

**POLICY AND THE POLIHEURISTIC THEORY OF FOREIGN  
POLICY DECISION MAKING: A SYMPOSIUM**

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**Applied Decision Analysis: Utilizing  
Poliheuristic Theory to Explain and Predict  
Foreign Policy and National Security  
Decisions**

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In recent years, more than 40 articles and chapters have utilized Poliheuristic Theory to analyze critical decisions made by foreign leaders and U.S. presidents. In this paper, I introduce the Poliheuristic Procedure—a series of steps that one can use to explain or predict decisions by world leaders. Subsequent articles in this Symposium present examples of poliheuristic analyses of decisions made by Presidents Carter, Clinton, Gorbachev, Mussaref and Saddam Hussein. These case studies provide strong support for Poliheuristic Theory: leaders use a two-stage process in making decisions: they first use simple heuristics to eliminate alternatives based on the avoid-major-political-loss principle, and then use more analytic calculations in selecting an alternative from a subset of surviving alternatives.

**Keywords:** poliheuristic theory, decision theory, foreign policy analysis

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The poliheuristic (PH) theory of decision postulates that leaders make decisions according to a two-stage decision process. They first simplify the decision problem by the use of cognitive short-cuts (heuristics). They then evaluate remaining alternatives using analytic calculations (Mintz, 1993, 2003, 2004a; Payne, Bettman, and Johnson, 1993; Mintz and Geva, 1997; Mintz, Geva, Redd, and Carnes, 1997). One heuristic frequently used by political leaders in the first stage of the decision process is: avoid major political loss (the non-compensatory principle): alternatives that are potentially harmful to the leaders are discarded outright (Mintz, 1993, 1995; 2004a; Kinne, 2005; Redd, 2005).

PH decision theory integrates elements of the rational choice school of decision making with elements of the cognitive psychology school of decision. Key findings of the PH research program are:

1. Leaders use more than one decision rule en route to a decision. Specifically, policy makers use a two-stage process in making decisions: they employ the

non-compensatory, avoid-major-loss principle in the initial screening of alternatives, and use analytic decision rules in the second stage of the decision process.

2. Leaders evaluate gains and losses in political terms— domestic politics is “the essence of decision” (Mintz and Geva, 1997).

PH theory has been applied to the analysis of decisions by U.S. presidents: Dwight Eisenhower’s decision not to use force at Dien Bien Phu (DeRouen, 2003) and his decision to use covert forces in Guatemala (Taylor-Robinson and Redd, 2003); Jimmy Carter Iran’s hostage rescue decision (Brule, 2005), Ronald Reagan’s decision to intervene in Grenada (DeRouen, 2001); George Bush Sr.’s decision to attack Iraq (Mintz, 1993); Bill Clinton’s Kosovo decision (Redd, 2005), and George W. Bush’s 2003 decision to invade Iraq (Mintz, 2004c).

The theory has also been used to analyze decisions by foreign leaders in democratic and non-democratic polities: foreign policy decisions made by Chinese leaders (James and Zhang, 2004), the Soviet leadership (Kinne, 2005), the Turkish parliament (Mintz, 2004a), the Syrian leadership (Astorino-Courtois and Trusty, 2000), Pakistani leaders (Sathasivam, 2003; Kinne, 2005), Iranian leaders (Maleki, 2002), the Iraqi leader (Mintz, 2004c, and Kinne, 2005), Palestinian leaders (Clare, 2003; Mintz and Mishal, 2003), and Israeli leaders (Mintz, 1995). For an application of PH theory to policy makers’ decisions at the state and local level, see Christensen and Marlowe (2004). Multi-method tests of the theory (utilizing experimental, formal, and statistical analyses)<sup>1</sup> provided strong evidence for the theory.<sup>2</sup>

Below I introduce a unified procedure that can be applied to the analysis of leaders’ decisions on foreign and national security policy. This procedure can help us understand how leaders make decisions and explain and predict their choices.

The PH procedure consists of two key steps:

1. Identify the decision matrix of the leader (e.g., the alternative set, dimension set, and implications of each alternative on each dimension).<sup>3</sup>
2. Apply PH calculations to the decision matrix to explain or predict the ultimate choice.

PH theory is generic. It is applicable to national security decisions, foreign policy decisions, foreign economic decisions, as well as to domestic decisions (e.g., Astorino-Courtois, 2000; DeRouen, 2003; Sathasivam, 2003). The PH procedure can be extended to sequential decisions, interactive decisions, in dynamic and static settings, in familiar and unfamiliar contexts, and under conditions of uncertainty and/or ambiguity.

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<sup>1</sup>A Special Issue of *The Journal of Conflict Resolution* (2004) offers theoretical extensions and multiple tests of PH theory using multiple methods (statistical, formal, and experimental) as follows: DeRouen and Sprecher (2004) tested N-nations’ initial reaction to crisis using a probit model; Dacey and Carlson (2004) used a formal model to illustrate, extend, and critique aspects of the theory, while Christensen and Redd (2004) and Mintz (2004b) used experimental methods to test the theory in familiar versus unfamiliar settings (Mintz, 2004b), as well as in comparison to the Bureaucratic Politics model (Christensen and Redd, 2004). These multi-method tests of PH theory provided strong evidence for the theory.

