S. relative power on changes in presidential beliefs, in order to provide some preliminary evidence of the impact of levels of

[43] However, the inclusion of additional foreign and domestically-based variables reflects my expectation that this is not the sole influence on presidential belief change.

relative power on changed perceptions of "the other," strategic preferences, and feelings of control over events.[44] I evaluate relative "power" by looking at U.S. GDP as a proportion of the total world GDP (both measured in billions of dollars—this is a yearly measure). This measure was chosen as GDP seems a good, overall reflection of a state's potential power as reflected in its economic strength.

Regarding hypothetical expectations, "offensive realism" suggests that states will seek to exploit and dominate others as the best means for ensuring security. From this perspective, if a state fails to act aggressively, then this is typically the result of this state's *inability* to act aggressively. As such, an orientation toward conflict might be viewed as a direct function of one's relative power. Expectations for the strategic preference belief follow from this, as in the "offensive realist" conception, higher levels of relative power will lead to an increased preference for conflict over cooperation in one's dealings with the outside world. Additionally, lower levels of relative power should result in decreased feelings of control, and higher levels of power should result in increased levels of control. This expectation follows the assumption that one's ability to control others is a function of the self's perceived level of power (which may typically be a function of one's actual level of power).

Finally, I expect that lower levels of relative power will result in an increased perception of the outside world as hostile. This follows from the fact that human beings tend to scapegoat, and to displace blame when things do not go our way—following the psychological concepts of the "fundamental attribution error" and "cognitive dissonance" as discussed in chapter 2. For example, leaders may attribute economic weakness on unfair trade practices by opposing

[44] In fact, though this is not tested here, we may find that U.S. relative power impacts presidential beliefs and U.S. behavior in different ways. If so, then this would give further impetus to the idea that political psychology is important to take into account beyond the evaluation of U.S. policy behavior.

countries that are "jealous" of U.S. power and influence, and their beliefs might turn to anger or even hatred toward these states. Conversely, when others are weak, given that they would be in less of a position to act aggressively, the president may expect and perceive these others as acting in a friendlier manner toward the self.

Thus, I expect that higher levels of relative power operationally defined as the U.S. proportion of world GDP should be associated with increased perceptions of others as more friendly, and that lower levels of relative power will be associated with increased perceptions of others as hostile. This assumption suggests that U.S. presidents are really not so different from anyone else. If a child performs badly on a test, he tends to blame the unfair question being asked. When a corporation goes bankrupt, the CEO tends to blame government tax policies, a fickle public, and unfair behavior by rival firms. I expect that presidents, though different from the average person in many ways, may not be so different in this manner.

Hypothesis H2: Higher levels of U.S. power capabilities will lead to increased perceptions of the world as friendly, an increased orientation toward conflict over cooperation, and increased feelings of control over international political events. Conversely, decreased levels of U.S. power capabilities will lead to increased perceptions of the world as hostile, an increased orientation toward cooperation over conflict, and decreased feelings of control over events.

6.4.1.3: Level of Cooperation or Conflict Experienced by the U.S.

The next international factor evaluated is one of the most important, as it structures the way that the statistical models are evaluated in this chapter, and is the reason why analyses are restricted to Presidents George Herbert Walker Bush, Bill Clinton, and George Walker Bush alone. This measure evaluates the overall level of cooperation or conflict experienced by the U.S. at a given point in time (this data is evaluated at the level of the month). Taken from Gary

King's 10 Million International Dyadic Events database, this variable is an aggregation of "events" targeting the United States—taken from Reuter's news leads—from 1990 through 2003.

Hypothesized expectations are that presidential beliefs will be impacted by actions directed toward the U.S. in precisely the same manner that they were in the hypothesis evaluating the level of overall conflict in the world. That is to say, when the U.S. experiences higher levels of conflict, the president should begin to see the world as more hostile, and should "learn" to more strongly advocate conflict as a strategy. This follows from "realist" expectations that, in order to maintain credibility, to demonstrate strength/resolve, and to help ensure national security, the U.S. should respond to conflict with an "in-kind" response. Finally, when the U.S. experiences higher levels of conflict, the president should begin to feel less control over events as a result of his inability to prevent the onset of conflict.

H3: As the U.S. experiences higher levels of conflict, the president will begin to see the world as more hostile, will display a stronger orientation toward conflict, and will feel less control over events than is the case when the U.S. experiences lower levels of conflict.

However, I expect more belief change to occur here than I do from the earlier "overall level of world conflict" measure, given that those events targeting the U.S. are much more salient to U.S. leaders than is the general level of conflict in the world at a given time. Thus:

H4: The change in beliefs expected resulting from the level of conflict or cooperation directed toward the U.S. (Hypothesis H3) will be more pronounced than that resulting from changes in the overall level of conflict in the world (Hypothesis H1).

6.4.2 Domestic Determinants of Belief Change Hypotheses:

One of the key influences on presidential beliefs in the domestic sphere derives from the fact that he is an elected servant of the people, and interacts on a daily basis with other elected

servants. As such, if the president does not effectively fulfill the expectations of the electorate, then: a) he will not be re-elected if he is in his first term, and/or b) he will have difficulties getting his preferred policies enacted, because of governmental (particularly, legislative) constraints. I expect the latter as the Congress is also made up of elected officials, who are held accountable by their electorate, and who will be less willing to support the policies of an unpopular president than they will be toward one with the public on his side. Thus, a critical component of the impact of domestic factors on the president is accountability. Though a president may get "passes" on certain issues, and at certain times, he is ultimately held accountable for his actions. Following from this, there is an expectation that presidential beliefs and behavior will be impacted by the degree of public and Congressional support for his policies.

However, realism suggests that influences from the domestic sphere take a back seat to international factors. A realist such as Hans Morgenthau (1978) would argue that the public could have some influence on domestic policy decisions, but is neither informed nor trained to handle decisions regarding international relations, and should stay out of discussions regarding such. Some realists might add that, given the weight of foreign policy decisions, leaders realize this and typically downplay public opinion when making decisions in the foreign policy sphere.

But is this the case or isn't it, particularly in the post-Cold War world (as evaluated here), where the "Cold War Consensus," and fear of nuclear annihilation no longer constrains leaders in the way that they once did? I address this by testing the impact of domestic factors on presidential belief change in relation to the impact of international factors.

6.4.2.1: Public Support for the President

As previously mentioned, many hypothesize that public opinion plays a key role in influencing U.S. policy in the foreign sphere, and there is evidence to support this, particularly in

the post-Cold War world (Sobel 2001). However, what has received far less attention is the potential impact of public opinion on the preferences, attitudes, and beliefs of political leaders such as the president. After all, just because politicians behave in a particular way does not necessarily indicate that their beliefs and attitudes reflect their behavior. Here I examine the possibility that public opinion does impact presidential beliefs regarding foreign affairs and the international political environment. In this sense, I am evaluating whether beliefs regarding international relations, broadly speaking, can be influenced by explicitly domestically-based factors that may have little to do with activities taking place in the international political environment.

Though some have hypothesized that differential levels of public support tend to lead to increased levels of hostility or peace by states (see Ostrom and Job 1986), the empirical evidence here is mixed (James and Oneal 1991; Morgan and Bickers 1992). Regarding beliefs, I am unfamiliar with any works suggesting that *levels* of public support (not types of political preferences, such as support for or against a specific policy or set of policies) should have an impact on the *type* of belief or attitude change that occurs for a political leader. However, it is possible that a kind of "diversionary" phenomenon occurs for political leaders' beliefs, in that leaders may shift their beliefs toward seeing others as more threatening and more strongly advocate an aggressive stance when public opinion is low, in a conscious or subconscious attempt to sway public opinion in their favor. If this is the case, then it is possible that lower levels of public support might result in an increased preference for conflict, and that a coinciding increase in perceptions of international hostility would also result. Conversely, if leaders tend to prefer conflict generally (as some "offensive" realists might predict, given that military exploitation is a potential means to expanding national power), then *higher* levels of public

support might result in increased preferences for conflict and perceptions of hostility. Here I will test these competing explanations.

H5a ("diversionary theory of conflict" hypothesis): When public support levels for the president are low, the president will begin to see the world as more hostile, and will more strongly prefer conflict.

H5b ("offensive realist" hypothesis): When public support levels for the president are high, the president will begin to see the world as more hostile, and will more strongly prefer conflict.

Regarding feelings of control, theorists from the Innenpolitik perspective may expect that higher levels of public support would equate to greater feelings of control over events than would be the case when public support levels are lower. This expectation derives from the idea that the president's feelings of control abroad may be, in part, a function of the levels of political capital one possesses at "home." In other words, do feelings of increased control and confidence domestically translate into similar feelings abroad, irrespective of the actual international landscape?

H6: When public support levels for the president are high, the president will feel greater control over the international political environment than is the case when public support levels are low.

6.4.2.2: House of Representatives Presidential Support/3: Senate Presidential Support

Expectations for the influence of support levels in the U.S. House of Representatives and Senate are similar to that of public support, as support from the Congress could either lead the president to become more or less aggressive depending on whether the "diversionary theory of conflict" or "offensive realist" expectations are realized. Thus, again there are competing hypotheses regarding how Congressional support might impact belief change.

H7a ("diversionary theory of conflict" hypothesis): When Congressional support levels for the president are lower, the president will begin to see the world as more hostile, and will more strongly prefer conflict.

H7b ("offensive realist" hypothesis): When Congressional support levels for the president are higher, the president will begin to see the world as more hostile, and will more strongly prefer conflict.

6.4.3 Mixed Domestic/International Factors:

Beyond the factors already discussed, there are some potential influences on presidential beliefs that are more explicitly a mix between international and domestic than are the others examined here. These are the economic considerations of levels of inflation and domestic unemployment. The degree to which these factors are perceived as existing in one of the two "domains" of interest here over the other (i.e. international vs. domestic) are likely to be affected by the perceptions of the president in office, as well as the specific situation in which these factors are perceived.[45] As such, I will classify these variables as being both internationally- and domestically-based.

I do not have any expectations regarding the impact of these "mixed" factors relative to international or domestic ones, as they might be expected by both "realists" and scholars of the "domestic policy" school to impact beliefs. However, I do have specific expectations for the type of impact of the economic situation on belief change.

[45] Initially, given that these factors exist, narrowly, in the domestic sphere, one might be inclined to classify them as domestic-level influences. However, given the increasingly globalized nature of international trade and finance, it would be too simplistic to view almost any "domestic" economic factor as being exclusively domestic in nature. The foreign imposition of barriers to trade, "dumping" of cheaply made products into the U.S., the buying and selling of U.S. currencies abroad, and other factors play critical roles toward impacting "domestically" experienced factors such as U.S. employment rates.

6.4.3.1: U.S. Inflation Rate

Given the often critical importance of the domestic U.S. economy to local, state, and national politicians, I was interested in including measures of economic well-being in my models as an influence on belief change/learning. I ultimately chose two measures, each tapping into different conceptions of economic well-being. The first is price inflation, a measure of overall national economic health that reflects the price of goods and services at a given point in time, or in other words, a measure of how expensive or cheap things are (McMahon 2008). Higher inflation can cause reductions in investment and savings (as the value of currency goes down while the cost of things goes up), and reduces the ability of the public at large to buy things. Both of these potential changes affect economic growth, broadly defined.

The state of the U.S. economy is strongly affected by the actions of other states (due to these states' international trade and finance policies, as well as the behavior of these states' central banks regarding their respective domestic economies), as well as private firms and investors in other states. Thus, when inflation occurs for the U.S., it does not occur in a vacuum, as it is the result of factors in both the domestic and international economic spheres. Price inflation tends to result from monetary inflation, which is an increase in a state's supply of money, or from a decrease in the quantity of goods and services available in relation to the amount of money available to spend on goods and services (McMahon 2008). To give an example of the domestic and international influences on inflation, governments might respond to times of economic hardship by printing extra money (a key domestically-based cause of inflation), but the cause of crisis may stem from deficits in international trade.

I expect that inflation will affect the president both directly (in that he will likely treat the maintenance of low inflation levels as a general policy goal) and indirectly through the demands

of others in the state who would be more directly impacted by increases in inflation (via decreased purchasing power, investment capacity, etc.). Following from this, and from the fact that inflation is, in part, a function of international influences, I test the possibility that inflation levels will affect U.S. presidential beliefs toward the international environment.

Hypothetical expectations are that the president will feel pressure to relieve public concerns regarding inflation, and that the "buck may be passed" to the international environment as a potential, significant cause of this problem. As such, I expect that the outside world will be viewed, consciously or subconsciously (and fairly or unfairly), as a major cause of the U.S. economic dismay. As such, I expect that when inflation is high, the president will "learn" to view the outside world as increasingly antagonistic and hostile in nature. Further, I expect that the president will feel lower levels of control when inflation levels are high, given that the international economy is something that the president will not typically have much control over, and that this truth will be made particularly salient in times of economic hardship.

Finally, it is possible that the president will respond to this hostility with an increased orientation toward conflict, for reasons outlined in the descriptions of the "actions targeting the U.S." and "level of conflict in the international system" hypotheses discussed earlier. This reciprocal behavior might be preferred as a means to signaling to the world that aggression, even of an economic variety, will not be tolerated. However, it is also possible that the president will respond to higher inflation levels with increased calls for cooperation toward the outside world. Unlike narrow military/security matters, where presidential actions might be more constrained, there might be room for more autonomy regarding less serious, economic issues. As such, the president could choose to respond to potential economic aggression with "carrots" instead of "sticks," and this may be seen both domestically and abroad as a legitimate means for dealing

with such issues, whereas this would likely not be viewed the same way in the security domain. Given that there are two conflicting potential hypotheses here, I examine the strategic preference variable here at the 2-tailed level of analysis.

H8: Higher U.S. inflation levels will contribute to increases in presidential perceptions of hostility and decreased feelings of control toward the international political environment.

H9a (hawkish strategic orientation hypothesis): Higher U.S. inflation levels will contribute to increases in presidential preferences for conflict.

H9b (dovish strategic orientation hypothesis): Higher U.S. inflation levels will contribute to increases in presidential preferences for cooperation

6.4.3.2: U.S. Unemployment Rate

Unemployment rate is another measure of economic well-being reflecting the number of individuals in a state who wish to work, and who can work, yet who are not working due to businesses being unable or unwilling to hire them. National increases in unemployment can occur for a number of reasons, including changes in domestic government regulation or taxation of companies and changes in domestic monetary policy (and the inflation that could result from this—Block 1981), as well as increased economic competition and changing economic policies emanating from foreign states. Given that there is often a strong international component to unemployment in what has become an increasingly economically interconnected world, I expect that, as with inflation, the president or the U.S. domestic public may view the international environment as at least a partial cause of the domestic economic woes here. Following from this, I again expect that a kind of blame-displacement process will take place regarding unemployment.

Specific hypothetical expectations for unemployment are similar to those constructed regarding inflation. That is, I expect that the president will view the world as more hostile and will feel lower levels of control over international events when U.S. unemployment levels are high. Again, I have competing, directional expectations for the "strategic orientation" variable, and thus will examine this factor with competing hypotheses (at the 2-tailed level of analysis).

H10: Higher levels of U.S. unemployment will contribute to increases in presidential perceptions of hostility and decreased feelings of control toward the international political environment.

H11a (hawkish strategic orientation hypothesis): Higher levels of U.S. unemployment will contribute to increases in presidential preferences for conflict.

H11b (dovish strategic orientation hypothesis): Higher levels of U.S. unemployment will contribute to increases in presidential preferences for cooperation.

Note that both inflation and unemployment were evaluated as these are very different phenomena, and though the two are inter-related, they might each be expected to exhibit independent effects on the U.S. economy (i.e. there is not always a direct, linear relationship between the increase in one factor and the increase or decrease in the other). Regarding the relationship between these two phenomena, Block (1981) states, "many economists believe that increased inflation can reduce unemployment only when the inflation rate is better perceived by employers than workers."[46] Further, Block states that inflation may fail to decrease unemployment, or that it may actively contribute to increases in unemployment. Thus, a change in one may not result in a direct change in the other, and certainly, different individuals might more strongly experience the effects of one than the other, in each respective domain.

[46] Note: source is an online document, and no page numbers are listed.

6.4.4 Perceptions of the Political Decision-Making Context

As noted previously, the measure examining "actions targeting the U.S." has an additional level of importance to this study, as it dictates several of the models examined. That is to say, I not only evaluate presidential change from one potential policy "domain," but from multiple domains, and values on this variable define these "domains." I define "policy domain" here as one of multiple potential political environments subjectively perceived by a political actor. As discussed in chapter 2, at any given point in time, the world can be perceived in any variety of ways. Political leaders, as everyone else, must thus engage in a process of selectively focusing on certain components of "reality" over others. Otherwise, the sheer amount of information would not be psychologically navigable, and these leaders would be unable to interpret the world or to act in any useful way.

This taps into a core assumption behind much of the work evaluating elite-level political psychology: we all engage in simplification strategies in order to function in any useful capacity. Political leaders are included in this group of course, and engage in "shortcuts" in the process of determining what goes on in the world, and of whom the relevant actors are that they should pay attention to and deal with. Certainly, as discussed in chapter 3, this lies at the basis of the operational code concept, but is also relevant in this chapter's discussion on "policy domains." By empirically evaluating the different ways in which the president may perceive the world at a given point in time, we may gain additional insight as to how presidents "cognitively order" their political world. That is to say, which "domains" are more salient for political leaders over others, in terms of having a stronger impact on belief change? In an attempt to address this question, I test a number of potentially salient "domains" here:

1) The Domain of Like-Minded Actors: Defined as the behavior of actors who are similar to the self. Similarity here is operationally defined as two states that hold similar alliance portfolios.

2) The Domain of Dissimilar Actors: Defined as the behavior of actors who are dissimilar to the self. Dissimilarity here is operationally defined as two states that hold dissimilar alliance portfolios.

3) The Domain of All Behavior: Defined as all potential "actions" initiated against a state.

4) The Domain of All Cooperative Behavior: Defined as only cooperative "actions" initiated against a state.

5) The Domain of All Conflictual Behavior: Defined as only conflictual "actions" initiated against a state.

At a given point in time, leaders might pay more attention to actions emanating from any one of the domains, or from any given combination of these domains, over others. For this project, I am interested in whether leaders generally respond in a "realist"-prescribed manner. I assume that realists would expect leaders to most strongly recognize and respond to "dissimilar" state actors, and to conflictual behavior initiated by others.

Realism presumes that opposing states will build and shift alliance structures in the process of achieving a systemic "balance of power." Though the behaviors of all states are important to all other states in the realist view, the actions of states in opposing alliances are of particular interest. Further, realism treats the achievement of state "security" (either narrowly or broadly defined) as a critical goal in international affairs. As such, more conflictual behavior, being that which can most readily threaten security, should be viewed much more closely, and treated much more seriously, than should less conflictual behavior.

If the evidence suggests that this is not the case, and that similar states have as much influence as dissimilar states, or if cooperative actions influence beliefs to the same extent as do conflictual ones, then we might question the degree to which realism helps us to understand changes in presidential beliefs. Thus, I will test the following "realist" hypotheses regarding the influence of other states on U.S. Presidential belief change:

H12 (dissimilar vs. similar states hypothesis): The findings regarding the influence of others' actions directed toward the U.S. (Hypothesis H3) are stronger when evaluated in the domain of "dissimilar" state initiated behavior, than when evaluated in the domains of either "similar" states, or in the general "all actions/all behavior" domain.

H13 (conflictual vs. cooperative actions hypothesis): The findings regarding the influence of others' actions directed toward the U.S. (Hypothesis H3) are stronger when evaluated in the domain of conflictual behavior, than when evaluated in the domain of cooperative behavior, or in the general "all actions/all behavior" domain (i.e. when all behavior is taken into account).

6.5 Method

6.5.1 Dependent Variable

As with all other empirical chapters in this dissertation, the psychological variables of interest were determined via content analysis of leaders' speeches through the Profiler Plus program (Young 2001). As in the previous chapters and as discussed in the hypothesis section, we focus here on what are hypothesized to be the three most "central" operational code beliefs. These are: 1) the image of the international political environment; 2) strategic orientation concerning the international political environment; and 3) feelings of control over the international political environment. All operational code data in this chapter was aggregated to the level of the month—each raw operational code indicator (e.g. Self +1, Other +3, etc.) was

summed for all speeches in a given month, and the operational code values for each month were determined based upon these summed values.

For this chapter, I do not use the 3 month, moving averages used in chapters 4 and 5, as I will control for problematic months here statistically using a generalized least squares (GLS) model (that is to say, I will account for the heteroskedasticity that will likely result from some months having more speech information than others).

Once operational code values were determined, I calculated out the degree of belief change from one month to the next by subtracting the belief value at time t-1 from the belief value at time t. In other words, for February's belief value on a given index, I subtract this belief's value in January from the belief value in February. By calculating change in this way, negative values indicate a negative change from January to February, and positive values indicate a positive change from January to February. Again, in opposition to the way that I often examine belief change in the preceeding chapter, I *do not* take the "absolute" values of these belief change levels. Instead, I am interested here in belief change of the "directional" variety.

6.5.2 International-Level Independent Variables

6.5.2.1 MIDCount

The "MIDCount" variable is an international-level measure used to evaluate the amount of conflict in the world. This data is a simple count of the total number of militarized interstate disputes (MIDs) that occurred in a given year. This is a yearly measure whose values I apply to each month of a relevant year for the purposes of statistical analysis. MIDs were taken from the Militarized Interstate Disputes V.3.10 database, which is part of the Correlates of War project[47] (for more information regarding the MID database, please refer to chapter 3).

[47] Available: http://www.correlatesofwar.org/COW2%20Data/MIDs/MID310.html.

6.5.2.2 U.S. Relative Capabilities

For the "realist" measure evaluating U.S. capabilities relative to the rest of the world, I use a proxy measure of U.S. Gross Domestic Product ("GDP"--measured in billions of dollars) divided by World GDP (measured in billions of dollars). As such, this measure evaluates the percentage of GDP that the U.S. possesses out of the entire world's GDP at a given point in time. Though I found monthly measures here for the U.S., I only had access to yearly measures for the rest of the world. Thus, this measure is evaluated at the level of the year.

The Bureau of Economic Analysis defines GDP as "The market value of goods and services produced by labor and property in the United States, regardless of nationality; GDP replaced gross national product (GNP) as the primary measure of U.S. production in 1991" (http://www.bea.gov/glossary/glossary.cfm). Thus, as discussed in the hypothesis section, this is a measure of overall national productivity and income, reflecting a state's economic status. Both U.S. GDP and World GDP measures taken from the World Development Indicators Online.[48]

6.5.2.3 Externally Originating Events Targeting/Impacting the U.S.

For the measure evaluating the impact of others' actions on U.S. presidential beliefs, I use events data, as taken from Gary King's "10 Million Dyadic Events" database.[49] Information regarding the nature of this database and how the data are collected can be found in chapter 3.

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[48] Available at: http://ddp-ext.worldbank.org.libezp.lib.lsu.edu/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=6, accessed 9/15/08 ; Values shown are in billions of dollars, and reflect the "current" U.S. dollar value as of July 2009.

[49] Gary King; Will Lowe, 2003, "10 Million International Dyadic Events", hdl:1902.1/FYXLAWZRIA UNF:3:dSE0bsQK2o6xXlxeaDEhcg== Murray Research Archive [Distributor]; available: http://dvn.iq.harvard.edu/dvn/dv/king/faces/study/StudyPage.jsp;jsessionid=a2bd6a40151a4f29aa5890d5bc42.dvnInstance1?studyId=505, accessed 04/20/08.

However, to briefly reiterate, I first restrict out this data to only that targeting the U.S. Secondly, I restrict out events initiated by foreign state or non-state actors, only. Then, I transform initially text-based data into numerical values (based largely on the values listed in King and Lowe, 2003) so that they can be interpreted statistically. Following this, I recode all data from IDEA/WEIS, nominal format into the Goldstein conflict/cooperation, interval-level format, which ranges from -10 (full out war) to +10 (state integration—see Goldstein 1992 for information regarding this transformation and these values).

Finally, I aggregate this data together based upon the specific hypothesis being tested. For instance, I aggregate all events across all actors for all months for evaluation in the "general" models. However, prior to monthly aggregation, I further filter the data in order to evaluate specific "policy domains" associated with hypotheses H12 and H13. The following, opposing policy domains were evaluated: 1) the cooperative versus the conflictual international political action domains (i.e. I examine the impact of cooperative or conflictual actions alone on the U.S.); and 2) the similar versus dissimilar state domains (i.e. I evaluate the impact of actions initiated by state actors from either similar or dissimilar states). I will discuss each of these respective "policy domains" and how I filtered data to evaluate such following my discussion of the domestic-level independent variables used. Once each "domain" was determined, I calculated the average for a given month, and used this value for analysis.

Note that the data evaluated in this measure, as well as the other monthly independent variables examined here, are evaluated as occurring one month prior to a given dependent variable observation (i.e. I am examining the 1 month lag of the dependent belief change variables against independent variable measures). This indicates that for a given month, I am actually comparing this month's value for these independent variables against next month's

value for leaders' change in beliefs. Thus, when I am looking at a change in presidential beliefs (dependent variable) from November to December, I test the impact of these independent measures as they occurred in November. Dependent variable lags are used as they help to explicitly demonstrate the temporal relationship between the independent and dependent variables. Leaders' beliefs might require a small time period to adjust to the influence of the various lagged independent variables of interest, and this lagging take this into account. Further, some speeches (used to calculate operational code beliefs) evaluated in a given month occur early in a month, some occur in the middle of the month, and some occur late in the month. By lagging belief change variables, I reduce the chance that there are any instances where any factor going into the construction of these explanatory variables occurs *following* one or more of the speeches contributing to the value for the latter month of interest in the belief change dependent variable calculation.

6.5.3 Domestic-Level Independent Variables

6.5.3.1 Public Support Lag

Public approval of the President is included here as a "domestic" determinant of U.S. presidential operational code beliefs. This measure was taken from the Roper Center for Public Opinion Research.[50] These data reflect evaluations of public opinion polls taken over a span of multiple days, and were evaluated at non-uniform time periods. That is to say, public opinion would sometimes be assessed once a month, sometimes multiple times in a month, and sometimes once for multiple months (usually not more than 2 months would go by without a survey). As with the operational code belief change measures, I was interested in evaluating this variable at the level of the month. Thus, when there are multiple public opinion evaluations in a

[50] Available: http://www.ropercenter.uconn.edu/, accessed July 20, 2008.

given month, I examine the average of those support numbers as the only measure for that month. For instances where there was no public opinion evaluation made in a given month, I treat the average of both the nearest month before and after this month in which an evaluation had taken place as the public opinion measure for this month.

