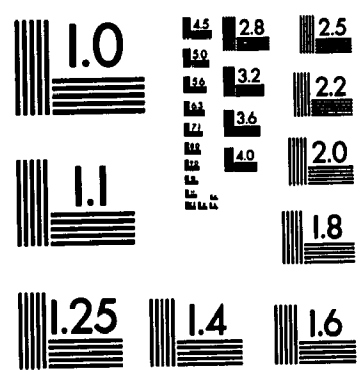


# UMI University Microfilms International



MICROCOPY RESOLUTION TEST CHART  
 NATIONAL BUREAU OF STANDARDS  
 STANDARD REFERENCE MATERIAL 1010a  
 (ANSI and ISO TEST CHART No. 2)

**University Microfilms Inc.**  
 300 N. Zeeb Road, Ann Arbor, MI 48106

## INFORMATION TO USERS

This reproduction was made from a copy of a manuscript sent to us for publication and microfilming. While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. Pages in any manuscript may have indistinct print. In all cases the best available copy has been filmed.

The following explanation of techniques is provided to help clarify notations which may appear on this reproduction.

1. Manuscripts may not always be complete. When it is not possible to obtain missing pages, a note appears to indicate this.
2. When copyrighted materials are removed from the manuscript, a note appears to indicate this.
3. Oversize materials (maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or in black and white paper format.\*
4. Most photographs reproduce acceptably on positive microfilm or microfiche but lack clarity on xerographic copies made from the microfilm. For an additional charge, all photographs are available in black and white standard 35mm slide format.\*

**\*For more information about black and white slides or enlarged paper reproductions, please contact the Dissertations Customer Services Department.**

**UMI** University  
Microfilms  
International

8612400

**Orbovich, Cynthia Biddle**

**COGNITIVE STYLE AND FOREIGN POLICY DECISIONMAKING: AN  
EXAMINATION OF EISENHOWER'S NATIONAL SECURITY ORGANIZATION**

*The Ohio State University*

PH.D. 1986

**University  
Microfilms  
International** 300 N. Zeeb Road, Ann Arbor, MI 48106

**Copyright 1986**

by

**Orbovich, Cynthia Biddle**

**All Rights Reserved**

COGNITIVE STYLE AND FOREIGN POLICY DECISIONMAKING:  
AN EXAMINATION OF EISENHOWER'S NATIONAL SECURITY ORGANIZATION

DISSERTATION

Presented in Partial Fulfillment of the Requirements for  
the Degree Doctor of Philosophy in the Graduate  
School of the Ohio State University

By

Cynthia Biddle Orbovich, B. A.

\* \* \* \* \*

The Ohio State University

1986

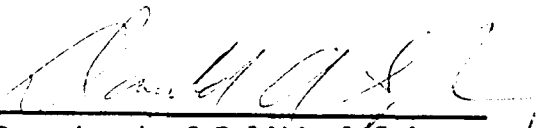
Dissertation Committee:

Donald A. Sylvan

Charles F. Hermann

Margaret G. Hermann

Adviser

  
Department of Political Science

Copyright by  
Cynthia Biddle Orbovich  
1986

To Sam and Alex

## ACKNOWLEDGMENTS

I express sincere appreciation to the members of my advisory committee, Dr. Donald A. Sylvan, Dr. Margaret G. Hermannn, and Dr. Charles F. Hermann, for their guidance and comments throughout the research. I am indebted to Richard Immerman and Fred Greenstein for providing me with access to most of the documents cited in this project. Gratitude is expressed to the Department of Psychology at Macalester College for providing me with a special place to work. Thanks go to Chuck Green for his quiet support and encouragement since I arrived at Macalester. The technical assistance of Linda Hunziker is gratefully acknowledged. To my special friend and colleague, Dr. Marita R. Hopmann, I thank you for the countless ways in which you contributed to this effort. To Sam, thank you for providing a loving support system. I want to thank my son, Alex, for supplying his special brand of motivation. Finally, I want to acknowledge my parents--their hard work provided me with the opportunity to pursue these interests. This research was supported by grants from the Ohio State University.

VITA

August 8, 1953 . . . . . Born - Crawfordsville,  
Indiana

1975 . . . . . B. A., Denison University  
Granville, Ohio

1976-1981 . . . . . Graduate Student at Ohio State  
University, Columbus, Ohio

1981-Present . . . . . Instructor, Political Science  
Macalester College  
St. Paul, Minnesota

PUBLICATIONS

"Employing a Policy Engineering Approach in Organizational Design: The Case of an International Energy Organization" (with Donald A. Sylvan), in K. Grundy, B. Hughes, and V. E. McHale (eds.) Evaluation of Transnational Programs in Government and Business, Pergamon Press, 1980.

FIELDS OF STUDY

Major Fields: International Politics and Policy Analysis



TABLE OF CONTENTS

DEDICATION . . . . .	ii
ACKNOWLEDGMENTS . . . . .	iii
VITA . . . . .	iv
LIST OF TABLES . . . . .	vi
CHAPTER	PAGE
I. INTRODUCTION . . . . .	1
II. METHODOLOGICAL ISSUES AND RESEARCH DESIGN . . . . .	27
III. EISENHOWER'S COGNITIVE STYLE . . . . .	52
IV. COGNITIVE STYLE AND FOREIGN POLICY ADVISORY SYSTEMS . . . . .	132
V. CONCLUSION . . . . .	175
LIST OF REFERENCES . . . . .	186

LIST OF TABLES

TABLE	PAGE
1. Number of Documents Coded by Type and Year . . . . .	60
2. Summary of Eisenhower's Information Gathering Behavior . . . . .	68
3. Summary of Eisenhower's Information Evaluation Behavior . . . . .	93
4. Summary of Eisenhower's Orientation Toward Time . . . . .	111
5. Summary of Eisenhower's Problem Emphasis . . . . .	116
6. Relationship of Dependent Variables to Organizational Models . . . . .	144
7. Characteristics of the Four Cognitive Styles . . . . .	146
8. Relationship of Cognitive Styles to Dependent Variables . . . . .	147

## Chapter I

### INTRODUCTION

Members of the academic and policymaking communities have devoted considerable attention to the constraints on foreign policy decisionmaking and the effectiveness of alternative decisionmaking procedures (See George, 1980; Janis, 1972; Janis and Mann, 1977; Murphy Commission Report, 1975). George (1980) has summarized some procedures that are considered to increase the probability of obtaining foreign policy decisions of higher quality (p.10).

1. Ensure that sufficient information about the situation at hand is obtained and that it is analyzed adequately so that it provides policymakers with an incisive and valid diagnosis of the problem.
2. Facilitate consideration of all the major values and interests affected by the policy issue at hand. Thus, the initial objectives established to guide development and appraisal of options should be examined to determine whether they express adequately the values and interests imbedded in the problem and, if necessary, objectives and

goals should be reformulated.

3. Assure a search for a relatively wide range of options and a reasonably thorough evaluation of the expected consequences of each. The possible costs and risks of an option as well as its expected or hoped for benefits should be carefully assessed; uncertainties affecting these calculations should be identified, analyzed, and taken into account before determining the preferred course of action.
4. Provide for careful consideration of the problems that may arise in implementing the options under consideration; such evaluations should be taken into account in weighing the attractiveness of the options.
5. Maintain receptivity to indications that current policies are not working out well, and cultivate an ability to learn from experience.

However, we know that there are multiple sources of constraints on the practice of these procedures including psychological, informational, bureaucratic and situational impediments. For this reason, most foreign policy decisionmaking seldom

parallels the "rational comprehensive model" set forth by Lindblom (1959) or Allison's Model I (1971). Rarely do foreign policy decisionmakers have adequate information available to know what all of their options are or to identify and understand the consequences of those options. How policymakers cope with these problems of complexity and uncertainty (George, 1980: 25) will certainly influence the substance of their policy decisions and the quality of those decisions. One of the factors which influences how the individual policymaker makes decisions is his cognitive style.

The objectives of this research are to (1) to develop a strategy for assessing the cognitive styles of foreign policy leaders in a systematic fashion; and (2) to develop some general hypotheses regarding the relationship of a leader's cognitive style to the structure and process of foreign policy decisionmaking. Although I will focus on presidents and U.S. foreign policymaking, the strategy suggested for assessing cognitive style from a distance could be used to study political decisionmakers in other contexts.

One assumption of the research is that there are systematic differences between political leaders in terms of their cognitive style and that we can assess these differences from a distance. A second assumption is that cognitive style plays an important

role in the political leader's selection of or preference for certain organizational arrangements for making policy decisions. More specifically, it is assumed that a president's cognitive style will influence how he structures and manages high level foreign policy decisionmaking.

An examination of foreign policy decisionmaking in the Eisenhower administration serves as the empirical basis for the generation of hypotheses derived from the above assumptions. Original documents, memoirs and secondary sources serve as the data base for the analysis.

#### Discussion of Cognitive Style

In this research cognitive style is viewed as ". . . the characteristic ways in which individuals conceptually organize the environment" (Goldstein and Blackman, 1978: 2). This definition reflects the core concerns of information processing theorists who focus on the processes that mediate between the input of stimuli from the environment and an individual's response to that stimuli. This definition also parallels many of the other conceptualizations of cognitive style found in the literature. For example, Harvey (1963) views cognitive style as the way an individual filters and processes stimuli so that the environment takes on psychological meaning. In his discussion of

cognitive styles, Bieri (1971) maintains that individuals learn ". . . strategies, programs, or other transformation operations to transfer objective stimuli into meaningful dimensions." Similarly, Messick (1976) defines cognitive style as consistent patterns of "organizing and processing information". In addition to the emphasis on intermediary processes that occur within the individual, most approaches to cognitive style emphasize the structure rather than the content of thought (Suedfeld, 1971). An assumption of this research is that cognitive style refers to ways in which thought is structured.

Although Alexander George agrees that the president's cognitive style influences his preference for one foreign policy management model as opposed to another, he seems to suggest that this relationship has not been evaluated more carefully because there is no standardized approach to characterizing the dimensions of cognitive style (George, 1980: 147). If George is interpreted as saying that there is no standardized measurement strategy for assessing cognitive style then I would concur. However, a careful review of the literature on cognitive style reveals a convergence in conceptualization of dimensions of cognitive style that provides a basis for empirically assessing the cognitive styles of political leaders from a distance. This section is devoted to an examination of the various frameworks on cognitive style. The assessment of each approach will include a

discussion of: (1) theoretical concepts; (2) background theory; (3) measurement strategy; and (4) empirical research applications.

Research on cognitive style tends to flow from one of three general paradigms: (1) field dependence-independence; (2) cognitive complexity; and (3) Jung's theory of psychological type. Specific frameworks and research efforts in each of these categories will now be discussed.

#### Field Dependence-Field Independence

Witkin (1954) focuses on the concepts of field dependence and field independence. In his research on cognitive style he examines the extent to which a person is able to deal with a part of a field separately from the field as a whole, or the extent to which he is able to disembed items from organized context. Cognitive styles are characterized as high analytic (reflecting tendency to identify patterns of data independent of their context) or low analytic (reflecting tendency to describe data in terms of the context in which it is embedded).

Witkin's work lacks a sound theoretical base. There is minimal discussion of underlying theory in his empirical research. What he offers is a bi-polar model based on



performance in tasks that focus on spatial skill. These concepts do not have distinct theoretical meanings apart from the Embedded Figures Test (EFT), the Rod and Frame Test (RFT), and the Tilting Chair-Tilting Room Test.

The subject taking the RFT is seated in complete darkness and views a luminous rod suspended within a luminous frame. Both the rod and frame can be tilted independently. Initially the rod and frame are both tilted, and the subject is told to direct the experimenter to adjust the rod to a position that the subject believes is vertical. Subjects who are successful at this task are termed field independent. Those who orient the rod in relation to the tilted frame are termed field dependent.

The EFT requires the subject to locate a simple figure within a complex background. The subject is given a limited amount of time (usually between three and five minutes) for each figure. The greater the amount of time it takes the subject to locate figures, the more field dependent he is said to be.

It is difficult to provide a theoretical definition of field dependence that is meaningful in a non-experimental setting. About the only thing we can say is that the field dependent person tends to experience surroundings passively conforming to the influence of the prevailing field or context whereas the

field independent person possesses a more analytical approach to the world and can better discriminate between figure and ground (Bieri, 1971: 193-94).

Bariff and Lusk (1977) administered the EFT to nurses as part of their research on designing a nursing evaluation information system. They found that the nurses were low-analytic compared with the national norm and that their cognitive style as measured by the EFT affected the perceived attraction of different types of communication reports.

Some of Witkin's ideas have been applied to political decisionmaking by Chesney (1980) who developed a scheme for assessing analytic ability based on interviews with members of the U.S. Congress. He devised a set of coding rules for measuring the elements of Witkin's "index of cognitive clarity" (1967) including: (1) awareness of means-ends relationships; (2) awareness of the motives of self and others; (3) evidence of interest in and activity directed at filling gaps in one's fund of information; (4) clarity of expression and relevance of responses; (5) ability to abstract and generalize.

Huysman (1970) discusses cognitive styles as ways of reasoning. He distinguishes between analytic and heuristic reasoning. Someone with an analytic style tends to reduce a problem

situation to a core set of underlying causal relationships and uses a more or less explicit model (often stated in quantitative terms) as the basis for making decisions. Efforts are directed toward identifying the optimal solution. The individual with an heuristic style emphasizes workable solutions to total problems and searches for analogies with familiar solved problems rather than for a system of underlying causal relationships. Common sense and intuition play an important role in problem solving. Decisions are characterized by consistency with their external and internal environment.

Witkin's work on field dependence-independence informs Huysman's research in management science. Huysman characterizes cognitive style as a constraint which affects the implementation of various research techniques by managers. He hypothesized that the gap between the development of operations research techniques and managerial use of such techniques was related to cognitive style differences between managers and operations researchers.

Huysman conducted an experiment to test his hypothesis, and although the background theory is supplied by Witkin, he devised his own measurement strategy. Huysman trained judges and asked them to classify experimental subjects as using one or the other styles based on observations of the subjects working on two analytic puzzles and a business case with no strict analytic solu-

tion. Verbal reports of the subjects were also analyzed by judges for their content. Huysman found that analytic subjects accepted the computer reports and explicit recommendations with full supporting evidence while heuristics accepted a more general, integral report aimed at getting the main ideas across without supporting formulas.

### Cognitive Complexity

A second paradigm which has served as an umbrella for research on cognitive style is characterized by those who focus on cognitive or conceptual complexity. Kelly (1955) and Bieri's (1966) work focuses on the concept of differentiation or the ability of individuals to identify differences among stimuli along a dimension. The Rep Test developed by Kelly asks individuals to rate people in terms of concepts or categories of their own devising. Cognitive complexity is measured by the number of different constructs a person uses in the protocol. Bieri's variation of the Rep Test provides constructs for the subjects to use in their descriptions of eight individuals, each of whom fits a predetermined role. The number of interpersonal constructs used is taken as the measure of cognitive differentiation. The more cognitively complex person has available a greater number of dimensions with which to construe the behavior of others than the less cognitively complex.

Schroder, Driver, and Streufert (1967), adopting an explicitly information processing perspective, conceptualize cognitive style in terms of two dimensions: differentiation and integration. Differentiation is described above. Integration refers to the ability to utilize complex rules or programs to combine dimensions. Their research is supported by a well articulated theoretical base. The primary method for measuring levels of integrative complexity is the Paragraph Completion Test (PCT). In the PCT the subject is presented with five or six sentence stems at one time and allowed a limited amount of time to complete each sentence and continue to write about the same topic until the time is up. Each completed paragraph is scored on a 7-point scale according to coding rules developed by Schroder and his colleagues. (See Appendix II, Human Information Processing, 1967). The possible scores range from 1-7 with scores of 1 reflecting low differentiation and low integration while scores of 7 indicate high differentiation and integration.

Suedfeld and Tetlock (1977) have adopted the scoring rules of the PCT for measuring the complexity of verbal material other than paragraphs written specifically in the experimental context and found that interscorer reliabilities for archival materials were as high as for the scoring of the actual PCT. They have concluded that almost any verbal material of sufficient length (usually a paragraph) can be analyzed for differentiation and

integration except for materials of a purely descriptive nature.

With this approach, U.N. speeches concerning the Middle East conflict have been scored to determine whether the complexity of information-processing was reduced preceding the outbreak of war (Suedfeld, Tetlock, and Ramirez, 1977). Diplomatic communications during international crises that resulted in war have been analyzed in this fashion (Suedfeld and Tetlock, 1977) as well as the public statements of policymakers to determine the extent to which simpler modes of information processing characterized groupthink situations (Tetlock, 1979). A significant disadvantage of this approach is that lengthy training supervised by one of the few qualified investigators is necessary for scoring. This stumbling block has precluded the widespread application of integrative complexity theory.

### Jung's Psychological Types

A third approach to cognitive style research is based on Jung's (1971) framework of psychological types as operationalized by the Myers-Briggs Type Indicator (MBTI). Jung's identification and development of four psychological types is based on two theoretical dimensions related to decisionmaking: perceiving which refers to the way in which an individual gathers information from the environment and judging which refers to how an

individual evaluates the perceived information or makes decisions based on the information gathered.

Isabel Myers' (1962) creation and refinement of the MBTI for determining type in individuals opened the theory of types to research. Over the past three decades the Educational Testing Service has amassed vast amounts of information regarding the behavior and attitudes of the various types.

Jung's framework is explicitly credited as the theoretical basis for cognitive style research conducted by several management science scholars including Mason and Mitroff (1973), Mitroff and Kilmann (1975), Hellreigel and Slocum (1975), and Henderson and Nutt (1980). These analysts conceptualize the cognitive styles (sometimes referred to as decision styles or organizational styles) of managers along Jung's two dimensions which they refer to as information acquisition (perceiving) and information processing or evaluation (judging). In terms of information acquisition, individuals are viewed as sensation types who rely primarily on data received by their senses and prefer objective, hard facts and pay attention to detail or intuitive types who rely on un verbalized hunches or cues, show a disdain for hard data, and tend to perceive objects in their totality, as a Gestalt. With respect to information evaluation, individuals are viewed as thinking types who rely on cognitive processes and make

judgments on the basis of formal systematic reasoning or feeling types who rely on affective processes and evaluate information on the basis of personalistic lines such as "good-bad" and "like-dislike". When combined these two dimensions comprise four different cognitive styles: sensation-thinking, intuitive-thinking, sensation-feeling, and intuitive-feeling. Management science researchers have adopted this approach for at least two reasons. First, these dimensions are directly related to different managerial and organizational styles which are observed in the field. Second, this framework does not prescribe any one of the four styles as being superior to or better than any of the others. From the Jungian perspective, each "type" is viewed as having strengths and weaknesses depending on the particular decision or managerial context.

Nutt (1979) describes the four cognitive styles which are derived from this framework:

Systematic Style (sensation-thinking)

1. Stresses hard data and logical analysis
2. Consciously structures plan to look for cues in evaluation data



3. Defines rules that can govern the decision process
4. Compares options using quantitative data
5. Likes cost/benefit analysis
6. Unwarranted theorizing/moralizing result when qualitative information and/or personalities clutter analysis

Speculative Style (intuitive-thinking)

1. Stresses analysis but seeks out broader criteria
2. Formal plan often followed but concerned with contextual factors
3. Often poses "what if" questions
4. Prefers models that combine objective and subjective data
5. Devises several premises and tests them

Judicial Style (sensation-feeling)

1. "Reality" is what key group can agree about/relies on

group consensus

2. Focus on human relations/described by facts and details
3. Decision task oriented
4. Seeks quantitative information but processes with group

Intuitive Style (intuitive-feeling)

1. Rely on unverbilized hunches
2. Defend choices with its "fit" to their experiences
3. Decision can't be made without considering context
4. Political and moral consequences of decisions stressed
5. Disdain for data; relies on the "big picture"
6. Models unable to capture complexity

In terms of measurement strategies in their research these analysts have administered the MBTI to business managers (Hellreigel and Slocum: 1980) and have content analyzed short

stories on the ideal organization composed by managers such as bank officers (Mitroff and Kilmann: 1975). Although the MBTI was used as the guide for the content analysis, none of this research reports the particular coding rules or strategies.

McKenney and Keen (1974) view cognitive style as a set of consistent and differentiated modes of thought that largely evolve in response to specialized information processing and educational environments. They argue that these become abilities or disabilities depending on the match between the individual's style and the demands of the problem-solving context. Cognitive style relates more to the propensity rather than the capacity of the individual. McKenney and Keen focus on managers in their research and contend that the central factor which determines whether a manager will use a particular model to reach a decision is the extent to which it "fits" his or her style of thinking.

McKenney and Keen also conceptualize cognitive style along two dimensions: information gathering which parallels Jung's perceiving dimension and information evaluation which is comparable to Jung's judging dimension. According to McKenney and Keen, information gathering refers to perceptual processes by which the mind organizes the diffuse verbal and visual stimuli it encounters. Information gathering involves rejecting some of the data encountered, summarizing and categorizing the rest. Along

this dimension McKenney and Keen distinguish between preceptive types who bring concepts to bear to filter data, focus on relationships between items and look for deviations from or conformities to their expectations and receptive types who tend to prefer a large data base, focus on detail rather than relationships, and try to derive attributes of the information from direct examination of it.

Information evaluation refers to processes commonly classified under problem solving. People usually differ in their sequence of analysis of the data. Along this dimension, McKenney and Keen distinguish between systematic types who tend to approach a problem by structuring it in terms of some method which, if followed through, leads to a likely solution and intuitive types who adopt more of a trial-and-error strategy, jump from one method to another, discard information and are sensitive to cues they might not be able to identify verbally. Clearly, the four styles of thinking conceptualized by McKenney and Keen are quite similar to Jung's types: systematic (thinking), intuitive (feeling), receptive (sensing) and preceptive (intuitive).

McKenney and Keen used twelve standard reference tests for cognitive factors developed by Educational Testing Service to assess the cognitive styles of one hundred and seven MBA

students. Seventy percent of their sample showed distinct differences in performance level between systematic and intuitive thinkers and receptive and preceptive thinkers. They also administered the MBTI and found that systematic subjects were likely to be "thinking" types while intuitive subjects were distributed at the "feeling" end of the scale.

Although Mock and Driver's research on decision style (1975) primarily reflects the information processing perspective of Harvey, Hunt and Schroder (1961), their conceptualization is also compatible with Jung's paradigm. Mock and Driver postulate two dimensions of decision style; amount of information used and degree of focus. A minimal data user is a person who uses just enough information to make an adequate decision while a maximal data user is not satisfied until all of the relevant information has been examined. Degree of focus refers to the range of options or solutions the decisionmaker sees after examining the data. Individuals who see multiple options tend to see the data as having varied meanings while people who see a single option tend to view the data as leading to one conclusion (p.497). Combining these two dimensions, Mock and Driver derive four decision styles.

1. Decisive Style: Minimal data/One option

2. Flexible Style: Minimal data/Multiple options
3. Hierarchical Style: Maximum data/One option
4. Integrative Style: Maximum data/Multiple options

This approach is clearly related to the information processing perspective and cognitive complexity paradigm in which differentiation and integration are the core dimensions. In Mock and Driver's scheme the integrative style represents the most "cognitively complex" decision style. Although it would be inaccurate to suggest that Mock and Driver's four decision styles are the same as the four cognitive styles derived from Jung's framework, there are some noteworthy similarities. For instance, a decisionmaker using the flexible style is able to come up with varying interpretations of the same data. It is a style associated with adaptability and intuition. This is similar to the intuitive style. However, unlike the intuitive style, the flexible style focuses on speed rather than planning. The hierarchical style is similar to the systematic style to the extent that it emphasizes the identification of the one best conclusion and enforces the one "best method" for analyzing information. However, long-range planning is favored by this style and this is not necessarily the case with the systematic style. The integrative style is similar to the speculative style to the

extent that many options and interpretations are generated and analyzed. None of the decision styles hypothesized by Mock and Driver seem to parallel the judicial style.

While Mock and Driver focus on the amount of information used, researchers who have explicitly adopted Jung's framework examine the type of data that the decisionmaker prefers. Mock and Driver's focusing dimension does not parallel Jung's conceptualization of cognitive style. However, descriptions of the speculative and intuitive styles do address the variety of interpretations of data.

Mock and Driver have tested some of their hypotheses in a set of experiments designed to consider the behavior of individuals with different decision styles with respect to information search, information purchase, decision speed, and decision quality. The information structure experiments were based on a business game and the subjects were MBA students. Two measures were used to assess the decision styles of the participants. The APSE, (Administrative Problem Solving Exercise) or IST (Integration Style Test) consists of a business problem which the person solves and indicates how he used data in the problem exercise. A second scale, the CXSD, is a self-descriptive questionnaire which assesses both style and values. While it is more reliable than the APSE it is considered less valid because of the

self-reporting.

### Conclusion

Cognitive style is clearly a multi-dimensional concept. The conceptualization of cognitive style which underpins this research draws from all three of the paradigms discussed above, with the strongest influence coming from Jung's framework. Based on this literature review I have identified the following attributes of cognitive style which serve as the basis for my empirical assessment of the cognitive style of Eisenhower. I will also discuss how the attributes are related to the two key dimensions of cognitive style: perceiving (sensation-intuition) and judging (feeling-thinking). Coding instructions for making inferences about these dimensions of cognitive style are presented in Chapter Two.

1. Information Gathering: This attribute refers to the kinds of information the decisionmaker prefers to examine or picks up as he scans the environment. Does the decisionmaker prefer to examine concrete facts or personal reflection and introspection? Does the decisionmaker prefer to work with a small or large amount of information? The sensation type is interested in facts and hard data taken in by the senses and focuses on infor-



mation about specifics and details. The intuitive type shows a disdain for quantitative, hard data and is interested in information on the "big picture". We would expect the sensation type to settle for a smaller data base because of the focus on a more specific problem and the desire for closure. Further search for information would tend to produce redefinitions of the problem or enlarge the problem. Therefore, the intuitive type is more likely to seek out a larger data base since he is interested in exploring several possibilities and is not as concerned with closure.

2. Information Evaluation: This attribute refers to the manner in which the decisionmaker makes judgments about the information which has been gathered. Does the decisionmaker prefer a decision process which emphasizes affective and personal factors or a decision process which emphasizes intellectual processes? Does the decisionmaker focus on one option/interpretation or many options/interpretations? The feeling type prefers decision processes which emphasize affective and personal processes. His decisions are more likely to be based on emotional and personal factors. The feeling type is likely to make decisions that will result in approval from others and avoids decisions that will likely result in

disagreements. The thinking type will emphasize intellectual processes and make decisions based on logical analysis. Thinking types tend to be rational problem solvers who prefer systematic inquiry. The sensation type is more likely to focus on one option or interpretation in search of closure. However, the intuitive type is likely to see data from different perspectives and will test out alternative interpretations.

