How Do We Know What We Know?[1]

5 September 2010

Our beliefs about the world are largely the product of the cultural milieu in which we are socialized. "...Cultural influences have set up the assumptions about the mind, the body, and the universe with which we begin; pose the questions we ask; influence the facts we seek; determine the interpretation we give these facts; and direct our reaction to these interpretations and conclusions." Gunnar Myrdal, <u>The American Dilemma</u>

All thinking is based, in part, on prior convictions
George A. Kelly, 1955

"Seeing is Believing"…or is it "Believing is seeing?"

"If you disagree with me on: abortion; taxes; same-sex marriage; health-care reform; the wars in Iraq and Afghanistan, etc.—you are not only wrong, you are evil." Anonymous ideologue

<u>Introduction:</u>

The quotes shown above suggest a fundamental truth about how people usually view the world—they interpret it through the lens of preconceived beliefs. Many of these preconceived beliefs are taught from childhood and are never seriously questioned. They become givens in individuals' decision-making calculus and thus fit reality to conform to those given beliefs, that is, "believing is seeing." This is especially true in regards to one's religious beliefs and dominant cultural mores.

The nation is faced with several serious threats to its continuing prosperity and freedom, if not its existence. While many of these threats are external, e.g. terrorism, others, e.g. the economic crisis, are internal. Ultimately, in a democracy the decisions made by the government to meet these threats are made by the voters, in the sense that voters elect the people that make policy. If the system is to work, the voters must make their choices based on valid beliefs of the qualifications of the candidates. There is much evidence to indicate that voters base their decisions on sources of information that are biased and that appeal to emotions rather than rational analysis of the issues. In a complex world, most people do not have the background or time to understand the complexity of national issues on which they vote. Consequently, they rely on what they consider to be authoritative sources. Ideally, they should trust the government that they have elected to make critical decisions. Unfortunately, this is not the case, as polls indicate. To what sources then, do they turn? Too often, they turn to biased sources that have vested interests that may or may not be the interests of the nation. An educated public should know the difference.

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[1] This paper was originally written for use in classes at the National Defense University, where students are challenged to question prior assumptions that underlie their beliefs about national security issues. As policymakers, they have a professional obligation to be analytical and objective.

The country was established on the assumption that people could determine their own fate. This requires a system that involves common values and a tolerance for diversity of thought and behavior balanced against the need for social order. The Founding Fathers ensured protection from the "tyranny of the majority" by encompassing safeguards in the Constitution. However, legal protection can go only so far in protecting these rights; the most important factor in long-term freedom with social stability is shared values and norms. The current climate among the body politic suggests that shared values and norms of behavior are in jeopardy. Polarized sources of information appeal to the partisan bases. Talk shows that appeal to rational analyses are replaced by provocateurs that stir the emotions of their respective bases. Party leaders adopt slash and burn politics; business and labor groups lobby for selfish goals. Voters don't know where to turn for valid information on subjects beyond their comprehension.

The major goal of education is to prepare people to look at the world in an objective, critical way and base their beliefs on facts, that is, "seeing is believing." The purpose of this essay is to establish a framework for the rational discussion of controversial issues that involve conflicting beliefs about what is true, just, moral, and pragmatic in political and social matters. It was originally written for classes at the National Defense University for students being educated to be senior national security policymakers, but the principles are just as applicable for the purposes of this seminar.

In my experience observing discussions of controversial issues, too often advocates of opposing positions talk as if they alone possess the truth. Discussions take the form of debate rather than dialogue. Neither side attempts to identify shared values and grounds for consensus; rather, each is focused on a win-lose outcome to ensure their position prevails. (See enclosure 2). Too often, the adversaries act as if they hold their views with metaphysical certitude, that is, their views are etched in stone and beyond the scope of rational discussion. Those people may be described as "true believers", or "ideologues[2]", impervious to the real world. This is true whether their beliefs derive from secular or divine authorities.

The aim of objective thinking is to examine critically a situation before forming one's beliefs (seeing is believing), but too frequently, we see what reinforces what we already believe (believing is seeing). This tendency is especially dominant when we perceive complex human behavior in which we have a vested interest. That people's definition of reality tends to reflect emotional, individual needs should be obvious. Go to a sporting event, especially a youth event, where the spectators are mostly parents of the participants. Observe how the opposite sides interpret events on the field (e.g., fouls, referee calls). If you are a disinterested observer, you may wonder if the two sides are viewing the same game. More starkly, watch a professional wrestling match, keeping in mind that tens of millions of viewers believe the contests are real. (The scary thing is that some of these same people choose political leaders the same uncritical way).

Move this phenomenon to the political, religious, or economic worlds and the dynamics are similar. People perceive the world in incompatible ways, yet they may be ready to die to impose their version of "truth" on the rest of the world. It is important to understand where and how individuals get these perspectives. "Biased" perception is more pronounced when our beliefs about what is "right" and "wrong" regarding these behaviors are based on uncritical faith in the sources of those beliefs. Each of us is a product of our own experiences and thus we bring

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[2]Ideologue: one who rigidly adheres to a belief system regardless of contradictory evidence; "True Believer": A zealot; a form of dogmatism commonly applied to political beliefs.

to a situation our own unique belief system that filters the "real world". Moreover, each of us has convictions that our beliefs are based on solid logic and critical thought—that we are seeing the world as it is, unfiltered through a biased perceptual system. Religious fundamentalists cannot accept that theirs is not the only "true" faith. Similarly, most Americans accept as a given that their central values, e.g., free markets and democracy, are universal values that are desired by all people on earth. To challenge these beliefs is heresy. Much of our foreign policy, including military excursions, is designed to impose those values on others. We justify these activities based on a belief that we have a moral obligation to do so. How confident are we that these cherished values are true?

Obligation to be Objective.