Given that these measures reflect public opinion over the span of multiple days, in some instances, a measurement period begins in one month and ends in another. In these cases, if a public opinion evaluation begins in the last few days out of a given month, and up to the first 3 days of the next month, then I measured this evaluation as reflecting the public opinion measure of the first month only. If, however, 4 days or more from the second month were included in this evaluation, then I averaged these numbers into the measures for both the preceding and succeeding months.

Similar to the "events targeting the U.S." indicator, values observed on this measure occur one month prior to dependent variable observations. As such, public opinion results from January will be examined as it impacts a change in beliefs from January to February.

6.5.3.2 Presidential Support in the U.S. House of Representatives

This measure evaluates the degree to which the president's stated policy preferences are shared by members of the House of Representatives in a given year. This data comes from George C. Edwards' work on Presidential-Congressional relations.[51] I use Edwards' "overall support scores" from this database, which for each member of the House of Representatives in a given year, gives the percentage of votes that match up with those policies for which the president has openly given support. This was created as an extension and improvement upon Congressional Quarterly House support scores. These data give the percentage of support for

[51] Available: http://presdata.tamu.edu/, accessed 07/10/08

each Congressman, so the overall average evaluated here is really the "average Congressman's" support for the U.S. president during a given year. This is a yearly measure, so I had to use each yearly measure 12 times in my analyses, given that I am evaluating variables at the level of the month.

6.5.3.3 Presidential Support in the U.S. Senate

This measure is the same as that for the House of Representatives excepting, of course, that it evaluates members of the U.S. Senate. Thus, this measure is the "average U.S. Senator's" support for the U.S. President in a given year.

6.5.4 Mixed International/Domestic-Level Independent Variables

6.5.4.1 Inflation

U.S. Inflation measures were taken from the historical inflation data page on the inflationdata.com web page.[52] This rate was calculated based upon the Consumer Price Index (CPI-U), which was taken from the U.S. Bureau of Labor Statistics.

6.5.4.2 Unemployment

U.S. unemployment measures were taken from the U.S. Department of Labor Statistics web site.[53] These data reflect seasonally adjusted unemployment levels for all persons in the U.S. aged 16 and over.

6.5.5 Policy Domain Determinations

6.5.5.1 Similar versus Dissimilar States

The models evaluating the domain of "similar" versus "dissimilar" states were determined by first calculating, for each year, every existing state's "S-Score" in relation to the

[52] Available: http://inflationdata.com/inflation/Inflation_Rate/HistoricalInflation.aspx?dsInflation_currentPage=3, accessed 07/03/08.

[53] Available: http://data.bls.gov/PDQ/servlet/SurveyOutputServlet, accessed 07/03/08.

U.S. The "S-Score" is a measure of the similarity of states' alliance portfolios. In other words, how similar, or dissimilar, are the alliance structures held by any two given states?[54] Then, states were rank ordered, so that the 20 states with alliances most similar to the U.S. in a given year were classified as "similar," and the 20 states with alliances least similar to the U.S. were classified as "dissimilar." Any model here evaluating "similar" states includes only events data from states with alliance portfolios similar to the U.S. for a given year, and any model evaluating "dissimilar" states includes only events data from states with alliance portfolios that differ substantially from that of the U.S. in a given year. Once data is filtered in this way, I aggregate all "similar" and "dissimilar" data across all relevant actors for each month of interest in the manner employed in the description of the "events targeting the U.S." variable.

6.5.5.2 Conflictual versus Cooperative Domains

For models evaluating events in the conflictual versus cooperative domains, I first restrict out data to focus only on cooperative or conflictual actions directed against the U.S., respectively. Cooperative actions are operationally defined as those events given a Goldstein value of greater than 0, and conflictual actions are operationally defined as those with Goldstein value less than 0. Actions coded as neutral (0) are not evaluated in these models. Again, I then aggregate data as described in the "events targeting the U.S." variable description for all "cooperative" and "conflictual" events respectively. As discussed in the theory section, this is done in order to test whether presidential beliefs are more strongly influenced by conflictual acts alone than they are by all acts together, or by cooperative acts alone.

[54] "S-Scores" were taken from Bennett and Stam's Expected Utility Generation and data management program ("EUGene"), available: http://www.eugenesoftware.org/. These scores reflect Signorino and Ritter's (1999) "rank order correlation for two states' alliance portfolios" (Bennet and Stam, 2007: 16).

6.5.6 Statistical Methodology

Given that I am using time-series data where serial autocorrelation is a potential problem, and given that I do not assume a uniform distribution of error terms across the samples evaluated, all statistical tests in this chapter are examined using heteroskedastic generalized least squares (GLS) regression analyses. In this model, I correct for heteroskedasticity caused by the uneven amount of speech material available from month to month across the presidencies examined (using the "panels(h)" command). The models run also account for potential first-order autocorrelation. Panel-specific autocorrelation coefficients (rho) are calculated for each presidential administration examined. Presidential dummy variables were included to evaluate the impact of each president on overall findings. Given that the events data of interest here only range from 1990 through 2004, George Herbert Walker Bush, Bill Clinton, and George W. Bush are the only presidents examined. George H.W. Bush provides the excluded variable in these analyses. For models evaluating similarity of alliance structures, only George H.W. Bush and Bill Clinton are used, as I did not have access to alliance similarity data after the year 2000 (thus, only the presidential dummy for Clinton is included here). Pseudo R-Squared values are obtained by calculating predicted values on the dependent variable for each GLS model, correlating predicted with observed values, and squaring these values.

6.6 Results

Given that all variable-specific hypotheses apply similarly to each of the models tested, I will not re-state those hypotheses here. Results for the general, all actions models can be found in Table 6.1.[55] These are the results contained in the "All Actions" columns. In none of the

[55] The majority of the coefficients in this chapter are evaluated at the 1-tailed level of analysis, and thus I will only note instances where variables will be evaluated at the 2-tailed level of analysis. All directional expectations are noted in corresponding tables next to variable names.

belief models examined (i.e. the image, strategic orientation, and feelings of historical control models) are any of the independent variable coefficients examined statistically significant. That is to say, none of the variables examined (be they foreign, domestic, or "mixed" in nature) yield an expected impact on operational code belief change on any these indices beyond what would be expected by chance. Further, for the "image" and "feelings of control" models, expectations regarding the directional impact of the variables examined are not observed, though most variables do yield at least a directionally anticipated impact on belief change in the strategic orientation model. Ultimately, no support is given to any variable-specific hypothesis in the "all actions" models (hypotheses H1 through H11).

Though this preliminary evidence suggests that these models might not capture some of the systematic influences on belief change, I am still interested in testing whether actions targeting the U.S. might be more or less important based upon the "policy domain" potentially being perceived by presidents. Recall the two "domain-specific" hypotheses:

H12 (dissimilar vs. similar states hypothesis): The findings regarding the influence of others' actions directed toward the U.S. (Hypothesis H3) are stronger when evaluated in the domain of "dissimilar" state initiated behavior, than when evaluated in the domains of either "similar" states, or in the general "all actions/all behavior" domain.

H13 (conflictual vs. cooperative actions hypothesis): The findings regarding the influence of others' actions directed toward the U.S. (Hypothesis H3) are stronger when evaluated in the domain of conflictual behavior, than when evaluated in the domain of cooperative behavior, or in the general "all actions/all behavior" domain (i.e. when all behavior is taken into account).

Results for models examining the impact of similar and dissimilar states, respectively, are contained in Table 6.1. For the image and strategic orientation "similar states" models, again, no

coefficient examined is a statistically significant predictor of monthly operational code belief change. That is to say, when only the actions of states with similar alliance portfolios to the United States are taken into account, I am unable to account for any important, systematic causes of belief change in the models examined here. In the "feelings of control," "similar states" model, I find that the "actions targeting the U.S." measure is modestly significant in the expected direction, at the one-tailed level of analysis ($t=1.51$, $prob<.10$). What this means is that when only states similar to the United States are examined, more cooperative actions toward the U.S. result in belief change toward increased feelings of control. Conversely, more conflictual actions toward the U.S. result in decreased feelings of control, when the impact of similar states alone is examined. Thus, post-Cold War presidents seem to be notably influenced by their "friends." If the U.S. receives criticism from, or is the target of conflictual actions by its allies, presidents seem to feel that they have less control over international events, broadly defined. However, when allies are praising the U.S., or are attempting to provide her with help and support, presidents tend to feel that they have greater control over events. No other variable is statistically significant in the "similar states," "feelings of control" model. Thus, some support is found for hypotheses H3 and H4 in this model, but no support is found for any other variable-specific model in any of the "similar states" models.

The "dissimilar states" models in Table 6.2 examine the influence of only those actions initiated by states with dissimilar alliance portfolios to the U.S. For the image, strategic orientation, and historical control models, no variable examined yields a statistically significant impact on presidential belief change. Based on the pseudo R-squared values, not only are findings in the "dissimilar states" models worse predictors than the "all actions" models, but they are worse predictors than the findings in the "similar states" models, as well. This runs against

Table 6.1: Factors Influencing Presidential Learning 1 (All Actions and Similar/Dissimilar States Models)

	Image of the External Environment			Strategic Orientation			Historical Control		
	All	Similar States	Dissimilar	All	Similar States	Dissimilar	All Actions	Similar States	Dissimilar
All Actions (+)	-0.01 [0.23]	--- ---	--- ---	0.01 [0.21]	--- ---	--- ---	-0.004 [0.27]	--- ---	--- ---
Similar States (+)	--- ---	0.015 [0.40]	--- ---	--- ---	0.011 [0.29]	--- ---	--- ---	**0.018** **[1.51]***	--- ---
Dissimilar States (+)	--- ---	--- ---	-0.023 [0.85]	--- ---	--- ---	0 [0.02]	--- ---	--- ---	-0.004 [0.46]
MIDCount (-)	0 [0.14]	0 [0.01]	-0.001 [0.20]	-0.001 [0.37]	0 [0.15]	-0.001 [0.21]	0 [0.21]	0 [0.55]	0 [0.20]
U.S. Rel. GDP P1/P4 (+); I1 (-)	-0.124 [0.11]	0.07 [0.06]	0.063 [0.05]	-0.724 [0.61]	-0.238 [0.20]	-0.269 [0.22]	0.008 [0.02]	0.111 [0.28]	0.064 [0.16]
Public Support	0.001 [0.94]	0 [0.25]	0 [0.22]	0.002 [1.38]	0.002 [1.35]	0.002 [1.36]	0 [0.76]	0 [0.64]	0 [0.66]
House Support	0 [0.09]	0.001 [0.17]	0 [0.04]	0 [0.14]	-0.001 [0.22]	-0.001 [0.25]	0 [0.17]	0 [0.13]	0 [0.08]
Senate Support	-0.002 [0.72]	-0.002 [0.59]	-0.001 [0.39]	-0.002 [0.70]	-0.001 [0.45]	-0.001 [0.40]	-0.001 [0.86]	-0.001 [1.11]	-0.001 [0.75]
Inflation (-), except I1	-0.005 [0.26]	-0.002 [0.13]	-0.002 [0.10]	-0.004 [0.24]	-0.003 [0.19]	-0.004 [0.21]	-0.001 [0.09]	-0.001 [0.11]	-0.001 [0.22]
Unemployment (-), except I1	0.01 [0.35]	0.004 [0.12]	0.01 [0.28]	0.001 [0.03]	0.016 [0.45]	0.016 [0.46]	0.002 [0.26]	0.004 [0.35]	0.006 [0.50]
Clinton Dummy	0.043 [0.46]	0.023 [0.23]	0.045 [0.45]	0.053 [0.56]	0.065 [0.67]	0.066 [0.67]	0.001 [0.03]	0 [0.01]	0.006 [0.19]
W. Bush Dummy	0.047 [0.44]	--- ---	--- ---	0.079 [0.70]	--- ---	--- ---	0.005 [0.13]	--- ---	--- ---
Constant	-0.003 [0.01]	-0.036 [0.07]	-0.041 [0.08]	0.152 [0.31]	-0.087 [0.17]	-0.067 [0.13]	-0.007 [0.05]	-0.062 [0.36]	-0.037 [0.21]
N	165	131	131	165	131	131	165	131	131
R-Squared	0.007	0.008	0.002	0.014	0.021	0.015	0.004	0.014	0.005

*prob<.10

Table 6.2: Factors Influencing Presidential Learning 2 (All, Conflictual, and Cooperative Actions)

	Image of the External Environment			Strategic Orientation			Historical Control		
	All	Cooperative	Conflictual	All	Cooperative	Conflictual	All Actions	Cooperative	Conflictual
All Actions (+)	-0.01 [0.23]	--- ---	--- ---	0.01 [0.21]	--- ---	--- ---	-0.004 [0.27]	--- ---	--- ---
Cooperative Actions (+)	--- ---	0.001 [0.02]	--- ---	--- ---	0.065 [0.87]	--- ---	--- ---	0 [0.00]	--- ---
Conflictual Actions (+)	--- ---	--- ---	-0.011 [0.30]	--- ---	--- ---	0.005 [0.13]	--- ---	--- ---	-0.01 [0.78]
MIDCount (-)	0 [0.14]	0 [0.10]	0 [0.11]	-0.001 [0.37]	-0.001 [0.28]	-0.001 [0.41]	0 [0.21]	0 [0.26]	0 [0.23]
U.S. Rel. GDP P1/P4 (+); I1 (-)	-0.124 [0.11]	-0.117 [0.10]	-0.072 [0.06]	-0.724 [0.61]	-0.751 [0.64]	-0.748 [0.63]	0.008 [0.02]	0.01 [0.03]	0.046 [0.12]
Public Support	0.001 [0.94]	0.001 [0.92]	0.001 [0.90]	0.002 [1.38]	0.002 [1.19]	0.002 [1.38]	0 [0.76]	0 [0.74]	0 [0.67]
House Support	0 [0.09]	0 [0.11]	0 [0.10]	0 [0.14]	0.001 [0.18]	0 [0.13]	0 [0.17]	0 [0.20]	0 [0.18]
Senate Support	-0.002 [0.72]	-0.002 [0.80]	-0.002 [0.74]	-0.002 [0.70]	-0.002 [0.67]	-0.002 [0.68]	-0.001 [0.86]	-0.001 [0.96]	-0.001 [0.82]
Inflation (-), except I1	-0.005 [0.26]	-0.004 [0.23]	-0.004 [0.24]	-0.004 [0.24]	-0.004 [0.26]	-0.004 [0.26]	-0.001 [0.09]	0 [0.06]	0 [0.08]
Unemployment (-), except I1	0.01 [0.35]	0.009 [0.31]	0.01 [0.33]	0.001 [0.03]	-0.002 [0.05]	0.002 [0.05]	0.002 [0.26]	0.002 [0.21]	0.002 [0.26]
Clinton Dummy	0.043 [0.46]	0.04 [0.43]	0.042 [0.45]	0.053 [0.56]	0.049 [0.52]	0.055 [0.59]	0.001 [0.03]	-0.001 [0.02]	0.001 [0.04]
W. Bush Dummy	0.047 [0.44]	0.05 [0.45]	0.045 [0.41]	0.079 [0.70]	0.068 [0.60]	0.078 [0.69]	0.005 [0.13]	0.005 [0.15]	0.001 [0.04]
Constant	-0.003 [0.01]	-0.006 [0.01]	-0.043 [0.09]	0.152 [0.31]	0.013 [0.03]	0.171 [0.34]	-0.007 [0.05]	-0.007 [0.04]	-0.041 [0.26]
N	165	165	165	165	165	165	165	165	165
R-Squared	0.007	0.008	0.007	0.014	0.017	0.015	0.004	0.004	0.012

expectations that presidents will pay closer attention to the events initiated by rivals than they will that of peers. Thus, I do not find any support to hypothesis H12, nor do I find support for any of the variable-specific hypotheses examined in the "dissimilar states" models.

The final set of models examined looks at the impact of the domains of "conflict" and "cooperation" on presidential beliefs. Again, I expect that conflictual actions will be more salient influences on changes in presidential beliefs than will either cooperative gestures, or all actions taken together. As such, when viewing the impact of conflict events alone, I expect to find a stronger expected relationship between the relative tenor of these conflict acts in a given month (ranging from extremely conflictual to only modestly conflictual) and resulting belief change than when only cooperative actions are examined, or when all actions (conflictual, cooperative, and neutral) are examined together. Results can be found in Table 6.2.[56]

In the "cooperative actions" models, there are again no significant coefficients as influences on presidential learning in any of the three models examined. However, there similarly are no significant coefficients in any of the "conflictual actions" models. In both sets of models, the directionality of findings is also often contrary to expectations, as found with previous models examined. As such, I do not find support for hypothesis H13, nor do I find any support for the variable-specific models in any of the "cooperative" and "conflictual actions" models.

6.7 Discussion

This chapter shows that neither the domestic- nor foreign-based factors tested have a notable influence on presidential belief change in the manner evaluated here. Further, beyond

[56] Note that I have re-entered the results from the "all actions" models in Table 6.II for easy comparison with the new results presented here.

the lack of findings regarding specific variables of interest, these results do not give clear support to the expectation that any of the five "domains" evaluated have a predictable, blanket influence on the impact of the factors examined over competing "domains." Ultimately, none of the hypotheses presented are given strong support, and beyond this, given the lack of statistical significance for specific coefficients and the low pseudo R-Squared values across the models evaluated, the data do not give us much of an indication of what might be wrong about these hypotheses.

Based on these findings (or more appropriately, on the lack thereof), I cannot say if beliefs are simply incredibly stable relative to the other factors examined, if they change in an unsystematic way, or if they change in ways that would be captured by the inclusion of variables not included in these models (as would be the case if model mis-specification is taking place here). Thus, it may be that this chapter helps to demonstrate that elite-level psychology *is* truly important to take into account, in that changes in beliefs do not logically follow from the influence of important foreign and domestic phenomena. These types of changes would be expected if a clear, direct impact on state actions and the beliefs of key decision-makers took place in the "smooth, transmission belt" conceptualization of leaders, as held by structural realists. However, it is also possible that these models simply do not include the relevant influences on belief change that do exist in the domestic and international domains. If true, then these findings do not tell us much at all, beyond the fact that these models need to be re-considered, re-constructed, and re-evaluated. Whatever the case, the lack of findings is an issue that requires additional research before a clear answer can be given as to its cause.

One further reason for the lack of findings may be that the normal, day-to-day influences on leaders are just not enough to warrant notable belief change, but that uncommon, traumatic

events might provide the impetus necessary for beliefs to change in a significant manner. The next two chapters test this possibility by examining the potential impact of crisis events on belief change.

CHAPTER 7: THE INFLUENCE OF CRISES ON PRESIDENTIAL LEARNING IN THE IMMEDIATE AND LONGER TERM

In the previous chapter, we evaluated a number of influences on presidential learning, but of course, those are not the only factors that might influence learning by the president. In fact, the most drastic changes in leaders' beliefs regarding the international political environment may well occur not when the public mood or broad "color" of U.S. affairs with others methodically shifts one way or another, but rather when major "shocks" to leaders' belief systems take place.

The events of 9/11 were clearly amongst the most influential events on U.S. foreign policy in recent years. They fundamentally shifted our nation's priorities, leading to what Gaddis (2005) called "the most sweeping redesign of U.S. grand strategy since the presidency of Franklin D. Roosevelt" (2). 9/11 provided the impetus for the White House's initiation of the 2003 war in Iraq, and in the process, brought into the popular lexicon the notion of the "pre-emptive" war. Apart from the policy changes that took place following 9/11, however, these attacks appeared to impact U.S. President George W. Bush in a particularly striking manner—fundamentally altering his conception of the nature of the political universe, and making Bush a much more interested and involved player in the foreign policy scene than he was previously.

Similar arguments could be made for Kennedy following the failed Bay of Pigs incident, for Jimmy Carter following the Soviet Invasion of Afghanistan and the Iranian hostage ordeal, and for Bill Clinton following the "Battle of Mogadishu." These events each seemed to fundamentally alter each leader's conception of either the international environment broadly defined, the U.S.'s role in world affairs, or a combination of these two factors. Stern (1997) reflects this with the following:

> Experiencing crisis tends to change the way people think, in important ways. Crisis experience often entails the challenging of tacit or explicit beliefs about adversary actors,

> the character of the environment (social and physical) and the adequacy of existing organizational and political arrangements designed to cope with that environment (73).

Further, he argues:

> . . . there is good reason to believe that crisis has the potential to speed up learning and diffusion processes due to . . . situational attributes . . . such as the focusing of political attention and broadening of attentive publics, both of which are likely to produce political and psychological accountability effects (74).

The questions I address in this chapter come from an understanding that crises often appear to have a notable and sudden impact on beliefs. These questions are: is there some systematic process by which leaders' beliefs change following these "crisis" events? And if so, what is this process, how enduring might these changes be, and what does this ultimately say about presidential learning?

7.1 Foreign Policy Crisis Defined

Before I go any further, let us evaluate what a "foreign policy crisis" is specifically. Among the most important works on foreign policy crises is Charles Hermann's (1969) pioneering study, appropriately titled *Crises in Foreign Policy*. Here, Hermann engages in a comprehensive literature review of crisis evaluation in political science scholarship (in his second chapter, "The Concept of Crisis"), and usefully breaks these definitions into two broad categories. The first of which is "Crises as Turning Points." This is the evaluation of crises as "the critical turning or branching point in some human activity," which is "analogous to the [definition of crisis used] in common medical usage" (21). Here, there is uncertainty and some form of "rapid and sudden change" that has the potential to disrupt the status quo. Hermann then evaluates this form of crisis from the specific standpoint of international relations research, and states that "the use of crisis as a critical turning point often refers to a specific kind of change—sudden variations in the level of conflict or in the intensity of hostilities which could lead to conflict" (22). An example of a crisis turning point given by Hermann is the Korean War, which

was a “turning point” in that it led to the U.S. and its Western allies drastically increasing defense spending, something that continued on long after the aftermath of the Korean conflict (23-24).

Hermann suggests that this manner of crisis evaluation has pros and cons. On the positive side, it is useful in the “systems approach” to international relations theorizing. That is to say, the turning point perspective is useful toward addressing the “big picture” of interstate relations, including the evaluation of “various patterns of interaction among the relevant actors in the world” (28). However, this perspective has notable drawbacks, as well. First off, it “does not explain *what* constitutes a crisis, but only *where*, in a temporal and spatial dimension, it takes place” (27). Nor does it explain why the crisis occurred to begin with. As such, it is not very useful in evaluating “internal,” foreign policy decision-making processes. An additional, related drawback is that this form of crisis evaluation is typically only useful in hindsight, and thus cannot predict crises very well given that until a crisis occurs and its effects have been realized, we cannot know if it is a “critical turning point,” or something less significant.

In opposition to the turning point approach, Hermann describes the second category of crisis research as “crises as traits or characteristics” (24). Here, crises are evaluated in terms of either their intrinsic traits, or in terms of the traits of those that are directly impacted by such. The advantage to evaluating crises in this way is that it may be useful in prediction, in that it does allow for foreign policy analysis in terms of states influencing, or being influenced by crises. Further, though this form of crisis evaluation is narrower in its scope than is the turning point perspective, here we benefit from possibly knowing a crisis when we see it, without having to wait for historical hindsight.

For this project, I evaluate crises following from Hermann's latter category, and below I will discuss the concept of "crisis" as evaluated here, as well as how these crises might be expected to influence U.S. Presidential beliefs when encountered. Hermann (1963) conceptualizes a crisis as an event that: "(1) threatens high-priority values of the organization, (2) presents a restricted amount of time in which a response can be made, and (3) is unexpected or unanticipated by the organization" (64). Though crises had been studied prior to Hermann's work, most definitions ignored the second and third components of his definition, while often including excess, symptomatic criteria (which Hermann frowned upon). Hermann's definition was valuable in that it was logical and intuitive, while at the same time theoretically parsimonious, eliminating the "fat" that characterized other trait-level definitions.

Though Hermann's definition was quite useful for researchers wishing to ground crisis evaluation in a clear, conceptual base, not all researchers were happy with this conceptualization. These individuals felt that the focus on purely external events and failure to take into account the possibility of armed conflict, among other factors, led to the conceptualization of an improperly specified phenomenon. That is to say, some events might be included here that should not, according to these authors, be considered a true "foreign policy crisis," whereas others that should be included would not be. As such, in the mid-1970s, Brecher and Wilkenfeld (2000) developed an updated definition that they believed avoided the trappings of Hermann's crisis concept. They characterized a crisis (for a state) as:

> . . . a situation with three necessary and sufficient conditions deriving from a change in the state's internal or external environment. All three are perceptions held by the highest level decision makers of the state actor concerned: a *threat to one or more basic values*, along with an awareness of *finite time for response* to the value threat, and a *heightened probability of involvement in military hostilities*. (3, emphasis in original)

This definition differs from Hermann's in 5 distinct ways:

> . . . (1) the omission of surprise as a necessary condition; (2) the replacement of "short" time [or "restricted" time in the definition by Hermann cited above] by "finite" time for response; (3) the recognition that a crisis might originate in the internal, as well as the external, environment of the crisis actor; (4) the concept of "basic values," rather than "high-priority goals," as the object of perceived threat; and (5) the addition of "higher-than-normal probability of involvement in military activities (hereafter, war)." (Brecher and Wilkenfeld 2000, 3)

They go on to emphasize that the probability of war, in the mind of the crisis actor, must be "*qualitatively higher than the norm* in the specific adversarial relationship," and that a *change* in the probability of conflict, rather than the absolute level of conflict probability, is a crucial component of crisis occurrence (3). That is to say, even if the probability of war with a state is very high, this only qualifies as a crisis if this probability is an increase from some prior point in time.[57] For this project, I evaluate this form of crisis, updated by Brecher and Wilkenfeld from Hermann's earlier work.

It is important to reiterate that both Hermann and Brecher and Wilkenfeld treat crises not as some "objective" event that occurs in a vacuum, but rather as an occurrence that impacts relevant actors' perceptions regarding the threat to their "values." This is important to keep in mind when evaluating the impact of these phenomena on beliefs.