3. Time Orientation: This variable identifies the time frame used by the decisionmaker and is related to the sensation-intuition dimension of cognitive style. To what extent does the decisionmaker emphasize the past, present or the future in his information processing? Does he adopt a more complex time orientation which addresses elements from all three time frames? Sensation types are more likely to focus on the present since they are interested in focusing on specific problems and the details of problems. Their interests in facts and hard data are more likely to be realized in the present or in terms of the immediate past. However, when thinking in terms of the future, information may be fuzzier and less precise. It is more difficult to have concrete data about the future. That is why the intuitive type is more comfortable with a future orientation. Intuitive types

are more interested in generating information from and about scenarios. Intuitive types are more comfortable with the more general, hypothetical type of information available about the future. They might also adopt a mixed perspective. In a policy context that a president finds himself in, it is unlikely that any president is able to avoid thinking about the present.

4. Problem Emphasis: This variable refers to the type of problem the decisionmaker prefers to work on. Does the decisionmaker prefer to address concrete or abstract problems? Does the decisionmaker emphasize issues or human relations? This is related to both the perceiving and judging dimensions of cognitive style. Thinking types prefer to focus on issues whereas the feeling types are oriented to people and human relations. Another facet of problem emphasis is the preference to focus on more concrete or abstract problems, no matter whether the focus is on issues or human relations. Sensation types prefer working on concrete problems. They are task oriented and more comfortable with structured problems. They are less comfortable with problems characterized by uncertainty. Intuitive types are interested in possibilities, what might be. They are interested in ideas, concepts and theories and have a drive to solve new problems. We would

expect intuitive types to generate and expand their agendas. They are more comfortable with unstructured problems marked by uncertainty.

Chapter Two continues with a discussion of methodological issues and includes the explanation of the coding rules. The profile of Eisenhower is presented in Chapter Three. Hypotheses relating cognitive style to the use of various foreign policy advisory systems are presented in Chapter Four. An analysis of Eisenhower's organizational arrangements is also included in Chapter Four. The thesis concludes in Chapter Five with a summary and discussion of future research possibilities.

## CHAPTER II

### METHODOLOGICAL ISSUES AND RESEARCH DESIGN

Only a few scholars have empirically assessed cognitive style from a distance using a content analysis research design. Chesney's analysis of the cognitive clarity of congressmen is based on the analysis of interviews with the legislators (1980). Hellriegel and Slocum (1980) asked managers to write a short story about their ideal organization. Researchers then read each manager's story and classified it as fitting the ST, NT, NF or SF style. While these scholars report intercoder reliabilities, they do not provide the coding instructions used in their research. The purpose of this chapter is to present the research design and measurement strategy employed to analyze Eisenhower's cognitive style.

There are several issues raised by a "cognitive style" approach to foreign policy decisionmaking that present obstacles to scholars studying political leaders. The primary problem is the issue of access. We rarely have direct access to high level political actors for the purposes of administering psychological tests like the MBTI. The standard ways of empirically assessing cognitive style that have been employed by psychologists and most

of the management science scholars discussed in Chapter One are inappropriate for analyzing political leaders.

In order to assess the cognitive style of political leaders we need to make inferences from a distance. Krippendorff defines content analysis as a ". . . scientific method that promises to yield inferences from essentially verbal, symbolic or communicative data" (1980: 20). In this research content analysis of archival documents is adopted as a strategy for making inferences about Eisenhower's cognitive style. In this research, content analysis is defined broadly rather than narrowly. It is viewed as a systematic strategy for to making inferences about an individual's behavior and personal characteristics from written and verbal materials.

In addition to overcoming the access obstacle, content analysis accepts unstructured material (Krippendorff, 1980: 30). In this research it is necessary to look at whatever relevant information is available even though the information is not presented in a desired form such as the structured material generated by questionnaires and some interviews. The documents examined in this project take many forms; they are not parallel in terms of their style, content, or audience.

Content analysis is also context sensitive. This is an important consideration in the research because the process of assessing Eisenhower's cognitive style requires that the analyst pay attention to situational variables such as the decision context, the issue area, and Eisenhower's familiarity with the issue or problem.

The remainder of this chapter is divided into four sections: (1) Identification of suitable data; (2) Plans for unitizing and sampling; (3) Coding instructions; and (4) Analysis procedures.

#### Identification of Suitable Data

In order to study the cognitive style of political leaders it is necessary to examine materials that allow us to monitor their information gathering and information evaluation processes. Of the available materials it is necessary to distinguish the relevant from the irrelevant. Although it is clear that certain kinds of materials such as public speeches authored by speech writers do not provide an adequate basis for making inferences about cognitive style, there is no agreement on the most suitable materials for analysis. The materials deemed relevant for this research project are documents authored by Eisenhower that were not originally produced for wide public consumption including diary entries, personal correspondence and policy memoranda and transcripts of phone conversations and policy meetings in which

Eisenhower participated. These documents are appropriate for several reasons. First, they are not subject to the public posturing which characterizes official memoirs, speeches and press conferences. This is why materials not produced for public release are particularly relevant. Second, these types of documents represent the best available traces of the problem solving processes Eisenhower and his advisors engaged in. These documents provide an opportunity to observe, at least indirectly, how Eisenhower was thinking about policy issues--how he was gathering and evaluating information individually and in the context of small groups of advisors.

#### Plans for Unitizing and Sampling

The primary unit of analysis is the individual document. A document may take one of the following forms:

1. diary entry by Eisenhower
2. personal correspondence by Eisenhower
3. policy memorandum by Eisenhower
4. memorandum of conversation with Eisenhower



5. transcript of policy meeting with Eisenhower

The document constitutes the sampling unit. If the volume of relevant materials on foreign policy decisionmaking in the Eisenhower administration were too large, it would be advisable to employ random methods to select a sample of these documents. In this case the volume of documents is large enough to contain sufficient information about Eisenhower's cognitive style, yet small enough for analysis. Therefore, I will analyze all of the materials I have collected rather than a sample of the documents.

It is important to note that the available documents do represent a non-random sample of all the documents of this type. Many of the documents from the Eisenhower administration remain classified. For example, summaries of several of the national security council meetings are still unavailable. Sections of some of the minutes which are available have been "sanitized" or deleted for national security reasons. Nevertheless, the available documents do provide a rich information base for making inferences about Eisenhower's cognitive style. To the extent that there is any systematic bias in the documents utilized for this research, I think there is an under-representation of materials which focus on covert operations, particularly in the developing world. For example, very little information is available on U.S. policy in Guatemala during the 1950's. However, I

do not see this as debilitating given the scope of my research.

Recording units are the separately analyzable parts of a sampling unit (Krippendorff, 1980: 50). In a content analysis design the selection of recording units that differ from sampling units is often made because the sampling units are too large, too rich or too complex to serve as a unit for description. That is the case in this research. Some of the individual documents such as the minutes of a lengthy national security council meeting are too rich and complex to be coded as one document. The same is true of some of Eisenhower's personal correspondence and policy memoranda. Typically several issues or problems are discussed which are not highly related. In these cases it is important to examine sections of the documents as individual documents. Therefore, recording units in this analysis are identified as the individual documents, sections of documents, or compilations of documents which focus on a particular issue or topic. A couple of examples should help to clarify this definition of recording unit.

At most national security council meetings, there are several items on the agenda which are usually discussed in a sequential fashion. A third of a meeting might be devoted to a discussion of basic national security policy, while another third would focus on the Middle East and the final third on nuclear

testing. The sections of the summary of the meeting which correspond to these different topics constitute recording units. Similarly, in his personal correspondence to friends like Swede Hazlett, Eisenhower often addressed several issues. Such a document would be divided into several recording units reflecting the various problems or topics analyzed. In cases where the document focuses on one topic or issue, as is often the case in the Eisenhower diary entries, the sampling unit corresponds to the recording unit.

#### Coding Instructions

The purpose of this section is the delineation and explanation of the coding rules for assessing cognitive style from the type of materials discussed above. These coding rules identify behaviors of the individual that are expected to be associated with the various dimensions of cognitive style discussed at the conclusion of Chapter One. The sequence and headings in this discussion correspond to the coding sheet. Each coding category will be explicated and an example from the documents will be supplied. Some of these examples may not be obvious since they are taken out of context from the actual documents. These coding categories will serve as a checklist for analyzing the documents. Frequencies of the presence or occurrence of these behaviors will be calculated. How such frequencies will be interpreted is

discussed in the next section of this chapter.

Information Gathering: Eisenhower's approach to information gathering is monitored in terms of the following behaviors.

1. Questions: All of the questions asked by the individual decision-maker in each document are identified and placed in one of the following categories. Monitoring the questions posed by the decisionmaker will provide information on the amount and type of information preferred. This information is appropriate for monitoring the information gathering dimension of the decisionmaker's cognitive style, as discussed in Chapter One.

a. Requests for information provide information on the amount of data the decisionmaker requires. Within this category there are distinct differences in the type of information requested. For example, "what is the exact unit price of a TITAN missile" is qualitatively different than "what about the Indian Ocean" with respect to the type of information sought. In order to capture these distinctions in the type of information requested, requests for information will be coded in terms of the following dimensions:

1. Focused or Global: Focused requests for information ask for specific information. Global information

requests are more open ended. Requests for information that are more focused may take several forms. These questions will be coded with respect to the extent to which they invite or seem to seek out contextual information from the respondent. Each focused request for information will be categorized as:

- a. Evaluative or Non-evaluative: Evaluative requests for information require the interpretation of the respondent. This type of question presumes that there may be differing opinions regarding the appropriate response. A greater cognitive burden is placed on the respondent when this type of request is made. Non-evaluative requests for information do not invite the interpretation or reflection of the respondent. Rather, they ask for referential information. Different respondents with access to the same information should give the same response to a non-evaluative request for information.

Examples: Focused/Non-evaluative: What exactly is the unit price of a TITAN missile? Focused/Evaluative: The President inquired of Secretary Dulles whether the inclusion of this language in previous statements of basic national security policy had occasioned difficulties for the State Department in its desire to increase economic assistance.

Global: What about the Indian Ocean? (By definition global requests for information are evaluative.)

b. Directives are questions used by the decisionmaker to tell someone else to do something. (e.g. I wonder whether, in view of this way that we talked about the other night, you shouldn't get in each House and take leadership in your confidence?)

c. Rhetorical questions are questions posed by the decisionmaker for which no substantive response is anticipated. These questions provide information on what is important or most salient to the decisionmaker. (e.g. Why didn't the French ask for help from the group; why did they continue to ask us for U.S. intervention?)

2. Probes: This refers to follow-up questions or comments to responses to questions the decisionmaker has asked. Probes are monitored to determine the extent to which the decisionmaker is interested in engaging in a discussion or dialogue and in acquiring more information. (e.g. In a White House conference with the Joint Chiefs of Staff about the deployment of TITAN missiles in Denver, Eisenhower asked: Why jam up a big city when other locations might be perfectly suitable? Sec. Quarles responded. According to minutes of the meeting: The President replied that this seemed curious, inasmuch as the servicing of the ICBMs was to be done by the Martin Co., which was to the south of the city. He again

explained that he could not understand why it was necessary to put these installations so close to a large city.)

3. Notes information shortage: Comments which demonstrate dissatisfaction with amount or quality of information are recorded. Requests for studies or reports (indirect questions) are also recorded as indicators of the decisionmaker's concern with the information shortage. (e.g. In a discussion with defense planners about the safety of nuclear weapons: The President said the group should carry on with the further computations as to whether any increased mechanical safety can be built into the weapons. At an NSC discussion of U.S. military assistance: The President then suggested that the NSC Planning Board be asked to start a review of those countries where the U.S. was really most heavily engaged in assistance programs. The Planning Board should be asked to look at the analysis of the Prochnow report for each of these countries, and having done so, review U.S. policy in each of these countries. Careful attention should be paid to what constituted the minimum demands of our national security with respect to the level of forces to be maintained in these countries.)
4. Initiation of discussion of topic/problem: This behavior is monitored in memos of conversation and minutes of meetings. Each time the decisionmaker introduces or raises a topic or problem for discussion that was not previously discussed in

that conversation is recorded. (e.g. The President next took up the leaks that are apparently coming out of the Department of State on prospective appointments. The President then brought up with General Twining a report which the President had seen in the newspapers relative to a written submission by the individual service chiefs concerning their additional needs at this time.)

Information Evaluation: Eisenhower's approach to information evaluation is monitored in terms of the following behaviors.

1. Evaluates information using terms such as "like/dislike":  
(e.g. I like the report.)
2. Evaluates information using terms such as "true/false":  
(e.g. The President questioned the accuracy of this figure.)
3. Analysis valued: Positive references to systematic and logical study are recorded. (e.g. All these questions, upon analysis, fail to furnish any satisfactory explanation of what seems to us to be a shortsighted policy on the part of the administration. At a conference with the Joint Chiefs of Staff Eisenhower discussed the outline he wanted the Chiefs to use to develop a paper on the military sphere of U.S. national security: The President said he was not interested in long treatises, but simply their conclusions on the major elements under the various headings, and he thought the



outline set out what would have to be considered in reaching a judgment as to the military program . . . There are reports of international movements of bank funds, rendering certain nations less vulnerable to fund seizure. The significance of such moves, and lines of action in light of them, should be considered. The President indicated he was more interested in this type of thing than in particular force or program levels. These can never be completely fixed. In their analysis, no specific forces should be considered as sacrosanct--all should be held up to examination, and study made of the kinds of forces which would help us better to meet situations threatening our interests. He said he would like to see them try such a paper--the more concise the better.)

4. Explanations/rationales provided: Substantive explanations of positions or decisions or rationales in support of positions are noted. Unlike the previous category of behavior which refers to the decisionmaker's positive references to analysis, this category monitors the extent to which the decisionmaker actually engages in analysis. (e.g. The President next discussed the fundamental reasons why needs of our economy must always be considered. It is the nature of our Government that everyone, except for a thin layer at the top, is working, knowingly or unknowingly, to damage our economy--the reason being that they see the need for more and

more resources for their own Service or agency, and the valuable results that can be achieved through an effort in their own particular element. Unless there is someone who brings all of these together, the net effect is to create burdens which could sap the strength of our economic system. Similarly, there are great pressures on the military program from every particular element, and the catalytic factor provided by the Press and Congress might make it explode. In working for permanent security, we must give due consideration to the right "take" from the economy--one which will permit the economy to remain viable and strong.)

5. Suggestions/recommendations initiated: Policy recommendations and suggestions offered by the decisionmaker are recorded. (e.g. I suggested to the State Department that we begin to build up some other individual as a progressive leader of the the Arab world--in the thought that mutually antagonistic personal ambitions might disrupt the aggressive plans that Nasser is evidently developing. My own choice of such a rival is King Saud.)
6. Expresses agreement with other policymaker: (e.g. And the President indicated concurrence. The President said he was inclined to agree.)
7. Expresses disagreement with other policymaker: (e.g. The President said he did not think as simple an approach as that is possible. The President went on to say that he did not

care too much for the definition of general war as given.)

8. Single interpretation/option: The decisionmaker focuses on one interpretation of some information or a single policy option. (e.g. In the succeeding discussion the President said he saw no reason why the Army should have jet aircraft, requiring jet airfields.)
9. Multiple interpretations/options: The decisionmaker focuses on more than one interpretation of some information or on several policy options. (e.g. In a diary entry addressing the possibility of the U.S. bringing about some kind of rapprochement between Egypt and Israel, Eisenhower wrote: There is, of course, no easy answer. The oil of the Arab world has grown increasingly important to all of Europe. The economy of European countries would collapse if those oil supplies were cut off. If the economy of Europe would collapse, the United States would be in a situation of which the difficulty could scarcely be exaggerated. On the other hand, Israel, a tiny nation, surrounded by enemies, is nevertheless one that we have recognized--and on top of this, that has a very strong position in the heart and emotions of the Western world because of the tragic suffering of the Jews throughout twenty-five hundred years of history.)

Time Orientation: Eisenhower's time orientation is coded in the following manner. If more than one time reference is referred to, then multiple categories are coded and explained.

1. Past: References to past experiences, historical analogies, and expression of a desire to go back in time are recorded in this category. (e.g. The President thought it would be advantageous to have the unit there. He recalled that he had asked for such a unit when he was in command in NATO. He did not think that the movement would have a damaging impact.)
2. Present: Emphasis on the current situation and the short term. (e.g. He thought that we should, in the present critical world situation, probably focus our attention and our priorities somewhat more on the shorter term.)
3. Future: Emphasis on longer time horizons; stress on planning and the creation of opportunities. (e.g. Reflecting on the Israeli and Egyptian acceptance of terms of the UN cease-fire in 1956, Eisenhower emphasized the future role of the U.S.: Simultaneously we must lay before the several governments information and proposals that will establish real peace in the area and, above all, exclude communist influence from making any headway there. There are a number of things to do. We would make some kind of arms agreement--particularly maintenance and training--with Israel exactly the same type we could make with Egypt. We could

explore other means of assisting the Arab states of Iraq, Jordan, Saudi Arabia, and Lebanon, and develop ways and means of strengthening our economic and friendly ties with each of these countries, either on a bilateral or group basis.)

Problem emphasis: There are two dimensions for which information will be coded in this category. Problem emphasis focuses on the types of problems that the decisionmaker addresses.

1. Issues: When the discussion, conversation, letter, diary, or memo focuses on theoretical, technical, or administrative issues. (e.g. White House meeting with Eisenhower, Admiral Strauss, Dr. Ernest Lawrence, Dr. Mark Mills, Dr. Edward Teller, and General Goodpaster on atomic weapons policy and fall-out from nuclear weapons.)
2. Human relations: When the discussion focuses on personalities and interpersonal relations among staff and advisors. (e.g. Diary entry, September 26, 1936: TJ and I came in for a terrible bawling out over a most ridiculous affair. The general has been following the Literary Digest poll and has convinced himself that Landon is to be elected, probably by a landslide. I showed him letters from Arthur Hurd, which predict that Landon cannot even carry Kansas, but he got perfectly furious when TJ and I counseled caution in studying the Digest report.)

a. Concrete problem:

1. Routine: (e.g. Meeting with Joint Chiefs of Staff, April 1956: Reflects Eisenhower's interest and activity in area of interservice rivalry.)
2. Implementation: (e.g. Meeting with Dr. Killian, July 1958: Eisenhower is actively involved in the implementation of the Space Bill.)

b. Abstract problem:

1. Focus on concepts, ideas, theories: (e.g. Meeting with Admiral Radford and General Taylor, May 24, 1956: Eisenhower focuses on concepts of general war and deterrence.)
2. Identify/define/refer to new problem: (e.g. In a meeting with members of the U.S. delegation to the surprise attack military discussions in Geneva: The President then said that somehow we must find a mechanism which will disclose and assist in the elimination of duplicating weapons systems and weapons systems of purely an interim nature, and which would identify those areas in which we had too much procurement.)

Some problems are obviously characterized by both concrete and abstract features. This is noted in the coding of the documents.

The data produced through this type of analysis is judgmental in nature and often open to question. Therefore, explicit notes on each coding decision have been kept and are available

for review.

### Analysis Procedures

The major question that remains before proceeding to the actual analysis of Eisenhower's cognitive style is what is the expected relationship between the four cognitive style types discussed in Chapter One and the individual behaviors being monitored according to these coding guidelines? What follows is a brief sketch of each cognitive style in terms of the empirical indicators proposed in this research. Each sketch includes a discussion of a) information gathering; b) information evaluation; c) time orientation; and d) problem emphasis.

#### Systematic Style (sensation-thinking)

A. Information gathering: The systematic decisionmaker would make a fairly large number of requests for information that are focused/non-evaluative because this type of individual is usually frustrated by not having the facts and figures. To the extent that systematic types provide a fairly careful definition of work roles and assignments, directives will be indicated. Rhetorical questions are less likely or more infrequent. Probes will be used by the speculative decisionmaker to check for accuracy of information, usually of a factual nature. The systematic decisionmaker will note a lack of information in terms

of concrete facts and figures and will make requests for studies to correct the situation.

B. Information evaluation: The systematic decisionmaker will approach information evaluation in terms of true or false rather than like or dislike. Analysis and study will be praised by the systematic decisionmaker who is interested in weighing costs and benefits and wishes to see information presented in an organized fashion. The systematic decisionmaker will offer explanations and rationales emphasizing costs and benefits, with a focus on clarifying and/or settling a situation. The systematic decisionmaker will both agree and disagree with advisors. A single interpretation or option is preferred by the systematic decisionmaker who is sometimes frustrated until a decision is made.

C. Time orientation: The systematic decisionmaker will focus on the present and the past.

D. Problem emphasis: The systematic decisionmaker will focus on issues rather than human relations. Within the context of those issues, the systematic decisionmaker will prefer to work on concrete problems which are routine and might focus on implementation tasks. Abstract problems emphasizing concepts and theories or the definition of new problems are less attractive to



the systematic decisionmaker.

Speculative Style (intuitive-thinking)

A. Information gathering: The speculative decisionmaker will make a large number of requests for information. These will take the form of focused/evaluative questions and global questions. Such questions will allow the speculative decisionmaker to gather information about contextual factors and the conceptualizations of advisors. Few of the speculative decisionmaker's questions will take the form of directives. However, the speculative decisionmaker will pose rhetorical questions as a way of assisting with the definition of problems. The speculative decision maker will use probes as part of a process of hypothesis testing and a way of getting at contextual information. The speculative decisionmaker is less likely to settle for the first response or a single response to a question. The speculative decisionmaker notes a lack of information through the request for reports. Reflecting his drive to solve new problems, the speculative decisionmaker often initiates the discussion of particular topics.

B. Information evaluation: The speculative decisionmaker will evaluate information using terms like true/false rather than like/dislike. Analysis and study will be praised by the

speculative decisionmaker with an emphasis on the incorporation of contextual factors. The speculative decisionmaker will provide explanations and rationales which are likely to reflect the relationships he sees among various ideas or units within an organization or system. The speculative decisionmaker will often make suggestions or recommendations as part of his interest in solving new problems and strategy of providing leadership through example. The speculative decisionmaker is comfortable expressing disagreement as well as agreement with advisors and leans toward multiple interpretations of information and multiple options.

C. Time orientation: The speculative decisionmaker will focus on the present and the future, reflecting his interest in identifying possibilities.

D. Problem emphasis: The speculative decisionmaker will focus on issues and pay minimal attention to human relations. Abstract problems related to the development of concepts, ideas and theories and the identification of new problems will appeal to the speculative decisionmaker.

Intuitive Style (intuitive-feeling)

A. Information gathering: The intuitive decisionmaker will ask fewer questions. His requests for information will take the form of global questions or focused/evaluative questions seeking information on political/ moral consequences. Directives will be kept to a minimum by the intuitive decisionmaker. The intuitive decisionmaker often poses rhetorical questions. Probes are seldom used by the intuitive decisionmaker. Only occasionally will the intuitive decisionmaker note a lack of information and he will sometimes initiate discussions of problems.

B. Information evaluation: The intuitive decisionmaker will evaluate information or ideas in terms of personal likes or dislikes rather than in terms of truth or falsity. Analysis and study are not praised by the intuitive decisionmaker and he seldom offers his own explanation or rationale supporting a position. The intuitive decisionmaker will make suggestions and recommendations. Most of the time you will find the intuitive decisionmaker in agreement with others. The intuitive decisionmaker will offer multiple interpretations of information, often designed to fit the audience.

C. Time orientation: The intuitive decisionmaker will focus on long-term goals in the future.

D. Problem emphasis: The intuitive decisionmaker will focus on global human issues reflecting his interest in serving humanity. The intuitive decisionmaker will not focus on narrowly defined human relations problems or purely theoretical administrative or technical issues. He will emphasize abstract problems to the exclusion of concrete problems.

Judicial Style (sensation-feeling)

A. Information gathering: The judicial decisionmaker will ask fewer questions. His requests for information will be focused/non-evaluative. Some may be global in the form of "what's your opinion on this". This may suggest that the decisionmaker is not familiar enough with the topic to be more focused. Directives will be kept to a minimum as will be rhetorical questions. The judicial decisionmaker will not rely on probes. Most of the probes will take the form of comments rather than questions. The judicial decisionmaker will rarely note a lack of information. While the judicial decisionmaker will respond easily to the ideas of others, he will not initiate discussions of topics, particularly areas he is not familiar with.

B. Information evaluation: The judicial decisionmaker will evaluate information in terms of personal likes and dislikes. Orderly and logical analysis will be supported if it is not too deep. The judicial decisionmaker rarely makes suggestions or recommendations but is prepared to respond to those presented by others. The judicial decisionmaker is often in agreement with advisors reflecting his preference for not fighting the system and avoiding conflict. The judicial decisionmaker will offer or support a single interpretation of information or a single option. This reflects his interest in maintaining the status quo and negative reaction to change.

C. Time orientation: The judicial decisionmaker will focus on the present--what needs to be accomplished now.

D. Problem emphasis: The judicial decisionmaker will emphasize human relations questions and will prefer to work on concrete problems which are more routine and structured.

Chapter Three offers a profile of Eisenhower's cognitive style based on the conceptualizations and coding guidelines presented here. The goal is to provide a careful interpretation of Eisenhower's cognitive style based on an examination of the frequencies and patterns of behaviors monitored throughout the documents.

## CHAPTER III

### EISENHOWER'S COGNITIVE STYLE

In this chapter I will present an analysis of Eisenhower's decisionmaking based on the conceptualization of cognitive style offered in Chapter One and the coding strategy described in Chapter Two. As you recall, there are at least four different cognitive styles: systematic, speculative, judicial and intuitive. These represent ideal types and no individual is likely to exhibit all of the characteristics associated with any one type. However, I believe it is possible to categorize decisionmakers in terms of the style which they most closely resemble. After carefully reviewing three hundred documents generated by Eisenhower or in decision settings in which he was a participant, I conclude that the speculative style most accurately describes his cognitive style. However, this style doesn't "fit" perfectly and deviations from this type are one of the subjects to be discussed in this chapter.

Before moving on to the actual discussion of Eisenhower, it is important to note some qualifications in this research which influenced the coding and interpretation of documents, and ultimately, my overall assessment of Eisenhower's cognitive style.

Some of these issues relate to the nature of the data base and other issues relate to the coding strategy I adopted. First, as noted in Chapter Two, there are "missing data" problems as in most empirical research. I did not have access to records which document all of the decisionmaking, information gathering and information evaluation in the Eisenhower administration. Many policy discussions were simply not recorded and records of other discussions are not available or have been "sanitized" in the process of declassification. More specifically, I did not have access to the briefing papers and background documents that served as the backdrop to much of the policy discussion I have records of. For example, references are often made to a particular National Security Council Memorandum at an NSC meeting, but the actual memorandum has not been released. In other cases it is not atypical to find a memorandum of a conference with the President in which an advisor opened with a presentation and a discussion follows. However, a summary of the actual presentation is often omitted. For example, in a meeting on White House administrative issues, the memorandum of the conference reports that Mr. Carter Burgess made a presentation to the President on the subject of White House Staff organization and staff procedures.<sup>1</sup> A summary of the discussion which followed is included but the interpretation of that discussion is hindered by not having access to the initial presentation.