One of the most critical elements in making rational decisions about the world is to avoid contaminating factors that distort objective analysis. Decisions, of course, are based on a number of factors, many of which are external to the decision-maker. Our professional education has taught us to ensure that we take into account those external factors. An obvious requirement is to have access to accurate information. This is a serious problem in regard to most of the complex issues that will be addressed in this course. It is ironic that in an environment where we are bombarded with information, many people are largely ignorant of the major issues shaping their lives. Part of the problem is that few people have the necessary background to understand the complex and technical aspects of issues such as economics. So they turn to trusted sources for the answers. Other contaminating factors, however, have to do with the personality of the decision-maker. Professional education tends to ignore these factors. This paper focuses on those personality variables, in particular those related to belief systems.

In his study on presidential decision-making, Alexander George[3] found that people don't make decisions merely on the facts of the situation; rather, the situational factors interact with the personalities of the decision-makers. Among the personality factors he discusses are:

1) Character-rooted needs with complex motivational patterns.
2) Ego defense mechanisms
3) Belief systems.

Each factor has the potential of contaminating the decision process. George has this to say about the role of belief systems:

"... it must be recognized that an individual's personality system itself includes more than character-rooted needs and ego defense mechanism (such as denial, repression, and projection) that are employed to cope with anxiety , fear and guilt. Thus, an executive's political behavior will be shaped also by a variety of cognitive beliefs (ideology, world view, beliefs about correct political strategy, and tactics, etc.) that he has acquired during his education, personal development, and socialization into political affairs. In other words, much of an individual's behavior as a political decision maker will reflect what he has learned along the way either through direct or vicarious experience and will be shaped also by the values and behavioral patterns that he has acquired by modeling himself on prestigious persons." p. 5

Most of us like to believe we have a pretty good idea of what is true and false about the world. In general, we have confidence that our beliefs are rational and grounded in fact; that they

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[3] Alexander George. Presidential Decisionmaking in Foreign Policy, Westview Press. Boulder, CO, 1980.

are well thought out. With regard to the physical world, we can look to science to verify our beliefs. In the realm of less physical phenomena such as human behavior and transcendental areas such as religion, however, we have reason to be less confident. At least we _should_ feel less confident. Although the scientific method has been applied to the area of human behavior for some time, our confidence in its findings is not quite as secure as in the physical sciences. Thus, we cannot subject our beliefs about human behavior to the same critical evaluation as we can for the physical world. Notwithstanding this lack of confidence in our beliefs about the non-physical world, we must rely on them for many of our decisions.

George acknowledges the need for beliefs (which are models, theories, or mental maps of the real world) in making sense of the complex world. They provide structure to an otherwise incomprehensible world. If used correctly, with an appreciation of their limitations, these tools are useful for organizing and explaining the world. No theory of the world is exactly correct; the usefulness of each is proportional to its approximate reflection of the real world. Each person likes to believe his own particular view of the world--whether it is religious, economic, political, or social—is accurate. As discussed below, some people have such rigidity in their beliefs that their decision-making is significantly flawed. As George points out, people often become "belief-seeking", rather than "fact-seeking", animals! Or, as posed in the heading of this paper, belief determines what one sees—or hears.

W.E. Moore[4] discusses how a person's point of view "strongly affects each phase of the decision-making process." He cites three components of the personal point of view: (1) frame of reference; (2) values; and (3) self-concept. These are comparable to George's personality factors in decision making. Moore stresses the critical role that these factors play in determining how we see and process the world. He points out the need to understand how our thought processes can be distorted by these factors and suggests the essence of education should be to learn to think effectively. That is the essence of education! It is imperative then, that people who want to be critical thinkers learn as much as possible about how to minimize contaminating personality factors.

In the following pages, I will discuss two concepts that will assist in understanding, and hopefully controlling, the dysfunctional aspects of these personality variables: (1) reference groups as sources of world perspectives and (2) dogmatism, a complex personality dimension, which roughly translates to a closed mind.

Reference Groups and Individual Perspectives

All of us enter decision making situations with unique mindsets, belief systems and convictions about the world. As pointed out in Moore, one's "frame of reference...includes all that one believes or knows to be true of the world; the sorts of things that are in it, both animate and inanimate, and how they behave; what has happened in the past; and what is likely to happen in the future." This frame of reference is the programmed code in the human data processor. To the degree it is programmed wrong, new data will be distorted. How, then, does one know whether his program is faulty? Or, how does one know what he knows?

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[4] Moore, W.E. Creative and Critical Thinking. Boston: Houghton Mifflin, 1985.

That the real, outside world and the images people have of that world differ significantly is evident to the most casual observer. As Walter Lippmann[5] said:

"... the trickle of messages from the outside is affected by the stored-up images, the preconceptions, and the prejudices which interpret, fill them out, and in their turn powerfully direct the play of our attention, and our vision itself ... In the individual person, the limited messages from outside, formed into a pattern of stereotypes, are identified with his own interests as he feels and conceives them." P.21.

Obviously, one's frame of reference plays a crucial role in decision making. It determines, to a great extent, what data will be sought, how that data will be interpreted and how it will affect one's belief system. These, in turn, critically affect the quality of a decision. People don't come to a situation with a fresh, objective, analytical mind; rather, they bring their own unique perspective shaped by their experiences. While no one can be completely objective, as professionals entrusted with the nation's welfare, we must do what we can to recognize our biases and make an effort to control their distorting effects in our decision making.

Shibutani[6] suggests that one's frame of reference, or perspective of the world, is a product of the reference groups with which one has been associated. According to his analysis, one constructs his world of reality based largely on the shared perceptions of those reference groups. Whether those subjective worlds of reality are congruent with the "real world" makes little difference to the individual, for as W. I. Thomas observed, "If men define situations as real, they are real in their consequences."

Studies of the socialization process, the principal source of values and beliefs, have highlighted the importance of groups to which a person belongs during his lifetime, especially during the formative years. Research shows that a person's beliefs are largely a reflection of the composite beliefs of the groups to which he has belonged. The influence of such groups has persisted even in the era of mass communications because an individual's interpretation of mass media messages is determined largely by the frame of reference that has been formed by these groups. Moreover, as more media outlets are targeted to select audiences and those audiences rely almost exclusively on those outlets for their knowledge, beliefs are reinforced.