7.2 The Impact of Crises on Foreign Policy Decision-Making

But what has work on crises discovered, in terms of their impact on decision making? Hermann's (1963) earlier work, though primarily concerned with how crises could hinder organizational responses to these crises, formed a number of interesting propositions concerning the behavior of an organization's units following crisis exposure. For instance, he suggested that

[57] Note: Brecher and Wilkenfeld also develop a definition for "international crisis" (i.e. crises which threaten the structure of international politics), but as this is not the focus of this project, this type of crisis will not be addressed here.

crises would tend to lead to "withdrawal" behavior (such as decreased production, increased absenteeism, etc.—pg. 66), and that the number of information/communications channels in a time of crisis were likely to be reduced (68). Of specific interest to this study, however, is his 4th proposition, which states that in crises there is "a tendency toward contraction of authority" (70). By "contraction of authority," he meant that authority would be held in the hands of a few at the top of the command hierarchy. Following this, Hermann suggests that the "authority units" in control following this contraction begin to feel the bulk of the stress caused by the crisis, well beyond that experienced by other organizational units (71). He goes on to quote Richard Meier when he writes, "a crisis occurs when stress 'reaches a peak in the executive level'" (Meier, quoted in Hermann 1963, 71). Hermann also discusses stress as a response to, rather than as a component of, crises.

Following from Hermann's definition, a crisis is expected to have a significant effect on a leader by increasing his stress level. However, Hermann's work, as well as that of most others evaluating crises, examines the impact of these occurrences on decision-making and outcomes in the very short term—that is, the steps that individuals or members of impacted organizations take toward managing or coping with these specific crises (Blight 1990; George 1986; Hermann 1963; Kuklan 1988). Other works are concerned with how state behavior changes following crisis exposure (Hermann 1990). Here, I am not concerned with how a leader handles a given crisis, or even with how individual or state behavior changes following a crisis. Instead, in this chapter, I am interested in the impact of crises on presidential belief change.

Though not abundant, there are a few notable works that have addressed belief change, or "learning," from foreign policy crises. For instance, Blight and Welch (1990) argued that the Cuban Missile Crisis actually created a "Kuhnian 'paradigm shift' of crisis management which

accompanied the advent of mutual vulnerability," and that this caused the superpowers to learn "a great deal" (319). In this sense, foreign policy crises are viewed as having the same impact as experiencing a "natural disaster" (Stern 1997, 74). Stern states:

> As a result, crisis experience may have important implications for the realignment of threat images or scenarios in the cognitive worlds of decision-makers and mass publics. Actors or structural processes traditionally deemed benign can be perceived as malignant or dangerous as the dust of crisis settles. Threats which had been previously considered marginal may take-over central positions on the policy stage, for a time. (74)

Lebow (1981) similarly argues:

> Crises can . . . put interstate conflicts into sharper focus by providing insights into the state of mind and objectives of the protagonists. Acute crises also produce a kind of collective trauma in that they confront leaders on both sides with serious threats to their personal and national interests and are likely to leave them somewhat shaken even after the successful mastery of such challenges. Both characteristics of crisis can act as catalysts prompting reassessment of the basic premises of a nation's foreign policy. (309)

Thus, crises may serve to demonstrate to leaders that existing conceptions of the political world are incorrect, or are inappropriate for understanding and dealing with potential threats.

Other "longer-term" results of crises, as laid out by Oneal (1982), include the potential alteration of: one's image of the opponent (303--discussed further below); goals, policies, and commitments (306); coalitions of policy making (310); and institutions of policy making (311). Oneal argues that each of these is influenced in a systematic way following crisis exposure, based upon pre-crisis and crisis-based factors. Take, as one example, the "coalitions of policy making." Oneal argues that one's cabinet might be "reshuffled" following a crisis, based upon who had better anticipated the potential for this crisis prior to its occurrence. He gives the example that, as the Soviet Union presented itself as a real threat, Truman gave promotions to his advisors who warned him of such a possibility early on. The same could be argued for President Bush, and the post-9/11 favor shown toward "hawks" such as Donald Rumsfeld and Paul Wolfowitz (whose worldviews might have expected the 9/11 terrorist attacks) over "doves" such

as Colin Powell (whose more optimistic worldview might not have meshed with Bush's perception of a post-9/11 world).

As a further example of how learning affects the "institutions of policy making," Oneal argues that "crises result in the growth and proliferation of forums for deliberation and decision in the executive branch" (311). This follows from the fact that principal decision makers tend to value increased "consultation and coordination" following a crisis. Again Oneal gives the example of Truman, and again there are parallels with the Bush Administration and the restructuring of the U.S. intelligence community following its failure to anticipate 9/11.

Many of the longer term changes in policy preferences and outcomes (in terms of the policy-making structure, the individuals involved in policy-making, and the content of policy) following crisis occurrence is expected to stem directly from the components of the crisis itself (i.e. its origins, its characteristics, the crisis outcome, etc.). However, a further impetus for these changes may be the intervening variable of public support. This is discussed to some extent in the preceding chapter, but regarding crises specifically, Stern (1997) suggests:

> Factors such as the magnitude of the stakes involved, the stage at which awareness of accountability occurs and the presence or absence of norms promoting critical thinking are thought to play an important role in determining to what extent heightened accountability will lead to enhanced cognitive complexity in decision-making (75).

In other words, when the environment is ripe for such, crises may have a powerful impact on leaders due to the role of accountability, which may facilitate more efficient decisions (defined as an increase in the "cognitive complexity" that leaders exhibit).

Thus, crises are expected not only to impact the immediate crisis decision-making context, but also leaders' longer-term beliefs, the broader policy-making environment, and policy itself in the longer term. Here, I am focusing on leaders' beliefs, and the potential systematic influence of crises on these beliefs.

7.3 Evaluating Crises and Learning

For this project, I evaluate crises in the manner conceptualized by Brecher and Wilkenfeld (2000). Recall that these authors define a crisis as "a *threat to one or more basic values*, along with an awareness of *finite time for response* to the value threat, and a *heightened probability of involvement in military hostilities"* (3).

Regarding the evaluation of beliefs, as with the rest of this larger project, I employ U.S. Presidents' operational code belief systems, taken from the content analysis of their speeches via "Profiler Plus." As with the previous two chapters, I am restricting my analysis to the more significant operational code beliefs that are hypothesized to structure leaders' overall worldviews. Thus, I will test the influence of foreign policy crises on the "master" beliefs of the image of the international environment (P1), strategic preferences for dealing with the international environment (I1), and feelings of control in the international system (P4) for U.S. Presidents from John F. Kennedy through George W. Bush (1961-2003).

In chapter 6, though I examined learning throughout three separate presidential administrations, I was really examining learning from month to month. That is to say, "do the phenomena that I encounter today influence leaders' beliefs in the very near future, and do the influences in the near future affect their beliefs in the following month?" One notable change in this chapter is that I am not evaluating "learning" in this manner. Rather, I am examining learning over long-term "chunks" of time. That is to say, "do crises affect leaders' beliefs over the period of several months, or even throughout presidencies, in a systematic way?" Thus, I employ a series of statistical models that evaluate "interruptions" in longer patterns of beliefs.

7.4 Hypotheses

7.4.1 The Isolated Influence of Crisis Exposure on U.S. Presidential Beliefs

First, I am interested in simply looking at the impact of crises on leaders' beliefs over the span of their presidencies, and in the process, evaluating whether crisis exposure alone will have some systematic influence on leaders' beliefs. My expectations here stem from the understanding that crises are events that threaten a given state's (in this case, the U.S.) values, where there is time pressure, and where the probability of war increases. These are serious incidents in which leaders may well come face to face with the worst kind of stress that a president may experience in his role as head of state—stress that could potentially have short, or long term effects on a given leader's beliefs.

The kind of learning that I expect to find follows from the arguments made by Lebow, Blight and Welch, Stern, and most explicitly, by John Oneal. Oneal (1982) states:

> With regard to the impact of a crisis on *the image of the opponent*, the onset of a serious confrontation is likely to affect policymakers' estimation of both the long-term objectives of their adversary and the means it is willing to use in pursuit of these objectives. Not surprisingly, crisis tends to reinforce the belief that the opponent is fundamentally opposed to the ideological values and concrete interests of the responding nation and that it will resort to the use or threat of force if such measures seem to be expedient. The primary, first-order effect of a crisis is, then, to make the opponent seem more hostile to the status quo power, less trustworthy, and more aggressive. (303)

Though Oneal was referring to the image of a specific opponent (or of a specific category of opponent), I examine the "image" of the entire international environment, as it is quite possible that one's general worldview will also shift following an event at traumatic as an international crisis. But apart from this, his observations provide the explicit expectations regarding learning, in terms of the image and strategic preferences beliefs, that I evaluate in my

first hypothesis.[58] I infer an additional expectation regarding feelings of control—that crisis occurrence will make presidents feel that they have less control over the international political domain than they did beforehand, since they were unable to resolve a given dispute prior to its escalation into a crisis (via the U.S.'s status as a political and military super-power, and/or the explicit use of persuasion or threats aimed at deterrence).

Specifically, I hypothesize that following each crisis period—instances in Brecher and Wilkenfeld's database where the U.S. is listed as a "crisis actor" (or an actor experiencing a given crisis)—presidents will come to believe that the world is a more hostile place (signified by a decrease in their image [P1] values), where they will learn to prefer conflict over cooperation (signified by a decrease in their strategic preference [I1] values), and will feel less control over events (signified by a decrease in their control [P4] values) than they did prior to crisis exposure. These expectations follow from the fundamental nature of crises and their impact on the president himself, as well as their impact on the U.S. public and government broadly defined. The impact of crises upon these latter groups is important, as the perceptions and preferences of these key domestic groups are likely to impact the president and his beliefs in important ways, given the accountability effect discussed by Stern.

Here, I essentially expect a change in the overall *magnitude* of mean belief values, or the establishment of a new *baseline* belief value, following crises. By looking at the mean magnitude of belief levels, we are testing the assumption that the crisis interruption will have an immediate, noticeable change in belief levels. Thus, if we were to view a scatterplot of belief

[58] Oneal notes that it is possible for crises to force actors to shift their "image" of the opponent in a more positive direction. He gives the example here of the intentional demonstration of restraint by one's adversary as a potential cause of this form of "learning." However, this is not expected to be the case in crises generally, and further, is not likely a sufficient condition to generate a change in one's "image" (305). Thus, this possibility is not tested here.

trends both before and after the crisis, there would be a noticeable "jump" in the data between these two periods, as the post-crisis trend points would essentially form a new baseline belief value, and would not appear part of a continuous trend with the pre-crisis trend data. A simplified graphical representation of this expectation can be seen in Figure 7.1.

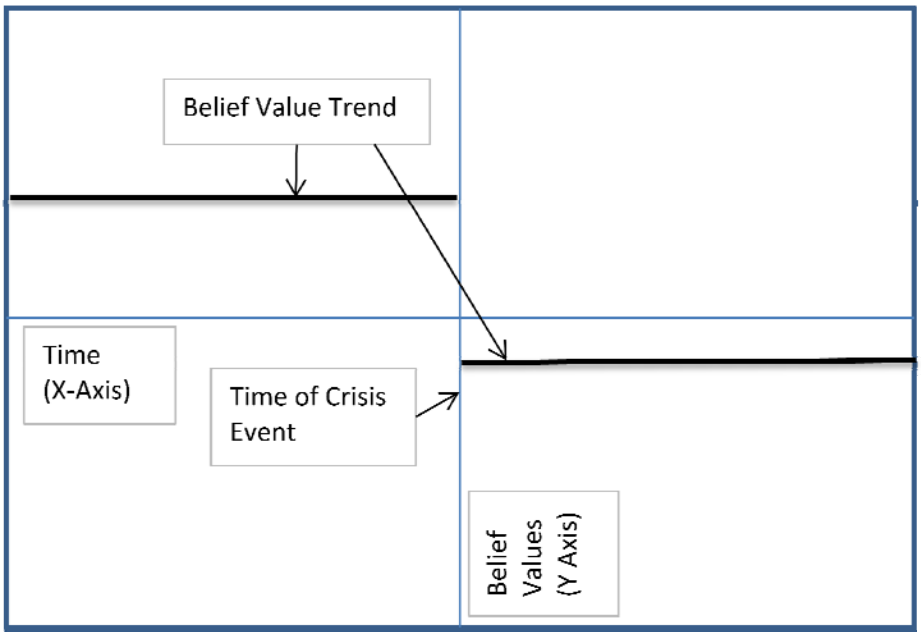

Figure 7.1: Expected Belief Changes following Crisis Exposure (Magnitude Change Hypothesis)

Data *trends* are not of explicit interest for this specific examination, but rather the simple change in the intercept point between the two samples of interest (i.e. beliefs before crisis exposure, and beliefs following crisis exposure). An example here would be a president who initially sees the world as a modestly friendly place according to the "image" belief, but then experiences the "shock" of a crisis, and quickly shifts his beliefs following this so that his mean belief level better reflects a perception of an unfriendly world. I expect this to happen following each crisis to which a president is exposed. The specific direction of expected belief change follows from the above discussion of Oneal's expectations regarding belief change following crisis. Thus:

H1: Crisis exposure will lead to a quickly-occurring shift in the magnitude of presidential belief values following crisis exposure. The manner of this belief change will be a shift toward: a) seeing the world as a more hostile place (decrease in leaders' image [P1] operational code values), b) preferring the use of conflict as a strategy more than he did prior to crisis exposure (decrease in leaders' strategic preference [I1] operational code values), and c) feeling less control than he did prior to crisis exposure (decrease in leaders' feelings of control [P4] operational code values).

However, examining the short-term magnitude change in belief values is not enough to tell us the full story of how crises might affect beliefs. Even if there is a strong, *initial* downward shift in leaders' belief values in the period following crisis exposure, does this shift *continue* in a given direction, over time, in the period following crisis exposure? Or rather, does this trend remain "flat?" And most importantly, is this trend significantly different from the previous (pre-crisis) trend for a given belief value? Further, in successive crisis periods, is any noticeable shift in trends a methodical continuation of earlier shifts, or might exposure to each successive crisis yield a more or less extreme trend shift of some type than those following previous crises? We evaluate these possibilities by testing *trends* in the dependent variable following "interruptions" in a longitudinal analysis.

Recall from hypothesis H1 the expectation that crises will have a sharp, immediate impact on leaders' beliefs that will lead to a change in the overall magnitude of a belief's mean value, essentially establishing a new baseline belief level. For hypothesis H2 however, I expect that following this initial change, the impact of a given crisis will decay over time, and belief values will tend to move back toward their initial states held prior to this crisis event. This follows from the idea that there is a tendency toward cognitive balance as discussed in chapter 2,

even following traumatic experiences. Though presidents should change their beliefs in order to facilitate interpretation of a world colored by the last crisis experienced, I expect that they will maintain a tendency to revert to some previously established equilibrium belief level. Given that a new baseline belief value is expected to be established following a crisis event, I expect that this previous equilibrium point is not likely to be reached again, but I do expect movement in that direction. This hypothesized phenomenon is expressed in Figure 7.2.

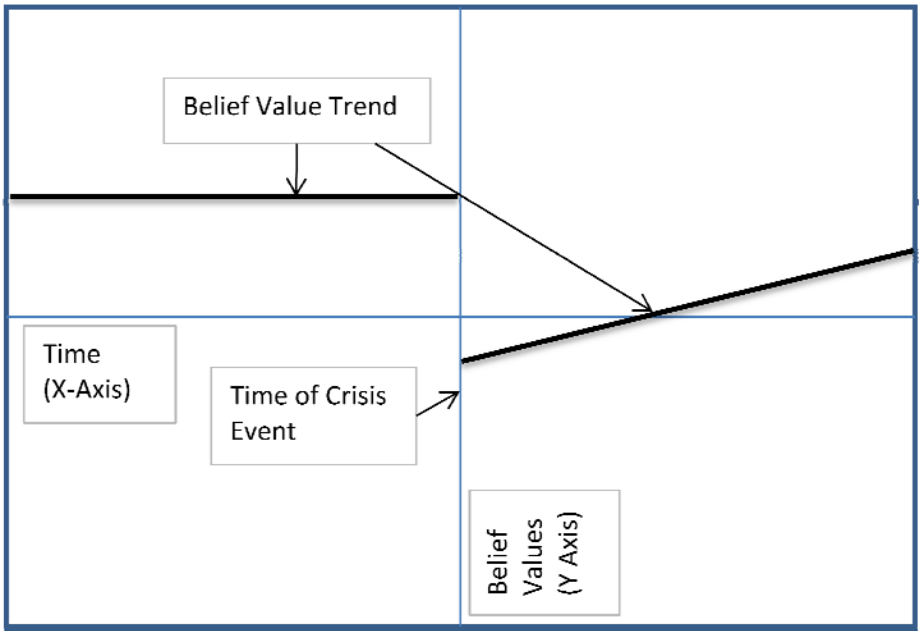

Figure 7.2: Expected Belief Changes following Crisis Exposure (Trend Change Hypothesis)

Given that I expect significant downward shifts in mean image, strategic orientation, and feelings of control values following crisis exposure, the reversion in belief trends towards the previous baseline belief values are expected to be *positive* shifts. As with hypothesis H1, I expect that this phenomenon will occur for each successive crisis to which a president is exposed. Hypothesized expectations are the following:

H2: The initial impact of crises on leaders' beliefs will be fairly strong (in the manner described in hypothesis H1), but this impact will decay over time in the period following crisis exposure, as

the initial impact of the crisis fades somewhat. Thus, when evaluating the trends in belief values, a slight *increase* in leaders' P1, I1, and P4 values (toward increased perceptions of friendliness, preferences for cooperation, and increased feelings of control, respectively) will occur in the period following a given crisis.

I will examine the above hypotheses both for each leader separately, and for all leaders together in pooled models. I test both hypotheses H1 and H2 using a multiple interrupted time series (MITS) analysis (see Lewis-Beck and Alford 1980 for a discussion of MITS—this will be discussed in greater detail in the methods section).

7.5 Data

As mentioned in the introduction, crises here are taken from the work of Brecher and Wilkenfeld, or more specifically, from these authors' International Crisis Behavior Primary Data Collections coding scheme.[59] This database is widely used in empirical international relations work, and provides an array of variables concerning every major international crisis from the Russian Civil War in 1918 through the Chad-Sudan conflict of 2005. Ultimately, 31 of these crises were examined where the U.S. is listed as the "crisis actor" (see Appendix C for a list of the crises examined, as well as those excluded and the reasons for their exclusion). This project examines crises that occurred during the administrations of Presidents Kennedy, Johnson, Nixon, Ford, Carter, Reagan, George H.W. Bush, Bill Clinton, and George W. Bush.

Excluded cases are: those during presidencies in which the U.S. initiates a crisis, but is not listed as a crisis actor; instances in which a crisis overlaps two presidencies; crises that occur near the beginning or ending of a presidency so that there is not enough speech data to assess pre-, or post-crisis measures at 3-month intervals; and crises that are outliers in terms of duration

[59] Available at http://www.cidcm.umd.edu/projects/project.asp?id=15

(i.e. those lasting over 6 months). Crises that occur in the first 7 months of a presidency are also left out of analysis, as I require this period for the establishment of MITS baseline levels. Additionally, some crises in the time period examined here overlap, or occur soon after another. For any crises that occurred while another was ongoing, or where one occurred in the 3 months following another, I treated each of these crises as part of a "crisis period." This was done in order to minimize the difficulties in evaluating true pre- and post-crisis changes when the beginning of one crisis occurred during, or soon after, the end of another. As such, I examine 25 total "crisis periods," though as noted above, I actually examine 31 crises.

For all hypotheses in this chapter, only events where a non-U.S. actor is the first to initiate crises are evaluated.[60] If, according to Brecher and Wilkenfeld, the U.S. first "initiates" a crisis (where another state perceives a crisis prior to the U.S.), then this crisis is not included. Though all crises in which the U.S. is threatened might be expected to have a serious impact on leaders' beliefs, these crises in which the U.S. feels more like the "victim" might be expected to have the most impact.

As is discussed in the hypothesis section, the operational code indices examined here are the image (P1), strategic preferences (I1), and feelings of control (P4) beliefs. For all analyses, monthly aggregations of operational code beliefs are examined (note: these are not the "3 month, moving averages" evaluated in previous chapters). Thus, I do not examine speech material leading up to the day prior to crisis exposure. Instead, I look at those that occur up until the month within which a crisis began. Exceptions to this are times when a crisis occurs in the last 4

[60] Ideally, I would look here at crises in which the U.S. was clearly not the instigator, but oftentimes, crises are the result of a series of inter-state interactions, and even long histories, where it is difficult to assess who truly "started" a dispute. As such, the manner of selecting crises here is a proxy for "non-U.S. initiated" crises, though this may not always actually be the case.

days of a month, or ends in the first 4 days of a month. When this occurs, the month during which a crisis takes place *is* included in either the pre-, or post-crisis period belief measure, respectively. In other words, if a crisis begins on December 31, then speeches made in December will be included in the calculation of a leader's pre-crisis belief values. Further, if a crisis ends on January 1, then speeches made in January will be included in the calculation of a leader's post-crisis belief values.

7.6 Methods

I examine beliefs by looking at leaders' monthly operational code data for the entire period leading up to and following each crisis period during their presidencies. Data are evaluated using the Multiple Interrupted Time Series Analysis (MITS) technique. The interrupted time-series method possesses advantages over other methods in that a simple comparison of pre- and post-crisis period belief mean levels would not allow us to account for *trends* in belief change following each crisis "interruption." That is to say, it may be that each successive crisis impacts a given leader's beliefs, but unless we look at the trends of change along with mean changes, then we cannot know the initial versus long-term impacts of each crisis. For a further discussion on this issue, see the work of Lewis-Beck and Alford (1980) and Garand, Monroe, and Vlosky (2001).

The first variable contained in these MITS models is a counter for each month of a given presidency, with a "1" associated with the first month, a "2" associated with the second month, etc. This measure examines the impact of time on learning from the president's inauguration *up until* the first "crisis period" of interest. In other words, for a given belief, a positive coefficient here reflects a positive slope for the period prior to the first crisis period experienced by a given president, and a negative coefficient reflects a negative slope for this period.

The other independent variables of interest evaluate the impact of each crisis period on beliefs. These variables are of two types. The first is a binary measure, in which a "0" is applied to all months prior to the occurrence of a given crisis period, and a "1" is applied for all months following this occurrence, up until the end of a given presidency. This measure evaluates the "short-term" impact of crises, as the *shift in the intercept point* from pre-crisis period to post-crisis period is examined here. *Trends* in the degree of belief change in this period (that is to say, longer term changes in the *slope* of belief values following a crisis) are not accounted for by this variable.

The second type of variable is a post-crisis count variable. On this measure, a "0" value is given to all months prior to a given crisis period's onset, similar to the binary measure. However, following the onset of a crisis period, a count value (i.e. 1=the first month following a crisis period, 2=the second month following a crisis period . . . t=month t following a crisis period) is associated with each subsequent month, up until the end of a leader's presidency. The post-crisis count variable, in opposition to the binary variable, *does* take belief trends (or slopes) into account, by examining longer-term learning changes following crisis periods. The interpretation of "negative" or "positive" coefficients on post-crisis-count variables is made in the manner described previously for the general count variable, but only for the period *following* the onset of a given crisis, up until the next crisis period (or until the end of the presidency, if it follows the final crisis period). In the results section, I will describe the Kennedy case in detail, in order to further elaborate on what these variables are tapping into, and what significant negative and positive coefficients tell us about the impact of crisis periods on beliefs.

At this point, borrowing from Garand, Monroe, and Vlosky's (2001, 5) work, the interrupted time series model for a single crisis interruption would look like this:

7.6.1 Single President, Single Crisis Interruption Model:

$$\text{Belief Values}_t = a + b_1(\text{Time Counter}_t) + b_2(\text{Binary Crisis}_t) + b_3(\text{Post-Crisis Counter}_t)$$

Following Garand et al.'s (2001, 5) description, Belief Values$_t$ is the belief value on a given index for a president at time t; Time Counter$_t$ is a monthly time counter beginning at the first month of a given presidency (measured as 1 in the first month of the time series, 2 in the second year, etc.) and lasting until the end of a presidency; Binary Crisis$_t$ is a binary measure, coded "0" for all years leading up to the onset of a given crisis period, and a "1" for every subsequent year until the end of a presidency; and Post-Crisis Count$_t$ is the post-crisis count measure, where a "0" is applied to every month leading up to a crisis, and a count begins in the month following the onset of a crisis period, continuing until the end of a presidency ("1" for the first month following the onset of a crisis period, "2" for the second month following the onset of a crisis period, etc.). a represents the intercept of the pre-crisis time period, b_1 represents the slope of the total pre-crisis period, b_2 represents a "shift in the level (intercept) of the time series" associated with the onset of a crisis period (i.e. the phenomenon represented in Figure 7.1) and b_3 represents the "change in the slope of the time series that occurs following the adoption" (Ibid.) of the crisis (i.e. the phenomenon represented in Figure 7.2). If an immediate, expected, short-term impact of crisis periods is found, then this will be represented with a *negative* b_2 value, indicating that crises have an immediate, negative impact on presidential belief levels. If crises have a more "gradual, longer-term" (Ibid.) impact on presidential beliefs, we would expect b_3 to be *positive,* indicating that the initial negative shift decays in the period following the crisis period.

If a single set of the above variables were employed, then the effect of a single "interruption" in a time series for a single president could be examined. However, given that

there are multiple crises being examined here in each model, I examine a *multiple* interrupted time series. Note that I evaluate three types of multiple interrupted time series models in this chapter. Examined first are individual, presidential models. Examined second are pooled models, including all crises experienced across all presidencies. Examined third are "fixed effect" pooled models including presidential dummy variables.

In all models examined in this chapter, I only include one "general" count variable, evaluating the slope of belief values leading up to the first crisis period. However, for the individual, presidential models, I include a set of "binary" and "post-crisis count" variables for each crisis period examined for each presidency. As such, I can tell whether each crisis period has the expected impact described in the two hypotheses tested here, whether only one or some crises have this impact, or whether no crises have this impact. The individual, presidential models are a basic form of the MITS model that do not include cross-sectional data across presidents. These models are similar to the single interruption model outlined above, but include indicators to account for additional crisis periods. Thus:

7.6.2 Single President, Multiple Crisis Interruption Models Equation

Belief Values$_t$ = a + b_1 (Time Counter$_t$) + b_2 (Binary Crisis Period 1$_t$) + b_3 (Post-Crisis Period 1 Count$_t$) + b_4 (Binary Crisis Period 2$_t$) + b_5 (Post-Crisis Period 2 Count$_t$) . . . + b_{n-1} (Binary Crisis Period z_t) + b_n (Post-Crisis Period z Count$_t$)

z reflects the number of crisis periods examined for a given president, and n reflects the ultimate number of covariates examined. The additional Binary Crisis and Post-Crisis Count measures reflect those variables added to account for additional crisis periods. Thus, a negative b_4 coefficient would demonstrate a negative, short-term impact of the second crisis period

experienced by a given president on belief levels, and a positive b_5 coefficient would reflect a longer-term "decay" of this impact over time on belief levels.