Second, most of the memoranda of meetings and conversations are not verbatim records but summaries. While they do provide a very rich source of information about individual and group decisionmaking processes, it is important to note that information which was included or excluded is influencing my interpretation in ways that I cannot control for. This issue is dramatically illustrated when you compare and contrast two different summaries of the same conversation or meeting. Both Dulles and Eisenhower had their secretaries listen in on their phone conversations and take notes. Sometimes Dulles would dictate his own summary of the conversation. Therefore, in a few cases I have been able to examine two versions of the same phone conversation. To illustrate, here are two summaries of a phone conversation between Dulles and Eisenhower in October of 1956. The subject is the Middle East and the Suez situation. The first summary is authored by Dulles and the second summary is authored by Eisenhower's secretary, probably Ann Whitman.

I called the President to say that as he had doubtless been informed there had been no Israeli action this morning. The President said he had been informed by Goodpaster.

I said that I was thinking of advising Bohlen to inform the Soviet Government of the passage in my Dallas speech upon which we had worked together, indicating that we did not look upon these satellite countries as potential military allies. The President thought this was a good idea. He also raised the question of whether we should at this point be getting in touch informally with Nehru. I said I had had a similar idea and that indeed we had talked it over on the plane coming back from Dallas. I thought perhaps we might get any thoughts we



had to the Russians through Nehru better than directly. The President said he also had in mind that we might establish better relations with India in view of a possible disillusionment of Nehru about Soviet policy.

The President suggested that this would be a good time really to talk with the Russians. I said that we have to be extremely careful not to do anything which could be misinterpreted in the satellite countries to indicate that we were selling them out and dealing with their hated masters behind their backs. The President expressed complete agreement that we must avoid anything of this sort.

Here is the summary by Eisenhower's secretary.

Secretary Dulles called the President. Said nothing had happened overnight with regard to the Israeli mobilization.

President asked if Dulles had read cable from Lawson concerning his conversation with Ben Gurion. President said it was interesting; despite what seemed to be rationalizations on the part of Ben Gurion, Lawson felt definitely Ben Gurion was not talking frankly to him.

The President said at least things on both fronts--Hungary and Israel--seemed a little better this morning than last evening. Dulles replied that at least 'we have gained 24 hours'.

Dulles said he was wondering if it would be desirable to try to find occasion for Bohlen to bring to the attention of the Soviet Government at as high a level as possible, the statement he made in his Dallas speech, saying that he had made it with full approval of the President.

President agreed, and said it might be a good thing to try to draw Nehru into it--cited letter that he had dictated to Dulles just a few minutes before--that Nehru must have some feelings that perhaps he ought to strengthen his ties with the West, if some face-saving device could be found by which he could do so. Dulles had been thinking along same lines, and had dictated on

plane coming back from Dallas something (directed toward the Soviets) of the same nature.

The President said that they might be willing to talk sense now more than at any time since Administration has been in power. Said approach might be that things are not going the way any of us want, better have a meeting that recognizes these points.

At this point President questioned Shepilov, but Dulles said he was pretty far down in the Soviet hierarchy.

Dulles said that undoubtedly there was a battle on in the Presidium--some of the people probably would want to go back to the old Stalinistic policies--but Dulles said, that was not too late. He said they were 'up against a tough problem.' The President agreed, and said we had to take advantage of that. Now is the time to talk (more) about reducing tensions in the world. Dulles agreed, but said we would have to be very careful not to do anything that would look to the satellite world as though we were selling them out.

The President of course agreed, said nothing could be done until present thing had settled down, but went back to Nehru and said that he might now be thinking about Soviet colonialism and imperialism in slightly different terms.<sup>3</sup>

Depending on which summary one referred to, different information would be inferred regarding such issues as the number and kinds of questions that Eisenhower asked, who initiated topics, the tone of the interaction, and who initiated suggestions and recommendations.

Third, certain coding categories that I have adopted present some conceptual problems. For this reason merely counting the frequencies of certain behaviors is not the most appropriate strategy. Although quantitative information based on the coding will be presented, this is a research area where it is very important to look at qualitative information and engage in careful interpretation. One of the categories that typifies this issue is examining the quantity and types of questions Eisenhower asked in order to assess his information gathering strategy. Even with the number of question categories examined (see Chapter Two), these simply do not capture the quite varied characters of the questions. Some questions are very brief such as "Have you read the report?" while other questions are very elaborate and sometimes constitute an entire document, as in the case when Eisenhower drafts a memo to an advisor which is basically a request for information. A good example of such a question is the one posed by Eisenhower to his brother Edgar in a confidential letter dated April 3, 1956. The President took three pages to lay out a hypothetical legal question regarding the implications of the Bricker Amendment. On the fourth and last page of the letter he finally says to Edgar "My question is: What is the answer?"<sup>4</sup> Each of these questions may be coded as "one" question, but clearly they should not have the same weight. This kind of distinction can be elaborated on in a qualitative way, but it is a difficult problem to handle in a quantitative summary of the

data.

Fourth, contextual factors influence the interpretation of inferences made from these documents. For example, it is important not to interpret the absence of questions on the part of Eisenhower at a National Security Council meeting as a definite indication that he is not very interested in gathering information or is only interested in gathering a certain type of information. One could argue that if the staff and advisors have done their work properly, the President shouldn't have to ask the important questions; the points will already have been covered as a result of good staff work. While not wanting to carry this point too far, this example illustrates the type of contextual information it is important to monitor and reminds us of the necessity of qualifying conclusions which are based solely on easily quantified indicators.

Finally, the documents analyzed in this research are not parallel in purpose, content or style. I learn different things about Eisenhower's cognitive style from diaries than from summaries of policy meetings or phone conversations. For example, the diaries are not very helpful when it comes to making inferences about Eisenhower's information gathering. Eisenhower does not make "requests for information" in his diary and since they are personal diaries, Eisenhower, of course, "initiates all

of the discussions of topics and problems". While it would be plausible for Eisenhower to note a lack of information on his part in the entries, this is not the most probable setting in which to discern that type of information. The diary entries are most helpful in assessing how Eisenhower tends to evaluate information and his preferences in terms of time orientation and problem emphasis. The records of Eisenhower's phone conversations and interactions with advisors at policy meetings are more helpful in assessing his information gathering strategies since it is possible to look at questions he asks. Personal correspondence and policy memoranda authored by Eisenhower provide information on all four dimensions of cognitive style--information gathering, information evaluation, time orientation, and problem emphasis. However, fewer of these documents were available compared to the others and in actuality they seem to provide more assistance with information evaluation.

Given the different types of information that are most likely to be inferred from the various documents, it is worth noting that the type and quantity of documents which were available to me vary throughout the Eisenhower administration. Table 1 provides a summary of the number of recording units (documents or sections of documents) that were coded, both by category and by year in the Eisenhower administration.

TABLE 1 Number of Documents Coded by Type and Year

	1953	1954	1955	1956	1957	1958	1959	1960	
Diary <sup>a</sup>	18	12	3	19	0	1	0	0	53
Corr <sup>b</sup>	3	1	2	3	1	1	0	0	11
Memos <sup>c</sup>	7	5	9	6	1	2	0	0	30
Phone <sup>d</sup>	7	47	17	32	10	23	1	0	137
Meet <sup>e</sup>	4	1	2	32	4	10	10	5	68
Total	39	66	33	82	16	37	11	5	299

<sup>a</sup> refers to individual diary entries.

<sup>b</sup> refers to Eisenhower's personal correspondence.

<sup>c</sup> refers to policy memoranda authored by Eisenhower.

<sup>d</sup> refers to memoranda of telephone conversations (most of these are calls between Eisenhower and Dulles).

<sup>e</sup> refers to memoranda of policy meetings including National Security Council meetings and other White House meetings.

Memoranda of conversations (mostly phone conversations) were most plentiful by far, followed by summaries of policy meetings and diary entries. Policy memoranda and personal correspondence authored by Eisenhower were in short supply. More documents were available for the years 1956, 1954, 1953 and 1958 than the other years of the administration. Also, the mix of documents by type varies from year to year. I raise this issue to once again point out the potential problems associated with trying to summarize this rich information base on Eisenhower in a rigid quantitative fashion. For example, the most plentiful documents, phone conversations, are very helpful in looking at aspects of Eisenhower's information gathering strategies. However, additional policy memoranda authored by Eisenhower would have facilitated a more detailed analysis of his approach to information evaluation.

#### Preview of Eisenhower's Cognitive Style

Before proceeding to a detailed assesment of Eisenhower's cognitive style based on a quantitative and qualitative review of the documents I will provide a brief summary of the conclusions that I have drawn. This preview is designed as a backdrop for the evidence that will be presented in the next section.

Of the four styles described in Chapters One and Two, Eisenhower's cognitive style seems to most closely resemble the speculative style which reflects a more intuitive approach to information gathering and a thinking approach to information evaluation. I will summarize the major characteristics of his style with respect to: (1) information gathering; (2) information evaluation; (3) his time orientation; and (4) problem emphasis.

#### Information Gathering

Like the speculative decisionmaker Eisenhower does seem to make requests for information on a fairly regular basis. He usually asks focused evaluative questions, although he also uses focused-non-evaluative questions to gather information. He also poses rhetorical questions to assist with problem definition. Based on the available documents, Eisenhower does not use probes as often as one might expect of the speculative decisionmaker. Eisenhower is clearly interested in the "big picture" and seeks information about contextual factors related to problems and decisions. At the same time he also wants to see supporting evidence in terms of appropriate factual information. In this sense, Eisenhower would be more appropriately located at a point near the center of the sensation-intuitive continuum than at the end near the most purely intuitive type. However, Eisenhower does not believe that the "facts speak for themselves" and he is



not interested in the presentation of factual information that does not facilitate a better understanding of the big picture. Eisenhower often notes a lack of information and requests new studies or reports in order to cope with the situation. Reflecting his drive to solve new problems and acquire information, Eisenhower often initiates the discussion of particular topics in conversations, policy meetings and in policy memoranda. Unlike the purely intuitive decisionmaker, Eisenhower does not show a disdain for data. Unlike the pure sensation type, Eisenhower does not prefer only quantitative, highly detailed information. He seems to prefer a mix of objective and subjective data.

#### Information Evaluation

Eisenhower clearly emphasizes intellectual processes rather than affective and personal processes when evaluating information. He seems to prefer logical and systematic analysis of problems. Eisenhower encourages his advisors to carefully study and analyze situations emphasizing the incorporation of contextual factors in their analysis. Eisenhower regularly offers his own explanations and analysis of problems. His explanations are analytical and are presented in a logical fashion. Rather than merely reacting to the ideas and views of others, Eisenhower will often initiate recommendations. It is important to note that these are usually intended as suggestions and not

directives or orders. Eisenhower is interested in soliciting the reactions of advisors to these ideas. Eisenhower's active participation in the development of potential alternatives reflects his interest in solving new problems and seems to be part of a strategy of providing leadership through example. Eisenhower seems to be comfortable expressing his disagreement with advisors. However, it is not unusual to find him in fundamental agreement with his closest advisors. In many of his own explanations Eisenhower offers multiple interpretations of information or options. However, there are a few cases where he focuses primarily on one interpretation or option.

#### Time Orientation

One of the most striking aspects of Eisenhower's time orientation are the relatively few instances in which he refers to the past. Although he will sometimes make a passing reference to prior experiences or situations he has found himself in, he rarely looks to historical precedent as a strategy for making decisions. Eisenhower does not seem particularly interested in his own place in history and does not long for a previous time. Eisenhower is oriented to immediate concerns and their implications for the future. He regularly encourages advisors to look at long-run implications of policies and is quite critical of "politicians" in general due to their emphasis on the short-run

and getting re-elected. Eisenhower also looks to the future in terms of creating opportunities. Although many of the interactions recorded in these documents require Eisenhower to think in terms of immediate problems and decisions, it is not unusual to find him raising the long-range issues.

#### Problem Emphasis

In virtually all of the situations recorded in these documents Eisenhower focuses on issues rather than human relations. However, he is clearly perceptive about interpersonal questions and human motivations. This comes across in several of his diary entries, correspondence, and policy memoranda where he provides an overview of some of his advisors and analyzes their strengths and weaknesses. However, Eisenhower does not dwell on this type of analysis. More specifically, Eisenhower prefers to address more abstract questions related to the discussion and development of ideas, concepts and theories. However, he is usually prepared to respond to more routine questions and seems interested in implementation questions related to defense issues and organizational arrangements. In terms of his substantive interests, Eisenhower clearly emphasizes foreign policy problems. He is also very interested in administrative and organizational issues on a more theoretical basis. Although Eisenhower does not focus on routine questions or problems, he does pay a great deal of

attention to details. For example, he usually provides very detailed comments on the drafts of Dulles' speeches, always looking for just the right word or phrasing. Eisenhower participates in the identification and definition of new problems and is interested in the design of policy alternatives.

In the next section I will discuss the evidence which serves as the basis for these conclusions.

#### A Quantitative and Qualitative Look at the Documents

Again I have organized the discussion in terms of the four dimensions of cognitive style: information gathering, information evaluation, time orientation, and problem emphasis. In each section I will attempt to summarize what I found in the documents from both a quantitative and qualitative approach. Clearly, the frequencies and percentage figures presented in Tables 2 through 5 are very crude indicators given the issues and problems discussed at the beginning of this chapter. However, I compiled these figures to see if there were any general patterns that emerged and to see if these patterns supported my overall interpretation of Eisenhower's style based on a careful reading of the documents. In support of my qualitative analysis I will quote rather extensively from the documents.

### Information Gathering

As noted previously, this dimension of cognitive style presents the greatest difficulty to the outside observer. Eisenhower obviously had access to and reviewed a great deal of information. Some of this information he made specific requests for. Much information is "automatically" forwarded to the president. While Eisenhower read and studied portions of these materials and listened to many reports, he clearly did not pay attention to all of it. While these documents provide some insight into what he did pay attention to, I think this type of documentation is likely to result in an underestimation of the quantity of information requested or reviewed. In terms of type of information preferred it provides at least a first cut.

In trying to assess Eisenhower's information gathering style I focused primarily on his requests for information by looking at the number of questions he asked and the kinds of questions he asked. Policy memoranda authored by Eisenhower, summaries of phone conversations and memoranda of policy meetings in which he participated provide the richest sources of information in monitoring such requests. Column 1 in Table 2 reports the percentage of documents in which Eisenhower posed at least one question.

TABLE 2 Summary of Eisenhower's Information Gathering Behavior

1953-1960

	1	2	3	4	5	6	7	8	9
Diary <sup>a</sup>	8%			4				4%	
Corr <sup>b</sup>	9%				1				
Memos <sup>c</sup>	37%	15		2	2	1		10%	20%
Phone <sup>d</sup>	52%	60	22	7	9	10	2	4%	20%
NSC <sup>e</sup>	67%	17	9	1	8	1	8	5%	5%
Meet <sup>f</sup>	56%	35	8		5	1	5	14%	40%

<sup>a</sup> refers to 53 individual diary entries.

<sup>b</sup> refers to 11 personal correspondence documents.

<sup>c</sup> refers to 30 policy memoranda authored by Eisenhower.

<sup>d</sup> refers to 137 memoranda of telephone conversations.

<sup>e</sup> refers to memoranda for 18 National Security Council Meetings.

<sup>f</sup> refers to memoranda for 50 White House policy meetings.

Column 1: percentage of documents in which at least one question is asked

Column 2: total number of focused evaluative questions

Column 3: total number of focused non-evaluative questions

Column 4: total number of global questions

Column 5: total number of rhetorical questions

Column 6: total number of directives

Column 7: total number of probes

Column 8: percentage of documents in which information shortage is noted

Column 9: percentage of documents in which Eisenhower initiates discussion of topic

For example, we find that Eisenhower asked questions or made requests for information in 67% of the National Security Council meetings, in 56% of the other foreign policy conferences, in 52% of the phone conferences, and in 37% of the policy memos he authored. These figures provide at least some preliminary evidence that Eisenhower actively sought information and did not merely listen or react to what his advisors were saying.

Columns 2 through 6 in Table 2 provide information on the total number of different types of questions that Eisenhower posed in the various settings. In the phone conversations Eisenhower asked sixty focused evaluative questions compared with twenty-two focused non-evaluative questions and seven global questions. In NSC meetings and other foreign policy conferences, he asked about twice as many focused evaluative as focused non-evaluative questions. A review of the documents shows that Eisenhower asked more focused evaluative questions than any other type followed by focused non-evaluative and rhetorical questions. Eisenhower's use of focused evaluative questions is typical of the speculative decisionmaker who is interested in more than the "facts". This type of question reflects his interest in gathering information about contextual factors and the conceptualizations and interpretations of advisors. Eisenhower's use of focused non-evaluative questions demonstrates his interest in accurate factual information. However, he does not rely

not rely primarily on this type of questioning strategy. Eisenhower's use of focused evaluative questions suggests that he was usually prepared and had done his homework. Otherwise he would not be able to identify relevant focused evaluative questions. Eisenhower seemed to use rhetorical questions as a way of assisting with the definition of problems and letting advisors know his priorities and concerns.

Although I expect the speculative decisionmaker to use probes or follow-up questions or comments as a strategy for gathering additional information, particularly contextual information, evidence of such probing on Eisenhower's part is not provided in these documents. This leads me to believe that the coding category might need to be revised or that the way in which the meetings and conversations are summarized may be interfering with my ability to monitor such probing. Similarly, Eisenhower does not often note a shortage of information.

It is important to note that Eisenhower does initiate the discussion of particular topics in conversations, meetings, policy memos and letters. In most cases Eisenhower raises particular questions or shifts the topic of the discussion or moves on to something that was not part of an advisor's original briefing. This can be viewed as one of his strategies for soliciting additional information. It also reflects his drive to



define and solve new problems.

In 1955 Eisenhower wrote a letter to Nelson Rockefeller who was chairing the executive group on psychological warfare. In this letter Eisenhower clearly demonstrates his interest in gathering information and being well-informed before giving a speech or making a policy decision.

Dear Nelson:

Mr. Repplier's idea has not been sufficiently staffed to warrant my discussing it with the Secretary of State. Repplier, like many others, has an idea that the 'President should make a speech.' Questions to be answered are:

- (a) Should anyone make a speech?
- (b) What subject should be the general purpose of the speech?
- (c) When should the speech be given?
- (d) Before what body should the speech be given?
- (e) What are the factual data which would best support the objective of the talk?

and a dozen other similar questions, including, in a matter as important as this, a very rough draft of the talk in order to express in concrete form the idea that the staff has agreed upon.

Each Agency interested should have its opportunity to give a reply to each of these questions. Any differences that are unresolved of course should finally be brought to my attention.

In the whole general subject of psychological warfare, the critical need of the President is for coordination. Hundreds of people have ideas affecting it; almost every returning traveler can tell the govern-

ment exactly what should be done to save the nation. Some of these ideas are good and of course others are generated right here in the government itself. The problem is to get the proper staff work of government--not of a special agency--on them, so that we may achieve true coordination. The Defense Department affects psychological warfare day by day, present and future. The same is true, of course, of MSA, a lot of the activities of ODM, Commerce, Agriculture, and, above all, State.

The problem is to have the effect of all these operations directed toward a common goal; the right hand must know what the left hand does.

The critical--the absolutely vital--mission of yourself and your office consists of the following:

(a) establishment of such splendid relationships with all concerned Departments that new ideas can be examined from every viewpoint and when necessary the result presented to me

(b) keeping in close contact as to the established or probable effect of every governmental action upon our standing in the world, and,

(c) keeping each Department informed as to what the others are doing in this respect, as well as keeping me informed.<sup>5</sup>

This letter from Eisenhower to Rockefeller concerning psychological warfare illustrates Eisenhower's general interest in being informed and soliciting ideas and information from groups inside and outside government. As Henderson (1984) has noted, Eisenhower often utilized special advisory groups to deal with such topics as continental defense policy, RD policy and basic national security policy.

At a conference with the Joint Chiefs of Staff concerning a broad-ranging review of policy in the military sphere, Eisenhower spells out his preferences in terms of information gathering. He makes some specific requests for information from the Joint Chiefs of Staff. Although Colonel Goodpaster had put together an outline for the meeting, that outline which Eisenhower refers to in the summary of the meeting is not available.

The President began by discussing the outline reflecting his comments to Admiral Radford on the 13th which I (Colonel Goodpaster) had prepared and provided to the Chiefs. He said that in developing their views they might, of course, wish to put in a caveat in the third section which recognized that many of the matters involved were not primarily military--this when they impinged on State Department considerations. Admiral Radford said the Chiefs were a little staggered by the outline--it really embraces everything in the military sphere.

The President said he was not interested in long treatises, but simply their conclusions on the major elements under the various headings, and he thought the outline set out what would have to be considered in reaching a judgment as to the military program. He thought they could work out the first section by themselves, the second might require some consultation with State, and the third should be general observations and reflections. Under the first heading, they could refer to any past calculations of our military position they thought to be sound, and then could bring it up to date indicating where the situation had improved, and where it had worsened. For example, in 1953 steps had been taken to shift our Armed Forces to forces built more around air and tactical strength. Regarding missiles, one must consider what their significance to be. It might be found that most of the missiles were simply added means of doing a job of destruction adequately provided for. The 5500-mile missile might give the USSR a capability they do not now have. With regard to keeping up to date, the question was what kind of military effort should we shift to--how do we keep pace with the changing face of warfare.

With regard to the second and third points, he cited as the types of views toward which they should aim an observation by a well-informed observer that we need bigger sums for economic aid, particularly in Asia. There are reports of international movements of bank funds, rendering certain nations less vulnerable to fund seizure. The significance of such moves, and lines of action in light of them, should be considered. He indicated he was more interested in this type of thing than in particular force or program levels. These can never be completely fixed. In their analysis, no specific force levels should be considered sacrosanct--all should be help up to examination, and study made of the kinds of forces which would help us better to meet situations threatening our interests. He said he would like to see them try such a paper--the more concise the better.

Eisenhower's comments to the Chiefs illustrate several aspects of his approach to information gathering. First, he is very interested in gathering information. Based on Radford's comment that the Chiefs were a little staggered by the outline he proposed, it is clear that Eisenhower was making a substantial request for information in terms of quantity. Second, Eisenhower is not primarily interested in easily quantified data such as particular force or program levels. Rather he is posing focused evaluative questions in order to get a better sense of the big picture in the military sphere. He is clearly interested in the implications of alternative scenarios and contextual factors which should influence what general lines of action the U.S. should be taking. Eisenhower is interested in posing "what if" questions as a strategy for studying alternative policies.

For instance, what kind of military effort should the U.S. shift to in order to keep pace with the changing face of warfare? Eisenhower is not simply interested in quantitative data regarding the specifics of current policies. He is interested in gathering information that will assist in the consideration of future possibilities and opportunities.

In January of 1954 Eisenhower devoted a great deal of attention to the debate over the Bricker Amendment. Throughout the discussions of this issue Eisenhower demonstrated his interest in gathering information on the implications of the amendment and being kept informed on the status of the amendment. Eisenhower's interest in being informed is reflected in the following phone conversation with Senator Knowland.

President called Senator Knowland: "I have been talking busily on the telephone. There seems to be some confusion of opinion--some of my friends are telling me there are some gimmicks in the amendment (the one worked out in his office this morning). These people believe we are going too fast on the thing. I told them I made clear to you this morning and again this afternoon that so far as I was able to see, it was along the lines that I believe, but that I could not be quoted as favorable for the simple reason that I am not a lawyer. Two things have come up since the last legal study. Ferguson and Millikin one thing; and I have had a long list of things from the State Department. State has been quoting examples that would have a terrific effect in war time. You could not allow a Canadian squadron to pass across our country--for example.

Knowland: I would not want frankly to go ahead with this if the Administration or the State Department was going over there (to House or State?) on a general de-gutting

of the thing. Two methods could be taken: (1) Originate up here (Senate) and go out to State; or (2) the reverse, originate in states and come back here.

Eisenhower: As I said this morning, I realize you people have to act on the affirmative side if you are going to keep this thing from complete disaster. I would have to have the privilege of telling the House exactly where I stand. What is your timetable that you have to have to get your things in order?

Knowland said he would not put it in tonight. Is planning to call a recess soon. So far has merely said "we have discussed it and have made some progress." Discussion will go on tonight. If anything is to be announced, he will have a press conference tomorrow.

Eisenhower: "I think you and I had better have a talk as late as you can before putting the thing in. Terrific doubts are being thrown at me. As you know, I am anxious to do the thing that makes your political job easier, but I simply cannot sacrifice what seems to the mass of people around me to go against the best interests of the people of the United States. I know you feel the same way."

Knowland: "I won't be up for reelection, but I'll be here for four years. I want to do things in your best interests. That's the way I work."

Eisenhower: "I feel that we could emphasize your position there and stop such things as I hinted at this morning. I am anxious for you to find a good satisfactory answer, but it must be satisfactory. Please don't do anything irrevocable until we have a chance to talk again.

Eisenhower said some of the people who had been talking to him had suggested he call Wiley. Knowland said in answer to question, he would say that the President definitely not call him, would not be wise to "rock the boat" at this time.

Eisenhower: "Well, I will confer with no one else until I talk to you again. In the meantime, as a non-lawyer these things don't look to me too dangerous, but people are trying to open my eyes to Millikin."

In order to gather information Eisenhower often asks focused evaluative questions. The focus of the questions demonstrates that Eisenhower was usually prepared and had done his homework. Otherwise, he would have been unable to initiate some of the questions that he raises. The focused evaluative questions also suggest that he is interested in gathering contextual and interpretative information in addition to concrete facts. The following letter to his brother Edgar regarding the implications of the Bricker Amendment, illustrates the type of focused evaluative question he often used.

April 3, 1956

Dear Ed:

Here are the elements of a legal problem that I put up to you for an opinion. I admit that you can, like the Supreme Court, refuse to answer a hypothetical question, but in my position I am forced to consider these and make decisions on the conclusions I form. Let us make certain assumptions.

(a) That the Bricker Amendment has been passed in a form somewhat as follows: "Any treaty or other international agreement that is in violation of any provision of this Constitution shall have no force or effect."

(b) That I, with the State Department, have at last succeeded in establishing satisfactory mutual inspectional systems with the Russians of which--as a preliminary to a partial disarmament plan--the purpose would be to get a plan started that would initially allow us to cut some five to six billion off a thirty-seven billion annual expenditure program for the armed services. (We are not talking in very great amounts; sums that account in their total for far more than half our yearly budget.)