The notion that people think, feel and perceive the world from a standpoint peculiar to groups in which they belong is not earth shaking. The extent to which it is so in pluralistic, mobile societies such as the United States and Western Europe is the surprising part. With cultural pluralism, each person internalizes several perspectives, many of which are in some measure incompatible. Moreover, each individual develops his own composite perspective. Clearly, incongruities and conflicts arise, forcing a choice. And yet, belief systems tend to be rather stable over a person's lifetime. Several factors determine the influence of a given perspective in a specific situation. Individual perspectives are the product of a lifetime of socialization, a gradual accumulation of experiences in different groups and with different people. Some groups and some people have more impact than others. In general, groups from

[5] Lippmann, Walter. Public Opinion. New York: Harcourt Brace, 1922.
[6] Shibutani, Tamotsu. "Reference Groups as Perspectives", American Journal of Sociology, 60 (1955), pp. 562-570.

the early years of development tend to be more important, especially the primary groups (e.g., family, youth groups, church groups). Similarly, persons who have some special significance such as parents and teachers are particularly influential in determining one's lifetime perspective. More and more, as issues get more complex and one finds it difficult to sort out the facts, many people turn their thinking over to an authority figure for answers. This can be a religious leader, a secular philosopher, a talk-radio host, or a political leader/party.

A crucial factor in determining the strength of a belief is the character of one's emotional ties to a group or person. When belief systems have a high emotional content, they are resistant to conflicting information even when the contrary evidence is factual, logical and rational. Emotional ties may stem from affection for significant persons and/or the group. Most groups that explicitly attempt to inculcate strong perspectives that will endure in the face of contradictory evidence deliberately use techniques that involve emotion. Religious and military institutions routinely use ritual and ceremony that associate emotion with beliefs. Such beliefs are resistant to logical and reasoned argument against them.

Group cohesion is another crucial factor in determining the influence a reference group will have on the member's perspective. Cohesion refers to the desire one has to conform to group norms (psychological viewpoint) or, from the sociological view, the attraction a group has to demand compliance. The traditional military officer corps tends to be cohesive. Thus, the "military mind" allegation has some validity. This is not necessarily a pejorative term; it connotes a shared perspective. When military communities were more or less isolated, this cohesion tended to be more pronounced. The military is very conservative, with some surveys showing that 85-90% of senior officers identifying themselves as "conservative Republicans." While this may have some negative sides, on the other hand it seems desirable that we have military leaders who are dedicated to follow authority without too much reflection—as long as democracy works.

Specific beliefs that make up individual perspectives vary in strength as a result of the factors mentioned above. In addition, beliefs will be stronger when some of an individual's references groups have similar perspectives, thus reinforcing each other. Conversely, a person may be torn between conflicting beliefs, especially when the reference groups from which he derived the conflicting perspectives are important to him, e.g., the military, an ethnic group, religion, etc. Specific situations may call for judgments that have relevance for specific reference groups. To the extent an individual can discriminate among such situations, conflict may be avoided. For example, the military perspective may be the appropriate reference for judgments in combat and the religious perspective appropriate for personal conduct in day-to-day situations. Of course, these two cannot always be easily separated and conflict may arise. People's political, economic and social beliefs often conflict with the positions taken by their religious leaders and their religious beliefs. There are different ways of handling such conflict, some functional and some dysfunctional, as will be discussed in the section on dogmatism.

Dogmatism And Perspectives

There are several personality variables that influence an individual's problem solving style. The term "dogmatism" gained scientific credence largely through the work of Milton Rokeach[7]. In his study of personality differences related to open and closed minds, and

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[7] Rokeach, Milton. "The nature and Meaning of Dogmatism." Psychological Review 61 (March 1954), pp. 194-205.

authoritarianism and intolerance, Rokeach looked for uniformities and consistencies in the way individuals perceive and judge the world, regardless of differences in ideologies, Thus, people can be dogmatic liberals or dogmatic conservatives; it is not *what* they believe, but *how* they believe it.

The initial study of dogmatism was stimulated in part by studies of authoritarian personalities, especially the fascist movements. Rokeach saw the rigid, blind conformity to a "cause" as a central component of a kind of thinking. Whereas the fascist movements were "right wing", Rokeach theorized that the same structure of thinking applied regardless of ideological content. Correspondingly, his measure of dogmatism includes both "left wing" and "right wing" ideological rigidity. (His dogmatism scale was developed in the mid-50s and would not be appropriate to use today. The ideological divide is much more complex than liberal/left wing and conservative/right wing).

People high in dogmatism tend to have absolute beliefs based on faith in some authority. They uncritically accept authority figures, glorify and admire them. They tend to hate, vilify and fear those who oppose their admired authority figures. There is a strong belief in the cause espoused by their authority figures and a rejection of opposing causes. Criticism of the cause, or decisions and policies of their authority figures, is condemned and branded as disloyal and subversive. There is a strong belief in the infallibility of the elite, the leaders of the particular cause to which the dogmatic person gives his allegiance. These authority figures may be religious prophets, political leaders, or philosophers.

The concept of dogmatism is complex and must be carefully studied to understand it and apply the knowledge in the real world of decision-making. Rokeach's ideas will be discussed in some detail below. In a general sense, however, dogmatism refers to the tendency to have rigid beliefs that are largely based on absolute authority, intolerance of other views of the world and reduction of issues into simplistic, either/or, black and white terms. Dogmatism is a serious barrier to objective decision-making. To the extent it exists in decision-making, it undermines rationality and sound judgment. If dogmatism is institutionalized as group behavior, it can be disastrous, e.g., Nazi Germany.