For pooled models, there are two broad changes to the individual presidential models (note that in my pooled database, rows represent months, and there is one row of data for each month of interest starting with January of 1961 and ending in December of 2003; each column represents a given variable of interest). First, I include a set of binary and count variables for each "first," "second," "third," etc. crisis period that a given president encounters (or for each "ordered crisis period" experienced), so that I am testing the extent to which the "first," "second," "third," etc. crisis period encountered affects *all presidents'* beliefs before and following a crisis period. In other words, I am testing whether the first crisis period, second crisis period, etc. yield systematic effects across presidents.

Secondly for the pooled measures, values on the general count measure, for each binary measure (one binary variable is created for each "ordered" crisis), and for each post-crisis count measure (one post-crisis count variable is created for each "ordered" crisis) re-start in the month when a new president takes office. As stated above, I only include one "general" count variable in all MITS models, and this is the case in the pooled models. However, in pooled models, given that more than one president is examined, this "general" count *re-starts* at the beginning of each presidency of interest. For example, 35 months are examined for Kennedy, so his "general counter" measure goes up to 35, and for the next month/row of data (Johnson's first month evaluated), the count re-starts at 1.

Further, for each "ordered" crisis period associated with a given president, the binary measure ends at the last month of a given presidency, and re-starts at the first month of the subsequent presidency. Thus, during the last month of the Kennedy Administration, the binary

value associated with each "ordered" crisis period that he experiences is a "1." For the next month, however (the first month of the Johnson Administration), the value on each binary variable reverts to "0," since at this point, Johnson had not yet experienced a crisis.

Similarly, the post-crisis count measure ends at the last month of a given presidency, and re-starts at the beginning of the subsequent one. Thus, during the last month of the Kennedy Administration, the post-crisis count value for the first "crisis period" experienced is "28" (that is to say, 28 months had passed since the onset of the first crisis period evaluated). For the next month (the first month of Johnson's Administration), this value reverts to "0," and remains zero until his first crisis period, at which time the new count begins.

Additional "fixed effect" models are run including presidential dummy variables to control for the impact of each president on belief values here. The pooled models with multiple crises are reflected in the following:

7.6.3 Multiple President, Multiple Crisis Interruption Model

$$\text{Belief Values}_{i,t} = a + b_1 (\text{Time Counter}_{i,t}) + b_2 (\text{Binary Crisis Period } 1_{i,t}) + b_3 (\text{Post-Crisis Period } 1 \text{ Count}_{i,t}) + b_4 (\text{Binary Crisis Period } 2_{i,t}) + b_5 (\text{Post-Crisis Period } 2 \text{ Count}_{i,t}) \ldots + b_{n-1} (\text{Binary Crisis Period } z_{i,t}) + b_n (\text{Post-Crisis Period Count } z_{i,t})$$

Again, following Garand and colleagues (2001, 5), this model is identical to the individual president, multiple crisis model, except that the "i" suffix is included, referring to the "ith" president. As Garand and colleagues state, "in this formulation the coefficient b_2 represents the global effect" (Ibid.) of the first crisis period on the presidential beliefs *levels*, and the b_3 coefficient evaluates the effect of the first crisis period on the *slope* of presidential beliefs following the first crisis period. I include a separate "fixed effect" model with dummy variables included in order to "capture the possibility of different intercepts" (Ibid.) for each president

(Kennedy is the excluded case here). Note that Stata does not give an overall "variance explained" measure for the pooled, interrupted time series. As such, pseudo R-squared values are taken by calculating predicted values for these models, correlating predicted with observed values, and squaring this value for each model.

Note that for all MITS evaluations, a preliminary baseline is required in order to establish the degree of change following a crisis "interruption" in the data. Though there is no solid rule regarding the number of observations required to establish such a baseline, I decided on a minimum of 7 months. As such, any crisis periods occurring within the first 7 months of a presidency (or 7 data points) are not examined. This decision only impacted the analyses of Kennedy (where the "Pathet Leo Offensive" and "Bay of Pigs" crises were not examined) and Nixon (where the "Vietnam Spring Offensive" and "EC-121 Spy Plane" crises were not examined).

For individual presidential MITS analyses, Prais-Winsten regression models were employed in order to account for the potential effect of autocorrelation (which is not unexpected, given the nature of the time series data employed). For the pooled MITS, generalized least squared models were employed in order to further account for potential heteroskedasticity across the presidential samples evaluated. Here, the "xtgls" command in Stata was used, in which autocorrelation and heteroskedasticity were accounted for, and in which an autocorrelation coefficient (rho) was calculated separately for each president.

7.7 Results

7.7.1 Individual Presidential Analysis

To reiterate, I am examining both the immediate-, and longer-term impact of crises on leaders' images of the international political environment, strategic preferences regarding the

international political environment, and feelings of control over the international political environment. Here again are the hypotheses being tested[61]:

H1: Crisis exposure will lead to a quickly-occurring shift in the magnitude of presidential belief values following crisis exposure. The manner of this belief change will be a shift toward: a) seeing the world as a more hostile place (decrease in leaders' image [P1] operational code values), b) preferring the use of conflict as a strategy more than he did prior to crisis exposure (decrease in leaders' strategic preference [I1] operational code values), and c) feeling less control than he did prior to crisis exposure (decrease in leaders' feelings of control [P4] operational code values).

H2: The initial impact of crises on leaders' beliefs will be fairly strong (in the manner described in hypothesis H1), but this impact will decay over time in the period following crisis exposure, as the initial impact of the crisis fades somewhat. Thus, when evaluating the trends in belief values, a slight *increase* in leaders' P1, I1, and P4 values (toward increased perceptions of friendliness, preferences for cooperation, and increased feelings of control, respectively) will occur in the period following a given crisis.

First, I run individual presidential models to assess how each crisis period impacts each president independent of all others. Results are contained in Tables 7.1, 7.2, and 7.3. Again, the "general" counter variable reflects the slope of belief data prior to the onset of the first crisis period. The binary crisis-related variables tap into hypothesis H1. They do this by telling us if there is a significant, short-term change in the magnitude of each president's belief values following the occurrence of crisis periods. The post-crisis count variables for each crisis tap into hypothesis H2. These measures look at trends in the same way that the general count variable

[61] Note that these hypotheses are evaluated at the one-tailed level of significance, given that I am testing directional hypotheses.

does, except that they look only at the changes following the occurrence of a given crisis period, up until the onset of the next crisis period.

The general count variables in Table 7.1 indicate that President Kennedy initially yielded a modest to strong change in each belief of interest over the first few months of his time in office (recall that this period actually contains the first major crises of the Kennedy Administration, including the failed Bay of Pigs invasion). First, he experienced a modest, negative shift on the image (P1) variable ($t=1.43$, $prob<.10$), suggesting that in the period following his election, Kennedy learned to see the world as a more hostile place than he did initially. However, Kennedy also yielded a significant, positive change on the strategic preferences (I1) variable ($t=2.84$, $prob<.001$), indicating that he learned to more strongly prefer cooperation over conflict during this time. Finally, Kennedy yielded a modest, positive increase on the control over events (P4) variable ($t=1.36$, $prob<.10$), suggesting that during this time he learned to feel more control over events than he did initially.

Following the Berlin Wall/Vietcong Attack crises (the "Crisis 1" period in the MITS models here—refer to Appendix D for a list of the crises evaluated during each "crisis period" for each president in Tables 7.1-7.5), Kennedy began seeing the world as a slightly friendlier place as time wore on leading up to the next crisis (on the image measure, as reflected by the post-crisis counter coefficient: $t=1.43$, $prob<.10$). This would appear to give some support to hypothesis H2, except that he failed to demonstrate a significant "short-term" shift in this belief immediately following the onset of this first crisis period (as reflected in the binary variable coefficient). The H2 hypothesis assumes that there is initially an immediate, downward shift in each belief of interest, supporting hypothesis H1. Thus, given that hypothesis H1 was not given support, hypothesis H2 cannot be given support, either.

The impact of this first crisis period on Kennedy's strategic preferences is that, relative to the "pre-crisis period" trends, he began to more strongly prefer conflict as time wore on, as indicated by the post-crisis count variable (t=2.14, prob<.05). However, similar to the image measure, there were no notable short-term effects of this crisis on Kennedy's strategic orientation beliefs. As such, no support is given to either hypothesis H1 or H2 for the strategic orientation belief for Kennedy. Regarding both the image and strategic orientation measures, subsequent crisis periods (2 and 3) do not appear to have affected Kennedy in a significant manner.

Regarding the "feelings of control" variable, after the initial movement toward feeling increased control over events (t=1.36, prob<.10), Kennedy's feelings of control appeared to have leveled off following subsequent crisis exposure, with the exception of a shift toward feeling slightly less control over time following the second crisis period (Nam Tha), and an immediate shift toward feeling slightly more control following the third crisis period (the Cuban Missile Crisis). Taken as a whole, I fail to find support for either hypothesis H1 or H2 for Kennedy on any belief measure, since we do not consistently see significant, negative coefficients on the crisis binary variables (which would support hypothesis H1), alongside consistently modestly positive coefficients on the crisis Count variables (which would support hypothesis H2).

Johnson appears to have maintained fairly stable image perceptions, strategic preferences, and feelings of control toward the international political environment for his first months in office. However, his first crisis period (Gulf of Tonkin/Congo II) had the short term effect of Johnson seeing the world as more hostile (t=1.37, prob<.10) while more strongly preferring conflict over cooperation (t=2.12, prob<.05). This gives support to hypothesis H1 for Johnson's first crisis period on the image and strategic preference variables. Further, following this initial crisis period, Johnson yields a positive, long-term shift toward seeing the world as more friendly,

Table 7.1: Multiple Interrupted Time Series Results for Kennedy, Johnson, and Nixon

	Kennedy			Johnson			Nixon		
	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
General Counter	**-0.055 [1.43]***	**0.111 [2.84]*****	**0.015 [1.36]***	-0.005 [0.20]	0.027 [1.19]	0.003 [0.32]	0.003 [0.20]	0.005 [0.53]	-0.006 [0.98]
Crisis 1 Binary	0.069 [0.34]	-0.132 [0.64]	-0.024 [0.39]	**-0.267 [1.37]***	**-0.422 [2.12]****	-0.081 [1.02]	-0.233 [0.88]	**-0.353 [1.67]***	**0.163 [1.40]***
Post- Crisis 1 Counter	**0.066 [1.43]***	**-0.096 [2.14]****	-0.01 [0.75]	**0.07 [1.46]***	0.048 [0.99]	0.014 [0.71]	0.067 [0.93]	**0.107 [1.85]****	-0.025 [0.76]
Crisis 2 Binary	0.028 [0.11]	0.225 [0.84]	0.018 [0.24]	-0.08 [0.56]	-0.135 [0.91]	**-0.081 [1.42]***	-0.226 [1.10]	**-0.471 [2.87]****	0.102 [1.12]
Post- Crisis 2 Counter	-0.03 [0.43]	-0.082 [1.18]	**-0.028 [1.37]***	**-0.064 [1.54]***	**-0.075 [1.73]****	-0.016 [0.94]	-0.069 [0.96]	**-0.102 [1.78]****	0.023 [0.73]
Crisis 3 Binary	-0.094 [0.48]	0.135 [0.66]	**0.108 [1.84]****	-0.1 [0.65]	0.124 [0.81]	-0.073 [1.17]	0.114 [0.91]	0.09 [0.89]	0.002 [0.03]
Post- Crisis 3 Counter	0.028 [0.43]	0.067 [0.99]	0.016 [0.83]	-0.007 [0.24]	-0.007 [0.25]	0.012 [1.06]	-0.008 [0.76]	**-0.016 [1.96]****	**0.011 [2.22]****
Crisis 4 Binary	--- ---	--- ---	--- ---	-0.073 [0.44]	-0.044 [0.26]	0.031 [0.46]	--- ---	--- ---	--- ---
Post- Crisis 4 Counter	--- ---	--- ---	--- ---	0.037 [1.11]	0.012 [0.35]	**-0.026 [1.88]****	--- ---	--- ---	--- ---
Constant	0.679 [3.97]***	-0.111 [0.64]	0.163 [3.24]***	0.445 [3.47]***	0.476 [3.70]***	0.325 [6.23]***	0.459 [4.03]***	0.646 [7.05]***	0.399 [7.38]***
N	35	35	35	61	61	61	67	67	67
R^2	.13	.57	.29	.15	.15	.2	0.09	0.3	0.12

Note: All analyses tested at the 1-tailed level of analysis; t-scores in brackets
***prob≤.01
**prob<.05
*prob<.10

following his initial, short-term negative shift (t=1.46, prob<.05), giving support to hypothesis H2 on this measure for Johnson following the first crisis period evaluated. The longer-term effects of this crisis period on his strategic preferences belief are more negligible, but also positive, as expected. Thus, hypotheses H1 and H2 are given some support for Johnson following his first crisis period. However, he yields neither a long- nor a short-term shift on the control measure following the first crisis period.

Following the second crisis period (Pleiku/Dominican Intervention), Johnson yields only a short-term decrease in feelings of control (t=1.43, prob<.10), but experiences a longer-term trend toward seeing the world as more hostile (t=1.54, prob<.10) and more strongly preferring conflict (t=1.73, prob<.10). The third (Six Day War) crisis period of the Johnson Administration did not yield any significant shifts in the beliefs of his evaluated here, and the fourth crisis period (Tet Offensive) only yields a long-term decrease in his "feelings of control" (t=1.88, prob<.05). Thus, on the whole, hypotheses 1 and 2 are not given much support for Johnson, either, except following the first crisis period that he experiences.

Table I also contains results for President Nixon. Findings here show that Nixon did not change his beliefs much from his inauguration up until his first crisis period on any belief. Further, no crisis affected his image of the world in any significant way. The only times that Nixon experienced a change in his feelings of control were after his first crisis period (Invasion of Cambodia), which had the short-term effect of making him feel more control (t=1.40, prob<.10), and the third crisis (Vietnam Ports Mining), which had the longer-term impact of making Nixon progressively feel more control from the onset of these crises until his resignation from office (t=2.22, prob<.05).

Following the second crisis period (Black September/Cienfuegos Submarine Base), Nixon's strategic orientation become more and more conflictual as time goes on, with each of the final two crisis periods exacerbating this trend (Crisis 2: t=1.78, prob<.05; Crisis 3: t=1.96, prob<.05). The second crisis additionally has a more immediate, short-term influence of leading Nixon to more strongly prefer conflict (t=2.87, prob<.05). However, neither hypothesis H1 nor H2 are ultimately given much support for Nixon.

I described results for the above presidents in detail in order to convey the manner in which these coefficients can be interpreted, but from the pool of remaining presidents, I will only discuss Clinton, as he is the only individual president to give notable, albeit partial support to the hypotheses presented here.

Results for President Clinton can be found in Table 7.3, and show that each of the first three crisis periods (Haiti Military Regime/Iraq Military Deployment Kuwait; Desert Strike; UNSCOM I) have a significant, short-term impact on his control belief (Haiti/Iraq Deployment: t=2.83, prob<.05; Desert Strike: t=1.90, prob<.10; UNSCOM I: t=2.23, prob<.05), demonstrating that he feels less control following each subsequent crisis period than he did previously. This supports hypothesis H1 for President Clinton on the control variable for the first three crisis periods, and the positive trend shift following these changes in the first and third crises gives some support to hypothesis H2. However, these feelings stabilize for the final two crisis periods of his presidency (U.S. Embassy Bombings/UNSCOM II; Kosovo).

Following the second crisis period (Desert Strike), Clinton also yields a notable, long-term shift toward seeing the world as more friendly (t=2.96, prob<.05) and more strongly preferring cooperation (t=1.49, prob<.10), whereas he yields a significant, short-term shift toward seeing the world as more hostile (UNSCOM I: t=1.43, prob<.10; U.S.

Embassy/UNSCOM II: t=1.68, prob<.05; Kosovo: t=1.41, prob<.10) and more strongly preferring conflict (UNSCOM I: t=1.63, prob<.10; U.S. Embassy/UNSCOM II: t=2.00, prob<.05; Kosovo: t=3.22, prob<.001) following the third, fourth, and fifth crisis periods. These findings thus support hypothesis H1 for Clinton on the third, fourth, and fifth crisis periods on the image and strategic preference measures. Finally, Clinton experiences a significant, long-term change toward more strongly preferring cooperation following his fourth crisis period (U.S. Embassy/UNSCOM II: t=1.52, prob<.10), but yields a long-term shift toward more strongly preferring conflict after his fifth crisis period (t=2.18, prob<.05). Overall then, hypothesis H1 receives some pretty strong support for Clinton, though there is not consistent support for hypothesis H2.

On the whole, however, each president seems to respond to crises, and subsequent crises in their own, unique ways. There does not seem to be a great deal of systematic behavior across presidents, certainly not in the manner hypothesized. In the next section, I will test the possibility that, despite this, there may be systematic findings that become evident when presidential data are evaluated together.

7.7.2 Pooled Analyses

Table 7.4 contains results for a pooled, multi-interrupted time series analysis of presidential learning from crises. This evaluates the impact of each "ordered" crisis period (the first, second, third, etc.) on learning across presidents on their image, strategic orientation, and feelings of control beliefs. That is to say, does the first, second, third, fourth, or fifth crisis period that presidents encounter have a systematic effect on leaders' beliefs in the manner predicted in hypotheses H1 and H2, across presidencies? Results show that there is a tendency for presidents to start seeing the world as slightly more hostile (t=1.57, prob<.10) and to feel less

Table 7.2: Multiple Interrupted Time Series Results for Ford, Carter, and Reagan

	Ford			Carter			Reagan		
	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Counter	-0.002	**-0.049**	**-0.011**	-0.002	0.015	**-0.006**	**-0.004**	**-0.006**	**-0.002**
	[0.13]	**[1.61]***	**[1.59]***	[0.25]	[1.40]	**[1.71]****	**[1.34]***	**[1.39]***	**[1.91]****
Crisis 1	0.081	0.218	**0.12**	0.125	0.057	0.011	0.023	0.114	-0.011
Binary	[0.60]	[0.82]	**[1.72]****	[1.25]	[0.44]	[0.24]	[0.20]	[0.74]	[0.32]
Post- Crisis	0.009	0.058	-0.01	-0.014	**-0.044**	0.003	**0.022**	0	**0.008**
1 Counter	[0.26]	[0.74]	[0.55]	[1.46]	**[3.47]****	[0.61]	**[1.54]***	[0.00]	**[1.88]****
Crisis 2	**-0.165**	-0.159	0.063	0.135	0.03	0.035	**-0.213**	-0.01	**-0.069**
Binary	**[1.44]***	[0.70]	[1.06]	[1.23]	[0.20]	[0.72]	**[2.09]***	[0.07]	**[2.27]*****
Post- Crisis	-0.001	0.02	0.022	0.017	**0.052**	0.003	**-0.019**	0.005	**-0.006**
2 Counter	[0.02]	[0.27]	[1.20]	[1.40]	**[3.27]****	[0.60]	**[1.37]***	[0.28]	**[1.48]***
Crisis 3	0.134	0.002	-0.001	---	---	---	---	---	---
Binary	[1.09]	[0.01]	[0.02]	---	---	---	---	---	---
Post- Crisis	**-0.058**	-0.045	-0.019	---	---	---	---	---	---
3 Counter	**[1.97]****	[0.75]	[1.20]	---	---	---	---	---	---
Constant	0.537	0.789	0.382	0.489	0.55	0.409	0.49	0.755	0.298
	[7.13]***	[4.60]***	[9.95]***	[6.46]***	[5.56]**	[12.16]***	[7.64]**	[9.40]**	[17.66]**
N	30	30	30	49	49	49	95	95	95
R^2	.53	.15	.54	0.2	0.43	0.32	0.15	0.05	0.14

***prob≤.01
**prob<.05
*prob<.10

Table 7.3: Multiple Interrupted Time Series Results for George H.W. Bush, Clinton, and George W. Bush

	H.W. Bush			Clinton			W. Bush		
	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Counter	-0.005	**0.036**	0	0.002	0	0.001	-0.018	0.03	**-0.016**
	[0.25]	**[2.23]****	[0.07]	[0.25]	[0.00]	[0.70]	[0.81]	[0.75]	**[2.12]****
Crisis 1 Binary	0.119	-0.142	0.068	0.004	-0.056	**-0.074**	**-0.303**	-0.28	**0.102**
	[0.75]	[1.07]	[1.18]	[0.04]	[0.78]	**[3.02]****	**[2.83]****	[1.42]	**[2.70]****
Post- Crisis 1 Counter	-0.018	**-0.037**	-0.005	-0.006	-0.004	0.003	0.021	-0.033	0.013
	[0.70]	**[1.74]****	[0.49]	[0.72]	[0.59]	[1.15]	[0.96]	[0.81]	[1.66]
Crisis 2 Binary	-0.017	-0.072	-0.018	-0.125	0.02	**-0.05**	---	---	---
	[0.13]	[0.70]	[0.39]	[1.26]	[0.26]	**[1.90]****	---	---	---
Post- Crisis 2 Counter	**0.028**	0	0.007	**0.029**	**0.011**	-0.001	---	---	---
	[1.57]*	[0.00]	[1.10]	**[2.96]****	**[1.49]***	[0.48]	---	---	---
Crisis 3 Binary	---	---	---	**-0.184**	**-0.175**	**-0.08**	---	---	---
	---	---	---	**[1.43]***	**[1.63]***	**[2.23]****	---	---	---
Post- Crisis 3 Counter	---	---	---	-0.021	0.016	0.003	---	---	---
	---	---	---	[0.97]	[0.93]	[0.45]	---	---	---
Crisis 4 Binary	---	---	---	**-0.271**	**-0.277**	-0.016	---	---	---
	---	---	---	**[1.68]****	**[2.00]***	[0.35]	---	---	---
Post- Crisis 4 Counter	---	---	---	0.044	**0.051**	-0.01	---	---	---
	---	---	---	[1.11]	**[1.52]***	[0.93]	---	---	---
Crisis 5 Binary	---	---	---	**-0.171**	**-0.348**	0.043	---	---	---
	---	---	---	**[1.41]***	**[3.22]***	[1.21]	---	---	---
Post- Crisis 5 Counter	---	---	---	-0.041	**-0.067**	0.004	---	---	---
	---	---	---	[1.17]	**[2.18]***	[0.41]	---	---	---
Constant	0.541	0.552	0.275	0.427	0.695	0.287	0.612	0.47	0.369
	[4.35]**	[5.46]**	[6.06]**	[5.59]**	[12.00]	[14.46]**	[5.51]**	[2.30]**	[9.44]**
N	48	48	48	95	95	95	36	36	36
R^2	0.13	0.25	0.08	0.18	0.27	0.31	0.5	0.14	0.27

***prob≤.01
**prob<.05
*prob<.10

control (t=6.30, prob<.001) in their first months of office leading up to their first crisis period (as measured by the counter variable). The first crisis period then yields a modest, immediate effect on the strategic preferences belief, leading presidents to more strongly prefer conflict over cooperation (t=1.54, prob<.10), but the slope of strategic preference belief values is negative (to reiterate, a positive slope trend is expected, which would indicate the "decay" of the impact of crises on presidential beliefs). Additionally, despite there being no immediate "shift," the first crisis period has a longer-term impact on presidents' feelings of control beliefs, so that they feel more control as time goes on, following this event or series of events (t=2.14, prob<.05). Presidential images of the "other" are not significantly affected by their "first" crisis period.

Table 7.4: Basic Pooled MITS Results
***prob<.01
**prob<.05
*prob<.10

	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Counter	**-0.002**	0.000	**-0.002**
	[1.57]*	[0.26]	**[6.30]*****
Crisis 1	-0.004	**-0.047**	0.015
Binary	[0.13]	**[1.54]***	[1.42]
Post- Crisis	-0.000	-0.003	**0.001**
1 Counter	[0.15]	[1.27]	**[2.14]****
Crisis 2	0.008	0.017	0.008
Binary	[0.25]	[0.52]	[0.80]
Post- Crisis	0.001	**0.003**	0.001
2 Counter	[0.67]	**[1.47]***	[0.97]
Crisis 3	0.033	**0.092**	**-0.028**
Binary	[0.78]	**[2.17]****	**[1.55]***
Post- Crisis	-0.004	-0.004	**0.004**
3 Counter	[1.02]	[1.16]	**[2.04]****
Crisis 4	**-0.152**	-0.042	0.017
Binary	**[1.67]****	[0.48]	[0.49]
Post- Crisis	**0.039**	0.018	-0.012
4 Counter	**[2.35]****	[1.14]	[1.82]**

Table 7.4 (cont.)

	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Crisis 5	**-0.106**	-0.135	0.038
Binary	**[1.19]**	[1.70]**	[1.22]
Post- Crisis	**-0.026**	-0.007	0.007
5 Counter	**[1.51]***	[0.45]	[1.10]
Constant	0.480	0.656	0.330
	[22.67]***	[28.78]***	[43.98]***
N	516	516	516
Pseudo R^2	0.055	0.042	0.088

The effects of the first crisis period may be particularly notable, as we might expect initial crises to have a similar, systematic impact on leaders' beliefs as they first come face-to-face with the harsh reality of international politics. We see this with the strategic preference finding (an immediate shift toward a preference for conflict), but not as much in terms of presidential images or feelings of control.