Now as this international agreement proceeds, we are very careful to look into all of the Eisenhower repositories of arms and armaments that the Russians would have. For example, we would demand that the forces of their satellites, as well as of the so-called independent Republics--the Ukraine and so on--all be counted in the total armaments to which the Soviets would be entitled. In the same way, we would have to agree that we were talking about the sum total of warlike arms and armaments maintained in the whole United States.

Of course, the Russians know every single detail of our organization, including our Federalized form of government. Quite naturally, therefore, they will say that, since the matter of reserves is always important to a military system, the National Guard must be included in the framework of the military structure our country could maintain. This would be only fair.

So, we assume that in this treaty the United States and Soviets succeed in devising a mutually agreeable disarmament plan on the basis I have just outlined. It would be one in which we would have every confidence because of our unlimited power of inspection to see that the other fellow didn't break its terms. He would have the same privilege with respect to us.

(c) Now we assume that the treaty goes before the Senate where it is received with great acclaim because it offers some beginning to the lifting of the great burden of armaments; a burden that is not in itself depressing and damaging to our efforts to raise standards, but carries the threat always of an unspeakable type of war.

So we assume that the treaty passes with practically a unanimous vote in the Senate.

(d) The next assumption is that some State decides to maintain--at its own expense--larger armaments than the Federal Government had agreed to in the treaty. It does so under the second amendment to the Constitution, which you remember states that the right of the people to bear arms shall not be infringed.

My question is: What is the answer?<sup>8</sup>



As noted in other recent accounts of decisionmaking in the Eisenhower administration (Greenstein, 1982; Immerman, 1979), Eisenhower and Dulles spoke with each other frequently each day by phone. In the summaries of these phone conversations, it is evident that Eisenhower is calling the shots and probing Dulles for information. Clearly one of Dulles' primary tasks is to keep Eisenhower well informed by responding to his requests for information. The following conversation which took place during the Suez crisis in the autumn of 1956 is typical of the Eisenhower-Dulles interaction. In this instance Eisenhower asks Dulles five questions--three are focused evaluative and two are focused non-evaluative. Eisenhower requested both interpretative and factual information from Dulles.

Secy. Dulles.

He will proceed on the UN matter at 3 o'clock today. Will have their resolution then. British and French have asked that action should be suspended until consideration could be given to the Eden proposals. But they propose to go ahead, and state that 2 items (Israeli invasion; and Suez Canal) should be kept separate and distinct. Dulles said they have a 12-hour ultimatum to Egypt that is about as crude and brutal as anything he has ever seen. He does not think there is much use in studying it. Said that of course by tomorrow they will be in.

The President asked, aren't they partially in now? Mr. Dulles did not know, but thinks not yet. They have this 12-hour ultimatum apparently at noon.

President asked why they suggest waiting. Dulles said their reason is that Eden has made an important speech, and they want us to wait until we study it.

The President just now received the ultimatum--so Mr. Dulles read his copy aloud. The President agreed that it was pretty rough.

Dulles said it is utterly unacceptable.

President thinks they would expect the Russians to be in on this. Asked where is Egypt going to turn?

Mr. Dulles said he did not know, but agreed with President on ideas of the Russians. He again said he thinks we should push ahead on our resolution.

President wondered how the request came to us. Dulles replied that Dixon gave it to Lodge in N.Y.; and they also had message from the French Embassy here suggesting we defer action on our matter today.

If we push it now, President asked, don't we tend to confuse these 2 issues?

Dulles replied, no, on the contrary. One would be armistice between Egypt and Israel. The Suez Canal is still on our agenda, and should be taken up under the other agenda item.

President said it is all right with him that they go ahead--and that, after all, they haven't consulted with us on anything.

In addition to more formal National Security Council meetings, Eisenhower frequently met with NSC members and other advisors to discuss various foreign policy and national security issues. At these sessions Eisenhower regularly raised focused evaluative questions and initiated the discussion of various topics. In 1957 Dr. James Killian presented the recommendations of the Planning Board to several members of the NSC regarding U.S. intelligence policies related to national security.

Excerpts from this conference show how Eisenhower focused the discussion, made additional requests for information and offered particular substantive comments.

The President asked several questions. Regarding the recommendation for improved coordination, is it coordination of the final product or of the acquisition activities that is contemplated? . . . Regarding the recommendations for clarifying the wartime setup, the speech President said that the best step that could have been taken would have been to locate CIA out of Washington, in his opinion. Other factors were allowed to outweigh this, and he thought the wartime usefulness would be very much limited as a result. With regard to the proposal for tighter supervision of "operations" conducted by CIA, the President questioned bringing more people to the supervisory process. Dr. Killian said that the principal aim was more definite and stronger procedures, although an increase by two or three in the people involved would be indicated. The President said he thought that the basic proposal for a special operation should be brought to him or to Secretary Dulles with a request for approval to develop a program. The program should then be thoroughly reviewed by a group such as provided for in NSC papers. The President asked how many people would be involved in the special scientific group that was proposed to attack one major problem, and Dr. Killian said 15 or 20 would be his estimate, working for a 4 to 6 month period.

The President said he gets a lot of separate intelligence items, and would see advantage in receiving, perhaps twice a week, an overall report by area, bringing separate details together and giving a judgment of general nature similar to the report of the Watch Committee . . .

In further discussion the President recalled that because of our having been caught by surprise in World War II, we are perhaps tending to go overboard in intelligence effort . . . The President concurred in the importance of screening but stressed that important items should not be held back, citing the experience of Short and Kimmel with regard to the Pearl Harbor messages.<sup>10</sup>

In addition to illustrating Eisenhower's strategy for gathering information in the context of a policy conference, these excerpts also document his general interest in staying informed and looking at the bigger picture.

Although National Security Council meetings were typically organized in a more formal fashion, Eisenhower did not simply sit back and listen to the reports and briefings. He usually initiated discussions and posed several questions to his advisors. The type of questions usually represented a mix of focused evaluative and focused non-evaluative. At the National Security Council meeting held on April 24, 1958, the Security Resources Panel of the Office of Defense Mobilization Science Advisory Committee reported to the President on the missile program. After the report was concluded Secretary McElroy from the Department of Defense made some comments. Eisenhower was the second person to comment and raise questions. Here are a few excerpts which illustrate Eisenhower's information gathering strategy at the meeting.

The President was next to comment. He first referred to the recommendation in Mr. Holaday's report that the number of IRBMs be increased from 8 to 12 squadrons and from 120 to 180 missiles as an initial operating capability in 1963. The President pointed out that by 1960 we were going to be in a position to know a lot more than we now do about the effectiveness of THOR and JUPITER missiles, and it would probably be true of the second generation of these missiles. Accordingly, some time about 1960 we may have to say that we are going to scrap

some of these missiles. The President therefore said he was inclined to question the value of the recommended increase to 180 of first-generation IRBMs.

The President said his next question concerned the allocation of a total of \$454 million for the TITAN missiles. The President said it seemed to him, in the light of these figures, that every time we fire off a TITAN-missile we are shooting away \$15 million. If this was indeed the case, he hoped there would be no misses and no near-misses! What exactly was the unit price of a TITAN missile?

In the same connection, the President noted that Mr. Holaday had stated that the TITAN missiles would be deployed at Denver, Colorado. This clearly troubled the President because, he said, the municipal authorities of Denver were constantly on his neck because of the abnormally large number of military installations in a city which was growing rapidly and which was facing severe congestion as a civilian air center . . . The President wondered if it was judged really necessary to put the ICBM installations so close to Denver. Why jam up a big city when other locations might be perfectly suitable?

Secretary Quarles replied that the sum of \$454 million mentioned by Mr. Holaday was not a fair figure against which to compute the unit price for these TITAN squadrons . . . The President sought assurance that the figure of \$454 million represented all the money allocated for research and development of the TITAN missile. There were no sums for this purpose placed elsewhere in the budget.

The President continued by asking Secretary Quarles to try to make a better case for convincing Eisenhower of the desirability of increasing the IOC of the IRBMs from 120 to 180, particularly in view of the heightened possibilities which could be envisaged for the second-generation IRBMs. The President warned that we could not let our defense programs pyramid simply because we had once established these programs.

The President then commented that we are now beginning to think of aircraft as becoming obsolescent, and so it is also with first-generation ballistic missiles. Despite this, we are going ahead full stem on the production both of aircraft and first-generation ballistic missiles. Perhaps the rate of obsolescence of the airplane will

actually be the slower of the two. Accordingly, it would seem that we must anticipate some very hard thinking if in four or five years' time we are to avoid presenting a bill to the public for these military programs which will creat unheard-of inflation in the United States.

The President then made inquiries of Mr. Holaday about the MACE aerodynamic missile, which was explained to be a second-generation MATADOR. In the same connection the President inquired as to why it was necessary to have both MACE and REGULUS aerodynamic missiles . . . The President then asked whether this meant that the REGULUS could not be launched from bases on land . . . The President continued, however, that the REGULUS ought to be simplified, in his opinion, so that it could be used on land, and the MACE program discarded.<sup>11</sup>

On September 27, 1956 Admiral Strauss summarized the State-Atomic Energy Commission report on the peaceful uses of atomic energy. Eisenhower actively participated in the discussion of the report as evidenced in the following excerpt from the National Security Council meeting.

The President replied that he had two questions in particular in mind. The first dealt with the newly erected atomic power plants in Great Britain. If one disregarded the capital costs, said the the President, could these atomic power plants produce electricity at costs which were competitive with electric power produced by conventional fuels? . . . The President then inquired as to the size of the British plants which he said he thought were very small. . . The resident then went on to say that essentially what he was trying to find out was whether our Shippingport plant would be more economical than the British atomic power plants.

The President said his second question concerned the weight of the atomic fuel which had been sent to Belgium as a one-time fuel for their new reactor.<sup>12</sup>

In these comments Eisenhower asks four questions; two focused evaluative questions and two focused non-evaluative questions. Once again he is interested in seeking both factual information and interpretative information.

In July of 1960 Eisenhower met with Secretary of State Herter, Colonel Goodpaster, Press Secretary Hagerty and a few other representatives from the State Department to discuss a variety of foreign policy issues, including matters before the UN, the situations in Cuba and the Congo, and requests for ICBMs. Excerpts from the summaries of this meeting illustrate the type of questions Eisenhower posed in less formal policy conferences. Once again, the emphasis is on focused evaluative questions. Eisenhower is clearly interested in gathering information.

Mr. Herter next reported on the status of the Nicaro plant. It is evident that we will probably have to close this plant. However, we are making a final attempt to negotiate its sale to the Cubans. The President asked what recourse we have if the Cubans force us to close it. He commented that our case regarding this plant should be stronger than with regard to private enterprises since its operation is based upon an intergovernmental agreement. Mr. Herter said we will simply do the best we can. The President went on to ask what we would do in case the Cubans try to take the Guantanamo Base over. He was not talking of the water supply, since we can meet minimum needs with water brought in by tanker. Mr. Herter said that as regards the base itself, we have a valid treaty not limited in duration, and subject to change only upon agreement by both parties. The President said what he wants to see is what we do if they attack and how we plan to do it.

The President said he was concerned that the UN was getting into something that it could not bring to a conclusion, and asked where this operation (in the Congo) would end in terms of running the country.

At this point the President asked in what specific military fields this could be done which would have real significance. He commented that everyone knows that if we added to our ICBM program it would be three years<sup>3</sup> before the additional items were actually off the line.

In addition to examining the types and quantity of questions that Eisenhower asks, one gets a sense of Eisenhower's interest in "evidence" in some of the passing remarks he makes. Commenting in his diary on the U.S. mobilization stockpile and the possibility of limited war, Eisenhower says:

The theory of the thirty-to-sixty day war has nothing whatsoever to back it up. While it is obvious that in thirty to sixty days the two giants in the atomic field might conceivably accomplish a mutual destruction of terrifying proportions, yet this would not in itself necessarily end the war.

During one of their many phone conversations, Eisenhower mentioned to Dulles an article in the morning newspaper in which Senator Green had criticized the administration on the question of bipartisanship in the area of foreign policy. Eisenhower said that:



sometime in an informal talk the whole question of bipartisanship could be brought up, even to the point of giving exact numbers on what we have done.<sup>15</sup>

Eisenhower was referring to the 130 to 140 times he had met with bipartisan groups on the Hill. Although he is not requesting evidence for himself, Eisenhower suggests that such evidence will be important in arguing against Senator Green's criticisms of the administration.

In a letter to Dulles on the Indian situation, Eisenhower opens with the following observation:

In the Indian situation I am struck by the amount of evidence we have that Nehru seems to be often more swayed by personality than by logical argument. He seems to be intensely personal in his whole approach, and I have no doubt that the recent meeting in my office was arranged by Mr. Nehru in order that his trusted lieutenant could give him a personal appraisal of my general attitude toward the world, India, and Nehru himself.<sup>16</sup>

This comment not only illustrates Eisenhower's attention to "evidence", but provides us with some insight into the kind of information he pays attention to. This letter demonstrates Eisenhower's sensitivities to the motivations and styles of other policymakers. It seems important to him to know that "Nehru seems to be swayed more by personality than by logical argument". This is the type of information preferred by someone with a more intuitive style toward information gathering. Although

Eisenhower is clearly interested in gathering relevant factual information (as exhibited in many of the questions he posed at policy meetings and in phone conversations), he is not primarily interested in very detailed, concrete data that is easily presented in a quantified form as typified by the individual with the sensation style toward information gathering.

In a phone conversation Eisenhower pleads with Dulles to keep the big picture in mind as he analyzes a particular problem.

President called Secretary Dulles. He had just been through exhaustive interview with some hundred people, brought in by Senator George, on cotton problem, and his request to the Secretary was to try to find something that would alleviate the situation, not to worsen it. He was asking Secretary of Agriculture, Joe Dodge, and Secretary of Commerce to review the matter and talk to Dulles. Dulles seemed a little offended, said that the Agriculture program had been voted down 8 to 1--compared to balance between oil and cotton. Senator George recognizes the international aspects, the President said . . . actually all the President pleaded for was for the Secretary to view the matter "with as broad an eye as possible."<sup>17</sup>

The more intuitive decisionmaker relies on personal introspection as well as various forms of factual information. It is not unusual to find Eisenhower acting on the basis of such introspection as well. Eisenhower's phone conversation with Bedell Smith on the issue of Quemoy is revealing in this regard.

Discussion of Quemoy. Smith sending long report sent in by Allison with regard to a confidential discussion some pro-American Japanese had with Chou-En-Lai. His estimate of situation serious.

Radford thinks Quemoy could be held, Ridgway differs. Smith and Eisenhower agree that if we go in, our prestige is at stake. We should not go in unless we can defend it. Discussion of Little Quemoy.

Smith asked about undertaking evacuation in case full-scale invasion is made.

President: My hunch is that once we get tied up in any one of these things our prestige is so completely involved.<sup>18</sup>

An individual who only wants the "facts" is unlikely to give much weight to "hunches".

A more intuitive type of decisionmaker is also interested in posing "what if" questions and thinking in terms of scenarios and possibilities. Thinking in terms of scenarios is quite typical of Eisenhower's information gathering style. An excerpt from a phone conversation with Dulles on the Formosa resolution before Congress illustrates this aspect of Eisenhower's style.

President said suppose there is actual fire on Tachens and they want to evacuate. If we go in, we are going to be in midst of battle, and only thing to do, it would seem, is to fight. That is pretty close to an act of war. President knows he has right to defend Formosa only so long as congress agrees to it.<sup>19</sup>

Finally, in terms of Eisenhower's obvious interests in gathering information on contextual factors related to policy decisions, this excerpt from a meeting with Senator Duff and Senator Saltonstall on national security and defense issues is revealing.

The President pointed out that the final decisions on national security are based on a careful judgment of national needs, with the full realization that we must expect these needs to continue indefinitely . . . He pointed out that whether or not we had adequate air power should be based on the adequacy of our deterrent power and not on numbers alone. He made it clear that determination is necessarily a matter of judgment and cannot be worked out on a mathematically exact basis by any one . . . The President pointed out that in any consideration of the adequacy of our security, we must take into account the striking power of our naval aviation as well as the location of our bases in close range of the Soviets. Furthermore, we have allies and the aviation of these allies must be taken into consideration in looking at the overall picture.<sup>20</sup>

This discussion by Eisenhower demonstrates his emphasis on taking into account contextual factors in the process of designing military programs. While the "numbers" are relevant, they alone are not adequate for making decisions.

Based on a careful examination of the available documents, Eisenhower seems to adopt a more intuitive approach to information gathering than a sensation approach. Although he is interested in relevant factual information, Eisenhower also prefers to look at the broader picture and examine contextual information.

### Information Evaluation

Eisenhower seems to be a thinking type who prefers systematic inquiry and makes decisions on the basis of logical analysis. Unlike the feeling type of individual, Eisenhower does not seem to evaluate information on the basis of affective and personal factors. In a letter to General Al Gruenther regarding U.S. policy and Formosa, Eisenhower offers his own analysis of how he evaluates information and proceeds to make a decision.

Of course, only time will tell how successful we have been. Every day will bring its problems and many of these will cause much more talking and haggling--even some thinking! More and more I find myself, in this type of situation--and perhaps it is because of my advancing years--tending to strip each problem down to its simplest possible forum. Having gotten the issue well defined in my mind, I try in the next step to determine what answer would best serve the long term advantage and welfare of the United States and free world. I then consider the immediate problem and what solution can we get that will best conform to the long term interests of the country and at the same time can command a sufficient approval in this country so as to secure the necessary Congressional action.

When I get a problem solved in this rough basis, I merely stick to the essential answer and let associates have a field day on words and terminology. (I suppose that many of those around me would protest that even in this field I am sometimes something of an autocrat and insist upon the employment of my own phraseology when I consider the issue important.) However, I really do try to stay out of this particular job as much as <sup>21</sup>my own characteristics, particularly my ego, will permit.

In Eisenhower's reconstruction of his decisionmaking, he views

himself as a rational problem solver.

Before turning to additional examples from the documents, I will briefly discuss the general findings of the quantitative analysis. The documents were only somewhat helpful in assessing whether Eisenhower evaluated specific pieces of information according to affective criteria or intellectual criteria. There were very few instances in which Eisenhower specifically commented on the accuracy of particular information or said he liked or disliked a particular report. Turning to Table 3, you will notice that I found no instances of Eisenhower evaluating information using terms such as "like" or "dislike". I identified a total of sixteen instances in which he commented on or questioned the truth or accuracy of some information. Although sixteen examples in almost three hundred documents do not constitute strong support for the idea that Eisenhower evaluated information using intellectual criteria, the absence of any affective comments about the data he was presented with is revealing and provides at least some preliminary support for my argument that Eisenhower's strategy for evaluating information is typified by the thinking type rather than the feeling type.

Table 3 Summary of Eisenhower's Information Evaluation Behavior  
1953-1960

	1	2	3	4	5	6	7	8	9
Diary <sup>a</sup>		8%	15%	62%	40%		4%	2%	17%
Corr <sup>b</sup>			18%	91%	27%				9%
Memos <sup>c</sup>		10%	23%	73%	40%	7%	7%	3%	20%
Phone <sup>d</sup>		3%	4%	21%	48%	28%	19%		3%
NSC <sup>e</sup>		11%		78%	50%	28%	33%		
Meet <sup>f</sup>		6%	16%	64%	52%	34%	14%		4%

<sup>a</sup> refers to 53 individual diary entries.

<sup>b</sup> refers to 11 personal correspondence documents.

<sup>c</sup> refers to 30 policy memoranda authored by Eisenhower.

<sup>d</sup> refers to 137 memoranda of phone conversations.

<sup>e</sup> refers to memoranda for 18 NSC meetings.

<sup>f</sup> refers to memoranda for 50 White House meetings.

All of the figures in the table refer to the percentage of documents in which the behavior was exhibited.

Column 1: evaluate information in terms of like/dislike

Column 2: evaluate information in terms of true/false

Column 3: analysis and study praised

Column 4: explanations/rationales offered

Column 5: suggestions/recommendations offered

Column 6: expresses agreement with advisor(s)

Column 7: expresses disagreement with advisor(s)

Column 8: focuses on single interpretation/option

Column 9: focuses on multiple interpretations/options

Eisenhower did explicitly encourage and praise the analysis and study of issues throughout the documents. Explicit comments such as these are more prevalent in the first couple of years of his administration. My sense is that once he set this tone with his advisors, he did not feel a need to reiterate this emphasis on a regular basis.

Perhaps one of the most appropriate and strongest indicators of Eisenhower's thinking style is the quantity and quality of analysis he engaged in during the administration. To what extent did Eisenhower engage in problem solving? This is reflected in the numerous explanations and suggestions he proposed. Table 3 shows that Eisenhower offered explanations and suggestions in a high proportion of the policy meetings and policy memoranda. He also offered his own analysis in his diary entries and many of the phone conversations. As you will see in upcoming examples, Eisenhower's explanations reflected his analysis of problems and the relationships he saw among ideas. His suggestions and policy recommendations are typical of the speculative decisionmaker who seeks to solve new problems and provide leadership through example.

Unlike the feeling type of decisionmaker who prefers to avoid conflict and is usually in agreement with advisors in order to promote consensus, Eisenhower seems comfortable expressing



disagreement with others when he differs with their judgment or analysis. As you can see in Table 3, Eisenhower both agrees and disagrees with advisors on a regular basis. Clearly he does not serve as a mere rubber stamp of his advisors' opinions. On the other hand, it is not surprising that he is often in agreement or supportive of his advisors, given that he selected them and often directed their activities.

In Chapter Two I hypothesized that the speculative decisionmaker would lean toward multiple interpretations of information and think in terms of multiple options when making decisions. The documents provide some interesting examples of Eisenhower engaging in such behavior. However, from a quantitative perspective, the frequency of such instances is not particularly high. On the other hand, there were only a few cases in which Eisenhower rather obviously adhered to a single interpretation or considered only a single option. The bottom line is that it was difficult to make such inferences from these documents. Remember, at this time I am not examining the number of options or interpretations that the entire advisory group or decision group considered--only what Eisenhower discussed or commented on.

While the record of the frequencies of the various behaviors related to information evaluation provides some preliminary evidence about Eisenhower's style, a closer examination of the documents is more revealing.

Eisenhower's interest in careful study and analysis of issues is displayed in a diary entry discussion of foreign trade.

A third commission is to study the whole problem of foreign trade. Here again, if we succeed in getting a thorough study and unbiased analysis, we should have a very sound background for the programs that we shall have to present to Congress during the coming months. Pressure groups always want to establish new tariffs--I believe that an increased volume of trade, with decreasing obstacles of all kinds, is absolutely essential to the future of the free world. Undoubtedly, at numerous places in this notebook, I have discussed the reasons for this. But this does not mean that the job of getting out people to examine this matter dispassionately and intelligently and with the hope of serving the enlightened self-interest of the United States is an easy one.<sup>22</sup>

Similarly, Eisenhower's preference for thoughtful analysis and study is evident as he ponders his first State of the Union address.

Today I give my first state of the union talk before a joint session of the Congress. I feel it a mistake for a new administration to be talking so soon after inauguration; basic principles, expounded in an inaugural talk, are one thing, but to begin talking concretely about a great array of specific problems is quite another. Time for study, exploration, and analysis is necessary. But, the Republicans have been so long out of power they want, and probably need, a pronouncement from their<sup>23</sup> president as a starting point. This I shall try to give.

As noted previously Eisenhower offers a great number of explanations and rationales which reflect his interest in engaging in analysis and thinking. Typically his explanations or rationales are well organized, analytical and logically presented. In an excerpt from a 1953 diary entry Eisenhower explains why he gave the Atoms for Peace speech and why he thinks it is important to promote the peaceful use of atomic science and materials.

The reasons were several. Of these, the first and principal one was exactly as stated--to make a clear effort to get the Soviet Union working with us in some phase of this whole atomic field that would have only peace and the good of mankind as a goal . . . Another important objective was to call the attention of the small nations of the world that they likewise had an interest in the uses to which the world would put its limited available supply of raw material, out of which the atomic bomb is made.

Another reason was that even in the event that the USSR would cooperate in such a plan for "propaganda purposes" that the United States could unquestionably afford to reduce its atomic stockpile by two or three times the amounts that the Russians might contribute to the United Nations agency, and still improve our relative position in the cold war and even in the event of the outbreak of war.

Another important reason was to give the population of our country the feeling--the certain knowledge--that they had not poured their substance into this whole development with the sole purpose and possibility of its being used for destruction. This effort also gave the opportunity to tell America and the world a very considerable story about the size and strength of our atomic capabilities, but to do it in such a way as to make this presentation an argument for peaceful negotiation rather than to present it<sup>24</sup> in an atmosphere of truculence, defiance, and threat.

Eisenhower's logical and systematic approach to examining information is clearly seen in excerpts from a letter to Secretary of Defense Wilson in which he summarizes his views on the general needs of the U.S. in military strength.

Certain considerations, applying more specifically to our own country's military preparation, are these:

First, the threat to our security is a continuing and many-sided one--there is, so far as we can determine, no single critical "danger date" and no single form of enemy action to which we could soundly gear all our defense preparations. We will never commit aggression, but we must always be ready to defeat it.

Second, true security for our country must be founded on a strong and expanding economy, readily convertible to the tasks of war.

Third, because scientific progress exerts a constantly increasing influence upon the character and conduct of war, and because America's most precious possession is the lives of her citizens, we should base our security upon military formations which make maximum use of science and technology in order to minimize numbers of men.

Fourth, due to the destructiveness of modern weapons and the increasing efficiency of long-range bombing aircraft, the United States has reason, for the first time in its history, to be deeply concerned over the serious effects which a sudden attack could conceivably inflict upon our country.

This provides a useful overview of Eisenhower's style of expressing himself and his analytical approach.

With respect to U.S. policy in the Middle East, it is clear from the documents that Eisenhower did not passively respond to or endorse the recommendations of his advisors. Rather he actively engaged in analysis about U.S. policy in that part of the world. After receiving a cable from Dulles in the spring of 1956, Eisenhower proceeded to do some "thinking aloud on paper" in his diary.

Of course, there can be no change in our basic position, which is that we must be friends with both contestants in that region in order that we can bring them closer together. To take sides could do nothing but to destroy our influence in leading toward a peaceful settlement of one of the most explosive situations in the world today . . . In any event, we have reached the point where it looks as if Egypt, under Nasser, is going to make no move whatsoever to meet the Israelites in an effort to settle outstanding differences. Moreover, the Arabs, absorbing major consignments of arms from the Soviets, are daily growing more arrogant and disregarding the interests of Western Europe and of the United States in the Middle East region. It would begin to appear that our efforts should be directed toward separating the Saudi Arabians from the Egyptians and concentrating, for the moment at least, in making the former see that their best interests lie with us, not with the Egyptians and with the Russians. We would, of course, have to make simultaneously a treaty with the Israelites that would protect the territory (possibly this might be done through a statement, but I rather think a treaty would become necessary).<sup>26</sup>

This entry not only illustrates Eisenhower's thinking approach, but also demonstrates his thinking in terms of policy recommendations. Throughout the documents Eisenhower offers fairly specific and substantive suggestions and recommendations in a variety of areas. A couple of weeks after this entry in his

diary, Eisenhower reported on an additional suggestion he made to the State Department regarding the Middle East.