Beliefs and Disbelief Systems

As Heradstveit quotes the philosopher, Trueblood[8]:

"We have beliefs about history, beliefs about the structure of material aggregates, beliefs about the future, beliefs about God, beliefs about what is beautiful or what we ought to do. Most of these beliefs we state categorically. We say, "Columbus landed in the West Indies", "Water is composed of hydrogen and oxygen", "Rain is falling today", "There will be a snowstorm tomorrow", "God knows each individual", "Greek temples are more beautiful than Egyptian temples", "I ought to work rather than play tennis today". Each of these statements, similar to thousands we make everyday, is elliptical in that the preliminary statement is omitted. We might reasonably preface each of these propositions by the words, "I believe", or "There seems to be good evidence that..."

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[8] Heradstveit, Daniel. The Arab-Israeli Conflict: Psychological Obstacles to Peace. Oslo: Universitetsforlaget, 1979.

Every proposition becomes in fact a judgment and man is a creature greatly concerned with his own judgments. We take our judgments seriously and, foolish as we are, we are deeply interested in the correctness of our judgments" (1942, p.24)

Beliefs about specific phenomena are organized into a system that attempts to provide coherence to related beliefs. Although a belief system may contain logical relationships, it also contains psychological relationships. This distinction is crucial, because people often have incompatible beliefs that are compartmentalized within rigid boundaries. These rigid boundaries allow an individual to isolate and segregate conflicting beliefs without acknowledging their incompatibility. If two beliefs are intrinsically related, to the extent an individual is reluctant to see them as interrelated, the two beliefs are said to be isolated from each other. The denial of contradiction allows a person to see himself as consistent. Religious beliefs often contradict social, political and economic beliefs. For example, a person may believe in the religious doctrine of distributive justice and helping the poor and at the same time espouse a political ideology that amounts to "survival of the fittest". Some people accept the conflicts; some agonize over them, while others—those who are highly dogmatic—deny the contradiction.

Rokeach also describes what he calls the "disbelief system". The disbelief system consists of ideologies, worldviews, and perspectives different from those strong beliefs the individual holds. While at first thought these may seem to be merely a mirror image of the belief system, this is not the case. A closed mind is continually subjected to stress and strain resulting from the inability to adapt to reality. Reality is accommodated by psychic arrangements within the belief/disbelief system. Some of the mental tricks one uses to handle stress from the contradictions include:

1. **Accentuation of differences between belief and disbelief systems.** The greater the dogmatism, the greater the belief system will be seen as starkly different from disbelief systems, that is, similarities will be overlooked and differences accentuated. Hostility is often manifested toward disbelief systems that in reality have a great deal of similarity with the dogmatic individual's belief system. People who hold the contradictory beliefs about distributive justice cited above will go to great lengths to discredit "liberal" programs to help the poor. Similarly, some religious belief systems show overt hostility and intolerance toward other beliefs that differ only slightly from their own. For example, Judaism, Christianity, and Islam have common roots and share basic values; and yet, there has been constant friction, sometimes leading to "crusades", between fundamentalists in all these religions. Similarly, in the secular realm, ideologues in both the U.S. and Russia still tend to ignore common features of the countries and see the other as "an evil empire" long after the cold war is over.

2. **The perception of irrelevance.** Ideological arguments pointing to similarities of belief and disbelief systems are rejected as irrelevant. Phrases such as "only a simple minded fool would buy that", "A person has to be naive to believe that", "pure hogwash", are used to reject statements with which a dogmatic person disagrees.

3. **Denial of contradictory evidence.** The greater the dogmatism, the stronger is the denial of information and events that contradict one's belief system. The contradictory data are dismissed as not valid or not relevant. If a given policy is by all objective criteria a failure, it is not judged by its dogmatic proponent to be the culprit. Scapegoats are found. The "true believer" redoubles his effort when evidence suggests he is clearly headed down the wrong path.

4. **Coexistence of contradictions in the belief system**. As mentioned earlier, dogmatic belief systems tend to be compartmentalized, allowing contradictory beliefs to exist without

communicating with each other. Logical evidence of incompatible beliefs is rationalized. Thus, one can profess certain ethical values while acting in an unethical way when dealing with someone identified as a member of an out-group. Many people could, and did, hold a belief in the preamble to the U.S. Constitution and Declaration of Independence, yet endorsed slavery.

     5. **Attribution of motives: Your side and their side.** Heradstveit[9] has identified a technique some use to attribute different motives when one's own group and adversary groups behave in the same way. He explains the Middle East conflict in this way:

     (a) When observing one's own "good" behavior, the tendency of both Arabs and Israelis is to explain it in dispositional terms. His own good behavior is the result of pure motives, not because the situation forced the good behavior.

     (b) But when observing the behavior of one's own side of which the enemy disapproves, the tendency is to explain it in situational terms, i.e., one's own side is forced by the situation to behave badly. It is not because we are bad people; we were forced by circumstances.

However, these relationships are reversed where the individual respondent observes and explains the opponent's behavior.

     (c) Thus, when the opponent admittedly behaves well in a particular instance, the tendency of both Arab and Israeli respondents is to explain it in situational terms. "They acted good only because circumstances forced them".

     (d) In contrast, when the opponent is seen as behaving badly in a particular situation, the explanation offered is in terms of his dispositions--he does bad because that is his character.

     A more familiar example of this kind of selective perception is the partisan views of "dirty" political practitioners. Our side does it because circumstances force us to respond. The other side does it because they are mean-spirited and unethical. Our sports team plays aggressively, but fair. The other team is undoubtedly coached "to play dirty." There is a clear lack of bipartisanship in Congress today. The party most responsible for this _____.

Dealing with Disbelief Systems

     Disbelief systems, or those beliefs that contradict one's own beliefs, obviously differ in their degree of congruence with the belief system of an individual. Some of the systems differ only slightly, in inconsequential ways; others differ in fundamental ways. In a pluralistic society, such ass the United States, cooperation and unity of effort depend on tolerance of, and compromise among, these with various belief systems. The concept of a world "community", with interdependent economic systems, environmental degradation and other common interests, requires such tolerance. Bi-partisanship policy requires Democrats and Republicans, the Executive and Congress, to cooperate. Ideologues resist these efforts.