The second crisis has a single modest, long-term effect on presidential belief trends, where cooperation is more strongly preferred as time goes on (t=1.47, prob<.10). The third crisis has the short term impact of persuading presidents to more strongly prefer cooperation (t=2.17, prob<.05) and to feel less control (t=1.55, prob<.10), and only has the longer term impact of leading presidents to feel more control than they did previously as time wears on (t=2.04, prob<.05). In this sense, both hypotheses H1 and H2 are given some support following the "third" crisis period in terms of feelings of control. Following fourth crisis periods, presidents tend to experience an immediate shift toward seeing the world as more hostile (t=1.67, prob<.10), but start seeing the world as more friendly (t=2.35, prob<.05) and feel less control over time (t=1.82, prob<.05). Thus, both hypotheses are again given support for the fourth crisis period, but only regarding image beliefs. Finally, following fifth crisis periods, presidents tend

to yield a short-term shift toward more strongly preferring conflict (t=1.70, prob<.05), and a longer-term shift toward seeing the world as more hostile (t=1.51, prob<.10).

Ultimately, neither the individual presidential nor the basic pooled MITS models give clear support to either hypotheses H1 or H2. Instead, it seems to show us that across presidents, there is a great deal of variation in belief change from crisis to crisis. For instance in the pooled model, each subsequent crisis tends to influence beliefs in alternating directions in a rough kind of cycle (i.e. negative, positive, negative, positive, etc.). Of the three beliefs evaluated, the control variable appears to be the most consistently affected by crises (as leaders tend to feel *more* control, in both the short, and long-terms, following crisis exposure). However, even this shifts following the third and fourth crisis periods. It may be that crises tend to have a moderating influence on beliefs, by pulling them to one extreme, and then to the other, but the "back and forth" trends aren't consistent enough to warrant even this explanation. Instead, it may be simple, random variation, based upon the idiosyncrasies of the crises examined and the presidents experiencing them.

Following from the basic pooled MITS, I ran the same model, additionally controlling for individual presidential influences by including presidential dummies (Kennedy is the excluded president). Results are located in Table 7.5. Findings show that, even accounting for individual presidential influences, crisis periods tend to have a fairly erratic impact on beliefs over time. However, it is interesting that, as with the basic MITS model, presidents feel progressively less control in the first months of their presidency (t=2.45, prob<.05), but shift toward feeling progressively more control following the first crisis period (t=1.68, prob<.05). Also similar to the basic model, the first crisis leads presidents to more strongly prefer conflict (t=1.29, prob<.10), but here it is a longer-term shift, whereas an immediate shift with no corresponding

change in the slope is evident in Table 7.4.

Table 7.5: Pooled MITS Results with Presidential Dummies
***prob<.01
**prob<.05
*prob<.10

	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Counter	-0.002	-0.000	**-0.002**
	[0.85]	[0.04]	**[2.45]****
Crisis 1	0.000	-0.023	0.008
Binary	[0.01]	[0.65]	[0.71]
Post- Crisis	-0.000	**-0.004**	**0.002**
1 Counter	[0.08]	**[1.29]***	**[1.68]****
Crisis 2	-0.008	0.019	-0.003
Binary	[0.26]	[0.58]	[0.33]
Post- Crisis	0.002	**0.004**	-0.000
2 Counter	[0.82]	**[1.82]****	[0.06]
Crisis 3	0.020	**0.106**	**-0.026**
Binary	[0.50]	**[2.51]****	**[1.65]****
Post- Crisis	-0.004	-0.004	0.002
3 Counter	[1.05]	[1.15]	[0.97]
Crisis 4	**-0.150**	-0.046	0.020
Binary	**[1.66]****	[0.54]	[0.62]
Post- Crisis	**0.039**	**0.020**	**-0.009**
4 Counter	**[2.38]****	**[1.29]***	**[1.44]***
Crisis 5	**-0.176**	**-0.202**	0.030
Binary	**[1.97]****	**[2.55]****	[1.03]
Post- Crisis	-0.018	-0.001	0.008
5 Counter	[1.03]	[0.06]	[1.20]
Johnson	0.014	0.025	**0.062**
Dummy	[0.30]	[0.47]	**[3.72]*****
Nixon	0.035	0.043	**0.104**
Dummy	[0.72]	[0.77]	**[5.33]*****
Ford	**0.114**	0.011	**0.088**
Dummy	**[2.59]****	[0.17]	**[5.53]*****
Carter	**0.038**	0.014	**0.066**
Dummy	**[0.78]**	[0.23]	**[3.59]*****

Table 7.5 (cont.)

	Image of the Other (P1)	Strategic Preferences (I1)	Feelings of Control (P4)
Reagan	0.016	0.056	**0.033**
Dummy	[0.23]	[0.72]	**[1.64]***
H.W. Bush	0.036	**0.150**	**0.036**
Dummy	[0.73]	**[2.74]****	**[2.03]****
Clinton	0.045	**0.084**	**0.048**
Dummy	[0.90]	**[1.47]***	**[2.94]*****
W. Bush	**-0.113**	-0.050	**0.029**
Dummy	**[1.95]****	[0.73]	**[1.66]****
Constant	0.448	0.607	0.266
	[10.72]***	[11.90]***	[18.90]*
N	516	516	516
Pseudo R^2	0.112	0.098	0.198

Regarding the presidential dummies, every president feels significantly more control over events than does Kennedy, when the impact of crises is taken into account. Additionally, Ford sees the world as friendlier (t=2.59, prob<.05), H.W. Bush (t=2.74, prob<.05) and Clinton (t=1.47, prob<.10) more strongly prefer cooperation, and George W. Bush sees the world as more hostile (t=1.95, prob<.05) than does Kennedy.[62]

7.8 Discussion

There were a number of questions addressed in this project, but what broad lessons can we take away from all of this, if anything? First off, the various significant findings on the general counter variables tell us that when presidents are first elected, a great deal of learning

[62] I additionally ran the two pooled models, substituting the square root of the post-crisis period counter measure for the non-transformed version of this measure. This way, I could account for a more gradual positive shift away from the new, hypothesized negative shifts after crisis periods (as expected by the binary measures), which would become more drastic as time wore on. If the initial shift were to "stick" a bit, followed by a later-occurring shift "toward the mean," this transformation would account for that phenomenon. Results for those models yield higher pseudo-R-squared values than those included in this chapter, but demonstrate no notably different findings (in terms of direction or significance of findings) from those in the non-transformed models. Thus, they are not included here.

seems to take place in the first few months of office. This differs from president to president, but tells us that learning begins early on, and that beliefs tend to methodically change toward seeing the world as somewhat different as presidents encounter the world in their new role as leader of the free world.

Across presidents (in the pooled models), this is most evident on the feelings of control measure, as it appears that leaders begin to feel much less control when they are actually in office than they do when they initially take over. Additionally, crises do appear to have a number of notable influences on presidents' core beliefs. These influences do not vary systematically across crises and presidents as I had anticipated, but they are evident, and suggest that crises do play some role toward influencing presidential perceptions of both the international political environment, and of themselves within this environment.

Further, the process of experiencing multiple crises often has an important impact on belief change throughout presidencies. Leaders' beliefs often change in fundamental ways from crisis from crisis, where their pre-existing beliefs are either strengthened or brought into question and changed. Perhaps the best example of crises reinforcing beliefs is the case of Clinton who, following each of the first three crisis periods, feels progressively lower absolute levels of control than he did in each previous period, before maintaining a stable feeling of control for the latter part of his presidency. Clinton additionally experiences something similar with his image and strategic preference variables for the final three crisis periods of his presidency, where subsequent crises further exacerbate his perception of the world as hostile, and his preference for conflict.

On the other extreme is President Reagan. In terms of his longer-term belief trends, he initially "learns" to see the world as more hostile than he initially does, but then begins to see the

world as more friendly following the first crisis period, and then reverts back to viewing the world as significantly *more hostile* following the experience of his second crisis period. A similar dynamic occurs for Reagan regarding his feelings of control. Though my hypotheses help somewhat toward explaining Clinton's changes, I cannot answer the question of why each of these different leaders seems to be impacted in these respective ways by multiple crises. However, this observation opens up the possibility for future projects evaluating these phenomena. Further observations regarding these findings will be discussed at the end of the following chapter, in which I make broad observations regarding the role of crises on presidential learning.

CHAPTER 8: THE INFLUENCE OF PRE-EXISTING BELIEFS AND CRISIS SALIENCY ON BELIEF CHANGE FOLLOWING CRISES

In the previous chapter, I looked at the narrow influence of crises on belief change. Though I examined both the magnitude levels and trend level changes of presidential belief values following crises, I did not take into account a number of factors that might facilitate or prohibit change following belief exposure. First, the president's pre-crisis belief levels might be more or less conducive to change following exposure to a crisis. Further, the variable components of crises themselves may play a role in mediating the impact of belief change following crisis exposure. I test both of these possibilities in this chapter, in an attempt to better flesh out the impact of crises on presidential learning.

8.1 Hypotheses

8.1.1 Section 1: The Influence of Pre-Existing Beliefs on Belief Change Following Crisis Exposure

The first set of hypotheses are distinct from those in the previous chapter in that I am concerned with the content of the beliefs that one holds *prior to* experiencing a crisis, and the effect of these initial beliefs on learning following crisis exposure. In the previous chapter, change in these belief levels was tested, but I did not account for the possibility that the type of belief one holds prior to exposure might play some role in amplifying or muting the influence that a crisis has on post-crisis beliefs. Here, I test this.

Crises, as noted in the previous chapter, tend to be anxiety-provoking stimuli that bring a leader face-to-face with what are often the ugly realities of global politics. For the purposes of "learning," the interpretation of this reality as either an expected norm or an unexpected violation of the status quo may be of critical importance. Could it be that some leaders are less "surprised" encountering conflicts and their aftermaths than are others? Further, might it be that

the degree of perceived "surprise" experienced by crises may affect belief change to a greater extent than would be expected in normal, non-crisis situations? I suspect that these two questions could be answered in the affirmative, an expectation derived from work on cognitive dissonance (see Festinger, Riecken, and Schachter 1956; Jervis 1976; and Larson 1985).

Cognitive dissonance theory states that the process of undergoing experiences that run counter to our previously held beliefs are typically either ignored or rationalized, so that they fit into an individual's existing belief framework. However, Jervis (1976) notes, "the influence of an event varies directly with its importance for the person. . .," and "major events. . .influence people deeply" (262). Thus deep, meaningful change in one's beliefs is not unexpected, but perhaps only in specific, exceptional situations. On such situation might well be exposure to stimuli of a highly salient nature.

I hypothesize that crisis exposure will most strongly influence learning *in certain instances*. Specifically, I expect that those leaders who initially see others in the system as wicked and hostile (low image of the "other" [P1] levels), who prefer conflict as a strategy over cooperation (low strategic preference [I1] levels), or who feel that they do not have much control over events (low feelings of control [P4] levels), will *not* be significantly influenced by crises. That is to say, if the world is filled with bad people who do bad things, and if conflictual preferences breed conflictual outcomes, then why should conflict, when it inevitably occurs, lead to a change in these beliefs? Similarly, if a leader does not have control over outcomes, and thus does not possess the ability to avoid crises by forcing his opponents to capitulate, then why should this leader change his feelings regarding control when these situations arise? In the above instances, perceptions and reality should intersect in such a way that the belief change occurring following crisis exposure for those with initially low P1 (image of the "other"), I1 (strategic

preference), or P4 (control) levels should be minor, if not in the direction of actually reinforcing previously held beliefs.

On the other hand, I expect that those who initially see the world as a friendly, cooperative place (high image values), who prefer cooperation over conflict (high strategic orientation values), and who feel that they have control over events and historical outcomes (high control values), *will* be significantly affected by exposure to crises. I expect these individuals to be quite shocked when their rosy perceptions of reality are brought into question by a major conflict in the international system involving hostility, threats, or worse. Following these events, no longer will the friendly image hold, as this will have been replaced by a cautious, skeptical perception of others who would rather hurt than help if given the choice. Similarly, the preference for cooperation will have been replaced by a preference for conflict. Maintaining cooperative preferences toward a world in which conflict can occur might be viewed as maladaptive at best. And finally, the initial belief of control is gone. Conflict has occurred despite initial feelings of power and influence, and disturbed the self-image of a benevolent leader who should inspire others to follow, rather than rebel. The following hypotheses reflect these expectations:

H1: Following a crisis, leaders who initially perceive the other as hostile, who hold a conflictual strategic orientation, or who feel low levels of control, *will not* experience a more significant change in their beliefs than would be expected by chance, or following non-crisis situations.

H2: Following a crisis, leaders who initially perceive the other as friendly, who hold a cooperative strategic orientation, or who feel high levels of control, *will* experience a more significant change in their beliefs than would be expected by chance, or following non-crisis

situations. These changes should result in perceptions of an increasingly hostile world, an increased preference for conflict, and decreased feelings of control over events.

I evaluate Hypotheses H1 and H2 at 6 month time intervals by looking at the average pre- and post-crisis belief levels for the 6 month periods before and after crisis exposure.[63]

8.1.2 Section 2: The Influence of Pre-Existing Beliefs and Crisis-Related Factors on Belief Change Following Crisis Exposure

One possible reason for the lack of findings in the previous chapter is that all crises were treated as the same. That is to say, I anticipated a uniform manner of belief change following from each crisis period experienced, as if each crisis were equally influential. However, some crises should yield a stronger impact on presidents and U.S. behavior than others. For this second section, I account for this by examining factors that may contribute to the saliency of a given crisis on presidential perceptions, and thus, on beliefs. For instance, does a crisis that threatens higher priority values affect leaders to a greater extent than do those that only threaten lesser values?[64] Does the physical proximity of a crisis to the U.S. affect the degree of belief change? What of the discrepancy in power between the U.S. and its rival in the crisis?

Further, as hypothesized above, might leaders' pre-existing beliefs have a notable impact on post-crisis belief change, controlling for crisis saliency? The final set of hypotheses here begins with an evaluation of the influence of crises on beliefs, accounting for the influence of other, largely crisis-related influences. I expect that, even accounting for these other influences, leaders' pre-crisis beliefs will yield a strong influence on post-crisis belief change, in the manner

[63] Given that I am aggregating belief values at 6 month intervals, I account for the problem of outlier values from overly small speech samples in some months as discussed in chapter 4.
[64] Relatively speaking, since one component of all crises examined here, as noted in the previous chapter, is the threat to "basic" values.

described for hypotheses H1 and H2 for those with initially low or high values on the image, strategic preference, and control indicators. Thus:

H3: Following a crisis, controlling for crisis-related factors and the relative novelty of crisis experience, leaders who initially perceive the other as more friendly, who hold a more cooperative strategic orientation, or who feel higher levels of control will experience a significant change in their beliefs toward seeing the world as more hostile, will take on a more conflictual strategic orientation, and will feel lower levels of control, respectively.

Additional hypotheses are based on the crisis-related variables employed here.

8.1.2.1 Crisis Outcome[65]

The first crisis-related characteristic tested as an influence on presidential beliefs is crisis outcome. My interest here comes from an article by Leng (1983) that predicted learning outcomes based solely on whether one "loses" or "wins" a crisis conflict. His intuitive assumption is that losses influence leaders to a greater extent than do wins, as wins should only serve to reinforce the pre-existing behavior that leads to this outcome. Further, Leng argued that experiencing a loss typically leads to increased belligerence in the next conflict (following realist expectations that leaders will err on the side of acting more aggressively following a policy failure). Here, I am able to provide at least a preliminary test of this hypothesis. This is preliminary because not all military conflicts involving the U.S. are classified as crises as examined here. Secondly, Leng was predicting behavioral outcomes and not changes in beliefs, though it could be assumed that the former follows from the latter. Third, in the data examined here, there is a heavy skew toward U.S. victory in crises (53% of total cases examined) and there are very few crises in which the U.S. is classified as the "loser" (9% of cases examined),

[65] See Appendix F for a description of all crisis-related variables examined here as they are coded.

meaning that a simple test of those two categories would not provide an equal comparison of cases and presents a statistical "power" issue. Regarding this last issue, I expand on Leng's notion a bit by including an examination of compromises and stalemates.

Following from the idea developed by Leng, I expect that presidents will learn from the most to the least following these crisis outcomes, in this order: losses, stalemates, compromises, and wins. Further, I expect that the kind of learning that takes place following losses and stalemates will be in the negative direction (toward increased perceptions of hostility, increased preferences for conflict, and decreased feelings of control), whereas learning following compromises and wins will lead to belief stability. Though belief stability is the most anticipated outcome, it is possible that beliefs could also witness increased positive movement on the image (toward increased perceptions of friendliness), strategic preference (toward increased preference for cooperation), and feelings control (toward increased feelings of control) indices, as leaders may "let their guard down" and fail to remain psychologically prepared for future conflict situations following the satisfaction of a victory. Thus:

H4: The worse the crisis outcome, the more likely presidents will see the world as more hostile, will more strongly prefer conflict, and will feel less control than they did previously. The better a crisis outcome, the more likely leaders will maintain their pre-existing beliefs (yielding stable P1, I1, and P4 scores), or will become more optimistic, leading to an increased perception of external friendliness, an increased preference for cooperation, and an increase in feelings of control over events.

Thus, a linear, negative relationship is roughly expected between the degree of "directional" belief change (measured as post-value belief scores – pre-value belief scores—see the methods section for more on this) and crisis outcome (ranked from best [victory = 1] to worst [loss = 4]).

8.1.2.2 Learning over Time

I also examine the role of exposure to international events over time on learning. I expect that leaders will be more likely to learn early in an administration—when there are fewer preconceived ideas of how to handle what are, at first, novel situations—than they will be at some later point. I expect that all crises should "harden" presidential perceptions of the international environment as specified in earlier hypotheses, but that this "hardening" will be most extreme following the first crisis. As time goes on and the president gets more accustomed to conflicts, I expect later, successive crises to have similar, but less profound hypothesized shifts in beliefs. This hardening would take the form of increased perceptions of hostility, increased preferences for conflict, and decreased feeling of control over events. Thus:

H5: Initial exposure to crises will yield the most noticeable changes in leaders' image, strategic preference, and control beliefs in the negative direction (i.e. toward increased perceptions of hostility, increased preferences for conflict, and decreased feelings of control, respectively). However, as time goes on, learning will be less and less pronounced, as further negative shifts will be less extreme than were previous changes.

This hypothesis predicts a roughly positive relationship between crisis order and "directional" belief change as measured here.

8.1.2.3 Other Crisis-Oriented Influences

In addition to crisis outcome and the order of crisis exposure, other components of the crisis itself may play a role in mediating crisis influence on the degree and type of learning that a president undergoes. Crisis characteristics examined here that might account for belief change beyond the influence of one's initial beliefs, are: 1) the extent of violence experienced by the crisis actor—higher levels of violence experienced are expected to correlate with higher degrees of belief change in the negative direction; 2) the precipitating cause of the crisis (i.e. a verbal act,

political act, violent act, etc.)—expectation being that violent acts should have the strongest, negative influence on belief change and that "verbal" acts will have the least influence; 3) the proximity of the crisis to the U.S.—expectations are that crises occurring "closer to home" will have a greater impact on belief change than crises that occur further away; 4) the discrepancy in power between the U.S. and its major opponent in a crisis—expectations are that the president will learn more when interacting with more formidable and threatening adversaries; 5) the initial issue at stake in the crisis—when issues of greater importance are initially threatened in a crisis, then presidents are expected to learn more in a "negative" direction; and 6) the most important object to receive a "grave" level of threat to the U.S. stemming from the crisis—when objects of greater importance are seriously threatened in a crisis, the president is expected to learn more, and to learn in a more negative direction. Examples of "objects" that could be threatened here are: political influence in the world, one's military or security well-being, and a threat to one's existence or way of life (see Appendix F for a more detailed list). Thus, these influences will be modeled here.

8.2 Methods

8.2.1 Section 1

Whereas the MITS analysis in the previous chapter evaluated *all* operational code data for the period before and after crisis initiation, for Hypotheses H1 and H2 in this chapter, I evaluate only the 6 month periods before and after entire crisis periods. That is to say, I examine the 6 month periods prior to the onset of these crisis periods, and the 6 month periods following the termination of these crisis periods. Note that this differs from the analysis of crises in the previous chapter, where I examine learning immediately following the onset of a crisis in a time series fashion (a necessary concession given the nature of the statistical analysis employed).

Unlike in the previous chapter, the order in which the crisis occurs, and the specific president experiencing the crisis are not taken into account in this section—pre-crisis belief levels are the only independent variables examined.

Recall that for these hypotheses, I expect those presidents with higher pre-crisis image, strategic preference, and control values prior to crisis exposure will learn more than will those with lower values on these indices. To test these hypotheses, "high" and "low" categories were determined based upon presidents' pre-crisis operational code scores on each index of interest for the 6 month periods prior to crisis exposure.[66] All average pre-crisis values across all presidents were rank ordered for each 6 month period, with those falling above the median score classified as "high," and those below the median classified as "low."[67] Analysis of Variance (ANOVA) and Multivariate Analysis of Variance (MANOVA) methods are used to evaluate the Hypotheses H1 and H2.

Note that the crises examined here (both in sections 1 and 2) also differ slightly from the sample of crises examined in the previous chapter. Given the necessity of establishing pre- and post-crisis event periods for multiple interrupted time series analyses in chapter 7, all overlapping crises, as well as those that occurred within a few months of each other were lumped together. In this chapter, this is not as much of an issue. Overlapping crises are still examined as a single "crisis period" in some instances, but if one crisis occurs more than a few months after another, they are examined separately. Further, some crises occurring within the first or final

[66] I settled on the "high" and "low" labels over "positive" and "negative" because U.S. beliefs on these values are typically positive overall. As such, I am really evaluating those of a "high" versus "low" positive nature, rather than those that are actually "negative" versus "positive."
[67] I had considered determining "high" and "low" pre-crisis values by looking at the top and bottom third of rank ordered pre-crisis values, but given the small sample size that would result from this, I chose instead to include into these groups all operational code averages above and below the median crisis value.

few months of a presidency are also included here, though they could not be included in the MITS analyses of the previous chapter. I did not want to exclude any of these critical events if at all possible, and as such, made the decision to violate the 6 month rule in a few instances (note that this was possible as it did not present methodological issues in this chapter as it would have using MITS analyses in the previous chapter). Thus, early and late crises are included as long as I have 2 months of pre- or post-crisis data to work with, respectively. A list of crises and crisis periods examined in this chapter can be found in the Appendix E.

8.2.2 Section 2

As with Section 1 of this chapter, for Section 2 I evaluate the mean belief values for the 6 month periods prior to the onset, and following the termination of crisis periods on the image of the "other," strategic preference, and feelings of control operational code belief indices. However, for this section, the dependent variable of "belief change" was obtained by calculating each leader's average belief scores for the 6 month periods *following* a crisis minus his respective belief score for the 6 month periods *prior to* crisis exposure, respectively, resulting in a value for each belief index that could theoretically range from -2 (in the case of the image and strategic preference beliefs) or -1 (for the control belief) to +2 (for all beliefs evaluated here).[68] A positive score here indicates that a leader's belief scores increased in value (i.e. these leaders saw the world as more friendly [increase in P1], preferred more cooperation [increase in I1], or felt more control [increase in P4]), and negative scores indicate that these scores decreased in

[68] I experimented with squaring this value, or taking the absolute value of such in order to examine absolute forms of belief change, or one's propensity to "adapt" to one's environment, narrowly. However, in this conceptualization of learning a great deal of information is lost, as this form of data transformation does not allow for an examination of *directional* changes in beliefs (e.g. toward increased perceptions of friendliness or hostility). Ultimately, for the hypotheses being tested in this section, the simple calculation of post-crisis minus pre-crisis belief scores was seen as the most useful way of evaluating "learning" as it is of interest here.

value (i.e. these leaders saw the world as less friendly [decrease in P1], preferred less conflict [decrease in I1], or felt less control [decrease in P4]) following crisis exposure).

By controlling for other potential influences, I can provide a more stringent test of the influence of psychological predispositions on learning. Here, I employ a number of independent variables to do just this, taken from the characteristics of the crisis periods, while also testing for the respective impact of these factors. All crisis-related, independent variables used can be found in Brecher and Wilkenfeld's International Crisis Behavior database (see Brecher and Wilkenfeld, 2009). Variables included are: 1) the crisis outcome for the U.S.; 2) the level of violence experienced by the U.S.; 3) the act or situation that caused the crisis (i.e. the triggering event); 4) the proximity of the crisis to the U.S.; 5) the power discrepancy between the U.S. and its major rival in the crisis; 6) the most important *initial* issue of concern in the crisis, as experienced by the U.S.; 7) the most serious U.S. value threatened during the entirety of the crisis; and 8) the order in which the crisis was experienced for a given president. A description of these variables and their values can be found in Appendix F. All of these variables are either interval or ordinal, and thus, hypotheses are tested using OLS regression models.

8.3 Results[69]

8.3.1 Section 1

Section 1 Evaluates Hypotheses 1 and 2. Again, these are the hypotheses being tested here:

H1: Following a crisis, leaders who initially perceive the other as hostile, who hold a conflictual strategic orientation, or who feel low levels of control, *will not* experience a more significant change in their beliefs than would be expected by chance, or following non-crisis situations.

[69] Note that all hypotheses are evaluated at the one-tailed level of significance, given that I am evaluating directional hypotheses.

H2: Following a crisis, leaders who initially perceive the other as friendly, who hold a cooperative strategic orientation, or who feel high levels of control, *will* experience a more significant change in their beliefs than would be expected by chance, or following non-crisis situations. These changes should result in perceptions of an increasingly hostile world, an increased preference for conflict, and decreased feelings of control over events.

To begin, Table 8.1 shows the impact of crises on those with initially low and high image of the "other" (P1) levels for the 6 months[70] prior to crisis exposure. Those with initially low P1 levels see the world as a relatively hostile place prior to crisis exposure, and those with initially high P1 levels see the world as a relatively friendly place prior to crisis exposure. Again, expectations are that those with initially high P1 levels will yield a significant, negative change in image belief value following crisis exposure reflecting increased perceptions of hostility, and that those with initially low P1 levels will not yield a significant change in beliefs.

Table 8.1: ICB 6 Months Image of the External Environment (P1) ANOVA Results

Initially Low P1 (perceptions of hostility)				
	M	St Dev	N	
Pre-Crisis	.380	.042	15	
Post-Crisis	.421	.051	15	
	SS	df	MS	F
Between	.012	1	.012	5.643**
Within	.061	28	.002	
Initially High P1 (perceptions of friendliness)				
	M	St Dev	N	
Pre-Crisis	.525	.071	15	
Post-Crisis	.436	.097	15	
	SS	df	MS	F
Between	.059	1	.059	8.116**
Within	.204	28	.007	

[70] Note that I also tested all hypotheses here by looking at the 3 month pre- and post-crisis periods in order to gauge "short" term learning (versus the "moderate" term learning examined at 6 month intervals here). However, the results for the 3 month analyses were so similar to that of the 6 month tests that they were not included in the results described here.