A fundamental factor in the problem is the growing ambition of Nasser, the sense of power he has gained out of his associations with the Soviets, his belief that he can emerge as a true leader of the entire Arab world--and because of these beliefs, his rejection of every proposition advanced as a measure of conciliation between the Arabs and Israel.

Because of this, I suggested to the State Department that we begin to build up some other individual as a prospective leader of the Arab world--in the thought that mutually antagonistic personal ambitions might disrupt the aggressive plans that Nasser is evidently developing. My own choice of such a rival is King Saud. However, I do not know the man and, therefore, do not know whether he could be built up into the position I visualize. Nevertheless, Arabia is a country that contains the holy places of the Moslem world, and the Saudi Arabians are considered to be the most deeply religious of all the Arab groups. Consequently, the king could be built up, possibly, as a spiritual leader. Once this were accomplished we might begin to urge his right to political leadership. (Obviously, this is just a thought, but something of the nature ought to be developed in support of the other suggestions contained in this memorandum.)

27

In the fall of 1956 Eisenhower was very much involved in the design of alternatives regarding the Suez crisis and the ultimate management of the Canal. In a letter to Under Secretary of State Herbert Hoover, Eisenhower offers several suggestions for future study. Once again, this letter demonstrates Eisenhower's own analysis and interest in engaging in problem solving.

Dear Herbert:

As you could tell from my telephone conversation, I have not very definite views of what I might do either now or in the future in order to prevent the Suez business from getting out of hand. Some thoughts such as the following occur to me:

(a) Assuming that Foster finds the going very sticky at the UN, he might think it helpful if I should issue a White House statement outlining our position and detailing our step-by-step moves to keep the peace. The statement might also contain a frank warning that the United States will not support a war or warlike moves in the Suez area. It would insist that negotiations must be continued until a peaceful but just solution is reached--regardless of how long it takes.

(b) Without direct reference to the Suez, we might make public some of the results of studies conducted under the leadership of ODM concerning the world's future need for big tankers. If we should conclude to go ahead with the construction of some of these (approximately sixty thousand tons) regardless of the Suez affair, the announcement of our intention might have a calming effect.

(c) sanitized

(d) sanitized

(e) Could the Organization of American States serve any useful purpose now or in the future--such as a joint resolution or the like?

(f) sanitized

(g) A more spectacular thing might be for me to invite a number of nations to a conference, including most of the eighteen who agreed upon the "London Plan" as well as India, Egypt, Israel, and probably Saudi Arabia.

As you know, I am immersed in the sum total of affairs necessitated by governmental and political work. None of the items in this list has been deeply studied; I send it to you more as a clear indication of my readiness to participate in any way in<sup>28</sup> which I can be helpful than as a series of suggestions.

This memo to Hoover is typical of Eisenhower's role in analyzing problems and participating in the evaluation of information and alternatives.

In addition to analyzing the big policy issues and offering recommendations, Eisenhower regularly made suggestions to Dulles and other advisors about their speeches and other documents they were drafting. It is important to note again that Eisenhower paid attention to what many observers might view as details. As someone who was very interested in clarity and having others (leaders, advisors, the mass public) really understand the issues or problem, Eisenhower seemed to think it was important to comment and offer revisions as he does in the following conversation with Dulles on the Secretary's upcoming talk on U.S. -Soviet relations.

#### TELEPHONE CALL FROM THE PRESIDENT

The President had a second thought on the Secretary's talk: The President thought it is the time we want to get across that the conflict is not between the U.S. and the USSR but it is between civilization and poverty and disease and lack of opportunity on the other side. The uncommitted nations are not going to either. They are going where they can get their human aspirations satisfied. Play it up a bit more--this could stop the armaments race. What the Secretary said was correct but one in a while you have to get the urgency in it to get them to sit up and listen. Here is a war that is universal--let's get<sup>29</sup> at it. This for the section on Economic Development.



Eisenhower regularly expressed disagreement with his advisors and challenged their views. He does not act as a rubber stamp. This is one of the ideas that has been documented in the recent discussion of the relationships between Dulles and Eisenhower (Greenstein, 1982; Immerman, 1979 ). Eisenhower is not simply a "yes-man" and appears to be comfortable expressing disagreement in a constructive fashion. After reading a memo from Dulles on disarmament and inspection systems, Eisenhower responds in a typical fashion: with constructive criticism. Although Eisenhower agrees with some of Dulles' observations, he notes some contradictions and raises a few objections.

Dear Foster:

I have given preliminary study to your memorandum. I think it contains a good idea; I am certain that that part which stresses the importance of political leadership is absolutely correct.

Here and there I have scrawled some hasty notes on the paper, but my basis question is something of this sort:

When flatly rejecting technical inspection as providing any practicable basis for disarmament, we thereby give to the Russians a great opportunity for hurting us politically. Yet another part of the program assumes that we can have a sufficient inspection or knowledge of productive capacity in both countries to insure that the amount of fissionable material in the hands of the international agency will be greater than that possessed by any particular country. In fact, we apparently assume that the proportion would be so great that any individual country would be foolish to challenge the international power.

These conclusions seem to be somewhat contradictory between themselves.<sup>30</sup>

During a phone conversation with Eisenhower, Dulles listed three alternatives with respect to the Middle East situation which were supported by the experts at the State Department. Eisenhower disagrees with their recommendation and engages Dulles in a discussion in which Eisenhower's analysis of the issue is presented. Again, excerpts from this interaction support my conclusion that Eisenhower was comfortable expressing his disagreement and was quite interested in thinking about and analyzing the issues himself.

The Secretary then said he wished to discuss the Middle East situation. He apparently listed 3 alternatives before cjp got on phone. Secretary then said he, Phleger who was with him, Hoover, preferred the course of action calling for a Congressional resolution authorizing President to make arrangements for military cooperation, appropriations for expenditure, etc., quoting parts of his Draft No. 2 Joint Resolution, which would give both military and economic bait. Secretary said this would show, particularly with Congressional adherence, determination to make our presence known in the area, which would not exist through the Baghdad Pact, a new pact which would have great difficulties. The President said he believed if we proceed we could carry two strings in the bow, both No. 1 and No. 3 proposals. If we should get Saudi Arabia and Lebanon to adhere to Pact we could go in with them and that would be wonderful. The Secretary mentioned the problem of Jewish and non-Jewish elements, both of which would get something from Resolution proposal. The President said in argument on the other side that as a member of the Baghdad Pact we would guarantee that nothing would be done as a Pact to harm Israel . . . 31

Eisenhower also challenged the positions of advisors in small group settings as well, not simply in his one-on-one exchanges with Dulles. As noted previously, Eisenhower often met with members of the NSC such as the Joint Chiefs of Staff or people from Defense and State in less formal sessions. In these sessions he did not refrain from disagreeing with or challenging the estimates of his advisors. Excerpts from a meeting with representatives from the State Department and Defense Department to discuss armed force strength levels and inspection systems quite aptly illustrate Eisenhower's style of "debate" with his advisors.

The President began by saying that it seemed to him the Defense letter to State regarding the U.S. position with respect to a commitment to reduce to an armed force strength of 2.5 million following institution of an effective inspection system was open to serious question. He understood it to say that the U.S. should not undertake such a reduction until world problems have been resolved. If, however, an inspection system were instituted and shown to be effective, this accomplishment would in his view bring about the greatest and broadest possible resolution of world problems. He questioned a comment in the Defense letter that the strength of our forces is not related to Communist strength. He felt that if they cut their forces to a very small figure--one amounting to a small threat--we could cut down very greatly on our own armed strength. He felt that if we are in the position of being unable to talk about numerical totals until after an inspection scheme is in effect, our good faith will be challenged by the Russians and questioned by the rest of the world.

Admiral Radford joined in Secretary Robertson's view that if we offer a number, the Soviets will try to adopt it without the conditions and qualifications that go with it. He saw only two reasons for giving a number--world opinion, and the hazard that the French and the British might leave us. He thought that the great reductions we

have made since World War II should, if properly presented to world opinion, show our peaceful intent adequately. With regard to the French and British, he did not see why we must always dance to their tune. He restated the view that our strengths are not based upon Russian strengths. The President immediately challenged this. While he recognized that geographical considerations influence our strength needs, still he thought it was clear that a substantial decrease in Soviet strength should make possible a decrease in ours.<sup>32</sup>

The speculative decisionmaker will tend to consider multiple interpretations of information and think in terms of multiple options. Usually Eisenhower adopts such an approach as he evaluates information and ideas. However, there are instances where he seems more rigid and focuses more inflexibly on a single interpretation or position. Reflecting on the situation in the Middle East in one of his diary entries, Eisenhower demonstrates his more complex approach to evaluating that problem.

There is, of course, no easy answer. The oil of the Arab world has grown increasingly important to all of Europe. The economy of European countries would collapse, the United States would be in a situation of which the difficulty could scarcely be exaggerated.

On the other hand, Israel, a tiny nation, surrounded by enemies, is nevertheless one that we have recognized--and on top of this, that has a very strong position in the heart and emotions of the Western world because of the tragic suffering of the Jews throughout twenty-five years of history.<sup>33</sup>

Similarly, with respect to the problem of the offshore islands in 1958, Eisenhower clearly sees different sides of the problem. In conference with General Twining and General Goodpaster, Eisenhower demonstrates that he is not viewing this problem from a single perspective.

He (General Twining) understood the matter would come up for consideration in the NSC this week, and commented that the situation is unclear, perhaps intentionally so, with respect to the objective of defending the offshore islands. The President said he had spoken to Gordon Gray a few minutes earlier on this same subject, and had suggested it might be best to have just the statutory NSC members meet with him to discuss the question. He confirmed that the picture is cloudy regarding the offshore islands. There are good reasons for taking the view that they should be abandoned. However, a great part of the Chinese Nationalist forces are now deployed on the islands, and their removal or loss would be a signal to all of Asia that there is <sup>34</sup>no hope that can be held against the Communists in China.

Eisenhower's consideration of multiple interpretations of information is often demonstrated in his analysis of the implications of particular policy actions. In the fall of 1960 the State Department recommended to Eisenhower that the U.S. prohibit all exports from the United States to Cuba except medical supplies and non-subsidized foodstuffs. While the State Department did not think that this would bring the downfall of the Castro regime, it did believe that it would create major pressures on that government. This excerpt from Eisenhower's response illustrates his emphasis on looking at the multiple ramifications

of such an action and how it might be interpreted by different audiences.

The President stressed that we must not make any mistakes in evaluating the reaction of these countries. Mr. Dillon said we could not at this time get multilateral action of this type against Cuba . . . The President said we should not make any mistakes in a hurry. This matter has dragged on and he is seeing for the first time a very concrete and sweeping suggestion for a ban on exports. We must also think how this action will affect the American people. Coming in the present weeks, we must be concerned as to its political impact and the possibility it will get mixed up in the campaign. He thought we must recognize the possibility that the Cubans might announce a defense treaty with Russia, and asked for careful consideration of the effect of this action on the OAS and our own population.<sup>35</sup>

Although Eisenhower often seems to consider multiple interpretations of information or thinks in terms of multiple options, there are instances when he focuses more exclusively on a single interpretation. With respect to the situation in Guatemala in 1954, for instance, Eisenhower seemed convinced about the communist domination in that country and assumes that the majority of Guatemalans oppose the regime. These sentiments are set forth by Eisenhower in a memorandum which he prepared for a legislative meeting.

By every proper and effective means we should demonstrate to the courageous elements within Guatemala who are trying to purge their government of its communist elements that they have the sympathy and support of all freedom-loving people both in the United States and elsewhere in the hemisphere. We know that these patriotic Guatemalans represent the overwhelming majority of the

people there.

We must keep ourselves informed as accurately as possible of the true situation in Guatemala. We must assemble evidence of a kind that would convince the minds of reasonable men, and showing the extent of communist penetration of the political institutions of Guatemala.<sup>36</sup>

This is one of the few documents examined in which Eisenhower seems to focus on a particular interpretation in a rather inflexible fashion.

In terms of his approach to evaluating information, then, Eisenhower's style resembles that of the thinking type rather the feeling type. He emphasizes intellectual processes rather than affective processes in evaluating information and policy alternatives. Eisenhower actively engages in thinking about and analyzing issues and the recommendations presented to him by his advisors.

#### Time Orientation

In terms of his time orientation, Eisenhower exhibits a mixed orientation, focusing on the present and the future. Table 4 demonstrates that Eisenhower makes very few references to the past. He certainly does not long to have things the way they were or to be in a past situation. Unlike other leaders, he does not seem preoccupied with history or his place in it. While Eisenhower sometimes does refer to World War II or his service in

the Philippines, he does not usually make such a reference in support of historical precedents or lessons of history as a guide to policy. In most instances Eisenhower focuses on the immediate problem and emphasizes the analysis of the long-term consequences of various actions. Eisenhower seems interested in anticipating problems and creating opportunities. This reflects his interest in the future. Given that all presidents are forced, by the nature of the job, to focus on the present, immediate issues, I think it is noteworthy that Eisenhower so often refers to the future, planning, and creating opportunities. For this reason, Eisenhower's time orientation is more similar to the intuitive type than the sensation type because the sensation type focuses exclusively on the present and the past. The more intuitive decision maker is interested in the future. Given what I have concluded about Eisenhower as falling closer to the intuitive end of the scale, but not typifying the purely intuitive person, it is not surprising to find that he focuses on both the present and the future.



Table 4 Summary of Eisenhower's Orientation Toward Time  
1953-1960

	1	2	3
Diary <sup>a</sup>	11%	85%	34%
Corr <sup>b</sup>	9%	82%	45%
Memos <sup>c</sup>	3%	77%	53%
Phone <sup>d</sup>		90%	17%
NSC <sup>e</sup>		89%	78%
Meet <sup>f</sup>	8%	90%	76%

<sup>a</sup> refers to 53 individual diary entries.

<sup>b</sup> refers to 11 personal correspondence documents.

<sup>c</sup> refers to 30 policy memoranda authored by Eisenhower.

<sup>d</sup> refers to 137 memoranda of phone conversations.

<sup>e</sup> refers to memoranda for 18 NSC meetings.

<sup>f</sup> refers to memoranda for 50 White House policy meetings.

Column 1: refers to percentage of documents in which Eisenhower focuses on the past

Column 2: refers to percentage of documents in which Eisenhower focuses on the present.

Column 3: refers to percentage of documents in which Eisenhower focuses on the future.

In September 1953, a North Korean defected in a MIG plane. Writing to Bedell Smith about the incident, Eisenhower refers to the past, present and future considerations. Excerpts from this document illustrate Eisenhower's orientation toward time. In terms of the past Eisenhower says:

You will recall that in World War II, when we gave the French some P-40s, two of the pilots defected at once and went back to France with our planes. This did not stop us from giving more to the French. Some months ago a Polish pilot came into Denmark with a plane, and I believe one also came in to Yugoslavia. These incidents are so scattered and so infrequent as to have little significance.<sup>37</sup>

This is typical of the infrequent references to the past made by Eisenhower. With respect to the immediate problem of how to respond to the incident Eisenhower's reaction was:

(a) Like all the rest of you, I agree that we had to pay the \$100,000 in this case.

(b) The MIG plane is no longer of any great interest to us that I know of, and consequently we are not anxious to have this one--and certainly I cannot see why we want any more of them.

(c) Having paid \$100,000, I would have withdrawn the offer.

(d) Next, I would have notified the Communists that we had no interest in the MIG plane, and they wanted to send a pilot down and take it back, that would be all right with us.<sup>38</sup>

With respect to the future, Eisenhower tells his friend and

policy advisor why he is sending this memo:

This note is for no official action whatsoever. I am merely trying to put my personal thoughts before you so that when next we meet we may discuss these matters in an effort to develop a sort of pattern, or at least a conviction, that will possibly help us in the future.<sup>39</sup>

Eisenhower's interest in focusing on longer time horizons comes out in his discussion with General Twining, General Goodpaster and General Eisenhower about the Berlin crisis.

The President then stressed the necessity to avoid over-reacting. In so doing we give the Soviets ammunition. The President stressed the view that Khrushchev desires only to upset the United States. He expressed once again his view that we must address this problem in terms not of six months, but of forty years. During this time the Soviets will attempt continually to throw us off balance.<sup>40</sup>

In a discussion with science advisors about the Geneva meetings on surprise attack and the state of the Soviet missile program, Eisenhower thinks in terms of the future and what scenario is likely to develop.

Dr. Kistiakowsky said he was very much impressed with the importance that the Soviets attach to long-range ballistic missiles . . . He said it is his opinion that they now have an operational long-range missile force. The President said he could accept this possibility, but still holds a question as to the numbers and accuracy of such weapons . . . In his mind there is the question whether this is a feasible means of making war; he granted that it is a feasible way of destroying much of the nation's strength, but the resulting

retaliation would be such that it does not make sense for war. He said he thought it would be at least a few years before the Soviets would conceivably have enough missiles so as not to have grounds to fear retaliation.

Many times Eisenhower's emphasis on the future is related to his seeming interest in creating or making the most of opportunities or possibilities. This was clearly his intention in November of 1956 after Israel and Egypt accepted the terms of the United Nations cease-fire plan. In a diary entry Eisenhower outlines actions the U.S. should take to influence future events in the region.

Simultaneously we must lay before the several governments information and proposals that will establish real peace in the area and, above all, exclude communist influence from making any headway therein. There are a number of things to do.

For example, we can provide Egypt with an agreed-upon amount of arms--sufficient to maintain internal order and a reasonable defense of its borders, in return for an agreement that it will never accept any Soviet offer.

We should likewise provide training missions.

We can make arrangements for starting the Aswan Dam on a basis where interest costs would be no higher than the money costs ourselves. This, of course, would be contingent upon Egypt negotiating faithfully on the Suez Canal matter and in accordance with the six principles laid down in the United Nations.

We could possibly translate the tripartite statement of May 1950 into a bilateral treaty with each of the countries in this area.

We could explore other means of assisting the Arab state of Iraq, Jordan, Saudi Arabia, and Lebanon, and develop ways and means of strengthening our economic and friendly

ties with each<sup>42</sup> of these countries, either on a bilateral or group basis.

These comments by Eisenhower are typical of his emphasis on looking at the immediate situation in light of long-run consequences and opportunities. As Eisenhower told journalist Merri-  
man Smith during an interview in 1954:

In many ways I will make smarter political decisions than a lot of the guys who are pros--because they have gotten too used to the narrow, quick <sup>43</sup> advantage rather than taking a look at the longer range.

#### Problem Emphasis

Like the speculative decisionmaker Eisenhower focuses on issues and pays minimal attention to human relations. This emphasis is well supported in the documents as summarized in Table 5. However, it is important to note that Eisenhower was not insensitive to interpersonal issues and he did take into account human motivations and style. Although Eisenhower seems to prefer abstract problems related to the development of ideas and the identification of new problems, he also attends to more concrete problems related to implementation when he thinks it is important for the communication or support of ideas. Although this nuance does not come out clearly in a quantitative analysis of the documents, close textual analysis of certain documents supports this preliminary conclusion.

Table 5 Summary of Eisenhower's Problem Emphasis  
1953-1960

	1	2	3	4	5	6	7	8
Diary <sup>a</sup>	62%	21%	13%		2%	66%	13%	8%
Corr <sup>b</sup>	91%	9%				73%	36%	
Memos <sup>c</sup>	93%		3%		3%	93%	34%	23%
Phone <sup>d</sup>	93%	1%	22%		1%	64%	9%	11%
NSC <sup>e</sup>	100%		28%			94%	22%	17%
Meet <sup>f</sup>	94%	6%	26%		8%	92%	20%	22%

<sup>a</sup> refers to 53 individual diary entries.

<sup>b</sup> refers to 11 personal correspondence documents.

<sup>c</sup> refers to 30 policy memoranda authored by Eisenhower.

<sup>d</sup> refers to 137 memoranda of phone conversations.

<sup>e</sup> refers to memoranda for 18 NSC meetings.

<sup>f</sup> refers to memoranda for 50 White House policy meetings.

All figures in the table refer to the percentage of documents in which Eisenhower exhibited the particular problem emphasis.

Column 1: emphasis on substantive issues

Column 2: emphasis on human relations

Column 3: emphasis on routine issues

Column 4: expresses dislike of uncertainty

Column 5: expresses interest in policy implementation

Column 6: emphasis on abstract issues, concepts and ideas

Column 7: participates in identification of new problems

Column 8: expresses interest in design of policy alternatives

Eisenhower focuses almost exclusively on issues rather than human relations in the documents. As noted in Table 5, Eisenhower was more likely to explicitly discuss human relations issues in his diary. However, it is important to note that he might have been thinking about such issues, but did not actually discuss them with advisors at official meetings. However, there is little emphasis on human relations in his informal discussion with Dulles, as well. Column 6 provides strong evidence of Eisenhower's interest in ideas and more abstract issues. Columns 3 and 5 also support my conclusion that Eisenhower paid selective attention to some more routine issues and policy implementation.

Eisenhower's preference for focusing on issues rather than human relations is reflected in the two substantive areas which he paid most attention to on a regular basis: foreign policy and organizational arrangements. In his own reflections Eisenhower often notes that he devotes most of his attention to foreign policy and usually evaluates himself and administration in terms of the foreign policy record. In January 1954 Eisenhower included an entry in his diary in which he identified what he considered to be the major achievements of his first year in office. Several of these addressed foreign policy issues: the fighting and casualties in Korea had come to an end; U.S. defenses had been strengthened against communist aggression; a strong and consistent policy had been developed toward gaining

and pertaining the initiative in foreign affairs; and a plan to harness atomic energy for peaceful uses had been proposed to the world.<sup>44</sup>

In a conversation with Senator Style Bridges Eisenhower explained:

To the foreign problem, I have given my entire hours. I am convinced that the only way to avoid war--the only way to save America in the long run from destruction--is through the development of a true collective system of defense. This I have explained a dozen times . . .<sup>45</sup>

In addition to his substantive emphasis on foreign policy during his two terms, Eisenhower is clearly interested in administrative and organizational matters--not on a day-to-day level but in terms of organizational design and planning. He understands how the structure and process of decisionmaking and staff work influences the substance of policy and the ability to succeed politically. His interest and astuteness in such matters is reflected in his memo to Dulles on the advisability of establishing a committee to review proposed legislation relating to foreign policy and international trade.

The administration will not even be in the saddle before the legislative hoppers will be filled by bills--each sponsored by some pressure group and each seeking some new kind of obstacle to throw into the path of international trade. Not all of these will be directed toward raising tariffs . . .



One of the ideas that Mr. Hoffman had was that through the establishment of a committee for the study of these subjects, automatic rebuttal could be brought forward against some of these spurious proposals . . . Above and beyond the usefulness of such a body in providing answers, will be added one of providing a reason--or an excuse--for urging postponement of unwise legislation pending the receipt of the Committee's findings. Consequently from the second that a study group of this kind would be appointed, there would be an automatic break upon speedy enactment of unwise laws.<sup>46</sup>

It is not unusual to find Eisenhower initiating recommendations related to organizational change in the executive branch or various advisory systems. In the following excerpt from a memo to Admiral Radford, Eisenhower explains his suggestion of providing the Joint Chiefs of Staff with a group of civilian advisors.

Roughly, this idea is that you and the Joint Chiefs of Staff, as the senior Military advisors to me and to the Secretary of Defense, are entitled to and should have a group of your own civilian advisors in the industrial-military field . . . Permeating all our hard problems in security, including force levels and budget allocations, is the question of the mobilization base. Though this question strongly influences our strategic planning, it is as much an industrial as a military problem . . . It was my thought that the Joint Chiefs could be greatly helped toward the answers to these difficult questions by bringing in, on a consultative basis, a group of retired officers. Men of this type would form a very unique group with rich and varied military experience, and with the great advantage of having<sup>47</sup> worked at the production problem from top positions.

Although Eisenhower definitely emphasizes issues rather than human relations, he is sensitive to the differences among advisors and the importance of individual styles and motivations. Several places in his diary he reflects on the strengths and weaknesses of his advisors. For instance,

John Foster Dulles, Secretary of State: I still think of him, as I always have, as an intensive student of foreign affairs. He is well-informed and, in this subject at least, is deserving, I think, of his reputation as a "wise man" . . . He is not particularly persuasive in presentation and, at times, seems to have a curious lack of understanding as to how his words and manner may affect another personality. Personally, I like and admire him . . .

George Humphrey, secretary of the treasury: He is a sound business type, possessed of a splendid personality, and truly interested in the welfare of the U.S. and of all the people that compose it . . . He is persuasive in his presentations and usually has his facts in hand. He is an acceptable figure in every conference and always adds something in its deliberations.

Charles Wilson, secretary of defense: In his field, he is a really competent man. He is careful and positive, and I have no slightest doubt that, assisted by the team of civilian and military men he has selected, he will produce the maximum of security for this country at minimum or near minimum cost. . . If he fails it will be because of his inability to sell himself and his program to congress . . . It is the one direction in which I <sup>48</sup>feel that Charlie Wilson has a definite weakness.

Although Eisenhower seems to address more abstract issues and is very interested in ideas, he does not ignore more concrete issues to the extent that they are intimately related to the "big

picture". In 1955 when Alfred Gruenther informs Eisenhower that he would like to step down as Supreme commander of NATO, Eisenhower replies with an emphasis on the concept of European integration and its importance. However, he then focuses on the more concrete issue of Gruenther's resignation, his replacement and the timing of the replacement. These more routine issues are important to Eisenhower because they are related to the success of the bigger idea--European integration.

Only a few days ago, at either a Security Council or Cabinet meeting, I took some ten minutes to give the assembled group a lecture on how necessary it was to bring about a closer integration among the countries of Western Europe, and how we must support NATO to the extend of our abilities, both in word and deed. I am convinced that every step we make toward this integration is one further step toward the ultimate safety of the Western world and one additional insurance against a future war. The Steel community is important not merely for itself, but because it helps also to establish a trend. I shall never doubt for a minute that if Western Europe could find the determination and ability to combine itself effectively into a federation, there would be automatically established a third great power complex in the world.

The question that instantly flashes through my mind is, "Would your retirement from the scene indicate either a sense of defeatism on your part, or of indifference on ours?"

A corollary of course is: "What would be the acceptance among the European nations of any man we might name?"

Finally, as to timing--if we here should agree to your early relief, there should instantly begin a series of private conversations to determine the acceptability of your successor, and a lot of other similar details.