     Dogmatic personalities tend to have little knowledge of facts, events and ideas about opposing belief systems. This is because of a selective processing of such information. This filtering of the real world can be conscious or unconscious, an individual effort or an institutional exercise. For example, a religious order may proclaim that "give me a child until the age of seven and he will never depart" (from our teachings). A person may deliberately avoid contact

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[9] Op. cit.

with things that run counter to his own perspective (e.g., people, literature, the media, political events), or his community may protect him from some "contamination". A philosopher once labeled this practice "cerebral hygiene", i.e., keeping one's beliefs pure from contamination from contradictory information. This selective exposure is often institutionalized through the outright destruction of literature, or banning of certain material, or publication of suggested reading material. Management of information (censorship) in the mass media and the schools accomplishes the same purpose. Many parochial schools routinely bias their curricula to support their dogma while stereotyping opposing perspectives. One can find practices of unintentional cerebral hygiene among professionals. Some academics narrow their studies to exclude knowledge of disciplines beyond the demands of their own specialization. Some academics select associations, books, and professional publications to reinforce their belief system within their narrow discipline.

Much of the selective perception is unconscious. Most of us have a need to have confidence in our beliefs; uncertainty is stressful and we seek closure. Some individuals have a greater need for closure than do others. It is only natural to avoid information that increases ambiguity and uncertainty. This is particularly true when the beliefs are central to our view of the world. Deeply held religious, political, economic and social beliefs become sacred cows to some people and some groups. Similarly, we select friends and associates who have similar beliefs, further reinforcing our own beliefs and isolating us from other belief systems.

Dogmatic personalities frequently refer to authority in handling contradictions. The more dogmatism, the more an individual is likely to uncritically follow the "party line". One can readily observe this behavior in all walks of life--political, economic and religious. Obviously, institutions differ widely in the degree of dogma they espouse, as do their members. In general, dogmatic personalities are drawn to dogmatic institutions, but this assumption can't be carried too far. A church leader who stresses an absolutist dogma too much may find a flight of membership or a membership that practices less stringent compliance. For example, surveys show that the vast majority of Catholics in the U.S. practice artificial birth control in spite of the church's dogma against this practice.

As one might expect from this description of dogmatism, the dogmatic personality tends to condone the use of force to impose his belief system on others. First, there is a certainty associated with the dogmatic person's belief in a cause. Why should one compromise? "Extremity in the pursuit of virtue is not a vice". Secondly, adversaries are stereotyped as being not only wrong, but as having evil motives. How can an opposing leader act from other than selfish motives to abuse power? "They don't value life like we do". "They only understand force". Any overture for compromise and cooperation is viewed with suspicion; it is either a ploy or a sign of weakness. " this kind of behavior is often characterized as "hardball," or "Machiavellian." These behaviors can also be observed in marriage disputes, labor/management conflict, religious debates, international relations, political party squabbles in congress, etc. As former Senator Alan Simpson once remarked on a talk show, "Some members of my party believe compromise, which is essential in a democratic society, to be wimpish.   It should be apparent to the reader that dogmatic thinking is a serious obstacle to effective decision making."

Not only does the dogmatic person have a flawed view of the world, but also a mental process that prevents correcting that view. His mode of perceiving and processing data ensures a feedback loop that only allows positive reinforcement for beliefs, policies and action plans. His mind is closed to evidence that challenges sacred cows. He is a true believer. Perhaps worst of all, the dogmatic person does not recognize these traits in himself. The dogmatic person's

black/white, absolutist world of reality is "how it **is**", not "how **I see** it". He does not see himself as dogmatic; he believes he has strong intellectual convictions based on "facts" and sound reasoning. As George would say, he becomes a belief-seeking animal, rather than a fact seeking, animal. These people, the "base" of political parties, respond to simplistic, bumper-sticker slogans, which is the stock in trade of propagandists.

The preceding paragraphs, of course, describe the extreme point of the continuum, that is, a totally closed/dogmatic mind. Few people fit that description. However, many possess a heavy dose of this mental pathology. How does one know if the shoe fits? There is a fine line between dogmatism and "strong intellectual conviction." One person's dogmatism is another's intellectual conviction. As some pundit said, "If a person with strong opinions agrees with me he has strong intellectual convictions. If he disagrees, he is dogmatic."

People may be dogmatic, belief seeking on some issues and rational, fact seeking on others. All of us erect boundaries around our regions of beliefs and treat them differently. One measure of a dogmatic personality might be the portion of one's belief system that is governed by the belief-seeking mode of perceiving the world. Thus, an individual may be labeled dogmatic on a given issue, but otherwise considered open-minded and objective. Other individuals may be dogmatic on a wide range of issues. We normally label this latter person as having a dogmatic personality. All of us know people who fit this description, that is, their perceptual style of processing information tends to filter out conflicts with their belief system. No amounts of evidence will alter their views.

The feature of the national decision-making system that seems to give some the most trouble is the requirement in a democratic society for compromise and consensus. In a pluralistic democracy with a heterogeneous culture, some officials exhibit a high intolerance of views that differ significantly from their own. When it leads to gridlock that is fiercely partisan, as Alan Simpson observed, it becomes counter productive. As I write this on 14 January 2005, I have just read an article describing the most polarized congress in recent memory. This intolerance is a product of, among other factors, styles of thinking. All of us have varying degrees of conviction and confidence in our belief systems. Obviously, one's confidence in the validity of his views can be an intellectual conviction based on superior knowledge. Others' convictions represent nothing more than a dogmatic assertion of truth without supporting evidence.