Note: all statistical tests evaluated at the 1-tailed level of significance
**prob<.05

These results provide some preliminary support for hypothesis H2, as leaders who initially see the world as a friendly place do, in fact, see the world as significantly more hostile following crisis exposure (F=8.116, prob<.05). However, hypothesis H1 is not given support, as those who initially see the world as a hostile place actually see the world as significantly *more friendly* than they initially did in the 6 months following crisis exposure (F=5.643, prob<.05). This latter finding is surprising, as it does not make intuitive sense that those who see the world as hostile would shift their perceptions toward seeing the world as *friendlier* following a crisis situation. Further, this finding may bring into question the above stated support for hypothesis H2. Instead of the expected belief change process taking place in Hypotheses H2 and H1, it may be that crises act as a type of generalized, moderating influence on perceptions of the other, bringing them to some "equilibrium" point irrespective of whether they are initially hostile or friendly. However, let us put further speculation regarding this finding on hold for the moment (I will come back to this later).

Table 8.2 conveys the impact of crises on those with initially low and initially high strategic preferences (I1 levels) for the 6 months prior to crisis exposure. Those with initially high I1 levels prefer the strategy of cooperation to a greater extent than do others prior to crisis exposure, whereas those with initially low I1 levels prefer the strategy of conflict to a greater extent than do others. Findings here are similar to those in Table 8.1. Hypothesis H2 is given preliminary, modest support, as those with initially high strategic preference levels yield a statistically significant downward shift on this measure following crisis exposure, toward increased preferences for conflict (F=2.597, prob<.10). However, as with findings on the image index, hypothesis H1 is not supported for the strategic preferences index, as those who initially

prefer conflict actually yield a statistically significant shift toward preferring cooperation following crisis exposure (F=3.786, prob<.05). As with the image measure, this finding regarding those with initially low strategic preference levels is surprising. That is to say, why would leaders who first prefer conflict prefer cooperation following a crisis?

Table 8.2: ICB 6 Months Strategic Preferences (I1) ANOVA Results

Initially Low I1 (preference for conflict)				
	M	St Dev	N	
Pre-Crisis	.526	.187	15	
Post-Crisis	.634	.108	15	
	SS	df	MS	F
Between	.088	1	.088	3.786**
Within	.654	28	.023	
Initially High I1 (preference for cooperation)				
	M	St Dev	N	
Pre-Crisis	.707	.047	15	
Post-Crisis	.668	.080	15	
	SS	df	MS	F
Between	.011	1	.011	2.597*
Within	.121	28	.004	

Note: all statistical tests evaluated at the 1-tailed level of significance
**prob<.05
*prob<.10

Table 8.3: ICB 6 Months Feelings of Control (P4) ANOVA Results
Note: all statistical tests evaluated at the 1-tailed level of significance
*prob<.10

Initially Low P4 (low feelings of control)				
	M	St Dev	N	
Pre-Crisis	.262	.033	15	
Post-Crisis	.279	.030	15	
	SS	df	MS	F
Between	.002	1	.002	2.192*
Within	.028	28	.001	
Initially High P4 (high feelings of control)				
	M	St Dev	N	
Pre-Crisis	.337	.025	15	
Post-Crisis	.331	.046	15	

Table 8.3 (cont.)

	SS	df	MS	F
Between	.000	1	.000	.156
Within	.038	28		

Table 8.3 gives results concerning the impact of crises on those with initially low and initially high control (P4) levels for the 6 months prior to crisis exposure. Recall that those with initially high control levels feel more control than others do prior to crisis exposure, and those with initially low control levels feel less control than others prior to crisis exposure. Hypothesis H2 is not given support in this analysis, as those who initially feel higher levels of control do not feel less control following crisis exposure. However, H1 also fails to receive support as, similar to the results regarding the image and strategic preference measures, those who initially feel relatively powerless tend to feel significantly *more* control following crisis exposure ($F=2.192$, prob<.10). Though counter to hypothesized expectations, this specific finding may not be so surprising on further thought. In the sample of cases evaluated, the U.S. "lost" only 3 crises, and won 16 of them. Given that the U.S. usually comes out of crises without "losing" (even if they don't always "win"), the experience of undergoing a crisis in the U.S. may well help to give leaders increased feelings of control and power over their environment than they felt beforehand.

Now that we have evaluated the 3 psychological variables of interest for 6 month periods before and after crisis exposure, let us come back to the unexpected results for those with initially low image (P1) and strategic preference (I1) levels. Does this finding really suggest that both Hypotheses H2 and H1 are not supported for these belief variables? Though only H1 does not appear to be supported on its surface, if crises simply behave as generalized moderating influences on beliefs, or if they act no differently than might be expected in any given non-crisis period, then the assumptions behind the findings that support hypothesis H2 would be incorrect

as well, despite technical empirical support to the contrary for the "image of the 'other'" and "strategic orientation" variables.

Given the above dilemma, I test the degree to which these findings could have been the result of chance. Toward this end, I examine 37 randomly chosen, non-crisis (and non-dispute[71]) time periods for the presidencies examined here (these periods are referred to from here on out as "non-occurrences," since there were no major international crisis or dispute occurrences of note during the times examined). These times were chosen during non-crisis periods with the idea that if there were noticeable differences in either the direction or degree of belief change following from these periods versus those found with the crisis models above, then there may well be something to the peculiar relationship found above, beyond a simple "regression to the mean." However, if a similar trend to that found in Tables 8.1, 8.2, and 8.3 were found in this random selection of data, then the relationship found in the above analyses could be said to simply reflect a regression to the mean with no other systematic explanation.

In order to evaluate these possibilities, the "non-occurrences" were evaluated as if they were crises (these "non-occurrences" lasted from a few days up to a few months in length—length was chosen at random to roughly correlate with the variable length of the crises examined). Thus the image, strategic preference, and feelings of control scores for the 6 months prior to the onset of these "non-occurrences" were averaged out, and rank-ordered into "high" and "low" "pre-non-occurrence" groups on each operational code index (grouping was again based upon the median belief value, with half of the cases falling into the "high" category, and half falling into the "low" category). These data were then used to compare the data evaluated in

[71] I also ensured that these crises did not occur during periods of Militarized Interstate Disputes (MIDs—see Jones, Bremer, and Singer [1996]) in order to best ensure that these were periods of relative "peace."

Tables 8.1-8.3 against a non-crisis, "control" group. This comparison was made via between-groups Multivariate Analysis of Variance (MANOVA). The factors compared in these MANOVAs are crisis vs. non-occurrence, and pre- vs. post-crisis belief values. The main finding of interest in these MANOVAs is the interaction between the two factors of interest. If there is a significant difference between the interactions of crisis vs. non-occurrence samples on the direction and degree of pre- vs. post-crisis belief change experienced, then we might say that the crisis sample differs in a notable way from the non-crisis sample in the manner of learning that takes place following crisis exposure. If, on the other hand, we find no significant difference, then we may presume that crises do not affect learning as evaluated here in any noteworthy way. Instead, we could say that crises only affected belief change in the direction and degree that one would expect by chance.

I examine 2 models for each belief measure. The first will compare those with initially low "pre-crisis" values against those with initially low "pre-non-occurrence" values. The second will compare those with initially high "pre-crisis" values against those with initially high "pre-non-occurrence" values. I expect that there will be no significant difference in belief change between those groups evaluated in the "low" models, which would suggest that crises do not have any special, notable effect on belief change, as measured here, for those with initially low belief values. However, I expect that there *will* be a significant difference between those groups evaluated in the "high" models, as I expect that crises will have a stronger, expected influence on those with high belief values prior to crisis exposure, in expected directions, than "non-occurrences" will on presidents with similar pre-"non-occurrence" belief levels.

Table 8.4 gives the results of the crisis/non-occurrence comparisons for presidents' belief change on the image of the "other" (P1) index, at evaluation periods of six months before and

after crises and "non-occurrences." The first section of this table examines leaders with "low" image values (again, those who saw the world as a relatively hostile place) prior to either crises or "non-occurrences." Results suggest that, when they initially see the world as hostile, the degree of belief change experienced by presidents does not differ significantly based upon whether or not a crisis occurs (F=.03, prob=.427). This follows hypothesized expectations. The second section of this table evaluates how the beliefs of leaders with initially "high" image values (that is, those who initially see the world as relatively "friendly") change following exposure to crises and "non-occurrences." Results here also suggest that, when they initially see the world as "friendly," the degree of belief change experienced by presidents also does not differ significantly based upon whether or not a crisis occurs (F=.13, prob=.326). This runs counter to hypothesized expectations, as I expected that these individuals would "learn" from these crisis experiences to a more significant extent than would be expected by chance.

Table 8.4: ICB 6 Month MANOVAs for P1 Crisis/Non-Crisis Comparisons

Leaders with Initially Low P1 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.368	.043	18
	Post-Event	.415	.095	18
Crisis				
	Pre-Crisis	.380	.042	15
	Post-Crisis	.421	.051	15
For Entire Sample		.396	.066	66
	SS	DF	MS	F
Within Cells	.25	62	.00	
Non-Occurrence/Crisis	.00	1	.00	.33
Pre/Post	.03	1	.03	7.75**
High/LowXPre/Post	.00	1	.00	.03
Model	.03	3	.01	2.76**
Total	.28	65	.00	
R-Squared	.118			
Adjusted R-Squared	.075			

Table 8.4 (cont.)

Leaders with Initially High P1 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.509	.047	18
	Post-Event	.435	.110	18
Crisis				
	Pre-Crisis	.525	.071	15
	Post-Crisis	.436	.097	15
For Entire Sample		.476	.092	66
	SS	DF	MS	F
Within Cells	.45	62	.01	
Non-Occurrence/Crisis	.00	1	.00	.15
Pre/Post	.11	1	11	15.02***
High/LowXPre/Post	.00	1	.00	.13
Model	.11	3	.04	5.06***
Total	.56	65	.01	
R-Squared	.197			
Adjusted R-Squared	.158			

***prob≤.01
**prob<.05

Given that expectations are not supported by the empirical evidence, including the crisis/non-occurrence comparisons, I cannot reject the null hypothesis for Hypothesis H2 regarding the image index. Hypothesis H1 is given partial support, in that crises do not affect those who initially see the world as hostile to any greater extent than would be expected by chance. However, the lack of support for Hypothesis H1 regarding the image index in the earlier, ANOVA results (i.e. following crisis exposure, there is a significant degree of belief change experienced by individuals who initially see the world as hostile) suggests that we cannot reject the null hypothesis for Hypothesis H1, either.[72]

Table 8.5 gives the results of the crisis/non-crisis comparisons for presidents' belief change on the strategic preferences (I1) index, at evaluation periods of six months before and

[72] If the earlier ANOVA findings showed that there was no significant change in beliefs following crisis exposure for those with initial perceptions of the world as a hostile place (which would have supported Hypothesis H1), then a null finding on the interaction term in the MANOVA here would give further support to Hypothesis H1, but that was not the case.

after crises and "non-occurrences." As with Table 8.4, the first section evaluates those presidents with initially low strategic preference levels—that is to say, those who preferred conflict over cooperation in the six months leading up to a crisis or "non-occurrence." Here, the interaction finding suggests that there is no significant difference in the degree of belief change that occurs between the crisis and "non-occurrence" samples (F=.26, prob=.306), as expected. The second section evaluates those presidents who preferred cooperation to a greater extent than did others prior to crisis or "non-occurrence" exposure. Findings show that there is a statistically significant difference in belief change between those who encountered crisis periods and those who did not (F=2.76, prob=.051—both groups experience a change toward increased preferences for conflict following crises and "non-occurrences," respectively). However, the degree of belief change experienced by those in the "non-occurrence" time periods is actually *greater* than the belief change experienced by those in the crisis periods (an I1 belief index change of .101 is found for "non-occurrence" group, and a change of .039 is found for the crisis group). Thus, if anything, we might say that crises stabilize, or reinforce the strategic preferences of those who initially prefer cooperation to a greater extent than would be the case in non-crisis situations. Following from this, as well as the findings from Table 8.2 showing that those with initially low I1 values (preferences for conflict) experience a significant, upward shift in belief values following crisis exposure (toward increased preferences for cooperation), we cannot reject the null hypothesis for hypotheses H1 and H2 regarding the strategic preferences operational code belief index at the 6 month level of evaluation.

Table 8.6 contains the results of the crisis/non-crisis comparisons for presidents' belief changes on the feelings of control (P4) index, at evaluation periods of six months before and after crises and "non-occurrences." Note that, based upon the results found in Table 8.3, we

Table 8.5: ICB 6 Month MANOVAs for I1 Crisis/Non-Crisis Comparisons
Note: all statistical tests evaluated at the 1-tailed level of significance
***prob≤.01
**prob<.05
*prob<.10

Leaders with Initially Low I1 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.573	.061	18
	Post-Event	.651	.113	18
Crisis				
	Pre-Crisis	.526	.187	15
	Post-Crisis	.634	.108	15
For Entire Sample		.597	.130	66
	SS	DF	MS	F
Within Cells	.93	62	.02	
Non-Occurrence/Crisis	.02	1	.02	1.10
Pre/Post	.14	1	.14	9.43**
High/LowXPre/Post	.00	1	.00	.26
Model	.16	3	.05	3.53**
Total	.16	3	.02	
R-Squared	.146			
Adjusted R-Squared	.105			
Leaders with Initially High I1 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.709	.039	18
	Post-Event	.608	.112	18
Crisis				
	Pre-Crisis	.707	.047	15
	Post-Crisis	.668	.080	15
For Entire Sample		.672	.086	66
	SS	DF	MS	F
Within Cells	.36	62	.01	
Non-Occurrence/Crisis	.01	1	.01	2.32*
Pre/Post	.08	1	.08	13.83***
High/LowXPre/Post	.02	1	.02	2.76*
Model	.12	3	.04	6.73**

Table 8.5 (cont.)

Total	.48	65	.01
R-Squared	.246		
Adjusted R-Squared	.209		

already know that we cannot reject the null hypothetical expectations for Hypotheses H1 or H2 on this belief index. Nonetheless, it may still be useful to compare the impact of president's pre-crisis feelings of control on belief change versus what might be expected by chance, for the sake of understanding how control beliefs are affected by crises. As such, I report MANOVA results here. The first section of Table 8.6 gives results for those presidents with initially low feelings of control levels—or those who felt less control than others over world events in the six months leading up to a crisis or "non-occurrence." Results indicate that there is no significant difference in belief change between for presidents in crisis and non-crisis samples (F=.26, prob=.306), as expected. The second section here evaluates those presidents with initially high feelings of control levels—or those who felt more control over world events than did others prior to crises and "non-occurrences." Results here show that crisis exposure does have a modestly significant impact on the learning behavior of these leaders (F=2.14, prob<.10). However, as with the I1 findings in Table 8.5, those in the "non-occurrence" sample actually yielded a stronger, downward shift in their P4 values (a change in belief values of .032) than did those in the crisis sample (who yielded a downward shift in their P4 values of .006). Thus, when evaluating those presidents with relatively high feelings of control in a given six month period of time, crises appear to actually reinforce existing feelings of control to a greater extent than is the case in non-crisis situations.

Table 8.6: ICB 6 Month MANOVAs for P4 Crisis/Non-Crisis Comparisons

Leaders with Initially Low P4 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.266	.021	18
	Post-Event	.275	.031	18
Crisis				
	Pre-Crisis	.262	.033	15
	Post-Crisis	.279	.030	15
For Entire Sample		.271	.029	66
	SS	DF	MS	F
Within Cells	.05	62	.00	
Non-Occurrence/Crisis	.00	1	.00	.00
Pre/Post	.00	1	.00	3.48**
High/LowXPre/Post	.00	1	.00	.26
Model	.00	3	.00	1.20
Total	.06	65	.00	
R-Squared	.055			
Adjusted R-Squared	.009			

Leaders with Initially High P4 Values				
Factors		M	SD	N
Non-Occurrence				
	Pre-Event	.331	.030	18
	Post-Event	.299	.043	18
Crisis				
	Pre-Crisis	.337	.025	15
	Post-Crisis	.331	.046	15
For Entire Sample		.323	.039	
	SS	DF	MS	F
Within Cells	.09	62	.00	
Non-Occurrence/Crisis	.01	1	.01	4.41**
Pre/Post	.01	1	.01	4.18**
	SS	DF	MS	F
High/LowXPre/Post	.00	1	.00	2.14*
Model	.02	3	.01	3.78**
Total	.10	65	.00	
R-Squared	.155			
Adjusted R-Squared	.114			

**prob<.05
*prob<.10
Note: all statistical tests evaluated at the 1-tailed level of significance

8.3.2 Section 2

Section 2 evaluates Hypotheses H3 through H5. Here, I look at the relative impact of individual psychological and crisis-based factors on learning following crisis exposure. As stated in the methods section, the dependent variable (the degree of belief change following crisis exposure) was calculated by subtracting pre-crisis belief values from post-crisis belief values. Negative values here indicate belief change in a negative direction, with stronger negative values indicating more negative change. In other words, negative values suggest a tendency toward increased perceptions of hostility on the image of the external environment (P1) variable, an increased preference for conflict on the strategic preferences (I1) measure, and a decreased feeling of control over world events on the control (P4) variable. Conversely, positive values on this dependent variable indicate belief change in a positive direction, with more positive values indicating more positive change. That is to say, toward increased perceptions of friendliness on the image (P1) variable, an increased preference for cooperation on the strategy (I1) variable, and an increased feeling of control on the control (P4) variable.

Here again are the hypotheses being evaluated in this section:

H3: Following a crisis, controlling for crisis-related factors and the relative novelty of crisis experience, leaders who initially perceive the other as more friendly, who hold a more cooperative strategic orientation, or who feel higher levels of control will experience a significant change in their beliefs toward seeing the world as more hostile, will take on a more conflictual strategic orientation, and will feel lower levels of control, respectively.

H4: The worse the crisis outcome, the more likely presidents will see the world as more hostile, will more strongly prefer conflict, and will feel less control than they did previously. The better a crisis outcome, the more likely leaders will maintain their pre-existing beliefs (yielding stable

P1, I1, and P4 scores), or will become more optimistic, leading to an increased perception of external friendliness, an increased preference for cooperation, and an increase in feelings of control over events.

H5: Initial exposure to crises will yield the most noticeable changes in leaders' image, strategic preference, and control beliefs in the negative direction (i.e. toward increased perceptions of hostility, increased preferences for conflict, and decreased feelings of control, respectively), but as time goes on, learning will occur to a lesser and lesser degree, and further change will be less negative in nature (i.e. toward increased perceptions of friendliness, increased preferences for cooperation, and increased feelings of control).

Table 8.7 gives regression results for belief change on all three psychological variables of interest at six month periods before and after crisis exposure. Findings indicate that for the model examining the image of the "other" (Model I), the president's pre-crisis belief score on this index plays a significant mediating role regarding the influence of crisis exposure on belief change, when taking assorted crisis-related factors into account ($t=-4.859$, $prob<.001$). Thus, after undergoing a crisis, presidents who initially view the world as a relatively friendly place tend to see the world as more hostile than they did beforehand. However, this finding also suggests that leaders who initially view the world as hostile tend to see the world in a much friendlier manner (as we saw in the earlier ANOVA and MANOVA analyses).[73] Thus, the

[73] I had initially planned on looking at those with initially "high" and "low" operational code belief measures separately in regression analyses here (similar to how they were evaluated in section 2). However, this would have reduced the sample size by half, creating statistical "power" problems in evaluating the number of controls included in these models. Further, given the observed linear relationship between pre-crisis belief values and belief change irrespective of pre-crisis beliefs (as evidenced by the findings in section 2), there is no real reason to expect notable findings in a model exclusively evaluating those with initially "high" or "low" belief values.

support for this hypothesis is moderated by the fact that the impact of presidential pre-crisis image values on belief change is not restricted solely to those with initially friendly perceptions of the outside world.

Regarding the crisis-related variables in Model I, the more important the initial "issue" threatened in a crisis, the more hostile presidents see the world following crisis exposure (t=-1.743, prob<.05). This suggests that when issues of a military and security variety lie at the basis of a crisis, leaders view the world in a more hostile fashion following crisis exposure than is the case when less salient issues (such as those of a "cultural" or economic nature) are at issue. Further, the more significant the threat occurring within a crisis (t=-2.545, prob<.05), the more hostile presidents see the world following crisis exposure, following hypothesized expectations.

Interestingly, the "level of violence experienced" variable runs counter to expectations (t=1.814, prob<.05), indicating that the higher the level of violence experienced during a crisis, the more friendly leaders will view the world in the period following crisis exposure. Similarly, the "triggering event" factor in Model I suggests that the more significant and threatening the triggering event, the more friendly the president sees the world following crisis exposure. Given that neither the crisis outcome or crisis order variables are statistically significant, we cannot reject the null hypothesis for hypotheses H4 or H5 regarding the image variable.

In Model II of Table 8.7, I evaluate factors impacting changes in presidents' strategic preferences following crisis exposure at six month periods. Similar to Model I, the psychological variable here is statistically significant, suggesting that leaders who initially prefer cooperation tend to prefer conflict following crisis exposure, and that those who initially prefer conflict tend to prefer cooperation following crisis exposure. This pre-crisis belief value, though not having the precise effect hypothesized, again appears to strongly influence belief change to a greater extent

than any other variable examined. The "grave threat" variable is also modestly significant here (-1.478, prob<.10), indicating that the graver the threat during a crisis, the more the president

Table 8.7: Influences on U.S. Presidential Belief Change following Crisis Exposure (Measured as Post Crisis Beliefs – Pre Crisis Beliefs) at Six Month Intervals

	Model I: Image of the Opponent (P1)		Model II: Strategic Preference (I1)		Model III: Feelings of Control (P4)	
	b	t	b	t	b	t
Pre-Crisis Belief Value (-)	-0.844	-4.859***	-0.816	-5.569***	-0.427	-2.699**
Outcome (-)	-0.009	-0.578	-0.006	-0.276	0.013	1.614*
Violence (-)	0.026	1.814**	0.001	0.030	0.011	1.491*
Triggering Event (-)	0.007	1.383*	-0.001	-0.141	0.001	0.354
Proximity (+)	-0.012	-0.760	-0.012	-0.590	-0.005	-0.604
Power Discrepancy (+)	0.000	-0.728	0.000	-0.717	0.000	-0.484
Issue (-)	-0.040	-1.743**	-0.014	-0.438	-0.017	-1.374*
Grave Threat (-)	-0.064	-2.545**	-0.053	-1.478*	0.019	1.369*
Crisis Order (+)	0.008	0.995	0.007	0.611	0.002	0.505
(Constant)	0.570	3.673***	0.746	4.324***	0.105	1.381*
N	30		30		30	
R^2	0.747		0.725		0.418	
Adjusted R^2	0.633		0.602		0.156	

***prob≤.001
**prob≤.05
*prob<.10

will prefer conflict following such. No other crisis-based variable is significant in this model. Thus, hypothesis H3 is given support for the strategic preferences variable in the manner that it was supported in Model I, whereas hypotheses H4 and H5 are not given support.

Model III of Table 8.7 evaluates factors impacting changes in feelings of control at six month periods following crisis exposure. Once again, the psychological variable of interest here is statistically significant, suggesting that those who initially feel higher levels of control will feel significantly less control following crisis exposure, whereas those who initially experience lower levels of control will feel more control following crisis exposure ($F=-2.699$, $prob<.05$). Though it appears that Hypothesis H3 is given support here, when we look at the results from Table 8.3, it seems that this finding can be largely attributed to those leaders that have initially low control values, whose post-crisis belief change values help to produce the expected, negative relationship between pre-crisis control beliefs and post-crisis belief change values.

Additionally, there are a few modestly significant findings regarding crisis-based variables here. The more significant the initial issue being disputed in the crisis, the less control a leader feels following crisis exposure ($F=-1.374$, $prob<.10$). However, three other variables yield unexpected findings. The more negative the outcome for the U.S., the more control presidents feel following crisis exposure ($F=1.614$, $prob<.10$), running in opposition to Hypothesis H4. Further, presidents who experience higher levels of violence during crises also seem to feel more control following crisis exposure ($F=1.491$, $prob<.10$), and when more serious threats are experienced, these leaders also seem to feel more control following crisis exposure ($F=1.369$, $prob<.10$).

Taken together, the latter three findings above tell a strange tale that begs the question: why would worse experiences and outcomes lead to a president feeling greater control following a crisis, and better experiences make him feel less control? It may be that following highly undesirable experiences and outcomes, presidents feel a stronger than average need to convince the U.S. public, the international community, and other members of their own government feel

that they have a "grip" on things. That is to say, once the U.S. goes through hard times during crises, leaders would have an interest in propagating the idea that such negative experiences are not likely to occur again in the future. Otherwise, they might lose domestic political support, which is necessary to obtaining preferred policy outcomes. Further, the U.S. might lose credibility in the eyes of those abroad, which could have a detrimental impact on U.S. foreign policy. This is not to say that this is a conscious decision, as this belief might change subconsciously as a means to better adapt to the international environment. Examined from this perspective, the findings here might not be that surprising. Ultimately, however, hypotheses H4 and H5 fail to receive support when evaluating the control variable at six month periods.

8.4 Discussion

There were a number of questions addressed in this chapter, but what broad lessons can we take away from all of this? In section 1, I find that beliefs tend to fluctuate around an equilibrium point at both 6 month periods of analysis, and are not affected in a systematic, predictable way by the impact of crises. Additionally, I found that for those who initially prefer cooperation, or who feel high levels of control, crises actually help to reinforce existing beliefs to a greater extent than what would be expected by chance (via the crisis vs. "non-occurrence" comparisons). This is an interesting finding, and though it suggests the exact opposite of what was hypothesized, it is not unreasonable to imagine certain personality-types, or leaders in certain situations, finding greater faith in their pre-crisis beliefs if a crisis either turns out in a way that reinforces pre-crisis beliefs, or reinforces something about their pre-conceived belief framework—even if these beliefs are not based on a pessimistic, negative view of the world. That is to say, perhaps some crises are *not* viewed as being noxious, painful experiences, a fact that may explain many of the results both in this, and the previous chapter.