Eisenhower's focus on concrete details as they relate to broader concepts and issues also comes through in his comments on Dulles' speeches. Eisenhower often read and commented on the drafts of speeches Dulles was to deliver. Interestingly, Eisenhower's comments and suggestions are usually quite specific. He seems to be concerned with how the use of particular words or phrases will affect the tone or message of the speech. In the following excerpts from a memo to Dulles, Eisenhower's focus on details is demonstrated. Dulles is preparing a speech to the CIO.

I have read the draft of your talk to the CIO and I must say that, in general, I enthusiastically approve. The suggestions that follow may have sufficient validity that you will want to consider them briefly:

I. On page 6, at the point marked, I suggest that it might be well to expand your idea a little bit, somewhat as follows: . . .

I make this particular suggestion because I think there should be emphasized--especially for your audience--the direct connection between a prosperous and happy America, and the execution of an intelligent foreign policy. The language I have used is suggestive, but I do think the point could be emphasized . . .

II. On page 10, where you take up colonialism, it might be well to advert momentarily to Russia's adventure in to Manchuria, Outer Mongolia, and so on.

III. At the bottom of page 12 and top of page 13, there is the implication that the economic development of natural resources will one day be complete. I doubt that you mean exactly this.

IV. On page 17, it seems to me that a little explanation should be inserted between the clause that shows that the Associated States could not alone retain their independence, and the next clause suggesting the French

Union as an applicable method.<sup>49</sup>

Although Eisenhower sometimes focused more on details and concrete issues, his primary emphasis is on concepts, ideas, identifying new problems and thinking about the design of policy alternatives. Eisenhower's memo to Lewis Strauss, Chairman of the Atomic Energy Commission, reflects this emphasis. It is so typical of the Eisenhower approach that I quote this document in its entirety.

Dear Lewis:

I submit to you herewith a question, for your personal examination, that may be so ridiculous as to excite hilarity. I have at my command no sufficient array of facts to determine whether or not my thought does lie entirely outside the realm of the feasible; but I am comforted by the fact that if this happens to be the case, you will instantly detect it and no effort on your part will be necessary. I assure you that I shall not be resentful of an answer implying that I should "know better."

These are the factors that, taken together, constitute the problem I hand you.

(a) The Mid East, particularly Iran, is producing oil at a tremendous rate.

(b) In the interests of Iranian development and free world security, there should be a growing market for Iranian oil.

(c) The world's current markets for oil are glutted, particularly in the United States. Any increased imports in this country would cause us a very considerable economic difficulty; specifically we would be damaging the numerous independents and wildcatters through whom is conducted the great mass of our oil exploration activities. European countries are only slowly convert-

ing industry to use of fuel oil.

(d) In iran crude oil or fuel oil can be purchased at something like 80 cents a barrel, including royalties. In the United States it costs \$2.75 a barrel to produce.

(e) The world's needs in energy constantly mount. In certain areas, possibly including some within the United States itself, the production of power through traditional methods is impractical. In other nations in which we are vitally interested, this truth has much wider application than in our own country. The necessity for solving power problems in these countries is urgent.

(f) Nuclear science provides a way in which energy can be stored or stockpiled for periods of indefinite length. To produce and store nuclear energy we should have an abundance of cheap power.

(g) The proved reserves of uranium and other materials needed for the production of nuclear energy continue to grow.

My question is couched in several parts.

(a) Could we not use the growing quantity of uranium, cheap oil of Iran, to produce "stored energy"?

(b) Could we not use the plentiful labor in Iran to erect and operate at the least possible cost, the plants necessary to produce this stored energy? It would appear that transportation costs would be insignificant.

(c) By so doing would we not be assisting in achieving the desired objectives indicated above?

For the moment I do not desire any long and exhaustive analysis and report on this problem. I would prefer only that you think about it sufficiently to talk to me the next time we meet. If there is any virtue<sup>50</sup> in it whatsoever, we can then decide upon the next step.

In this memo we see Eisenhower focusing on ideas and the definition of a new problem: potential energy shortages in the United States. Eisenhower offers his own analysis and focuses on the

future rather than immediate problems.

Eisenhower's meetings with advisors often focused on conceptual and theoretical issues. For instance, in a meeting with General Taylor and Admiral Radford regarding the Joint Strategic Objectives Plan for 1960, the discussion focuses on distinctions between general war and small wars.

The President said he thought General Taylor's position was dependent on an assumption that we are people who would think as we do with regard to the value of human life. But they do not, as shown in many incidents from the last war . . . In the event they should decide to go to war, the pressure on them to use atomic weapons in a sudden blow would be extremely great. He did not see any basis for thinking other than that they would use these weapons at once, and in full force. The President went on to say that he did not care too much for the definition of general war as given. To him the question was simply one of a war between the U.S. and the USSR, and in this he felt that thinking should be based on the use of atomic weapons . . . We should therefore develop our readiness on the basis of use of atomic weapons by both sides . . . As to local wars, the President thought that the tactical use of atomic weapons against military targets would be no more likely to trigger off a big war than the use of twenty-ton "block busters". In his opinion, we must concentrate on building up internal security forces and local security forces of the regions themselves.<sup>51</sup>

Eisenhower is clearly interested in ideas and problem solving. In a letter to his long-time friend Captain Swede Hazlett, Eisenhower's excitement about coming up with ways to get the Soviet Union to look at the atomic problem in a new way is

apparent.

Quite a while ago I began to search around for any kind of idea that could bring the world to look at the atomic problem in a broad and intelligent way and still escape the impasse to action created by Russian intransigence in the matter of mutual or neutral inspection of resources . . . One day I hit upon the idea of actual physical donations by Russia and the United States--with Britain also in the picture in a minor way--and to develop this thought in such a way as to provide at the very least a calm and reasonable atmosphere in which the whole matter could again be jointly studied. Once the decision was taken to propose such a plan in some form, the whole problem became one of treatment, choice of time, place and circumstance, and the niceties of language. I had, of course, a lot of excellent help--but I personally put on the text a tremendous amount of time. Throughout the friendly world reactions have been good . . . The Soviets have now, at last, moved toward a meeting, though not without their customary grumbling, griping and sneering. We will see now what the next step brings forth! But all in all I believe that the effort up to this point has been well worth while, and has done something to create a somewhat better atmosphere both at home and abroad.<sup>52</sup>

Of course, Eisenhower is referring to his "Atoms for Peace" proposal. His interest in the development of the proposal demonstrates his preference for being involved with the definition of problems and the design of potential alternatives.

#### Conclusion

Although no individual fits any one of the pure types described in Chapters One and Two, Eisenhower's cognitive style most closely resembles that of the speculative decisionmaker. His style clearly reflects that of the thinking type in terms of



his strategies for evaluating information. Although he is far from a purely intuitive type, his information gathering strategy more closely resembles the intuitive type than the sensation type. In terms of his approach to information gathering Eisenhower's style is mixed: elements of the sensation type and the intuitive type are present.

## KEY TO EISENHOWER LIBRARY MATERIAL

PD: Diary items for 1935-1967 published by Robert H. Ferrell as The Eisenhower Diaries (New York: Norton, 1981).

WF: Dwight D. Eisenhower, Papers as President of the United States, 1953-61 (Ann Whitman File).

Other primary materials will be cited in full.

## NOTES

1. Memorandum of Conference, April 23, 1956, WF.
2. Memorandum of Phone Conversation between Dulles and Eisenhower, October 29, 1956, Papers of John Foster Dulles, Princeton University Library.
3. Phone Calls, October 29, 1956, WF.
4. Eisenhower to Edgar Eisenhower, April 3, 1956, WF.
5. Eisenhower to Nelson Rockefeller, August, 5, 1955, WF.
6. Memorandum of Conference with the Joint Chiefs of Staff, March 16, 1956, WF.
7. Phone Calls, January 28, 1954, WF.
8. Eisenhower to Edgar Eisenhower, April 3, 1956, WF.
9. Phone Calls, October 30, 1956, WF.
10. Memorandum of Conference, January 19, 1957, WF.
11. Minutes of National Security Council Meeting No. 363, April 25, 1958, WF.
12. Minutes of National Security Council Meeting No. 298, September 28, 1956.
13. Memorandum of Conference, July 21, 1960, WF.
14. PD, January 11, 1956.
15. Phone Calls, March 4, 1957, WF.
16. Eisenhower to Dulles, March 23, 1955, WF.
17. Phone Calls, August 1, 1955, WF.
18. Phone Calls, September 6, 1954, WF.
19. Phone Calls, January 25, 1955, WF.
20. Memorandum of Conference, April 4, 1956, WF.
21. Eisenhower to Gruenther, February 1, 1955, WF.

22. PD, July 24, 1953.
23. PD, February 2, 1953.
24. PD, December 10, 1953.
25. Eisenhower to Wilson, January 5, 1955, WF.
26. PD, March 8, 1956.
27. PD, March 28, 1956.
28. Eisenhower to Hoover, October 8, 1956, WF.
29. Memorandum of Phone Conversation, September 17, 1958, Papers of John Foster Dulles, Princeton University Library.
30. Eisenhower to Dulles, January 23, 1956, WF.
31. Memorandum of Phone Conversation, December 8, 1956, Papers of John Foster Dulles, Princeton University Library.
32. Memorandum of Conference, March 1, 1956, WF.
33. PD, March 13, 1956.
34. Memorandum of Conference, August 11, 1958, WF.
35. Memorandum of Conference, October 13, 1960, WF.
36. Memorandum by Eisenhower, April 26, 1954, WF.
37. Eisenhower to Bedell Smith, September 21, 1953, WF.
38. Ibid.
39. Ibid.
40. Memorandum of Conference, March 9, 1959, WF.
41. Memorandum of Conference, January 14, 1959, WF.
42. PD, November 8, 1956.
43. Memorandum of Conference, November 23, 1954, WF.
44. PD, January 18, 1954.
45. Memorandum of Conference, May 21, 1957, WF.

46. Eisenhower to Dulles, January 15, 1953, WF.
47. Eisenhower to Radford, November 3, 1953, WF.
48. Eisenhower to Gruenther, December 2, 1955, WF.
49. Eisenhower to Dulles, November 16, 1953, WF.
50. Eisenhower to Strauss, February 15, 1955, WF.
51. Memorandum of Conference, May 24, 1956, WF.
52. Eisenhower to Swede Hazlett, December 24, 1953, WF.

## CHAPTER IV

### COGNITIVE STYLE AND FOREIGN POLICY ADVISORY SYSTEMS

The purpose of this chapter is to examine the implications of cognitive style for understanding, explaining and improving particular aspects of foreign policy decisionmaking. In recent years both presidents and scholars have devoted a great deal of attention to the ways in which various organizational arrangements and processes influence the content and quality of foreign policy decisions, and in so doing, accepting the notion that the structure and management of high level foreign policy decisionmaking does make a substantive difference. For actual policymakers, the problem is how to design and manage foreign policy advisory systems which will enhance the quality of the decisionmaking process and, ultimately, the quality of decisions. For scholars, the problem is how to generate thoughtful research on the development and impact of various organizational arrangements so as to provide a more solid empirical base which practitioners can turn to for guidance.

In this chapter I will argue that the president's cognitive style will greatly influence the way he arranges and uses particular foreign policy management systems or organizational arrangements. As Alexander George has noted:

Instead, it is now recognized that each president is likely to define his role in foreign policy decisionmaking somewhat differently and to approach it with a different decisionmaking and management style. Hence, too, he will have a different notion as to the kind of policymaking system that he wishes to create around him, feels comfortable with, and can utilize. In brief, the present emphasis is on designing organizational structures to fit the operating styles of their key individuals rather than attempting to persuade each new top executive to accept and adapt to a standardized organizational model that is considered to be theoretically the best (George, 1980: 146).

In the management science literature, some attention has been devoted to the relationship between cognitive style and preferred organizational arrangements (See Hellriegel and Slocum, 1980; Henderson and Nutt, 1980). These studies of managers and executives offer some preliminary support for the notion that decisionmakers will develop and utilize organizational arrangements which are congruent with their cognitive style (Nutt, 1979). However, little systematic analysis of this relationship is present in the literature on foreign policy decisionmaking which focuses on presidential advisory systems. Although George acknowledges the connection, he does not follow through by offering explicit, testable hypotheses. He describes the primary characteristics of the foreign policy advisory systems of several recent presidents, but devotes little attention to an analysis of cognitive style and its relationship to the different choices made by the various leaders (George, 1980).

Similarly, Stephen Hess (1976) and Richard Tanner Johnson (1974) have also noted the importance of the leader's operating style in their discussions of the presidency and how various presidents have organized their advisory systems. Like George, they have not attempted to characterize "style" in a systematic fashion. Nor have they explained specific connections and linkages between style and the characteristics of the advisory systems used by the president. In the remainder of this chapter, I will propose some specific hypotheses relating the various cognitive styles developed in Chapters One and Two to different types of organizational arrangements directly relevant to the management of U.S. national security policy. In other words, what type of organizational arrangements and processes would I expect the systematic, intuitive, speculative, and judicial types to arrange and use?

Although it is beyond the scope of this project to actually test these hypotheses, I will offer a preliminary interpretation of Eisenhower's foreign policy advisory system in light of the hypotheses. As a decisionmaker who exhibits a speculative style, to what extent do the organizational arrangements he uses offer some support for the hypotheses?



The independent variable in these hypotheses is the cognitive style of the president (systematic, speculative, judicial, and intuitive). The dependent variables are particular organizational structures and processes which reflect different ways of managing the national security advisory system. My identification and selection of the dependent variables draws directly from Richard Tanner Johnson's Managing the White House (1974) and Sylvan and Hermann's (1979) more detailed explication of aspects of U.S. foreign policy organization.

Richard Tanner Johnson has identified three management models which characterize the different approaches utilized by recent presidents: the formalistic, competitive, and collegial models. The formalistic model is based on hierarchical lines of communication and a structured staff system. It is characterized by an orderly policymaking structure and well-defined procedures. This management model discourages open conflict and bargaining among participants in the policy process.

In contrast, the competitive model is designed to deliberately encourage competition and conflict among advisors and cabinet heads in order to garner diverse opinions, advice and analysis. Typically this is accomplished by giving advisors overlapping assignments and ambiguous, conflicting jurisdictions in various policy areas. Competing advisors are forced to bring

their positions directly to the president who will resolve conflicts and make the final decision.

The collegial model encourages advisors to work together as a team to solve problems in a way that will incorporate the best aspects of divergent points of view. In this system, advisors serve more as generalists than functional experts. Policymaking procedures are informal and decentralized so as to promote flexibility and the open discussion of ideas regardless of an advisor's power or status.

Although these three models identify major differences in recent presidents' approaches to managing national security policy, these conceptualizations do not capture some important distinctions in recent advisory systems. For instance, Johnson and George both note that while Truman, Eisenhower and Nixon employed the formalistic approach, there were important variations in their national security advisory systems. Also, the three models, as characterized by Johnson, are not mutually exclusive. Rather the formalistic and competitive approaches are set up as opposites on a continuum with the collegial model explained as an attempt " . . . to achieve the essential advantages of each of the other two while avoiding their pitfalls" (George, 1980: 149). For this reason, it is often difficult to characterize any one president's system as purely

formalistic or competitive as these represent the extremes. Once you move toward the middle of the continuum, at least some features of the collegial approach are likely to be present.

Sylvan and Hermann (1979) have identified several organizational variables which allow us to make finer distinctions in national security advisory systems. Some of these variables, in addition to a couple I have added, will serve as the dependent variables in my hypotheses on cognitive style and the use of particular organizational arrangements. Before proceeding to the discussion of the hypotheses I will define these organizational variables and discuss their relationship to Johnson's formalistic, competitive, and collegial models.

#### Identification of Variables

The following variables comprise the set of dependent variables utilized in the hypotheses. The cognitive style of the president will influence his the arrangements he makes regarding these aspects of the structure and process of national security policymaking. The variables are presidential participation, NSC staff function, interagency information exchange, interagency option coordination, tolerance for disagreement, and ways of resolving conflict. These variables are defined as follows:

Presidential Participation: This element focuses on the timing of presidential participation and the style of presidential interaction with advisors (Sylvan and Hermann, 1979). With respect to timing, I will focus on two variables:

1. Degree of presidential preoption participation: this identifies the extent to which the president underscores his concern with certain information and/or places parameters or requirements on the kinds of options he will accept and/or request certain sequence routines in handling the problem (Sylvan and Ramsey, 1985: 5).
2. Degree of presidential postoption participation: this variable identifies the extent to which the president interrogates his advisors for more information or for their evaluation of options and/or generates new options or combines elements of old options and/or conducts informal "votes" among advisors as to their preferred course of action after the options have been presented to the president (Sylvan and Ramsey, 1985: 5).

With respect to the style of presidential participation and interaction I will focus on two variables:

1. Style of presidential interaction: this variable identifies the number of actors that the president usually confers with at one time. The president could meet with advisors one at a time, with a subset of advisors or with all of his advisors (Sylvan and Ramsey, 1985: 5)

2. Degree of decision latitude the president gives advisors:  
this variable identifies the amount of independence the president gives to his advisors. For instance, does the president provide very precise guidelines for his advisors or does he tend to provide his advisors with a great deal of policymaking leeway?

National Security Council staff functions: This aspect reflects the varied roles and functions that might be played by a particular National Security Council Staff or the National Security advisor in a particular administration. With respect to NSC staff functions I will focus on four variables:

1. Role of National Security advisor: this variable refers to the amount of control and functions of the NSA. The NSA may serve primarily as a chief of staff who synthesizes, summarizes, and serves as an advocate, a custodian who works to make sure that diverse views are represented, a more passive scheduler or simply another member of the team who advises the president.
2. Establishment of government wide studies and requests for information: this variable identifies the extent to which the NSC staff produces studies and information needed by the president versus such studies being made by other governmental agencies (Sylvan and Ramsey, 1985: 3).
3. Role in creation of analysis and recommendations: this variable identifies the extent to which the NSC staff has

the authority and capability to generate independent analyses and recommendations versus no NSC staff authority or capability to conduct independent analysis of problems (Sylvan and Ramsey, 1985: 4).

4. Transmission of materials and access to the president: this variable identifies the extent to which non-evaluative, neutral transmissions of materials from the department (or departmental materials not routed through the NSC staff at all) and independent departmental access to the president occur versus NSC staff preparations of summaries and evaluations of departmental materials before transmitted to president and control of access to the president; e.g. is the NSC staff an intermediary? (Sylvan and Ramsey, 1985: 4).

Interagency information exchange: This variable identifies the amount of information that is exchanged between agencies (Sylvan and Ramsey, 1985: 3).

Interagency option coordination: This variable identifies the amount of coordination between agencies and/or departments in formulating options (Sylvan and Ramsey, 1985: 3).

Willingness to tolerate substantive disagreement or conflict: This variable identifies the extent to which the president encourages the airing of competing views and alternative sources of information versus discourages the airing of competing views

and alternative sources of information. To what extent is the president comfortable with debate and disagreement among his advisors?

Preferred way of resolving substantive disagreement or conflict:

This variable refers to different ways of resolving conflicts in decisionmaking groups. Various ways of resolving conflict include leader's preference, unanimity, use of a working majority, and a formal vote (See C. Hermann, 1979).

Relationship of Variables to  
Formalistic, Competitive, and Collegial Models

Before turning to my hypotheses relating cognitive style to organizational arrangements, I think it is useful to examine the features of the formalistic, competitive and collegial management models in light of the variables just set forth. Different values of these variables reflect the differences in Johnson's general models of presidential advisory systems (See Table 6).

Formalistic Model

With respect to presidential participation, the formalistic approach is characterized by little preoption and little postoption involvement. In this system, the president will probably interact with a few actors at a time. The NSC staff has a great deal of control over the preparation of summaries for the

president. The National Security advisor, acting as a strong chief of staff, functions as a clearinghouse and synthesizer of information for the president. The NSC staff produces much of the information and study needed by the president. The advisory process is characterized by minimal interagency information exchange. Agencies share few of their options and do not reach consensus before the information is passed on to the president or National Security advisor. In this model, the president exhibits a low tolerance for substantive disagreement or conflict and leader preference is most often used for resolving substantive conflicts and making policy decisions.

#### Competitive Model

In this approach, there is some presidential participation in the preoption period. presidential involvement in the postoption period is moderate to strong. The president usually meets with one actor at a time. The National Security Council exerts almost no control in this system as the president tends to deal directly with individual advisors and departments. This system is characterized by almost no interagency exchange of information. The agencies or departments develop their options in isolation and then send them directly to the president. In this model, the president has a very high tolerance for substantive disagreement and conflict. Leader preference is the primary way



of resolving substantive conflicts and making policy decisions.

### Collegial Model

The collegial model is characterized by a very substantial degree of presidential participation in both the preoption and postoption phases of decisionmaking. In this advisory system the president prefers to interact with several actors at a time, working together as a team. The NSC staff is weak. It produces few studies and requests for information. The National Security advisor is just another member of the team. This model is characterized by a fair amount of interagency information exchange. Agencies share some of their options with each other but do not reach a consensus before presenting their reports to the president and other members of the "team". In this system the president exhibits a moderate degree of tolerance for substantive disagreement. Unanimity or a working majority are the strategies most often used for resolving substantive conflicts and making decisions.

TABLE 6 Relationship of Dependent Variables to Organizational Models

	Formal	Collegial	Competitive
Variables <sup>a</sup>			
Variable 1	minimal	substantial	moderate
Variable 2	minimal	substantial	moderate
Variable 3	few	several	one
Variable 4	little	substantial	little
Variable 5	chief of	custodian	none
Variable 6	considerable	rarely	none
Variable 7	considerable	minimal	none
Variable 8	summarize/ evaluate	pass on	none
Variable 9	little	substantial	none
Variable 10	independent	share	independent
Variable 11	low	moderate	high
Variable 12	leader preference	unanimity majority	leader preference

<sup>a</sup>Definition of variables

Variable 1 = preoption involvement

Variable 2 = postoption involvement

Variable 3 = number of advisors consulted with

Variable 4 = decision latitude of advisors

Variable 5 = role of national security advisor

Variable 6 = NSC studies and information

Variable 7 = NSC independent recommendations

Variable 8 = NSC treatment of departmental recommendations

Variable 9 = information exchange among departments

Variable 10 = department coordination of options/recommendations

Variable 11 = tolerance of conflict and disagreement

Variable 12 = conflict resolution strategy

### Hypotheses

I will now explain the hypotheses relating cognitive style to the specific structure and process variables which characterize important distinctions between the various management models. Table 7 summarizes the characteristics of the four different styles with respect to information gathering, information evaluation, time orientation and problem emphasis. Table 8 cross references the cognitive styles by the dependent variables explicated in the previous sections.

TABLE 7 Characteristics of the Four Cognitive Styles

	1	2	3	4
Systematic	sensation	thinking	present past	issues concrete
Speculative	intuition	feeling	present future	issues abstract
Judicial	sensation	thinking	present	human relations/ concrete
Intuitive	intuition	feeling	future	human relations/ abstract

Column 1 refers to information gathering.

Column 2 refers to information evaluation.

Column 3 refers to time orientation.

Column 4 refers to problem emphasis.

TABLE 8 Relationship of Cognitive Styles to Dependent Variables

	1 <sup>a</sup>	2 <sup>b</sup>	3 <sup>c</sup>	4 <sup>d</sup>
Var 1	some	substantial	minimal	moderate
Var 2	minimal	substantial	some	more substantial
Var 3	one/few	few/several	few	several
Var 4	little	varies with advisors	little	substantial
Var 5	chief of staff	custodian manager	scheduler	none
Var 6	substantial	little	none	rarely
Var 7	substantial	some	minimal	minimal
Var 8	summarize evaluate	only with department participation	pass on	pass on
Var 9	little	substantial	little	some
Var 10	independent	share, but independent	independent	share, but independent
Var 11	low	moderate/ high	low/ moderate	low/ moderate
Var 12	leader preference	leader preference/ majority	leader preference/ majority	unanimity

Var 1 = preoption involvement

Var 2 = postoption involvement

Var 3 = number of advisors consulted with

Var 4 = decision latitude of advisors

Var 5 = role of national security advisor

Var 6 = NSC studies and information

Var 7 = NSC independent recommendations

Var 8 = NSC treatment of department recommendations

Var 9 = information exchange among agencies/departments

Var 10 = department coordination of options/recommendations

Var 11 = tolerance of conflict and disagreement

Var 12 = conflict resolution strategy used

a systematic style  
b speculative style  
c judicial style  
d intuitive style

### Systematic Style and the Formalistic Approach

The systematic decisionmaker focuses primarily on issues and concrete problems which are of a more routine nature. He is particularly interested in having facts and figures which he thinks are required for making a decision. The systematic decisionmaker wants to have this information presented in an organized fashion and is sometimes frustrated until a decision is made. Therefore, the systematic decisionmaker focuses on clarifying and/or settling a situation. For this reason, the systematic decisionmaker will arrange for the presentation of a single interpretation or option.

A president whose cognitive style resembles the systematic type will participate to some extent in the preoption phase of decisionmaking. His participation would take the form of making specific requests for information that are focused and non-evaluative in nature. To the extent that a president with a systematic style provides a fairly careful definition of work roles and assignments, we could expect some directives from him in the preoption phase of policymaking. However, a president with a systematic style would probably channel these directives through a National Security advisor or chief of staff. He will rarely participate in the postoption phase of decisionmaking in terms of probing advisors and engaging in follow-up discussions

because he tends to think that the facts speak for themselves and he is interested in bringing closure to the situation and making a decision.

In terms of his style of interaction with advisors, the president who exhibits a systematic style will probably interact with one to a few actors at a time to the extent that he finds it more agreeable to consider one interpretation or one option at a time. This type of interaction is also conducive for discussions which are fairly focused that make it easier for the president and the advisor(s) to get to the point quickly and make their presentations in an organized manner. A president with this style will provide advisors with a minimal amount of decision latitude. This is in keeping with his emphasis on providing well-defined work roles and assignments and his interest in controlling and settling the situation.

With respect to the functions and role of the National Security Council staff, the president with a systematic style will rely on a strong National Security advisor who serves as a chief of staff and synthesizer of policy. This type of president is interested in a centralized system with lines of authority well defined. For this reason the National Security Council staff will have a great deal of capability and authority to generate independent analyses and recommendations. The NSC under

the direction of the National Security advisor will produce studies and information needed by the president and will prepare summaries and evaluations of departmental materials before they are transmitted to the president. This is likely because the president with a systematic style wants to be well briefed in a highly organized and efficient manner.

The exchange of information between agencies and departments will be minimal in this president's management system because of the specifically defined assignments and work roles. Also, agencies, departments and individual advisors will not be encouraged to compare and contrast multiple options or consider the relationship of problems to other problems or contexts. Since information requests are likely to be very specific and concrete, there will be little incentive to exchange information with other departments. Similarly, agencies and departments will not share their options. Options they are requested to prepare will be forwarded directly to the president through the NSC and the National Security advisor.