Bases of Beliefs
If one is to make an honest effort to subject his/her beliefs to objective analysis, she/he must first understand the bases of his/her beliefs. Different spheres of the world are more amenable to validity checks than others. As will be discussed below, the source of one's belief can be a major factor in determining if a belief system is based on objective analysis. One way of answering the question posed by the title of this essay is to refer to the standards of judgment we use in justifying a belief. There are several standards that are commonly used.

Intuition. Sometimes we just "feel" that something is true or false, independent of any conscious reasoning process. Many great decisions of historical significance have been attributed to intuition. The reliability of this standard of varies widely among people. Intuition may derive from a well-grounded belief system, but the individual just can't pinpoint a rational basis for his belief. In other instances, it is nothing more than a whim. In general, this form of knowledge represents one of the lowest standards of justification because the reasons are not shared. And yet, many decisions must rely on it, at least in part. Most of our ethical decisions

are probably based on this mode of thinking. This can be a mask for avoiding rigorous analysis, however, if we rely on simplistic, dogmatic, black and white slogans.

Faith. Many of our beliefs are based on trust and confidence in the wisdom of a person, doctrine, group, ideology, or divinity. Depending on the degree of faith one has in this source of belief, justification of one's beliefs may be considered irrelevant. This is especially true in the more fundamentalist religious beliefs. If one considers religious teachings to be divinely inspired, and infallible, one does not offer rational arguments or proof. As one car bumper sticker reads, "God said it, I believe it, and that's it". This phenomenon is particularly critical in the so-called "war on terrorism", where there is a danger that it will evolve into a religious war leading to Armageddon.

Belief systems based on tradition and secular ideologies can be as rigid as fundamental religious beliefs. "True Believers" in Marxism and laissez faire economic theory both reject any notion of a mixed economy, which exists in all societies. There is usually an emotional element in such belief systems that act to block out information that conflicts with strongly held beliefs. Since logic, rationality and empirical evidence have little impact on emotionally laden beliefs, such beliefs resist change. Excessive reliance on this source of beliefs can result in dogmatism.

Rational, Logical Analysis. The "Age of Reason" was a western intellectual period of thought in which rules of analysis were developed that emphasizes logic and rational proof for arguments. Feelings and emotions are considered contaminants to the search for truth. Faith and tradition are irrelevant. All propositions must withstand rational, logical analysis. Philosophy is the form of inquiry that uses these standards of proof. This <u>can</u> be an antidote to dogmatism, but one person's logic and reason can be another's folly. But it is a giant step in rigor from faith and intuition.

Science. The scientific method of inquiry requires more than rational, logical thought--it requires empirical proof before something can be accepted as evidence. Methods have been developed to control for subjective factors such as emotion, biased perception, ideology and other contaminating variables. This form of knowledge is the most rigorous and demanding in terms of standards of proof. Because it is so demanding, certain areas of knowledge are not readily amenable to scientific inquiry. Since this method assumes a closed, physical universe of cause and effect, it does not address transcendental, metaphysical subjects. Those fields of inquiry are left to theology and certain branches of philosophy. The branch of philosophy that studies moral behavior, **ethics**, uses scientific knowledge, but is not limited to it. When it can be applied, this can be an effective antidote to dogmatism. Moral theology tends to use scientific evidence less than does secular-based philosophy. Enclosure 1 contains a more thorough discussion of this source of knowledge.

Clearly, the above standards vary in their rigor and objectivity, with intuition and faith requiring little of either; rational and logical reason requiring more; and science requiring the most. One should have more confidence in the validity of a belief if it withstands the scrutiny of science. This does not mean that one should believe only what can be verified by the scientific method since many of our beliefs are difficult, or impossible to verify by his method. It does suggest, however that those who are interested in objectivity and validity of their beliefs should subject those beliefs to the most rigorous analysis available.

People compartmentalize their belief systems and subject them to different standards of judgment. In this essay, I am not concerned with the validity of religious beliefs, per se, except to understand those beliefs. In a pluralistic world, where people hold different religious beliefs and those beliefs are in conflict, we must understand the problem of managing that conflict. For

example, if different divinities promise the same land to two different people (according to their respective religious beliefs), how does one resolve the conflict? This is a major part of the problem in the Middle East. Each of the protagonists in the conflict claim their respective God gave that land to them. Jews claim the land was promised to them through a covenant from God through Abraham to his son Isaac (by Sara), the Palestinians say the covenant was to Ishmael, Abraham's first son (by Hagar). Science, logic and rationality have little or no impact on the belief systems of the opposing factions.

One should not be concerned that religious beliefs are based on faith and deemed to be not subject to more demanding criteria for justification. One must, however, separate those beliefs from secular politics whenever possible. Otherwise, conflicting dogmatic faiths can lead to irreconcilable conflict. In recognition of this, among other concerns, our founding fathers emphasized separation of church and state, even while recognizing the critical importance of religion in a civilized society. It makes little difference whether one's dogmatic mindset is based on intuition, religion, secular ideology, just plain stubbornness, or ignorance of facts, the result is the same. As Rokeach points out, dogmatism involves several psychological characteristics that are obstacles to objective thinking. One characteristic is the rejection of any evidence that conflicts with the belief system.

As stated above, dogma, ideology and faith provide comfort to those who have a strong need for closure and certainty, and who are overly anxious when faced with complexity and ambiguity. Such persons tend to be "belief-seeking" rather than "fact-seeking", seeking simplistic answers to complex problems. They look for black and white answers to questions on issues that don't lend themselves to such simplification. The tendency to resort to simplistic answers is worsened by stress and the phenomenon of "group think". Rather than "see and then believe", dogmatic persons "believe and then see." They carry around "definitions of the situation" ready to provide answers before examining the facts. Almost all people are given to this phenomenon to some degree and the public is especially vulnerable to slogans and "bumper sticker" solutions to problems. Politicians—and leaders—play to these tendencies. All citizens have a duty to resist these seductive solutions to complex problems when making decisions. It is one thing to oversimplify when rallying public support; it is another thing to base policy on such thinking.