With section 2 I find some support for my hypothesis that, accounting for the impact of crisis-related controls, those with initially high image, strategic preference, and control values tend to experience a significant downward shift on these belief values. However, as the findings from section 1 demonstrate, those with initially *low* belief values also experience a fair degree of belief change in the opposite direction, counter to hypothesized expectations. Despite this, these regression findings do seem to tell an interesting story in that, even controlling for crises-related factors, learning from crises can be best explained by evaluating pre-crisis belief levels, as those coefficients were the most statistically significant of all variables examined. As with the general findings from section 1, this suggests that the need for leaders' beliefs to reach an equilibrium point of sorts is incredibly powerful—those with values that are too extreme one way or the other will tend to experience a shift of values in the opposing direction following a crisis. This again gives support to the notion that cognitive balance is critically important for political leaders, as it is for the rest of us.

Additionally, the regression results in section 2 regarding the crisis-related variables, though not giving much support to formal hypotheses posed, did yield some interesting expected, as well as unexpected findings. For example, when more serious issues are at stake, leaders seem to view the world as more hostile, and to more strongly prefer conflict following crisis exposure. Conversely, when more violence takes place, and when more significant values are threatened in a crisis, leaders tend to feel more control following this experience.

Despite these interesting and potentially useful findings, however, I would be remiss not to note that throughout this and the previous chapter, there is only sporadic support for the various hypotheses laid out. As such, crises do not appear to hold the type of systematic influence on leaders' beliefs that I initially expected.

Thus, for future analyses, researchers evaluating crises in a "large-n" manner might do well to take a more hands on role in determining which crises are being evaluated and why. I attempted here, concurrently, to minimize my own subjective influence on crisis case selection while maximizing my sample size. I did this by using Brecher and Wilkenfeld's database and using a set of simple and limited criteria for including or removing cases from analysis. However, again, some crises clearly matter more to the U.S. than do others, and are more clearly "crises" for the U.S. than are others. I attempted to account for some of these factors in section 2, but the results from chapter 7 and section 1 in this chapter might have been far different if a different selection of crises were evaluated.

Secondly, it might simply be that crises and pre-crisis beliefs simply don't play the kinds of systematic roles on belief change that I anticipate here. There are innumerable influences on a leader's beliefs at a given point in time, and it may just be that the experience of going through a crisis does not have a simple, directional, systematic impact on beliefs when there are so many other factors that might play a role. As noted in the beginning of this section, there are some interesting findings here, but when these findings vary so much from president to president, and across different crises, they might be better suited to evaluation as idiosyncratic and independent, rather than systematic, phenomena.

One other potential reason for my lack of findings could be that I was not looking at the right psychological variables. Here, I examine initially high and low values on three major belief indices, and the systematic, anticipated impact of crises on these different groups appears not to have occurred. However, there are a number of other psychological and non-psychological differences (and different ways to evaluate these differences) between presidents and other political elites. By examining these different phenomena, we might be better able to tell a more

complete story of how crises affect beliefs, and of how predispositions and other individual-level factors help to mediate the impact of crises on psychological change. For example, looking at other operational code beliefs, levels of conceptual complexity, motivations, levels of experience and interest in foreign policy, and perhaps even political ideology could help us to better understand how leaders learn from crises.

Additionally, for future work, it might be useful to evaluate crises as having multiple potential influences on leaders' beliefs, in ways that are more complex and nuanced than those hypothesized here. Here, I test whether crises have an influence on leader's beliefs. Behind this expectation is an assumption that leaders will not only be impacted by crisis events in a certain way, but will be impacted by these events at all. However, this might not always be the case. The psychologist Robert White (following the work of Jean Piaget) listed three forms of "adaptation"—1) mastery (trying to take control over one's environment); 2) coping (allowing the environment to impact the individual); and 3) defense (ignoring one's environment, and thus refusing to either change it, or to be changed by it—Oneal, 1982: 14-15). The assumption behind this chapter is that leaders adapt by "coping," at least to a certain extent. However, it may well be that presidents often engage in mastery and/or defense to such an extent that they do not "learn" much, if anything, from certain crisis experiences.

CHAPTER 9: THE INFLUENCE OF PRESIDENTIAL LEARNING ON U.S. FOREIGN POLICY ACTIONS

Thus far, this dissertation has been focused on presidential belief change as the dependent variable. That is to say—what are the dynamics of belief change, and what accounts for these changes? In this chapter, I instead treat belief change as an independent variable potentially influencing U.S. policy behavior.

The ultimate goal of elite-level political psychological research for many researchers is not to understand leader psychology for its own sake, but rather to better understand how and when psychology matters toward influencing policy and political outcomes. Even if we know what leaders think and feel, what does this matter if these thoughts and feelings do not influence behavior? Most political psychologists assume that psychology "matters," and the line of research treating behavior and outcomes as dependent variable is necessary toward demonstrating if and when this is the case.

Here, I take a preliminary step toward understanding how one specific psychological phenomenon—the change in leaders' operational code beliefs—may impact U.S. foreign policy actions. Elsewhere (Robison 2009) I have examined the impact of the "image" operational code belief values on policy actions, and found that this belief is a significant predictor of U.S. policy, even controlling for other various domestic and international factors. But beyond belief levels narrowly, the degree and type of belief *change* may also play a role toward influencing policy. For instance, is U.S. policy more hostile following a sharp change in beliefs toward seeing the world as more hostile, beyond what would be expected when these beliefs undergo less notable change, or a change toward perceptions of friendliness? The expectation here is that when beliefs change in a dramatic fashion over a short period of time, U.S. behavior will be more affected than when a less dramatic change occurs.

Of course, there are multiple potential reasons for dramatic, short-term change in beliefs (many of which were discussed and tested previously in this dissertation). In this chapter, I am not concerned with this, from a theoretical or methodological standpoint. Instead, I simply want to know if belief change, when it does occur for whatever reason, is a statistically significant predictor of U.S. policy action (in that more dramatic change leads to more extreme policy behavior), and if this finding holds controlling for other potential influences.

U.S. policy itself is influenced by a complex array of factors, and is generally quite stable from month to month. Thus, if I can demonstrate that changes in beliefs play a notable role toward influencing policy, then I would be making a strong case for the inclusion of psychological variables in analyses of the factors influencing U.S. foreign policy. As with previous chapters, I examine the three "master" beliefs here of the president's image of "the other," strategic orientation, and feelings of historical control over the international political environment.

9.1 The Use of Force

Perhaps the area of research most closely approximating that undertaken here is that examining the use of force (usually, but not always or only, initiated by the United States). Similar to much of the work in this dissertation, the use of force literature frequently integrates factors from both the international and domestic political spheres as influences on state policy action, demonstrating that both are important to consider when examining the decision to use military force. This literature also explicitly takes into account the role of important decision-makers as "cognitive misers" who are unable to fulfill the requirements assumed by rational actor models (Ostrom and Job 1986, 543). Much of this work has focused on the "diversionary" use of force, which examines whether periods of low public support or economic well-being will

contribute to the use of force abroad as a means to distract attention from domestic political woes (Clark 2003; Enterline and Gleditsch 2000; James and Oneal 1991; Miller 1999). Dependent variables in this literature can range from the use of force as measured by militarized interstate disputes (Fordham 2001) to Blechman and Kaplan's database of forceful acts (Ostrom and Job 1986) to the use of events data (Goldstein and Freeman 1990).

Despite all the work that has been done in this area, however, none of it has, to this author's knowledge, included actual variables representing leader psychology in the statistical models employed. Psychology is often embedded in the theory within these works, distinguishing them from more "structural" examinations of world politics. However, these psychological factors are usually assumed to be intervening variables between various international- and domestic-based factors and the dependent variable of the decision to use force. This project departs from these works by explicitly factoring psychology into these models on the independent variable side of the equation. Specifically, I look at operational code belief change as a potential influence on policy actions.

Further, this project diverges from most in its evaluation not simply of conflict, but of cooperation as a form of policy behavior. The reasons for this difference are more based on theory than a lack of empirical data (which may account for the failure to include psychological measurements on the "right" side of the equation), since much research treats conflict as existing in a fundamentally separate theoretical domain from cooperation, necessitating independent analysis. However, when considering the potential influence of psychology, I do not wish to assume from the get-go that conflict alone may be explained by presidential beliefs—or by other foreign or domestic influences, for that matter. Nor do I wish to suggest that cooperation is unworthy of attention. Instead, here I examine belief change and other factors as potential

influences on actions across the cooperation-conflict spectrum. Note however, that I do run statistical models examining conflict and cooperation alone, as a preliminary test of whether it makes some sense to disentangle these "types" of behavior in models of this kind.

9.2 Hypotheses

9.2.1 Operational Code Belief Change Hypotheses

Hypotheses follow from the earlier stated expectation that more dramatic change in beliefs will lead to more extreme policy actions—being either more hostile or cooperative than what would be expected following less dramatic belief change. Note that I am concerned with the independent variable of short-term belief change from month to month, and with the dependent variable of "typical" U.S. policy actions at the level of the month (I will elaborate on this in the methods section). Thus, longer-term belief change and policy trends are not taken into account. Specific belief expectations are the following.

9.2.1.1 Image of "the Other" and Strategic Orientation

When presidential image belief levels change to reflect an increased perception of hostility abroad (decreased P1 levels), I expect that policy will be more hostile, given that an increasingly dangerous, hostile world may be best dealt with by more hostile actions by the self. A response to increased hostility with indifference or more cooperation would be akin to a form of appeasement, a generally undesirable policy for U.S. presidents. When strategic orientation belief levels demonstrate an increased preference for conflict (decreased I1 levels), I also expect that resulting policy will be more hostile in nature, as dramatically increased preferences for conflict may promote increased *actual* levels of conflict.

In opposition to the above, when presidential image belief levels shift toward an increased perception of friendliness abroad (increased P1 levels), I expect that ensuing policy

will be more cooperative. If the world is not a particularly dangerous place, then there is much less need for hostile behavior than when hostility is perceived to be prevalent. Further, employing hostility toward this world might breed more conflict, an unnecessary and undesirable outcome, whereas friendliness might better promote cooperation directed toward the self. When presidential strategic orientation belief levels shift toward an increased preference for cooperation (increased I1 levels), I expect that ensuing U.S. policy will be more cooperative in nature, as increased preferences for cooperation should promote increased *actual* levels of cooperation.

H1 (image hypothesis): More conflictual U.S. policy will result following a shift toward seeing the world as more hostile (decreased P1 levels). Further, more cooperative U.S. policy will result following a shift toward seeing the world as more friendly (increased P1 levels).

H2 (strategic orientation hypothesis): More conflictual U.S. policy will result following a shift toward more strongly preferring conflict (decreased I1 levels). Further, more cooperative U.S. policy will result following a shift toward more strongly preferring cooperation (increased I1 levels).

9.2.1.2 Feelings of Historical Control

When feelings of historical control (P4) decrease, I have competing directional expectations. Some strains of offensive realism might expect that policy will be less conflictual in nature following decreases in feelings of control, since states would be expected to act more aggressively whenever they have (or in this case, when heads of state *feel* that they have) the capability to do so. From this perspective, lower levels of control would result in more cooperation, as leaders would not feel that they possessed the capacity to act aggressively, and would thus fail to do so.

Conversely, it is possible that decreased feelings of control will result in *more* aggression. The frustration-aggression hypothesis suggests that when an individual is blocked from achieving some goal, he is likely to respond with aggression (Dollard, Miller, Doob, and Mowrer, 1939). Hypothetical expectations here would be that a perceived decrease in power will likely reduce one's perceived ability to reach goals, which may then lead to increased aggression abroad. Conversely, when one feels that he is able to achieve his goals (as might be expected when feelings of control are high), aggression is not as likely to result, and thus more cooperative actions might be expected. The frustration-aggression hypothesis focuses on mood and emotion as influences on short-term behavior, and generally is not concerned with longer-term actions such as policy-making, at least in the manner that it was originally conceptualized. However, it is possible that a variation of this phenomenon will be manifested in the form of policy aggression, as may have been the case when frustrated Irish leaders Patrick Pearse and James Connolly responded to the British with aggression in the form of the 1916 Easter Rising (Schafer, Robison, and Aldrich 2006).

H3a (feelings of control offensive realist hypothesis): More conflictual policy will result following a shift toward feeling greater control over historical events (increased P4 levels). Further, more cooperative policy will result following a shift toward feeling less control over events (decreased P4 levels).

H3b (feelings of control frustration-aggression hypothesis): More conflictual policy will result following a shift toward feeling less control over historical events (decreased P4 levels). Further, more cooperative policy will result following a shift toward feeling more control over events (increased P4 levels).

Since there are competing expectations, feelings of control (P4) hypotheses will be tested at the two-tailed level of analysis. Conversely, the image (P1) and strategic orientation (I1) hypotheses will be tested at the one-tailed level of analysis, given that those beliefs only have single, directional expectations.

9.2.2 Control Variables

In addition to the belief change variables listed above, a number of domestically-, and foreign-based control variables are also included in statistical models, in order to provide a more stringent test of the impact of belief change on U.S. foreign policy behavior. Though I will not develop formal hypotheses for testing here, I do have directional expectations that I will briefly discuss. These variables are all included in Chapter 6, and for the most part, possess similar directional expectations.

9.2.2.1 Relative Power Capabilities (-)

This variable provides a more direct test of the "offensive realist," "feelings of control" hypothesis outlined above. When the U.S. is more powerful relative to other states—operationally defined as months when U.S. percentage of worldwide GDP is higher—then some offensive realists might expect that U.S. policy will become more conflictual, whereas policy would be more cooperative when the U.S. is weaker.

I test this expectation at the 1-tailed level of analysis, as I do not expect that the "frustration-aggression" explanation will be useful here. I am already pushing the hypothesis when testing the influence of the "feelings of control" belief by presuming that presidential frustrations (represented by his belief levels) might be realized in terms of policy behavior as a form of aggression. Here, I do not want to make the more convoluted presumption that either: a) relative power capabilities will in fact impact presidential feelings of control (an expectation not

given support in chapter 6), which would then impact policy behavior beyond the degree expected by examining the feelings of control belief change itself; or that b) the "state" will somehow be affected by its relative power levels in the manner hypothesized for individuals in the "frustration-aggression" hypothesis. Given that the "offensive realist" expectation is really built around the influences on and actions of the state, I do not run into these issues taking this perspective.

9.2.2.2 Actions Targeting the U.S. (+)

Another powerful potential influence on U.S. behavior is the actions of others. This is a "tit-for-tat," reciprocation measure, where I expect that levels of either conflict or cooperation initiated by others will be met with an in-kind response.

9.2.2.3 Bureaucratic Inertia (+)

I also look at the influence of the previously observed dependent variable value (the measure for the previous month examined as it impacts the behavior of this month) as a measure of "bureaucratic inertia." One of the strongest influences on behavior this month is expected to be the behavior of last month, and this is examined here.

9.2.2.4 Public Support for the President (+/-)

As with chapter 6, I have competing expectations regarding the potential influence of public support for the U.S. president on U.S. foreign policy. The "diversionary theory of conflict" expectation would be that low public support levels for the president result in more conflictual behavior, whereas the inherent preference for conflict/"offensive realist" expectation would be that higher public support levels for the president result in more conflictual behavior.

For this second potential expectation, note that offensive realists are not overtly concerned with feelings of power in the domestic sphere due to domestic support, so much as

relative international power stemming largely from military and economic influence. However, the implicit assumption in this line of thought is that political leaders will generally prefer conflict over cooperation as a means to expanding state power—through aggression. Thus, if leaders gain more public support, some "offensive realists" might expect that they would use this domestic advantage in order to pursue the inherent foreign policy preference of conflict held by all state leaders. Note that though this potential inherent preference may influence leaders' formal "strategic orientation" belief levels (as explored in chapter 6), it is also possible that these phenomena are independent, and the degree of this dependence or independence is an empirical question. For instance, it is conceivable that strategic orientation levels—which may be relatively short-term and which may shift and change in response to one's environment and predispositions—are not as entrenched as this inherent preference for conflict (should this inherent preference exist at all), or that its influence will not be realized to the extent that this inherent preference for conflict will.

9.2.2.5 House of Representatives/Senate Support for the President (+/-)

Similar to the public support measure, I have competing expectations for the House and Senate support measures. The "diversionary theory" and inherent preference for conflict/"offensive realist" expectations are the same as those for the public support measure regarding each of these groups.

9.2.2.6 U.S. Inflation/Unemployment Rates (+/-)

Again, as with chapter 6, I have competing expectations for these economic measures. The "hawkish" expectation is that decreased levels of economic well-being in the form of increased levels of inflation and unemployment will result in more conflictual policy behavior. Conversely, the "dovish" expectation is that increased inflation and unemployment levels will

result in more cooperative policy behavior.

Note that I am not including analysis of the various potential "policy domains" previously examined in this dissertation. However, I will include presidential dummy variables in these models.

9.3 Data and Methodology

9.3.1 Primary Independent Variables of Interest: Operational Code Belief Change[74]

Belief change is determined by subtracting belief levels (on the image [P1], strategic orientation [I1], and historical control [P4] belief indices, respectively) at time t (values as they occur in the "current" month) from belief levels at time t+1 (values as they occur in the "next" month). Thus, a 1 value in January and a 0 value in February would yield a value of -1 that would be applied to the month of February, signifying a decrease of 1 that was observed in this time period. Note that the dependent variable of U.S. policy behavior is examined as a one-month lag in relation to monthly independent variables. This will be discussed below, but in the example of belief change variables, values in February (signifying a change from January to February) are examined as an influence on policy action values for the month of March. By examining the lag of the dependent variable in this way, I ensure that the observed belief change temporally precedes the policy actions of interest, which helps to demonstrate causality.

9.3.2 Dependent Variable: U.S. Foreign Policy Actions

The dependent variable of U.S. foreign policy behavior is calculated in a manner similar to the "actions targeting the U.S." measure used in chapter 6. This data is based off of Gary King's 10 Million International Dyadic Events database, specifically those events occurring between 1990 and 2003. Of course, the principle difference between the data as it is used here

[74] Note: More information for most of these variables can be found in chapter 6 and/or chapter 3 (in the case of the Gary King, events data-based variables).

and that used in chapter 6 is that I am not interested in actions targeting the U.S. (though I am including this as a control variable), but rather U.S. actions targeting others.

Thus, for this chapter I filtered out all events data in the manner outlined in chapters 3 and 6, but for actions initiated by "state" actors within the U.S. and targeting non-U.S. targets. To briefly re-summarize, I first convert all data into the Goldstein-level format described previously, which re-codes the initially nominal-level data (as it exists in its raw state in Gary King's database) into an interval-level scale. Then, I filter out this data to only those events initiated by U.S. "state" actors. Finally, I determine the average Goldstein value for all U.S. initiated events targeting external/foreign actors in a given month. Thus, this measure is a reflection of the general "mood" of U.S. policy behavior targeting non-U.S. actors in a given month, as initiated against friendly actors, enemy actors, and all actor-types in-between.

This measure is examined as a one-month lag in relation to monthly independent variables. That is to say, the monthly independent variable values occurring in January will be examined as an impact on dependent variable values occurring in February.

9.3.3 Relative Power Levels

U.S. relative power levels are examined as the percentage of U.S. GDP out of the total world GDP in a given year. Both the component parts of this indicator—U.S. GDP and World GDP measures—were taken from the World Development Indicators Online.[75]

9.3.4 Actions Targeting the U.S.

This measure is constructed in the same way that it was in chapter 6. That is to say, in the same manner as the dependent variable of "U.S. Foreign Policy Actions," but for actions initiated by non-U.S. actors targeting the U.S.

[75] Available at: http://ddp-ext.worldbank.org.libezp.lib.lsu.edu/ext/DDPQQ/; Values shown are in billions of dollars, and reflect the U.S. dollar as of July 2009.

9.3.5 Bureaucratic Inertia

The measure of bureaucratic inertia is simply the prior month's value on the dependent variable (the dependent variable value at t-1) employed as an independent variable.

9.3.6 Public Support for the President

Public support values are taken from the Roper Center for Public Opinion, and are the average values for a given month, as discussed in chapter 6.[76]

9.3.7 House of Representative/Senate Support for the President

House and Senate support measures are taken from George C. Edwards' research on Presidential-Congressional relations.[77] I use the "overall support scores" from his House and Senate databases, respectively. This is the percentage of bills that a given congressman votes for supporting a policy for which the president has openly given support. I averaged out the percentage for each all congressmen for a given year on each indicator, essentially giving me the "average congressman's" level of presidential support in both the House and Senate, respectively.

9.3.8 Inflation Levels

U.S. inflation data were taken from the "historical inflation data" page on inflationdata.com. [78]

9.3.9 Unemployment Levels

U.S. unemployment levels were taken from the U.S. Department of Labor Statistics web page.[79]

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[76] Available: http://www.ropercenter.uconn.edu/
[77] Available: http://presdata.tamu.edu/
[78] Available: inflationdata.com/inflation/Inflation_Rate/HistoricalInflation.aspx?dsInflation_currentPage=3

9.3.10 Statistical Methodology

As with chapter 6, all models here are examined using heteroskedastic generalized least squares models. Given that I am dealing with pooled data, this model helps to account for potential issues of autocorrelation and heteroskedasticity. Pseudo R-squared values are calculated by calculating predicted dependent variable values, correlating them with observed values, and squaring these values.

Each of the first three models contains the impact of one presidential belief on U.S. policy behavior. The fourth model includes the impact of all beliefs on the dependent variable of U.S. policy behavior.

9.4 Results

All results are found in table 9.1. The first model examines the impact of changes in the presidential image of the external political environment on U.S. policy behavior. The image change coefficient is statistically significant at the 1-tailed, .05 significance level, in the expected (positive) direction ($t=1.70$, $prob<.05$). This means that following presidential image shifts toward viewing the world as more friendly (an increase in the image value), U.S. policy tends to be more cooperative. Conversely, following months in which the president "learns" to see the world as more hostile (a decrease in his image value), U.S. policy tends to be more conflictual. This is accounting for the various other control variables included in this model. This finding gives support to hypothesis H1.

Another significant variable in this model is bureaucratic inertia ($t=4.75$, $prob<.001$), which is significant in the expected direction at the one-tailed, .001 level of significance. This

[79] Available: http://data.bls.gov/PDQ/servlet/SurveyOutputServlet, accessed 07/03/08. These data contain seasonally adjusted unemployment levels for all persons in the U.S. over 16 years old.

Table 9.1: Influences on U.S. Foreign Policy Behavior (Actions)

	Image of the External Environment	Strategic Orientation	Historical Control	All Beliefs
Image Change (+)	**0.347** **[1.70]****	--- ---	--- ---	**0.324** **[1.46]***
Strategic Orientation Change (+)	--- ---	0.259 [1.49]	--- ---	0.16 [0.86]
Historical Control Change	--- ---	--- ---	-0.21 [0.36]	-0.44 [0.73]
U.S. Rel. GDP (-)	3.447 [0.97]	3.5 [0.96]	3.54 [0.98]	3.587 [1.00]
Other-Initiated Actions (+)	0.118 [0.84]	0.113 [0.80]	0.157 [1.12]	0.103 [0.73]
Bureaucratic Inertia (+)	**0.356** **[4.75]*****	**0.335** **[4.43]*****	**0.353** **[4.62]*****	**0.351** **[4.65]*****
Public Support	-0.002 [0.37]	-0.002 [0.38]	-0.002 [0.33]	-0.002 [0.29]
House Support	**-0.021** **[1.76]***	**-0.022** **[1.78]***	**-0.021** **[1.76]***	**-0.022** **[1.81]***
Senate Support	0.003 [0.30]	0.003 [0.34]	0.002 [0.22]	0.003 [0.31]
Inflation	0.05 [0.85]	0.048 [0.80]	0.052 [0.87]	0.052 [0.88]
Unemployment	0.145 [1.43]	0.15 [1.45]	0.147 [1.42]	0.156 [1.53]
Clinton Dummy	**0.449** **[1.70]***	**0.457** **[1.69]***	**0.461** **[1.70]***	**0.474** **[1.77]***
W. Bush Dummy	-0.141 [0.43]	-0.164 [0.49]	-0.115 [0.34]	-0.139 [0.42]
Constant	-0.883 [0.64]	-0.894 [0.63]	-0.915 [0.65]	-0.987 [0.71]
N	167	167	167	167
R-Squared	. 414	. 403	.402	0.414

See text for discussion of variables examined at one- vs. two-tailed levels of analysis.
***prob<.01
**prob<.05
*prob<.10

means that what the U.S. did in the *last* month has a significant, predictable impact on its behavior *this* month, controlling for other potential influences. If last month's actions were fairly conflictual, then this month's actions are likely to follow suit. Conversely, if the U.S. behaved fairly cooperatively last month, then it can be expected to behave similarly this month.

Additionally, support from the House of Representatives is a significant predictor of U.S. policy behavior, yielding a modest, negative influence at the .10, two-tailed level of significance ($t=1.76$, $prob<.10$).[80] This negative relationship gives support to the inherent preference for conflict/"offensive realist" expectation, which suggests that increased levels of support will result in increased conflict, given that presidents will inherently prefer to engage in increased conflict as a means to expanding political and military power when possible. Thus, increased political capital, which allows the leader more of an opportunity to pursue his policy preferences, will coincide with increasingly conflictual behavior.

Finally, the Clinton dummy coefficient is significant here in the positive direction, suggesting that U.S. policy during the Clinton Administration was more cooperative than it was during either the "Bush 41" or "Bush 43" Presidencies.

For the second model, I examine the impact of changes in presidential strategic orientation levels on U.S. foreign policy behavior. The strategic orientation change variable is not shown to be a statistically significant predictor of U.S. policy. Thus, no support is found for hypothesis H2. However, bureaucratic inertia ($t=4.43$, $prob<.001$), House support for the president ($t=1.78$, $prob<.10$), and the Clinton dummy measure ($t=1.69$, $prob<.10$) are all significant in a manner similar to the findings in the "image of the other" model (in terms of the direction and rough magnitude of their relationship to the dependent variable).

[80] Note that I examine this relationship at the two-tailed level due to the competing directional hypotheses associated with this variable.

For the third model, I test the impact of changes in presidential feelings of historical control on U.S. foreign policy behavior. Results are very similar to that of the strategic orientation model, as the feelings of control belief change coefficient is insignificant, but the bureaucratic inertia (t=4.62, prob<.001), House support (t=1.76, prob<.10), and Clinton dummy variables (t=1.70, prob<.10) are all statistically significant influences on the dependent variable of U.S. foreign policy behavior. Thus, no strong support is given to either hypotheses H3a nor H3b.