The president with a systematic style has a low tolerance for disagreement that is often reflected in his frustration until a decision is made. Substantive disagreements and conflicts that do develop will be resolved by leader preference--the systematic president will make a decision by weighing the costs and benefits



of options and assessing the accuracy of the information presented.

In general, we can expect the president who exhibits the systematic style to incorporate the dominant features of the formalistic management approach, emphasizing a centralized, hierarchically organized system of communication and policy development.

Summary of Hypotheses:  
Systematic Style

1. The president will be somewhat involved in preoption phase of policymaking.
2. The president will rarely participate in postoption phase of policymaking.
3. The president will interact with one to a few advisors at a time.
4. The president will provide advisors with a small degree of latitude.
5. The president will use a strong National Security Advisor who acts as chief of staff/policy analyst and synthesizer.
6. The NSC staff will produce many studies and much information needed by the president.
7. The NSC staff will have a great deal of authority and capability to generate independent analyses and recommendations.
8. The NSC staff will summarize and evaluate most departmental materials before they are presented to the president.
9. There will be little exchange of information between agencies/departments.
10. Agencies will not share options; will forward separate recommendations to president.
11. There will be low tolerance for substantive disagreement and conflict.
12. Leader preference will be used to resolve conflict.

Speculative Style and a Mixed Approach:

Formalistic and Collegial

The speculative decisionmaker focuses on issues, particularly in the form of abstract problems related to the development of concepts, ideas and theories. The identification and discussion of new problems and possibilities appeals to the speculative decisionmaker. The speculative decisionmaker probes other members of the decisionmaking process to gather information about their various interpretations and to engage in hypothesis testing. The speculative decisionmaker is not likely to settle for the first response to a problem or question. Analysis and study are praised by the speculative decisionmaker with an emphasis on the incorporation of contextual factors. The speculative decisionmaker is comfortable expressing disagreement with other participants in the decisionmaking process and leans toward multiple interpretations of information and options.

Reflecting his drive to define and solve new problems, the president with a speculative style will be highly involved in the preoption phase of policymaking. His involvement will take the form of asking focused evaluative questions, as well as rhetorical questions, and playing an active role in establishing the agenda. He will also be highly involved in the postoption phase of the policymaking process, probing advisors for additional

information and discussing alternative interpretations and options. At this stage the more speculative president will find it appropriate to make suggestions and recommendations which reflect the relationships he sees among various ideas or options.

The president who exhibits the characteristics of the speculative style will interact with a few to several advisors at a time in order to promote multiple interpretations of ideas and to see how different participants define problems and respond to his "what if" questions. This type of president will interact with a group of advisors of a size that is conducive for discussion, not merely formal presentations or briefings. Depending on the situation and his personal assessment of the individual, the speculative president will provide varying degrees of decision latitude to his advisors. Since the speculative decisionmaker is really interested in the ideas of other informed participants and in considering possibilities, he will tend to provide policy leeway for advisors he finds particularly competent and innovative. To the extent that this type of president has some fairly specific ideas and plans of his own, he may use some advisors primarily as deputies who are instructed to carry out his particular policy recommendations.

With respect to the organization and role of the National Security Council staff and the National Security advisor, it is important to keep in mind that while the speculative decisionmaker is interested in possibilities and contextual factors, he emphasizes careful analysis and study of problems backed by the systematic gathering of information and logical reasoning. Therefore, the president with a speculative style will design the NSC system so as to promote careful analysis and study and to make sure that multiple points of view are taken into consideration. The National Security advisor will serve as a very active "custodian" (George, 1972) who works to guarantee that the ideas of multiple participants and departments are available to the president. The NSC staff will have only some authority and capability to generate independent analyses and recommendations. Its primary role will be to assist with the summary and evaluation of departmental materials that will be transmitted to the president. However, the departments will still be actively involved in this process and disagreements between departments will not be papered over or resolved by the NSC staff or National Security advisor. One of the tasks of the National Security advisor will be to help identify those policy splits.

The exchange of information between agencies/departments will be encouraged by the president and the National Security advisor on issues which cross jurisdictions. To the extent that the speculative president tends to see relationships between and within organizations and their various agendas, he will encourage this exchange of information and the sharing of options between departments. One of the principle roles of the National Security Council is to insure that agencies and departments do discuss their views with one another. However, the departments will not reach a consensus before the reports move on to the president.

The speculative president has a moderate to high tolerance for substantive disagreement and conflict. This is in line with his focus on possibilities, hypothesis testing, and an emphasis on the future and longer-term policy consequences. Leader preference or a working majority will be the most often used strategies for making decisions. The speculative decisionmaker likes to make decisions and colleagues usually know where he stands.

In general, we can expect the president who exhibits the speculative style to combine important features of the formalistic and collegial approaches. On the one hand, he will construct a carefully designed and orderly process for moving through the various stages of the policymaking process. He relies on a

fairly formal set of procedures which will guarantee that all of the relevant participants play a role in the process. The president, with the speculative style will not want to leave this to chance. On the other hand, he wants to encourage informal discussion and debate and provide an opportunity to consider several possibilities. He also wants to encourage analysis of relationships between problems and ideas. Therefore, he will incorporate features of the collegial approach, emphasizing teamwork and group problem solving efforts.

Summary of Hypotheses:  
Speculative Style

1. The president will be substantially involved in preoption phase of policymaking.
2. The president will be substantially involved in postoption phase of policymaking.
3. The president will interact with a few to several advisors at a time.
4. The president will provide some advisors with a substantial degree of latitude.
5. The president will use an active National Security advisor who acts as a custodian-manager.
6. The NSC staff will produce few of the studies and information needed by the president.
7. The NSC staff will have some authority and capability to generate independent analyses and recommendations.
8. The NSC staff will facilitate the summary and evaluation of departmental materials, but the department representatives will be actively included in this process.
9. There will be a substantial exchange of information between agencies/departments.
10. Agencies will share provisional options but will not reach consensus; they will identify areas of agreement and disagreement.
11. There will be moderate to high tolerance for substantive disagreement and conflict.
12. Leader preference and working majority will be used to resolve conflict.

Judicial Style and a Mixed Approach: Formalistic and Collegial

The judicial decisionmaker emphasizes human relations and works on concrete problems which are fairly routine and structured. While he responds easily to the ideas of others, the judicial decisionmaker rarely initiates discussions of topics and asks few questions. The judicial decisionmaker focuses on what needs to be accomplished now and is usually interested in maintaining the status quo. Orderly and logical analysis is used if it is not too deep. The judicial decisionmaker evaluates information in terms of personal likes and dislikes.

The president who exhibits the judicial style will rarely participate in the preoption phase of the policymaking process because he usually reacts to problems as they come up and does not focus on the future. He will not be the policy participant who initiates and defines problems. The president with a judicial style will be moderately involved in the postoption phase of the policy process in order to find out what others think, not so much because he is really interested in learning about the substantive aspects of alternative interpretations or options, but because he wants to know how other advisors would "vote".

The president who exhibits this style will interact with a few advisors at a time. Although he does not want to be inundated with multiple interpretations and options, he does like to work with other people and cares about what they think. In this sense he will encourage participative decisionmaking. However, the president with a judicial style will not provide his advisors with a great deal of policy latitude. He will probably view them as functional experts, particularly cabinet heads and their assistants, and will not encourage them to think more broadly about the problems or to theorize about possibilities.

As a pragmatist who deals with problems in a fairly methodical fashion, the president with a judicial style will construct a centralized advisory system supported by a set of rules and regulations which guide the policy making process. However, the system will not be too hierarchical; he will not construct an advisory system which includes several layers. Basically, the president with the judicial style wants to have functional experts present him with options based on the facts that are not terribly abstract and do not advocate radical change. His National Security advisor will not play a very active role but will serve as a fairly passive scheduler or gatekeeper. Most studies will be conducted by the departments or agencies rather than the National Security Council staff. However, the president will want the NSC to organize regular procedures for transmitting



the departmental information to him. The NSC will not have a great deal of authority to generate independent analyses and reports and will basically serve as a neutral, non-evaluative conduit for materials from the departments.

To the extent that the president with the judicial style is not interested in abstractions and doesn't focus on relationships between problems or contextual factors which influence issues, he will not encourage the exchange of information between departments and neither will the NSC system. Similarly, departments and agencies will share few of their options and will not have the opportunity to reach consensus before the president sees their recommendations.

The president with a judicial style has a low to moderate tolerance for substantive disagreement or conflict. Rather than fight the system, he will be interested in using it to solve problems. What others think is very important to him, given his focus on human relations. Therefore, he will encourage participation through regular channels in order get a sense of support for various policy directions. Ultimately, leader preference will be the primary vehicle for making decisions. However, the president's preference will probably be influenced by his interpretation of the majority opinion.

In general, the judicial president will develop a formalistic advisory system in the sense that he is interested in using an orderly set of procedures for acquiring the recommendations of departmental experts and learning the basic "facts" related to the issue. To the extent that this type of president is interested in knowing what others think as a guide for making decisions, he will incorporate aspects of the collegial approach which encourage participation with a greater number of advisors than what is provided for in a steep, hierarchical management system.

Summary of Hypotheses:  
Judicial Style

1. The president will be minimally involved in preoption phase of policymaking.
2. The president will participate somewhat in postoption phase of policymaking.
3. The president will interact with a few advisors at a time.
4. The president will provide advisors with a small degree of latitude.
5. The president will opt for a weak National Security advisor who acts as a scheduler.
6. The NSC staff will not produce studies and information needed by the president.
7. The NSC staff will have virtually no authority and capability to generate independent analyses and recommendations.
8. The NSC staff will not evaluate or summarize departmental reports before they are seen by the president.
9. There will be minimal exchange of information between agencies/departments.
10. Departments/agencies will share few of their options and will not have opportunity to reach consensus before the president sees recommendation.
11. There will be low to moderate tolerance for disagreement and conflict.
12. Leader preference and working majority will be used to resolve conflict.

### Intuitive Style and the Collegial Approach

The intuitive decisionmaker focuses on global human issues reflecting his interest in serving humanity rather than more narrowly defined human relations problems or purely theoretical administrative or technical issues. He will not make many requests for specific types of information; careful analysis and study are not his priorities. The intuitive decisionmaker will make suggestions and recommendations and offer multiple interpretations of information and options, often designed to fit the audience.

The president with an intuitive style will sometimes participate in the preoption phase of the policy process, to the extent that he wants to identify his broad concerns and goals for the future. However, he will not participate substantially in this part of the process in order to direct his advisors or make specific requests for information. However, he will participate much more actively in the postoption phase of the process due to his interest in face-to-face contact with other advisors and his interest in learning about their feelings on the issue.

The president who exhibits this style will be quite comfortable interacting with several advisors at a time who he views as part of the group centered decisionmaking team. He will provide

advisors with a great deal of policy leeway as he is not interested in the centralization of power or control.

The intuitive president will develop a fairly unstructured, group centered advisory system in which each advisor serves as a general advisor to the problem solving team. For this reason, we would expect a weak to non-existent National Security staff. The National Security advisor would serve as merely another member of the team without special status or a narrowly defined role. The NSC staff might provide some analysis or managerial support on a demand basis, but the intuitive president would not rely on a formal set of procedures to guide its work and would not use the NSC as a clearinghouse or synthesizer of policy positions. Rather he will work on a regular basis with his "team" of specially selected advisors from the departments, agencies and White House.

There will be a moderate exchange of information between agencies and departments to the extent that this comes out of the informal discussions and debates of the president's team. However, there will be no formalized procedures for institutionalizing such an exchange. Similarly, agencies and departments will share some of their options and recommendations with each other through these informal contacts. However, they will not reach consensus before meeting with the president.

The intuitive president will exhibit low to moderate tolerance for substantive disagreement or conflict. The primary reason this type of president finds it desirable to let everyone participate is to get a handle on what everyone is thinking. The intuitive president is very interested in ultimately pleasing as many people as possible and generating support for his policies. The goal of the group centered management system is to generate as much consensus as possible. Therefore, unanimity is the strategy used for resolving conflicts.

In general, the intuitive president will emphasize many of the features of the collegial approach to foreign policy management. He will develop a fairly unstructured, group-centered advisory system which encourages face-to-face contact between advisors working as a team to solve problems. Formal organizational arrangements and rules will be kept to a minimum.

Summary of Hypotheses:  
Intuitive Style

1. The president will be moderately involved in preoption phase of policymaking.
2. The president will be moderately to substantially involved in postoption phase of policymaking.
3. The president will interact with several advisors at a time.
4. The president will provide advisors with a substantial degree of latitude.
5. The president will not use a National Security advisor or will opt for one who acts as another team member.
6. The NSC staff will rarely produce studies and information needed by the president.
7. The NSC staff will have little authority or capability to generate independent analyses and recommendations.

8. The NSC staff will not summarize and evaluate departmental materials before they are presented to the president.
9. There will be some exchange of information between agencies and departments.
10. Agencies/departments will share some of their options but will not reach consensus before meeting with the president.
11. There will be low to moderate tolerance for substantive disagreement and conflict.
12. Unanimity will be used to resolve conflict.

In summary, the systematic president is most likely to incorporate the primary features of the formalistic management model while the intuitive president is most likely to adopt the primary features of the collegial management model. Although both the speculative and judicial presidents will incorporate elements of both the formalistic and collegial approaches, there are important differences in how they will combine the models and what they will emphasize. The speculative president is particularly interested in formal procedures for managing the advisory system as a means for guaranteeing the systematic presentation of alternative points of view. He will try to balance this approach as equally as possible with those features of the collegial approach that encourage a sense of teamwork and the consideration of possibilities and contextual factors. In many ways the speculative president is interested in combining both approaches as a way of promoting systematic study and analysis and creativity. The judicial president is interested in adopting the primary features of the formalistic approach as a way to get things done in the most pragmatic way, as a way of responding to

immediate problems as effectively as possible without initiating major changes. A few features of the collegial approach are incorporated to the extent that that judicial decisionmaker is interested in finding out what others think in terms of taking an informal vote.

At this point it is important to point out that I do not think that any of the four cognitive styles are particularly compatible with the competitive approach. However, this does present a puzzle or anomaly given the widespread discussion of Franklin Roosevelt's "competitive" approach to managing the decision process. Although I have not systematically researched Roosevelt's cognitive style, my preliminary assessment would place him closest to the intuitive type who I hypothesize is likely to develop a collegial approach to management. One of the major distinctions between the competitive and collegial approaches is that in the former case no one else but the president resolves conflicts whereas in the latter case the need to build at least some consensus is viewed as important. In my view it is difficult to imagine any president operating successfully without building at least some consensus among advisors. I am concerned that the competitive approach is a straw man that primarily reflects the idiosyncracies of Franklin Roosevelt. Depending on the individual, certain intuitive types and speculative types might be able to manage such an approach. Clearly, this puzzle

warrants further consideration and might serve as the basis for refining the differences between the various cognitive style types or the distinctions between the competitive, collegial and formalistic approaches.

Before discussing the Eisenhower national security advisory system, let me conclude with a general summary of the proposed relationships between the various cognitive styles and organizational systems:

1. The decisionmaker who exhibits the systematic style will develop a national security advisory system which emphasizes the features of the formalistic approach.
2. The decisionmaker who exhibits the speculative style will develop a national security system which combines features of both the formalistic and collegial approaches in a fairly balanced way.
3. The decisionmaker who exhibits the judicial style will develop a national security advisory system which emphasizes features of the formalistic approach and incorporates selected features of the collegial approach.
4. The decisionmaker who exhibits the intuitive style will develop a national security advisory system which emphasizes the features of the collegial approach.

#### Eisenhower's National Security Advisory System

Although it is beyond the scope of this project to systematically test these hypotheses across several administrations, I would like to provide a very preliminary assessment based on a brief analysis of the organizational arrangements developed and



used by Eisenhower. This analysis is based on the documents described in Chapter Two and some additional secondary sources which have also reviewed the recently declassified materials. The general question for consideration is to what extent does Eisenhower's national security advisory system support the hypotheses related to the speculative cognitive style?

Although documentation in this area is somewhat fuzzy, Eisenhower was moderately to substantially involved in the preoption phase of the policy process to the extent that he identified particular policy problems and requested studies and reports on issues on a regular basis. Clearly he was very involved in the postoption phase of the policy process. For instance, the National Security Council met 366 times during the eight years of his administration (as compared with a total of 125 meetings during the Nixon and Ford years<sup>1</sup>) and Eisenhower attended and presided over 339 of these sessions<sup>2</sup>. Although many of the minutes of these meetings have not been released, the ones that are available clearly indicate that Eisenhower actively questioned the Council members and exposed them to his thinking on issues and problems.

With respect to his style of interaction with advisors, Eisenhower used several strategies. At National Security Council meetings he interacted with several advisors at a time, with the

core group usually being kept to a dozen members so as to provide for comfortable exchanges (Greenstein,1982: 125). However, Eisenhower would also meet with smaller groups of key advisors, a few at a time, in his office, often immediately following National Security Council meetings (Henderson,1984: 21). Goodpaster's "memoranda of conferences with the president" document Eisenhower's frequent meetings with a few advisors at a time. And of course, Eisenhower met with advisors one at a time, as well. One on one meetings took place most often between Dulles and Eisenhower, many in the form of briefings.

Greenstein emphasizes Eisenhower's selective delegation of power and policymaking leeway in The Hidden-Hand Presidency (1982). The degree of decision latitude Eisenhower provided advisors seemed to depend on the nature of the issue, Eisenhower's interest and knowledge of the issue, and his assessment of the competence and skills of the particular advisor. For example, given Eisenhower's expertise in defense policy and his personal observations of his first secretary of defense, Charles Wilson, it is not surprising to find that Wilson had little policy leeway (Greenstein,1982: 83). Eisenhower was very personally involved in the making of defense policy. On the other hand, Robert Anderson, Eisenhower's treasury secretary, was given more decision latitude in areas of economic complexity on which Eisenhower was not well informed (Greenstein,1982: 82). While

Eisenhower clearly delegated a great deal of power to Dulles, the two policymakers were in daily touch and transcripts of their private phone conversations document that Eisenhower made the final decisions although he often took Dulles' advice (Immerman, 1979).

Eisenhower's National Security Council system was designed to provide the president with the systematic presentation of alternative viewpoints. Eisenhower initiated the position of the Special Assistant for National Security, Robert Cutler served Eisenhower in that post during the first years of his presidency. Cutler's primary role was that of a custodian whose job was to guarantee that all of the important viewpoints and perspectives were presented in NSC memoranda and that these papers and reports were based on careful analysis and study.

There was a great deal of information exchange between departments and agencies as well as the sharing of provisional options between departments. This exchange of information and discussion of options was built into the policymaking process through the institution of the Planning Board, chaired by Cutler.

The NSC agenda and above all the papers on which agenda items were based derived not from the activities of a small secretariat and departments or groups of departments working on their own, but rather from intensive discussions by the key policy planners in each of the constituent departments meeting in the twice-a-week,

three hour long working sessions of the NSC Planning Board. A major strength of the Planning Board was that its members were the senior policy advising officers in each of the constituent departments represented in the NSC. Each board member had the entire policy planning process of his department at his disposal . . .

The special assistant was expected by Eisenhower to use all of his informal powers to see that the detailed, carefully reasoned summaries and analyses of facts and recommendations in the board's many agenda papers lived up to the official requirement stated in the administration's written Planning guidelines (Greenstein, 1982: 126-27).

These guidelines specified that the board

facilitate the formulation of policies, during the process of drafting policy recommendations, by marshaling the resources of the respective departments and agencies; by identifying the possible alternatives; by endeavoring to achieve acceptable agreements; by discussing differences; by avoiding undesirable compromises which conceal or gloss over real differences; and by reducing differences to as clearly defined and narrow an area as possible prior to reference to the Council.

Cutler usually opened these meetings with his own comments and criticisms of the paper based on work by the NSC staff. The NSC support staff was designed to provide a government-wide perspective rather than a parochial department outlook. "At the very least its existence meant that there was available to the president an independent source of analysis of departmental recommendations" (Clark and Legere, 1969: 64). Most reports were

discussed at several sessions and when disagreements existed, policy "splits" were written into the papers to be submitted to the entire National Security Council for debate and resolution (Henderson, 1984: 6).

In summary, the NSC staff played an active role in evaluating and summarizing departmental materials before they were presented to the president and the entire Council. However, while departments shared their options with each other at Planning Board meetings, the NSC staff did not force consensus or paper over disagreements as it prepared the briefing papers for the Council meetings. The NSC staff had some authority and capability to generate independent analyses and recommendations and did produce some studies and information for the president and Council. However, the emphasis of the "formal" procedures was to insure that the departmental perspectives were identified, carefully researched and presented in a coherent, complementary fashion.

Eisenhower seemed to have a fairly high tolerance for substantive disagreement given his very active and regular participation in the National Security Council meetings in which the discussion of "splits" was often the focus of the meetings. The summaries of those meetings which are available clearly indicate, though, that Eisenhower resolved the splits after

listening and promoting the debate and discussion. As Dillon Anderson has noted:

The President 'invited a lot of give and take' from departmental representatives before making his decision. But having participated in a decision by stating their views, representatives from the departments 'damn well know what it was [the decision] and there'd be no fuzzing up as to what the President's decision had been.'

In conclusion, a preliminary assessment of the national security management system in the Eisenhower administration provides substantial support for the general hypothesis that the president who exhibits a speculative cognitive style will combine many features of both the formalistic and collegial approaches. While Eisenhower relied on clearly established procedures for communicating and conducting policy analysis, his primary rationale for the content of the formal guidelines seemed to be to capture the qualities of the collegial approach in which policymakers working as a team would analyze and debate alternative points of view.

This view of Eisenhower's national security management system significantly challenges the perspective depicted by Neustadt (1960), Schilling (1962), Huntington (1961), and Armacost (1969) in their case studies of national security decisionmaking during the Eisenhower administration. They

concluded that Eisenhower oversaw a rigidly hierarchical advisory system that was unable to respond quickly and effectively to foreign policy crises. In their view Eisenhower's management style precluded the possibility of policy innovations that would enhance the position of the U. S. and its ability to meet its foreign policy objectives. It was the criticism of observers like Neustadt that contributed to the Kennedy campaign strategy of running against the Eisenhower "style" of decisionmaking. More recent works by Ambrose (1983) and Kinnard (1977) which are also based on the declassified documents offer support for the interpretation suggested in this project.

In Chapter Five I will provide a summary of this project, discuss its implications for the conduct of foreign policy, and suggest some questions for future research.

## NOTES

1. Phillip G. Henderson, "National Security Policy-Making Under Eisenhower: Lessons in White House-Departmental Cooperation". Presented at the Midwest Political Science Association Meeting, Chicago, April 11-14, 1984.
2. Gordon Gray to Eisenhower, January 13, 1961, WF.
3. "The National Security Council--Official Description," Jackson Subcommittee Report, Vol. 2, p. 131.
4. Dillon Anderson, Columbia Oral History Interview No. 1, p. 18. Eisenhower Library.



## CHAPTER V

### CONCLUSION

In the next few pages I will briefly summarize the project, discuss its significance, and identify some questions for further research. Based on a careful review of the literature I have identified and elaborated on four different cognitive styles: systematic, speculative, judicial and intuitive. The conceptualization of these styles is based on four characteristics of an individual decisionmaker: his information gathering strategy, his approach to evaluating and processing information, his orientation toward time, and the type of problems he works on. I have proposed a strategy and set of coding rules for making inferences about the president's cognitive style using documents such as diaries, policy memoranda, memoranda of conversations, and minutes of meetings. Using these coding guidelines, I have analyzed approximately three hundred documents produced during the eight years of Eisenhower's presidency and have concluded that his style most closely resembles the speculative type. I then developed several hypotheses specifying the relationship between a president's cognitive style and his development of different organizational arrangements or national security advisory systems. This flows from my assumption stated in Chapter One that a president's cognitive style will influence the

way he will want to organize the structure and process of high level foreign policy decisionmaking. For example, I hypothesized that the speculative president will combine elements of the formalistic approach and the collegial approach. Although it is beyond the scope of this project to systematically test the hypotheses generated in Chapter Four, a preliminary examination of foreign policymaking in the Eisenhower administration suggests at least some support for my hypotheses regarding the speculative decisionmaker.

This research contributes to the literature on cognitive style and foreign policy decisionmaking in the following ways:

1. The identification and elaboration of the concept of cognitive style reflects a careful integration of literature from psychology, political science and management science.
2. Coding rules for making inferences about cognitive style from a distance are developed and explained. Although other analysts have examined cognitive style or decision style from a distance, they have not provided explicit coding rules. This strategy for examining cognitive style enhances our ability to study foreign policy elites since we do not usually have direct access to them for the purposes of administering psychological tests such as the MBTI.
3. This research utilizes recently declassified historical documents as the data base for analyzing foreign policy

decisionmaking and the characteristics of a particular president. This data base is superior to published memoirs and secondary sources which are not based on the original documents produced in the policymaking process. These archival materials are a very rich source of information on individual and small group decisionmaking in the highest levels of the national security bureaucracy.

4. Testable hypotheses relating a president's cognitive style to the organizational arrangements used for making foreign policy decisions are specified. Although other analysts have discussed the importance of the president's "style" in this regard, they have not usually developed testable hypotheses
5. In addition to the theoretical components of the project, this research sheds additional light on the cognitive style of a particular president, Dwight D. Eisenhower, and the nature of national security decisionmaking during his administration.

In general I believe that this research agenda is important because the president's cognitive style is likely to impact a great deal on the ability of high level foreign policymakers to move close to meeting the criteria for quality decisionmaking suggested by Alexander George in the first few pages of Chapter One. The impact of cognitive style on the quality of decisionmaking is acknowledged by some of the management science

scholars. In his discussion of the linkage between decision styles and decision models (which is similar although not completely consistent with my focus on decision structures and processes), Nutt suggests some important possibilities:

The link between decision styles and decision models suggests that models are seldom used unless they are consistent with the decisionmaker's style. This inevitably leads to poor decisions because each decision model has specific strengths and weaknesses. Vague and ill-structured (open-system) decision tasks may be treated to rigorous analysis. This analysis is futile because the models cannot capture or represent critical criteria that must be understood in choosing among alternatives for open-system decisions. Clear-cut (closed-system) decision tasks may receive homeostatic tinkering when analysis can efficiently isolate a preferred (or desirable) course of action (Nutt, 1979:90-1).