Dogmatism and Foreign Policy

The purpose of discussing dogmatism in the context of international affairs is not to attempt to change anyone's position on the political spectrum; rather, it is to develop a greater tolerance of views that exist in a pluralistic world. This is especially crucial in foreign policy. The Bush administration essentially adopted a unilateralist approach to foreign policy and ignored the United Nations. For better or worse, the United Nation's charter is based on certain philosophical assumptions about how best to make the international system work in a relatively peaceful manner. In the realm of international affairs, one can observe the dogmatic behavior described in Politics Among Nations by Hans Morgenthau[10]:

> "Nations no longer oppose each other...within a framework of shared beliefs and common values, which imposes effective limitations on the needs and means of their struggle for power. They oppose each other now as the standard bearers of ethical systems, each of

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[10] Morgenthau, Hans. Politics Among Nations. New York, Knopf, 1978.

them of national origin and each of them claiming and aspiring to provide a supranational framework of moral standards which all the other nations ought to accept and within which their foreign policies ought to operate. The moral code of one nation flings the challenge of its universal claim with messianic fervor into the face of another, which reciprocates in kind. Compromise, the virtue of the old diplomacy, becomes the treason of the new; for the mutual accommodation of conflicting claims, possible or legitimate within a common framework of moral standards, amounts to surrender when the moral standards themselves are the stakes of the conflict. Thus the stage is set for a contest among nations whose stakes are no longer their relative positions within a political and moral system accepted by all, but the ability to impose upon the other contestants a new universal political and moral system recreated in the image of the victorious nation's political and moral convictions."

While Obama has gone back to a more traditional approach to foreign policy based on working through the international community, he still bases his policies on the Wilsonian Idealism of promoting democracy and free markets, which Morgenthau warns us against. As you examine different aspects of your own decision-making process and beliefs about the many complex issues that face the nation today, strive to be aware of the psychological dynamics discussed in this paper and how they operate to distort objective analysis. You should first do an introspective analysis of your own thought process. How much are you a captive of belief systems that aren't supported by rational thought and/or factual evidence? Are you "belief-seeking", or "fact seeking"? Do you acknowledge the likelihood that the unconscious internalization of values and perspectives of your reference groups have formed your own view of the world in large part—whether or not these groups had "true" values and perspectives?

Those of you who are leaders in your community have a special obligation to ground your frame of reference, or belief system, in a conscious, rational, logical, disciplined thought process. Otherwise, your decision-making skills will be flawed. If the data processing capabilities of the human mind are so vulnerable to contaminating variables, what can we do to reduce that contamination so that output (decisions) can be more rational, objective and valid? Many techniques have been developed to reduce contaminating variables in the decision-making process. Some of them involve quantification, e.g., assigning mathematical values to input variables, but one must understand the limitations of quantification. Other analytical techniques realize the limitations of quantification, but provide for some degree of logical, rational rigor. A common technique of this latter sort is the "spread sheet", which attempts to display relevant factors in a systematic way so that a decision-maker does not inadvertently omit a critical factor.

Conclusion

The first step in controlling contaminating factors in the thought process is to understand them. This short essay summarizes the concepts of reference groups, dogmatism, and the sources of beliefs. One might say it is an ethical imperative to have a thorough understanding of these phenomena and take steps to control them in making decisions about critical issues. Doing something about it is a second and essential step. Be intellectually honest and own your shortcomings.

Enclosure 1
Science and Knowledge

As the foregoing discussion has emphasized, there are many different sources of knowledge. It is sometimes difficult to weed the wheat from the chaff when reconciling conflicting beliefs. Logic and rational analysis are useful, but the most powerful tool is scientific analysis and the body of knowledge derived from that method of analysis.

It is important to know what scientific knowledge is, and is not. First of all, one must distinguish between the "method" of science and what is often labeled as "scientific fact". People often use the phrase "the fact of the matter is" to clothe their argument in a mantle of certainty as if the facts are not in doubt. An adversary will make an opposing claim with the same statement. How then, can one discriminate among the conflicting claims? The short answer is to ask for evidence, or proof to back up the assertions being made. This, of course, leads to the obvious question: What are the criteria for evidence/proof? Elsewhere, we discussed briefly the validation criteria for beliefs based on the different sources of knowledge, i.e., theology (faith), philosophy(reason), science(empirical data), intuition(gut feel) So one should ask the proponent of a claim to state the source of his "facts". If the issue were one concerning metaphysical phenomena, e.g., religion, one would look for a different type of evidence than on an issue such as medicine. In a sense, one's approach to knowing "truth" depends on one's assumptions about the nature of "reality" and how one experiences that reality. If one assumes the universe is a closed, concrete, physical system that can be understood through the five senses, then one adopts a method that searches for empirical evidence to support beliefs. If, on the other hand, one assumes that knowledge can be received directly from a metaphysical, transcendental source, e.g., God, then one looks for a different source on which to base beliefs. It is possible of course those different assumptions might apply to different sectors of the universe. In other words, the method used depends on what aspect of the universe one is studying.

Regardless of the subject matter, if one is interested in searching for what is true, one should use the most demanding and rigorous criteria appropriate for the situation. In general, people accept the assumption of the closed, empirical world for the "natural" sciences. It is in the arena of human behavior that many reject this approach. We have come a long way in accepting medical science as a mode of explaining diseases and some forms of mental disorders, but we hesitate to extend that confidence to other behavior such as social behavior--and especially values and ethics. This is especially true in the study of ethics/morality. In general, the study of ethics in philosophy courses focus on reason and rational thought in ethical decisions; students are asked to develop a rational model for ethical decision-making. This is not to deny that religion is a primary source of much of our belief system pertaining to ethics; rather, it merely says that professors focus on secular sources for the principles of right and wrong. On the other hand, religious schools tend to look at metaphysical sources for these principles. Often, people who look to metaphysical authority for answers of right and wrong also use this source for most of their beliefs about other aspects of the universe. Let us see how these different approaches can

lead to different conclusions, e.g., evolution versus creationism.