Finally, I look at the influence of belief change on all three indices of interest on the dependent variable of U.S. policy behavior. Results suggest that, even accounting for changes in presidential strategic orientation and feelings of historical control, changes in the "image of the other" yield a modestly significant, expected influence on U.S. policy (t=1.46, prob.<.10, 1-tailed test). Similar to previous models, bureaucratic inertia (t=4.65, prob<.001, 1-tailed test), House support (t=1.81, prob<.10, 2-tailed test), and the Clinton dummy variable (t=1.77, prob<.10, 1-tailed test) all yield statistically significant coefficients.

9.5 Discussion

I do not find unanimous support for the expectation that change in "master" beliefs will have a notable impact on U.S. foreign policy behavior. However, I do find that the changes in the "image of the other" master belief do influence policy to a greater extent than do several other potential influences, and that this influence is greater than what would be expected by chance.

Regarding other potential explanatory variables, bureaucratic inertia (previous U.S. behavior) is the strongest influence on current U.S. behavior in a logical, expected manner. Presidential support in the House of Representatives also appears to have an influence on the

tone of U.S. policy behavior, as decreased levels of support coincide with more cooperative behavior, and increased levels of support coincide with more conflictual behavior—giving some modest support to the inherent preference for conflict/"offensive realist" expectation on this variable. Finally, U.S. policy under Clinton appears to have been noticeably more cooperative than it was under George H.W. Bush or George W. Bush.

The analyses undertaken in this chapter are a preliminary attempt to demonstrate that belief change can impact U.S. policy, but one specific factor that should be integrated into future analyses is the interactive nature of the relationship between U.S. policy and presidential beliefs. Though I expect that beliefs and belief change will impact policy (such as I have demonstrated here with the "image" belief), I expect that policy will also influence beliefs, as has been the focus of the bulk of this dissertation. Where the influence of one these factors starts and ends *relative to the other* is a complex question that I do not address here, but hope to examine in future works.

CHAPTER 10: SUMMARY OF FINDINGS AND CONCLUSION

In this dissertation, my primary objective was to explore the nature of U.S. presidential operational code belief change. Toward this end, I proposed hypothetical expectations and attempted to systematically test these expectations via the use of an extensive database of quantitative, speech-based data. Along the way, I specifically examined the general trends of U.S. presidential belief change, hypotheses concerning the nature of belief inter-connectivity and change, the influence of various U.S. domestic and foreign factors on belief change, and the impact of crisis events and pre-crisis belief levels on belief change following crisis exposure. Additionally, I conducted a preliminary analysis of the impact of belief change on U.S. policy behavior—though not concerned with the nature of belief change narrowly, this is the ultimate goal of such research, and I wanted to explore a way in which this type of research might be pursued. Here I will summarize some of the major findings of this dissertation by posing questions that provided the impetus to many of the hypotheses posited in the various chapters of this dissertation. Note that I will answer these questions in general terms, more detailed answers (including exceptions to the answers provided) can be found in the discussion and concluding sections of individual, preceding chapters.

10.1 Hierarchical Belief Change and the Inter-Relationship of Beliefs

Are "central" beliefs (i.e. "image of the other," "strategic orientation," and "feelings of control") more stable than more "secondary" beliefs?

When examined at the level of the 3-month, "moving" average period, this is not the case for any of the three "central" beliefs. Instead, the "image of the other" beliefs of U.S. presidents are actually far *less* stable than the other, more peripheral "philosophical" beliefs, contrary to expectations. "Strategic orientation" beliefs, though not significantly less stable than other, more

peripheral "instrumental" beliefs, are not significantly different from these beliefs in this sense. Similarly, "feelings of control" beliefs of U.S. presidents are not significantly more or less variable than other "philosophical" beliefs.

When "central" beliefs do change, are more "secondary" beliefs also more likely to change?

Sometimes, but not always. In 3-month "moving" average periods when the "image of the other" belief values experience a significant change, the "realization of political values" (P2) and "predictability of the political future" (P3) also tend to experience a significant change. When the "strategic orientation" beliefs experience a significant change, "tactical orientation" (I2) and "the timing of conflict vs. cooperation" (I4a) beliefs also usually experience a significant change. However, no other operational code belief index experiences a significant change in over 50% of the cases where the "feelings of control" belief yields a significant change.

Do presidents' "image of the other" and "strategic orientation" beliefs remain more stable in instances when they do not run counter to one another?

No. Though more over-time variability is found on both belief indexes following months when they run counter to one another, these changes are not statistically significant.

10.2 The Impact of Domestic and International Factors on Presidential Learning

Which factors in the international or domestic political domains systematically contribute to presidential learning?

None of the factors examined have a statistically significant impact on monthly presidential learning (defined as a change in operational code beliefs from one month to the next) in terms of change in either the "image of the other," "strategic orientation," or "feelings of

control" beliefs for U.S. presidents. As such, the models examined were not correctly specified to address the specific dependent variable of interest (monthly belief change).

Are presidents more likely to "learn" from events that occur within the "dissimilar states" and "conflictual actions" domains than they are from the "similar states" and "cooperative actions" domains, respectively?

Not particularly. Based upon the dependent variable of monthly belief change, U.S. presidents do not appear significantly more responsive to factors in any one "domain" over any other.

10.3 The Impact of Crises on Presidential Learning

Do crises cause presidents to view the world as more hostile, to more strongly prefer conflict, and to feel decreased levels of control in the short term following exposure to crises? If so, does this effect "decay" over time following the onset of these crises?

The answer to both questions is no. Though expectations were supported for some presidents following some crises, systematic, cross-presidential support was not found. Instead, crises appear to have variable levels and types of influence on presidents, depending on factors not accounted for in the analysis undertaken in chapter 8.

Do crises cause presidents who see the world as friendly, who prefer cooperation, and who feel high levels of control to shift their beliefs toward seeing the world as more hostile, to more strongly prefer conflict, and to feel lower levels of control? Is this change greater than what we would expect to see by chance?

The answer to the first question is largely yes, but this is mediated by the fact that the answer to the second question is no. As a result, the affirmative answer to the first question is not in the spirit of hypothesized expectations. Instead, it initially appeared that crises played the

role of "moderating" leaders' initially more extreme beliefs, given that leaders who initially saw the world as hostile, preferred conflict, and felt lower levels of control also experienced notable shifts in the opposing direction (toward seeing the world as more friendly, more strongly preferring cooperation, and feeling more control, respectively). But even this finding does not hold very well when compared to the change of presidential beliefs following a sample of "control," non-crisis periods. As such, I ultimately did not find support to my hypotheses regarding the impact of crises on U.S. presidential beliefs.

However, the regression findings from chapter 8 suggest that pre-crisis belief levels are the best predictors of post-crisis belief change, even controlling for crisis-based factors.

10.4 The Influence of Presidential Learning on U.S. Policy

Do increasingly hostile perceptions of the world lead to more hostile U.S. actions abroad, and do more friendly perceptions of the world lead to more cooperative actions abroad, even controlling for other potential influences on policy?

Yes. Changes in "image of the other" belief levels yield an expected and statistically significant influence on U.S. policy action in the models examined. This finding even holds when accounting for the impact of changing "strategic orientation" and "feelings of control" beliefs.

Do increasing preferences for hostility lead to more hostile U.S. actions abroad, and do increasing preferences for cooperation lead to more cooperation abroad, even controlling for other potential influences on policy?

No. Changes in "strategic orientation" belief levels do not yield a statistically significant influence on U.S. policy actions in the models examined.

Do increasing feelings of control lead to either more or less hostility abroad, even controlling for other potential influences on policy?

No. Changes in "feelings of control" belief levels do not yield a statistically significant influence on U.S. policy actions in the models examined.

10.5 Conclusion

So what does all of the above mean? First, I do find a degree of support for some of the hypotheses set out in chapter 5. The findings in that chapter are probably the most useful of all those in the dissertation, as they help to provide "large-n" evidence supporting or failing to support hypotheses previously not examined beyond, at most, a small handful of cases. Let me reiterate, I am not suggesting that we should discount or even downplay the importance of "small-n," case study evidence. However, the type of broad, cross-case examination as that undertaken here provides us with another useful perspective for engaging in "at-a-distance," psychological research. By pursuing evidence via the "large-n" route, of course we lose detail and nuance. We also lose the researcher's subjective evaluation of events, behaviors, and thoughts, which can be invaluable when attempting to analyze phenomena that cannot be easily or effectively quantified. However, what we gain via this approach is the equally important ability to say whether findings hold across a larger number of cases or fail to do so. This is a major goal of much social scientific research. If we fail to find this support, then we must take care to qualify the findings from associated research on smaller samples.

Beyond that single chapter, however, there is a lack of support for formal hypotheses regarding the factors that might influence learning. As such, the variables examined in several of the previous chapters are not sufficient to answer the questions of how, when, and why presidential beliefs change. On the one hand, this is a bit disappointing, since researchers

typically set up hypotheses with the intention of finding support for some of them, and I am no different in this respect. However, there is still a potentially important story to be told.

Operational code beliefs apparently are not representative of the "smooth transmission belt" hypothesized by structural realists. In some instances and for some presidents, factors do appear to affect leaders as one might expect. But in other cases, and across the board, this is not the case. As such, perhaps we should not always assume that the environment is a stimulus that directly affects policy outcomes via the intervening variables of the beliefs of political leaders. U.S. presidents are not automata. They have preferences, beliefs, and general perceptions that filter the "real world" in a way that may not always be initially intuitive to the outside observer.

But this does not mean that research should cease attempting to tease out the potentially systematic relationships between the factors that impact political leaders in terms of their thoughts and their actions. Presidential operational code beliefs do change. The questions left unanswered here are still those of "how, when, and why"? Perhaps my models were not correctly specified, and additional variables, methods, and analytical viewpoints are required to identify whether the hypothesized phenomena actually take place or not. Of course, it is also entirely possible that the specific questions I address are sufficiently answered, and that we should move on to addressing other questions that require attention through the means of statistical analysis employing operational code belief data. In either case, I do believe that there are important, systematic phenomena that influence beliefs across individuals. Similarly, I believe that there are systematic processes across cases by which beliefs influence outcomes. And I believe that quantitative psychological data could and should be used toward determining answers to the questions of how, when, and why these instances will take place.

Related to this, and beyond the specific hypotheses tested, there was an additional goal for the research conducted in this dissertation. This is related to the theoretical and methodological nature of the operational code data used toward addressing the first goal of examining the nature of presidential belief change and its impact on policy behavior. Many research programs that actually implement quantitative data in the statistical analysis of conflict studies or foreign policy analysis fail to include measures quantifying leader psychology. Some do this for the simple reason that psychology is not expected or hypothesized to matter. But many likely never even think to include such a measure to begin with, largely because these researchers do not know that such data exists. This is not to say that many of these researchers would decide to use such data, but before such a decision can be made, they must understand the nature of the data and how such might be obtained.

I believe that this project, despite the lack of support for several of the hypotheses posited, demonstrates the utility of automated operational code analysis as a means to providing a less subjectively derived, more replicable, and frankly easier to obtain form of psychological investigation than that of more traditional works. I additionally believe that this work promotes the idea of operational code variables as potential independent and dependent variables in research examining peace and conflict, as well as foreign policy decision-making processes and outcomes. When all is said and done, it may be that psychology does not matter or is not influenced in the ways that many political psychologists expect. But it is also possible that these factors play much greater roles than others would give them credit. Without empirical analysis, examined across cases and over time, I do not believe that we can fully answer these questions one way or the other.

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APPENDIX A: FURTHER NOTES REGARDING THE SPEECH GATHERING PROCESS FOR OPERATIONAL CODE ANALYSIS

A.1 Selective Sampling of Potentially Irrelevant Speeches

I did not read through every presidential speech over the time-frame of interest to see if a given speech contained foreign policy-relevant information or not. If I were to have done this, then this project would have taken much longer to complete than has been the case. Instead, a sampling process was employed, where some speeches were either ignored, or were only briefly scanned for foreign policy material, based upon their titles. Initially, I did attempt to read through every speech, but after going through a few hundred of them, I could pick up cues (who the audience was, what the title of the speech was) that would help to classify a speech as one of the following: a) definitely containing foreign policy-related material; b) probably containing foreign policy-related material; c) possibly containing foreign policy-related material; or d) almost certainly not containing foreign-policy related material. Speeches falling into the "a" or "b" categories here were always read and coded, and most of those falling into category "c" were also read through, and coded if necessary. However, only a very small sample of speeches falling into category "d" was read through at all. Every once in a while, just to "keep myself honest," I would read through one, but in the vast majority of cases, no foreign-policy related material was contained.

When selecting which non-foreign policy focused speeches to evaluate (based upon the speech's title), I more often examined commencement speeches, speeches to democratic organizations (national or state-based), and speeches oriented toward specific ethnic (e.g. Jewish lobbying groups) or national sub-groups (e.g. Greek-Americans or regional groups such as "Asian-Pacific" Americans). Speeches toward members of the military or military veterans were

always examined. All generically titled "press conferences" or "radio addresses" were evaluated for foreign policy speech-related material.

Additionally, speeches immediately following important foreign policy events, or following important meetings with foreign policy leaders, were also typically examined for foreign-policy relevant material, as these speeches, in some instances, start or end with a brief discussion of these events.

Speeches examined less frequently (though still read and examined periodically) were those focusing explicitly on domestic groups or domestic interests (e.g. "townspeople in San Jose, California", a group of elementary school students, or a local social organization of some kind during times of relative international calm).

A.2 Trade and Finance

A key consideration for choosing speech material was the necessity of evaluating the relationship between the U.S. and any other foreign actor or foreign-related activity. International trade is almost always an international issue, but economic growth may or may not be framed in relation to foreign actors in the global economy. As such, some references to the international economy were coded, and some were not.

A.3 Pleasantries

When evaluating "pleasantries," it is often difficult to evaluate when a leader is following protocol, and when he is actually displaying his attitudes and/or beliefs toward a given actor. This is particularly the case when heads of state come to visit the White House. Generally, I erred here on the side of caution, and coded much of this as if it were statements regarding the president's belief toward these actors (with the assumption that there would be variance here between presidents in terms of both the number of White House meetings held with foreign

leaders and dignitaries, and in terms of the language used in regard to them). However, this was not always the case.

For instance, the following comment was made the following day regarding the Opening of the Summit of the Peacemakers in Sharm al-Sheikh, Egypt, and was not coded: "Thank you very much, President Mubarak. Your Majesties, Your Highnesses, heads of state, heads of government, Foreign Ministers, and Mr. Secretary-General." Though this comment was focused on foreign actors, similar to the first comment, it was not seen as containing any relevant references to Egypt or other foreign actors regarding Clinton's operational code. Instead, this appears *to be purely a reflection of etiquette.*

On the other hand, not every type of "pleasantry" is irrelevant to the evaluation of a leader's beliefs. In fact, oftentimes speaking in positive, albeit "soft" terms about another actor is assumed to be a reflection of a leader's beliefs, and is evaluated as such. For instance, this type of speech material was coded as containing a reflection of Bill Clinton's operational code:

> Let me say that we are delighted to have Prime Minister Chernomyrdin here. He and the Vice President have had very good meetings, and the relationship that they have established and the work they have done I think has played a major role in the continued strengthening of our partnership with Russia. And I'm very pleased at the progress of this meeting, and I'm very pleased again to have him here in the United States.

This speech was taken from a January 30, 2006 press conference held with Prime Minister Viktor Chernomyrdin of Russia. In these remarks, President Clinton was discussing U.S.-Russian relations (e.g. " . . . in the continued strengthening of our partnership with Russia."—the issue of interest regarding Clinton's operational code beliefs in these remarks) while concurrently engaging in the exchange of pleasantries (e.g. "I'm very pleased again to have him here in the United States"), following convention and diplomatic protocol.

Oftentimes, the president will speak of a historical relationship with some state, or of some past occurrence (regarding another state, the U.S., or both). Additionally, anecdotes and jokes are sometimes made in relation to a foreign dignitary are sometimes made, that essentially equate to further pleasantries. Anecdotes and historical discussions of these types were largely ignored unless they contained direct references to current issues or conflicts, as they frequently did not match up with the contemporary reality that the president was concerned with, and thus did not constitute his contemporary "operational code" beliefs.

APPENDIX B: FILTERING STEPS FOR GARY KING'S EVENTS DATA

1) Initially, I filtered out all non-U.S. data, from both the initiator side (actions originating in non-U.S. states toward the U.S.).
2) Next, I needed to measure only events, and I had to convert all events to a Goldstein value.
    a. In Gary King's database, all events (and non-event occurrences) are coded in text format. Thus, I had to convert these text measures into IDEA numerical format (via Excel's "vllookup" function), following from the conversion tables available in Gary King's events data documentation.
    b. IDEA values are not an interval-level conflict-cooperation scale. Thus, next, I had to convert these IDEA numbers into interval level values, or the "Goldstein" scale (where events were coded on a scale ranging from -10 [most cooperative] to +10 [most conflictual]). For this, 1) I had to go through the various IDEA/Goldstein conversion tables in order to determine which IDEA events had Goldstein conversions already available; and after converting those that did (available on the KEDS website, on the vranet.com website, and the documentation on Gary King's website), 2) I determined the other occurrences that were actually events by looking at them manually, filtering out those that were not events, and determining codes for those that were events (by consulting the aforementioned resources).
3) The next step was to determine relevant actors that would likely reflect foreign "state's" or "actor's" influence on the U.S.

4) Next, I created 3 separate files, relevant to research questions posed in the empirical chapter examining this data: 1) all relevant state actors; 2) all "different" state actors (based upon regionally weighted alliance similarity S-Scores, as taken from the Eugene program); 3) all "similar" state actors (based upon S-Scores)
5) Similarly, I created 2 separate files for each of these three sub-files, looking at "all cooperative actions" and "all conflict actions," again for the purposes of hypothesis testing. This process is discussed in chapter 6.
6) Following this, I then further broke each of these 3 files down into 2 groups: 1) all potential actors; 2) explicitly relevant "state" political or military actors. For the purposes of analysis in this project, I only look at "state" actors in the political or military domains.

B.1 Sectors included in analyses

State Actors:

<ROYA>	Royalty
<DIPL>	Diplomats
<GAGE>	Government
<MACT>	Military
<MILH>	Military
<MILI>	Military
<OFFI>	Officials
<POLI>	Police
<RAID>	Military

APPENDIX C: CRISES EXAMINED/NOT EXAMINED

C.1 Crises Included in Analysis

John F. Kennedy
Crisis #185: Last crisis over the Berlin Wall
Crisis #186: Viet Cong attack
Crisis #193: Nam Tha (2nd Pathet Lao Crisis)
Crisis #196: The Cuban Missile Crisis
Lyndon Johnson
Crisis #210: The Gulf of Tonkin
Crisis #211: Congo II
Crisis #213: Pleiku
Crisis #215: Dominican Intervention
Crisis #222: Six Day War
Crisis #225: The TET Offensive
Nixon
Crisis #237: Invasion of Cambodia
Crisis #238: Black September
Crisis #239: Cienfuegos Marine Base
Crisis #246: Vietnam Ports Mining
Gerald Ford
Crisis #259: Mayaguez
Crisis #260: War in Angola
Crisis #274: Poplar Tree
Carter
Crisis #292: SHABA II
Crisis #303: Soviet invasion of Afghanistan
Ronald Reagan
Crisis #343: Invasion of Grenada
Crisis #354-Nicaragua MIG 21-S
George H.W. Bush
Crisis #391: Invasion of Panama
Crisis #393: the Persian Gulf War
Bill Clinton
Crisis #411: Haiti Military Regime—*(note: beginning time estimated from description [mid-July, speeches taken prior to July 11] because of an apparent data input error)*
Crisis #412: Iraqi Troop Deployment in Kuwait
Crisis #419: Operation: Desert Strike
Crisis #422: UNSCOM I

Crisis #427: US Embassy bombings
Crisis #429: UNSCOM II: Operation Desert Fox
Crisis #430: Kosovo 1999
George W. Bush
Crisis #434: Afghanistan-US

C.2 Crises Excluded from Analysis:

Occurred too early in presidency to establish MITS baseline:
Crisis #180: Pathet Lao Offensive
Crisis #181: Bay of Pigs
Crisis #230: Vietnam Spring Offensive
Crisis #233: EC-121 Spy Plane
Outliers:
Crisis #224: The USS Pueblo Crisis (crisis listed as lasting 336 days)
Crisis #255-October/Yom-Kippur War (crisis listed as lasting 232 days)
Crisis #408: North Korea Nuclear I (crisis listed as lasting over 500 days)
Overlap between 2 presidencies or insufficient pre-/post-crisis data:
Crisis #309: US hostages in Iran (begins with Carter, ends with Reagan)
Crisis #386: Libyan Jets (terminates during last few days of Reagan presidency)
U.S. is listed as the crisis initiator, but not as the preliminary crisis actor:
Crisis #206: Panama Flag (Canal Zone Crisis)
Crisis #249: Christmas Bombing
Crisis #330: Gulf of Syrte I
Crisis #338: OGADEN III
Crisis #340: Libya threat to Sudan
Crisis #344: Able Archer 83
Crisis #350: Omdurman bombings
Crisis #363: Gulf of Syrte II
Crisis #383: Contra Rebels III
Crisis #441: Iraqi Regime Overthrow

APPENDIX D: CRISIS PERIOD KEY BY PRESIDENT FOR MULTIPLE INTERRUPTED TIME SERIES ANALYSES

Crisis Period	Kennedy[81]	Johnson	Nixon	Ford	Carter	Reagan	HW Bush	Clinton	W Bush
1	Berlin Wall/Viet Cong Attack	Gulf of Tonkin/ Congo II	Invasion of Cambodia	Mayaguez	SHABA II	Invasion of Grenada	Invasion of Panama	Haiti Military Regime/Iraq Military Deployment Kuwait	Afghanistan-USA
2	Nam Tha	Pleiku/ Dominican Intervention	Black September/Cienfuegos Submarine Base	War in Angola	Afghanistan Invasion	Nicaragua MIG-21S	Gulf War	Desert Strike	
3	Cuban Missiles	Six Day War	Vietnam Ports Mining	Poplar Tree				UNSCOM I	
4		Tet Offensive						US Embassy Bombings/ UNSCOM II	
5								Kosovo	

[81] Note that there were not enough pre-crisis time periods to include the first "crisis period" occurring during the Kennedy Administration—Pathet Lao Offensive/Bay of Pigs.

APPENDIX E: CRISES AND CRISIS PERIODS EXAMINED IN CHAPTER 8

Order of Crisis Period	Crisis Period Name
1	Pathet Leo
2	Berlin Wall/Vietcong Attack
3	Nam Tha
4	Cuban Missiles
5	Gulf of Tonkin/Congo II
6	Pleiku
7	Dominican Int.
8	Six Day War
9	TET Offensive
10	EC Spy Plane
11	Invasion of Cambodia
12	Black September/Cienfuegos Submarine Base
13	Vietnam Ports Mining
14	Mayaguez
15	War in Angola
16	Poplar Tree
17	Shaba II
18	Invasion of Afghanistan
19	Invasion of Grenada
20	Nicaragua MIG
21	Invasion of Panama
22	Gulf War
23	Haiti Regime
24	Iraq Deployment Kuwait
25	Desert Strike
26	UNSCOM I
27	US Embassy Bombing
28	UNSCOM II
29	Kosovo
30	Afghanistan

APPENDIX F: CRISIS VARIABLE DESCRIPTIONS

1) *Triggering Event/Cause of Crisis*: The specific event, act, or situational change that led the crisis actor (the U.S.) to perceive a threat to its values. Values: 1) Verbal act; 2) Political act; 3) Economic act; 4) External change; 5) Other non-violent act; 6) Internal verbal or physical challenge to regime or elite; 7) Non-violent military act; 8) Indirect violent act; 9) Violent act.
2) *Crisis Outcome*: The content of crisis termination for the U.S. Values: 1) Victory; 2) Compromise; 3) Stalemate; 4) Defeat
3) *Violence Experienced*: The highest level of violence experienced by the U.S. during the crisis. Values: 1) No violence; 2) Minor clashes; 3) Serious clashes; 4) Full-scale war
4) *Grave Threat*: The object of gravest threat to the U.S. at any time during the crisis. Note: this variable was re-coded so that it would be roughly ordinal. Re-coded Values: 1) other; 2) political threat or threat to influence in the international system or regional subsystem; 3) limited military threat or territorial threat; 4) threat of grave damage or threat to existence
   Note: a) the original values for this indicator were: 1) Limited military threat; 2) Political threat; 3) Territorial threat; 4) Threat to influence in the international system or regional subsystem; 5) Threat of grave damage; 6) Threat to existence; 7) Other
   b) For "crisis periods" where more than one crisis took place and where the crises involved had different "grave threat" measures, the object of gravest threat among those listed was evaluated for this period
5) *Order of Crisis*: The order in which this crisis was experienced for a given president (i.e. 1st, 2nd, 3rd, etc.)
6) Proximity (Note: here lower values are likely going to have a stronger, negative impact): The distance of the crisis from the U.S. Values: 1) Home territory; 2) sub-region; 3) same continent; 4) elsewhere
7) Power Discrepancy: The difference in power between the U.S. and its major rival in a given crisis. Values calculated based on six separate scores evaluating: size of population; GNP; territorial size; alliance capability; military expenditure; and nuclear capability. The value for both these two major actors of interest and their respective "tight alliance partners (if any)" (ICB Codebook, pg. 44) were combined and evaluated just prior to the onset of the crisis of interest to determine this value. Higher values indicate more power than the adversary, and lower values indicate less power than the adversary (Brecher and Wilkenfeld, 1997: 55).
8) *Duration of Crisis*: Length of crisis from perception of onset by the U.S. to resolution in days
9) Issue: The most important initial issue area of concern in the crisis as perceived by the U.S. Note: this variable was re-coded so that it would be roughly ordinal. Re-coded Values: 1) other; 2) cultural-status; 3) economic-developmental or political-diplomatic; 4) military-security

Note: the original values for this indicator were: 1) military-security; 2) political-diplomatic; 3) economic-developmental; 4) cultural-status; 5) other

Note: Variable descriptions taken from “Codebook for ICB2: International Crisis Behavior Project,” available http://www.cidcm.umd.edu/icb/data/ICB2-2006-final.pdf

VITA

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