What are the implications of this argument in the area of foreign policy decisionmaking and the design of national security advisory systems? First, it would not be advisable to develop a formalistic advisory system for a president with an intuitive style. Implementation would probably be a disaster because the intuitive president would not be comfortable with the organizational arrangements and processes associated with such an approach. Similarly, a competitive or collegial approach would not be appropriate for the systematic president if you are interested in getting him to actually participate and contribute to the process. To the extent that any president does not feel

comfortable with the structure and process of his national security advisory system, he will probably not play his role in that process very effectively and this will undermine George's criteria for quality decisionmaking in a general way. For instance, a president with a systematic style would probably find it difficult, if not impossible, to mediate differences and maintain teamwork among colleagues if he were the center of a collegial system and expected to use his interpersonal skills on a regular basis.

Second, given that the president will develop an advisory system that is compatible with his cognitive style, this may result in less than effective decisionmaking arrangements at times. Organizational arrangements will be more or less appropriate and promote quality decisionmaking depending on the nature of the policy problem. For example, in the case of external crises, the formalistic approach may be too slow and not encourage sufficient "brainstorming". It may not provide the flexibility to respond creatively in a short period of time. However, a formalistic approach may be more appropriate for considering longer term national security policies and doctrines. Such an approach is more likely to insure an orderly decision process. This means that when we are trying to explain low quality foreign policy decisionmaking and decisions, it is important to consider the "match" between the foreign policy

management system and the type of policy problem. A bad match may partially explain poor decisions.

This brings me to the consideration of several questions which deserve to be studied in the future. To the extent that a president can control his foreign policy agenda, what type of national security problems/issues will presidents with different cognitive styles to work on? This research suggests that presidents with different styles will focus on policy problems that are compatible with their style (and organizational arrangements). For example, the intuitive president will probably focus on longer term policies and doctrines and personal diplomacy while the systematic president will work on budgetary allocations related to national security. Problems are likely to arise when the president is forced to focus on problems which are not compatible with his style and related management system. Sylvan and Hermann (1979) have suggested several dimensions of different types of national security problems. These dimensions include problem familiarity, problem stability, value conflicts, technical information required, decision time, resource mobilization, degree of domestic collaboration and degree of external collaboration. Their conceptualization of foreign policy problems might serve as a starting point for examining the compatibility of different cognitive styles with different problems.

Another set of questions which deserve further study are related to the stability of an individual's cognitive style over time and in different situations. For example, does the president exhibit a different cognitive style in the later years of his administration than in the early years? Does the president exhibit a different style in his interaction with a close advisor, one-on-one, than in National Security Council meetings? I did not make much progress with this set of questions in the current research. Generally speaking, I did not discover major differences in Eisenhower's style over time or in different settings. However, this may be a function of the particular documents I had access to, both in terms of their substantive focus, setting and timing in the administration. Also, my coding categories may not be adequate for making the fine distinctions required to monitor such changes. The theoretical literature suggests that most people will not exhibit radical changes in their style over time.

Another issue to consider in future research is what happens in the design and implementation of national security decisionmaking given the mix and interaction of high level advisors with different cognitive styles. The president is certainly not functioning alone. What difference does it make if his National Security Advisor's cognitive style is the same or very different? How will and how should this influence the design and

implementation of the advisory process? Research in this area would probably be helpful in the development of scope conditions related to the hypotheses generated in Chapter Four. Perhaps the president's use of certain organizational arrangements will depend on the nature of the advisors he is surrounded by. With the "right" advisors, the president might be able and willing to work within a slightly different advisory system that will complement his strengths and weaknesses.

Finally, before moving on to an empirical examination of the hypotheses developed in this project, it will be necessary to specify more carefully the distinctions between the formalistic, collegial and competitive approaches to foreign policy management. As noted in Chapter Four, I am concerned that the competitive approach is a straw man that primarily reflects the idiosyncracies of Franklin Roosevelt. In the contemporary period it is difficult to imagine any president operating in that fashion. I do not think that any of the four cognitive styles are particularly compatible with the competitive approach. Depending on the individual, certain intuitive types and speculative types might be able to manage such an approach.

Given these general issues let me conclude by briefly discussing several follow-up research questions and possible research designs. The most obvious follow-up to this project



involves asking whether presidents with particular cognitive styles have the propensity to use certain organizational arrangements or advisory systems. Such a project would involve assessing the cognitive styles of several presidents and then empirically examining the particular advisory systems and management arrangements that they designed and used in making foreign policy decisions. In such a project I would focus on the correlation between various cognitive styles and different organizational arrangements.

Another interesting approach to these issues would be to ask whether presidents with particular cognitive styles are more successful with one type of advisory system compared to another managerial approach. A key question in this type of project is how to define success. In this case I would propose looking at success in terms of foreign policy outcomes (See Sylvan, 1985). To what extent will a particular set of organizational arrangements result in meeting the foreign policy goals in the external environment? One could look at the specific goal statements of key figures in the foreign policy bureaucracy as a standard for assessing the "success" of the foreign policy outcomes in the external environment.

A related question would be to ask whether presidents with particular cognitive styles are more successful with one type of advisory system compared to another in terms of enhancing the quality of the decisionmaking process itself. In Chapter One I summarized George's criteria for evaluating a high quality decisionmaking process. To what extent are these criteria likely to be met if one set of organizational arrangements as opposed to another is used by presidents with particular cognitive styles? How will these arrangements effect the search for and evaluation of policy relevant information?

Another interesting strategy would be to look at organizational changes made during administrations. For instance, it appears that Carter and Reagan have changed the organizational arrangements and advisory system during their administrations. Is cognitive style influencing these changes? Did they think that one approach rather than another was more appropriate or would work better? A related question relates to the matter of issue area or type of problem. For instance, did Carter and Reagan organize differently for different issues or types of problems? This relates to the question of whether an individual with a particular cognitive style is able to effectively shift from one type of advisory system to another. Perhaps individuals with particular cognitive styles are in a better position to be more flexible and move back and forth from one approach to

another. For instance, it seems that Eisenhower, with a speculative style, used a different approach in areas where he felt he had a great deal of expertise such as military issues than he did on areas in which he had less expertise, such as international economics. In the latter case he was more willing to defer to advisors while in the former case he played the central role in the advisory system. Therefore, it might be appropriate to consider how presidents with different styles respond to different issues and problems such as crisis vs. non-crisis and whether they organize differently in these different situations.

Finally, this project suggests that it might be quite fruitful to work on the development of organizational scenarios by building computational models. These models would examine organizations, building in differences in the cognitive styles of the president and focusing on different contextual variables. This would be an appropriate way to begin refining the hypotheses suggested in this research.

As in the case of most research programs, this project has clearly raised as many questions as it has answered. This discussion reflects some of the issues I hope to pursue.

## REFERENCES

- Abelson, Robert. "Script Processing in Attitude Formation and Decision-Making." In COGNITION AND SOCIAL BEHAVIOR. Eds. J.S. Carroll and J.W. Payne. Hillsdale, New Jersey: Lawrence Erlbaum Assoc., Publishers, 1976.
- Adorno, T.W., E. Frenkel-Brunswik, D.J. Levinson, and R.N. Sanford. THE AUTHORITARIAN PERSONALITY. New York: Harper, 1950.
- Alker, Henry A. "Is Personality Situationally Specific or Intrapsychically Consistent?" JOURNAL OF PERSONALITY 40 (1972): 1-16.
- Allison, Graham T. ESSENCE OF DECISION: EXPLORING THE CUBAN MISSILE CRISIS. Boston: Little, Brown, 1971.
- Armocost, Michael. THE POLITICS OF WEAPONS INNOVATION: THE THOR-JUPITER CONTROVERSY. New York: Columbia University Press, 1969.
- Ambrose, Stephen E. EISENHOWER. New York: Simon and Schuster, 1983.
- Allport, G.W. PERSONALITY: A PSYCHOLOGICAL INTERPRETATION. New York: Holt, 1937.
- Anderson, Paul A. "Decision-Making By Objection and the Cuban Missile Crisis." ADMINISTRATIVE SCIENCE QUARTERLY 28 (1983): 201-222.
- Axelrod, Robert. Ed. STRUCTURE OF DECISION. Princeton, New Jersey: Princeton University Press, 1976.
- Axelrod, Robert. "Schema Theory: An Information Processing Model of Perception and Cognition." AMERICAN POLITICAL SCIENCE REVIEW 67 (1973): 1248-1266.
- Bariff, M.L. and E.J. Lusk. "Cognitive and Personality Tests for the Design of Management Information Systems." MANAGEMENT SCIENCE 23 (1977): 820-829.
- Benbasat, Izak and Ronald N. Taylor. "The Impact of Cognitive Styles on Information System Design." MANAGEMENT INFORMATION SYSTEM QUARTERLY 2 (1978):43-54.
- Bieri, James. "Cognitive Structures in Personality." In PERSONALITY THEORY AND INFORMATION PROCESSING. Eds. Harold M. Schroder and Peter Suedfeld. New York: The Ronald Press, 1971.

Bieri, James, A.L. Atkins, S. Briar, R.L. Leaman, and H. Miller. CLINICAL SOCIAL JUDGMENT: THE DISCRIMINATION OF BEHAVIORAL INFORMATION. New York: Wiley, 1966.

Block, Jack. "Some Reasons for the Apparent Inconsistency of Personality." PSYCHOLOGICAL BULLETIN 70 (1968): 210-212.

Brody, N. PERSONALITY RESEARCH AND THEORY. New York: Academic Press, 1972.

Broverman, D.M. "Dimensions of Cognitive Style." JOURNAL OF PERSONALITY 28 (1960) 167-185.

Bruner, Jerome S., Jacqueline Goodnow and George A. Austin. A STUDY OF THINKING. New York: John Wiley and Sons, 1956.

Carlyn, Marcia. "An Assessment of the Myers-Briggs Type Indicator." JOURNAL OF PERSONALITY ASSESSMENT 41 (1977): 461-473.

Carroll, John S. "Analyzing Decision Behavior: The Magician's Audience." In COGNITIVE PROCESSES IN CHOICE AND DECISION BEHAVIOR. Ed. Thomas Wallsten. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.

Chase, William G. Ed. VISUAL INFORMATION PROCESSING. New York: Academic Press, 1973.

Churchman, C.W. and A.H. Schainblatt. "The Researcher and the Manager: A Dialectic of Implementation." 11 (1965): 69-87.

Crockett, Walter H. "Cognitive Complexity and Impression Formation." In PROGRESS IN EXPERIMENTAL PERSONALITY RESEARCH. Ed. Brendan A. Maaher. New York: Academic Press, 1965.

Chesney, James D. "The Impact of Analytic Ability on Congressional Behavior." JOURNAL OF POLITICAL PSYCHOLOGY, 1980.

Clark, Keith C. and Laurence J. Legere. Eds. THE PRESIDENT AND THE MANAGEMENT OF NATIONAL SECURITY. New York: Praeger, 1969.

Cook, Blanche Wiesen. THE DECLASSIFIED EISENHOWER. Garden City, New York: Doubleday and Company, 1981.

Dickson, G.W., J.A. Senn, and J.T. Chervany. "Research in Management Information Systems: The Minnesota Experiments." MANAGEMENT SCIENCE 23 (1977): 913-923.

Doktor, Robert. "Problem Solving Styles of Executives and Management Scientists." TMS STUDIES IN THE MANAGEMENT SCIENCES 8 (1978):123-134.

Doktor, R.H. and D.M. Bloom. "Selective Lateralization of Cognitive Style Related to Occupation as Determined by EEG Alpha Asymmetry." PSYCHOPHYSIOLOGY 14 (1977): 385-387.

Doktor, Robert H. and William F. Hamilton. "Cognitive Style and the Acceptance of Management Science Recommendations." MANAGEMENT SCIENCE 19 (1973).

Driver, Michael J. "Individual Differences as Determinants of Aggression in the Inter-Nation Simulation." In A PSYCHOLOGICAL EXAMINATION OF POLITICAL LEADERS. New York: The Free Press, 1977.

Driver, Michael J. and Theodore J. Mock. "Human Information Processing, Decision Style Theory, and Accounting Information Systems." THE ACCOUNTING REVIEW (July 1975): 490-508.

Ferrell, Robert H. THE EISENHOWER DIARIES. New York: Norton, 1981.

Flavell, John H. COGNITIVE DEVELOPMENT. Englewood Cliffs, New Jersey: Prentice-Hall, 1977.

Gardner, R.W., P.S. Holtzman, G.S. Klein, H.B. Linton, and D.P. Spence. "Cognitive Control: A Study of Individual Consistencies in Cognitive Behavior." PSYCHOLOGICAL ISSUES 1 (1959).

George, Alexander. PRESIDENTIAL DECISIONMAKING IN FOREIGN POLICY: THE EFFECTIVE USE OF INFORMATION AND ADVICE. Boulder, Colorado: Westview Press, 1980.

George, Alexander. "The Case for Multiple Advocacy in Making Foreign Policy." AMERICAN POLITICAL SCIENCE REVIEW (September 1972).

George, Alexander. "The 'Operational Code': A Neglected Approach to the Study of Political Leaders and Decision Making." INTERNATIONAL STUDIES QUARTERLY 13 (1969): 190-222.

Goldstein, Kenneth M. and Sheldon Blackman. COGNITIVE STYLE. New York: John Wiley and Sons, 1978.

Greenstein, Fred I. THE HIDDEN-HAND PRESIDENCY. New York: Basic Books, 1982.

Hammond, Kenneth R., Gary McClelland, and Jeryl Mumpower. HUMAN JUDGMENT AND DECISION MAKING. New York: Praeger, 1980.

Harre, R. and P.F. Secord. THE EXPLANATION OF SOCIAL BEHAVIOR. New Jersey: Littlefield, Adams and Company, 1973.

Harvey, O.J. "Cognitive Determinants of Role Playing." Technical Report No. 3, Contract Nonr 1147 (07). Boulder: University of Colorado, 1963.

Harvey, O.J., D.E. Hunt, and H.M. Schroder. CONCEPTUAL SYSTEMS AND PERSONALITY ORGANIZATION. New York: Wiley, 1961.

Hellriegel, Don and John W. Slocum. "Preferred Organizational Designs and Problem Solving Styles: Interesting Companions." HUMAN SYSTEMS MANAGEMENT 1 (1980): 151-158.

Hellriegel, Don and John W. Slocum. "Managerial Problem Solving Styles." BUSINESS HORIZONS (December 1975): 29-37.

Henderson, John C. and Paul C. Nutt. "The Influence of Decision Style on Decision Making Behavior." MANAGEMENT SCIENCE 26 (1980): 371-386.

Henderson, Phillip G. "National Security Policy-Making Under Eisenhower: Lessons in White House-Departmental Cooperation. Paper presented at the Midwest Political Science Association Meeting, Chicago, April 11-14, 1984.

Hermann, Charles F. "The Effects of Decision Structures and Processes on Foreign Policy Behaviors." Paper presented at the International Society of Political Psychology Meeting, May 24-26, 1979.

Hermann, Charles F. "Decision Structure and Process Influences on Foreign Policy." In WHY NATIONS ACT. Eds. Maurice A. East, Stephen A. Salmore, and Charles F. Hermann. Beverly Hills: Sage Publications, 1978.

Hermann, Margaret G. "The Implication of Leaders' Foreign Policy Orientations for the Quality of Foreign Policy Decisions." Paper presented at the International Studies Association Meeting, Los Angeles, April, 1980.

Hermann, Margaret G. "Some Personal Characteristics Related to Foreign Aid Voting of Congressmen." In A PSYCHOLOGICAL EXAMINATION OF POLITICAL LEADERS. Ed. Margaret G. Hermann. New York: The Free Press, 1977.

Hermann, Margaret G. "Effects of Leader Personality on National Foreign Policy Behavior." In COMPARING FOREIGN POLICIES. Ed. James N. Rosenau. New York: Halstead Press, 1974.

Hess, Stephen. ORGANIZING THE PRESIDENCY. Washington, D.C.: Brookings, 1976.

Holsti, Ole R. THE OPERATIONAL CODE AS AN APPROACH TO THE ANALYSIS OF BELIEF SYSTEM. Final Report to the National Science Foundation, Grant No. SOC75-15368, 1977.

Holsti, Ole R. "The 'Operational Code' Approach to the Study of Political Leaders: John Foster Dulles' Philosophical and Instrumental Beliefs." CANADIAN JOURNAL OF POLITICAL SCIENCE (1970): 123-157.

Holsti, Ole R. CONTENT ANALYSIS FOR THE SOCIAL SCIENCES AND HUMANITIES. Reading, Mass.: Wesley Publishing Company, 1969.

Huber, George P. "Cognitive Style as a Basis for MIS and DSS Designs: Much Ado About Nothing." MANAGEMENT SCIENCE 29 (1983): 567-579.

Huntington, Samuel. THE COMMON DEFENSE. New York: Columbia University Press, 1961.

Huysman, Jan H.B.M. THE IMPLEMENTATION OF OPERATIONS RESEARCH. New York: Wiley-Interscience, 1970.

Huysman, Jan H.B.M. "The Effectiveness of the Cognitive Style Constraint in Implementing Operations Research Proposals." MANAGEMENT SCIENCE 17 (1970): 92-104.

Immerman, Richard. "Eisenhower and Dulles: Who Made the Decisions?" POLITICAL PSYCHOLOGY 1 (1979): 21-38.

Janis, I.L. VICTIMS OF GROUPTHINK. Boston: Houghton Mifflin, 1972.

Janis, I.L. and Leon Mann. DECISION-MAKING. New York: The Free Press, 1977.

Johnson, Richard T. MANAGING THE WHITE HOUSE. New York: Harper and Row, 1974.

Jung, C.G. PSYCHOLOGICAL TYPES. Princeton: Princeton University Press, 1971.

Kelly, G.A. THE PSYCHOLOGY OF PERSONAL CONSTRUCTS. New York: Norton, 1955.

Kilmann, Ralph H. and Richard P. Herden. "Towards a Systematic Methodology For Evaluating the Impact of Interventions on Organizational Effectiveness." ACADEMY OF MANAGEMENT REVIEW 1 (1976): 87-98.



Kinnard, Douglas. PRESIDENT EISENHOWER AND STRATEGY MANAGEMENT: A STUDY IN DEFENSE POLITICS. Lexington: Lexington University Press, 1977.

Krippendorff, Klaus. CONTENT ANALYSIS; AN INTRODUCTION TO ITS METHODOLOGY. Beverly Hills: Sage, 1980.

Lucas, Henry C. and Norman R. Nielsen. "The Impact of the Mode of Information Presentation on Learning and Performance." MANAGEMENT SCIENCE 26 (1980): 982-993.

Lindblom, Charles E. "The Science of Muddling Through." PUBLIC ADMINISTRATION REVIEW 19 (Spring): 79-88.

Lusk, Edward J. and Michael Kersnick. "The Effect of Cognitive Style and Report Format on Task Performance: The MIS Design Consequences." MANAGEMENT SCIENCE 25 (1979): 787-798.

March, James G. and Herbert Simon. ORGANIZATIONS. New York: John Wiley and Sons, 1958.

McKenney, James L. and Peter G.W. Keen. "How Managers' Minds Work." HARVARD BUSINESS REVIEW (May-June 1974): 79-90.

Mason, Richard O. and Ian I. Mitroff. "A Program for Research on Management Information Systems." MANAGEMENT SCIENCE 19 (1973): 475-487.

Mendelson, G.A. "Review of the Myers-Briggs Type Indicator." In SIXTH MENTAL MEASUREMENTS YEARBOOK (Third Edition). Ed. O.K. Buros. Highland Park, New Jersey: Gryphon Press, 1965.

Messick, S. INDIVIDUALITY IN LEARNING. San Francisco: Jossey-Bass, 1976.

Mischel, Walter. "Toward a Cognitive Social Learning Reconceptualization of Personality." PSYCHOLOGICAL REVIEW 80 (1973): 252-283.

Mischel, Walter. PERSONALITY AND ASSESSMENT. New York: John Wiley and Sons, 1968.

Mitroff, Ian I. and Ralph H. Kilmann. "On Evaluating Scientific Research: The Contribution of the Psychology of Science." TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 8 (1975) 163-174.

Mitroff, Ian I. and Ralph H. Kilmann. "Stories Managers Tell: A New Tool For Organizational Problem Solving." MANAGEMENT REVIEW (July 1975): 18-28.

Murphy Commission. REPORT ON THE ORGANIZATION OF THE GOVERNMENT FOR THE CONDUCT OF FOREIGN POLICY. Washington, D.C.: U.S. Government Printing Office, June 1975.

Myers, Isabel Briggs. THE MYERS-BRIGGS TYPE INDICATOR: MANUAL. Palo Alto, California: Consulting Psychologists Press Incorporated, 1962.

Neustadt, Richard E. PRESIDENTIAL POWER. New York: John Wiley and Sons, 1960.

Newell, A. and H.A. Simon. HUMAN PROBLEM SOLVING. Englewood Cliffs, New Jersey: Prentice-Hall, 1966.

Nutt, P.C. USER PREFERENCE AS A BASIS TO SELECT A PLANNING MODEL, AIDS PROC. 8 (November 1976).

Nutt, Paul Charles. "Influence of Decision Styles on Use of Decision Models." TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 14 (1979): 77-93.

Payne, John W. "Information Processing Theory: Some Concepts and Methods Applied to Decision Research." In COGNITIVE PROCESSES IN CHOICE AND DECISION BEHAVIOR. Ed. Thomas Wallsten. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.

Robey, Daniel. "Cognitive Style and DSS Design: A Comment on Huber's Paper." MANAGEMENT SCIENCE 29 (1983): 580-582.

Robey, Daniel and William Taggart. "Measuring Managers' Minds: The Assessment of Style in Human Information Processing." ACADEMY OF MANAGEMENT REVIEW 6 (1981): 375-383.

Rokeach, Milton. THE OPEN AND CLOSED MIND. New York: Basic Books, 1960.

Schilling, Warner, Paul Hammond and Glenn Snyder. STRATEGY, POLITICS AND DEFENSE BUDGETS. New York: Columbia University Press, 1962.

Schroder, Harold M. and Peter Suedfeld. Eds. PERSONALITY THEORY AND INFORMATION PROCESSING. New York: The Ronald Press, 1971.

Schroder, H.M., M.J. Driver, and S. Streufert. HUMAN INFORMATION PROCESSING. New York: Holt, Rinehart and Winston, 1967.

Shapiro, Michael J. and Matthew G. Bonham. "Cognitive Process and Foreign Policy Decision Making." INTERNATIONAL STUDIES QUARTERLY 17 (1973): 147-174.

Shouksmith, George. INTELLIGENCE, CREATIVITY AND COGNITIVE STYLE. New York: Wiley-Interscience, 1970.

Shneidman, Edwin. "Logic Content Analysis: An Explication of Styles of Concludifying." In THE ANALYSIS OF COMMUNICATION CONTENT. Eds. George Gerbner. New York: Wiley, 1969.

Simon, Herbert. "Cognition and Social Behavior." In COGNITION AND SOCIAL BEHAVIOR. Eds. John S. Carroll and John W. Payne. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976.

Simon, Herbert. "Motivation and Emotional Controls of Cognition." PSYCHOLOGICAL REVIEW 74 (1967): 29-39.

Snyder, Richard C., H.W. Bruck and Burton Sapin. Eds. FOREIGN POLICY DECISION MAKING. New York: The Free Press, 1962.

Suedfeld, Peter. "Measuring Integrative Complexity in Archival Materials." In KOGNITIVE KOMPLEXITAT. Eds. H. Mendl and G.L. Huber. Gottingen: Hogrefe Verlag, 1978.

Suedfeld, Peter and Philip E. Tetlock. "Integrative Comcomplexity of Communications in International Crisis." JOURNAL OF CONFLICT RESOLUTION 21 (1977): 169-184.

Suedfeld, Peter, P.E. Tetlock, and C. Ramirez. "War, Peace and Integrative Complexity." JOURNAL OF CONFLICT RESOLUTION 21 (1977): 427-442.

Suedfeld, Peter. "Information Processing as a Personality Model." In PERSONALITY THEORY AND INFORMATION PROCESSING. Eds. H.M. Schroder and P. Suedfeld. New York: The Ronald Press, 1971.

Sundberg, Norman D. "Review of the Myers-Briggs Type Indicator." In SIXTH MENTAL MEASUREMENTS YEARBOOK (Third Edition). Ed. O.K. Buros. Highland Park, New Jersey: Gryphon Press, 1965.

Sylvan, Donald A. "Assessing the Impact of U.S. Foreign Policy Organizational Strategies." Paper presented at the International Studies Association Meeting, Atlanta, Georgia, March 28-31, 1984.

Sylvan, Donald A. "Output versus Outcome: Do U.S. Foreign Policy Organizational Strategies Make a Difference?" Paper presented at the American Political Science Association Meeting, New Orleans, Louisiana, September, 1985.

Sylvan, Donald A. and Charles F. Hermann. "Simulating U.S. National Security Decision Making." SIMULATION AND GAMES (September 1979).

Sylvan, Donald A. and Edward G. Ramsey. CODEBOOK FOR NATIONAL SECURITY ORGANIZATION PROJECT. 1985.

Sylvan, Donald A., Esther Thorson and Stuart J. Thorson. "Processing Styles and Theories of Foreign Policy Decision Making." Paper presented at the International Studies Association Meeting, St. Louis, 1977.

Sylvan, Donald A. and Stuart J. Thorson. "Measuring Cognitive Style at a Distance." Unpublished paper. 1979.

Tetlock, P.E. "Identifying Victims of Groupthink from the Public Statements of Decision Makers." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 37: 1314-24.

Tetlock, P.E. "Integrative Complexity as a Variable in Political Decision Making." Paper presented at the International Studies Association Meeting, Los Angeles, California, 1980.

Tetlock, P.E. and Ariel Levi. "Japan's Decision for War." JOURNAL OF CONFLICT RESOLUTION 24 (1980): 195-211.

Vannoy, J.S. "Generality of Cognitive Complexity-Simplicity as a Personality Construct." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 2 (1965): 385-396.

Vernon, Phillip E. "Multivariate Approaches to the Study of Cognitive Styles." In MULTIVARIATE ANALYSIS AND PSYCHOLOGICAL THEORY. Ed. Joseph R. Royce. London: Academic Press, 1973.

Waterman, D. and A. Newell. "Protocol Analysis as a Task for Artificial Intelligence." ARTIFICIAL INTELLIGENCE 2 (1971): 285-318.

Winter, David G. and Abigail J. Stewart. "Content Analysis as a Technique for Assessing Political Leaders." In A PSYCHOLOGICAL EXAMINATION OF POLITICAL LEADERS. Ed. Margaret G. Hermann. New York: The Free Press, 1977.

Witkin, Harold et al. PSYCHOLOGICAL DIFFERENTIATION. New York: John Wiley and Sons, 1967.

Witkin, Harold et al. PERSONALITY THROUGH PERCEPTION. New York: Harper, 1954.

Zmud, Robert W. "Perceptions of Cognitive Styles: Acquisition, Exhibition and Implications for Information Systems Design." JOURNAL OF MANAGEMENT 5 (1979): 7-20.