<sup>2</sup>PH theory can be refuted and falsified if the decision process is compensatory or holistic or alternative-based, or order insensitive.

<sup>3</sup>See Redd (2005), Brule (2005), Kinne (2005) for the use of a variety of sources for identifying the decision matrix of leaders.

## Unraveling the Decision Calculus of Leaders

### *I. Identify the Decision Matrix of the Leader*

A decision matrix consists of a set of alternatives the leader has, the policy dimensions (or criteria) for selecting among these alternatives, and an assessment of the implications of each dimension for each alternative. Weights (or importance level) can be optionally added for each of the dimensions, if the analyst observes that dimensions should receive unequal weight in the analysis.

#### *Alternatives*

Identify the policy alternatives that the leader has. For example: Do Nothing, Use Force, Apply Sanctions. Or, in another example applicable to terrorist organizations: Continue with Terrorist Attacks, Temporarily Halt Attacks, or Stop Attacks.

#### *Dimensions*

Identify the dimensions (criteria) that are relevant in evaluating the alternatives in the matrix: for example, in the Use of Force case, the dimensions typically are: political, military, economic, and diplomatic (James and Zhang, 2004).

#### *Implications*

Each alternative course of action has implications on each dimension: for example, the Use of Force alternative has military, economic, political, and diplomatic consequences.

#### *Ratings*

Implications can be rated, for example, from  $-10$  (very bad) to  $+10$  (very good), although assigning *numerical* ratings to implications is optional. For example, if Doing Nothing while facing an attack by an adversary is likely to result in an electoral defeat of the leader, then the analyst should assign a negative rating (very bad,  $-8$  or even  $-9$ ) to the political implication of Do Nothing. In contrast, if Use of Force may lead to a “Rally ‘round the Flag” effect, then the Use of Force alternative should receive a positive (e.g.,  $+8$  or  $+9$ ) rating.

#### *Weights*

Weights indicate the importance level of each dimension, for example, from 0 (not important at all) to 10 (very important). Thus, in the Use of Force example, the analyst assigns different weights to the military, economic, political, and

Dimensions	Alternatives				Weight
	Do Nothing	Apply Sanctions	Containment	Use Force	
Military	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	Add
Economic	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	Add
Political	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	Add
Diplomatic	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	<u>Implications</u>	Add
<b>Final Choice:</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Final Decision

FIG. 1. A Decision Matrix for the Use of Force Example

diplomatic dimensions, unless s/he considers dimensions as having equal weight in the decision.

Figure 1 displays a hypothetical example of a decision matrix of the president's decision to use force in a crisis. The president's alternatives are:

Do nothing;  
containment;  
apply sanctions;  
use force.

The decision criteria or dimensions are: military, economic, political, and diplomatic. The Decision Board software (<http://www.decisionboard.org/academic>) can help the analyst create decision matrixes easily. These can then be analyzed using the PH procedure. For a Decision Board application of decision-making processes of would-be suicide bombers, see Mintz and Saper (2005).

## *II. Apply PH Calculations to the Decision Matrix*

PH theory predicts that alternatives that have a very negative value on the political dimension will be discarded first, while remaining alternatives will be evaluated based on rational calculations. Based on the PH procedure, the analyst eliminates from consideration alternatives that are harmful to the leader. For example, studies have shown that because political considerations are important to political leaders, then when the public strongly opposes doing nothing in the face of a foreign policy crisis, the leader is likely to refrain from adopting passive options such as Do Nothing. This is non-compensatory for the leader. Consequently, he is likely to consider pro-active options as Apply Sanctions, or Use Force. Brule and Mintz (2004) found strong empirical support for this thesis using data on U.S. uses of force in the post-World War II era.

In the second stage of the decision, the president selects from the remaining alternatives, the alternative that has the best net gain on all dimensions (or on the dimension most important to the decision maker—a lexicographic decision strategy). Expected utility calculations take into account the values and the probabilities associated with each implication in the matrix in an attempt to select the alternative with the highest net gain. The ultimate decision then is a combination of discarding infeasible alternatives in the first phase of the decision and selecting the best alternative from the subset of acceptable alternatives in the second phase of the decision.

The articles in this symposium analyze, using PH theory, several important decisions:

1. President Carter's decision to attempt to rescue the American hostages in Iran (Brule, 2005)
2. President Clinton's decision to attack Kosovo (Redd, 2005)
3. Decisions by authoritarian leaders (Kinne, 2005)

Together, they show how one can utilize PH theory to explain and predict decisions by foreign and domestic leaders to use force, negotiate peace, avoid deploying ground forces, apply sanctions, or do nothing.

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