In man's early history, he turned to the gods for answers about what was going on around him. Later, in the Hellenic period, some thinkers, such as Thucydides, Socrates, Plato, and Aristotle started using "rational" thought to explain events. This approach, known as philosophical inquiry, required a more stringent set of criteria than faith in gods to justify a proposition. Conclusions had to be based on logical, rational reasoning. The philosophers would attempt to observe carefully what was going on, form hypotheses that explained the events, and predict what would happen if the same conditions occurred again. They would then observe future events and modify their hypotheses in light of new data. In brief, this method of thought is based on observation (induction), forming generalizations ((principles/hunches/hypotheses) based on these observations, drawing inferences from these hypotheses to apply to new situations (deduction), testing those new applications through observations, modifying the generalizations based on the new data, and repeating the cycle to increase confidence in the conclusions.

The scientific method, often referred to as the "inductive-hypothetico-deductive" method of inquiry, grew out of philosophical inquiry, but it is more rigorous than philosophical inquiry. The rules for observation, for example, are explicitly spelled out. Although methods differ for different disciplines, the scientist must describe in detail the circumstances of the observation, extraneous variables must be accounted for, other scientists must be able to repeat the observation under the same conditions with the same results, etc. Perhaps the most important distinction is that science requires some degree of mathematical measurement. One of my psychology professors once told the class, "if you cannot, as a minimum, put your observations in a chi-square table, it is poetry". Equally demanding rules are established for the other phases of the process.

Let us consider, for example, the proposition that a black cat crossing one's path will bring bad luck. Many people believe this and will cite anecdotal evidence to support their belief. Before accepting this belief as true, a scientist would set up an experimental design to test that claim/hypothesis. It might contain the following elements: 1) Definition of terms. Is a "black cat" one that has all black hair, majority of black hair, or some black hair? 2) When does the cat have to cross the road in terms of time and space before the person passes that spot? 3) Does the person have to see the cat and identify it as black (this is critical, because it is possible that the mere belief that it is bad luck may indeed increase the probability that "bad luck" will occur)? 4) What is the time limit for the bad luck to occur? 5) Define what constitutes bad luck. 6) Who must observe/verify the bad luck incident? Policymakers could also test some of the assumptions about public welfare in the same fashion, although as events get more complex, it is difficult to control events and get valid data. Thus, we often resort to ideological or religious assumptions and base policy on those assumptions without solid evidence for, or against, a policy.

Looking at the stringent criteria used for the scientific method, it is readily apparent that the method is not suitable for application to all subject matter. Obviously, it is not suitable for metaphysical inquiry. Is there a soul? Is there a god? What is the nature of these phenomena? Although there have been attempts to apply scientific methods to verify theological beliefs, e.g., weighing someone immediately before and after death to detect the weight of the recently departed "soul", this is not a widespread practice. And, this method cannot answer the "ought" in the study of ethics. The scientific method recognizes this limitation and assumes away that part of the universe that it cannot analyze. It assumes a "closed universe" in which all phenomena have an antecedent cause. These cause-effect phenomena are physical and can be explained without reference to metaphysical inputs from outside the physical universe. Of course, one can

point out the apparent fallacy of this assumption of cause-effect by the common sense notion that time and space cannot be infinite and therefore the universe had to start from nothing! Nonetheless, much progress has been made in understanding the universe based on the cause-effect assumption.

Most scientists also hold to the premise that the scientific method is an open, iterative process that never classifies a conclusion as immutably "true". While discrete events may be labeled as "fact", generalizations are usually called "hypotheses", or educated guesses-- propositions inviting further evidence. If considerable evidence increases confidence that a given hypothesis is valid, it is labeled a "theory". This open system that never closes out a theory as "true", but rather invites research to disprove theories, ensures a built-in skepticism that prevents dogma. This characteristic of the scientific method separates it from the theological and ideological approaches to knowledge, both of which often punish people for non-conformity to dogma. The current debate over evolution and creationism is a classic example of the different approaches.

Clearly, if we focus on theology as our source of knowledge, science will not have a great deal to offer, if anything. If, however, we are looking for a rational model for decision-making, it has a great deal to offer. True, it cannot answer the "ought", but it can help us to understand the "is". The "is" is a critical element for our model if we are interested in knowing the consequences of our choices. We see this in the discussion of abortion. Medical science cannot answer the question of whether or not abortion is ethical in a given situation, but it can provide critical input for making a more informed decision on the matter. This scientific input is valuable except when one relies on the absolute principle that any abortion after conception is unethical regardless of any other factors. In that case, consequences are considered irrelevant.

In summary, the model for critically examining one's beliefs suggested in this essay is based on the assumption that the best outcomes are based on rational analysis. This means that decision-makers need the most factual input they can get. Therefore, one should use the most powerful methods available to collect objective data. Use scientific knowledge when it is applicable to determine the "is", then use logic and reason to determine the "ought". While this may be the ideal model for decision-making, we should realize that most of our decisions are based on intuitive judgment. Our decisions will be improved, however, if we are more systematic and objective in our analysis, especially in our professional lives.

How should these principles be applied to the civic duties of governmental officials, especially members of the Judiciary? Religious beliefs may be part of one's calculus and these beliefs may, or may not, conflict with professional obligations. One may then have to decide which has precedence. If an official chooses to go with her/his religious beliefs that are in conflict with duty, does he/she have an obligation to make that known to the public? In times past, some political candidates have felt it necessary to inform the electorate that they would not be bound to church authorities. Others have explicitly said they would only appoint officials who shared their religious beliefs.

Debate vs. Dialogue[*]

Debate	**Dialogue**
Assuming there is a right answer; and you have it.	Assuming that many people have pieces of the answer and that together you can craft a solution.
Combative; participants try to prove the other side wrong.	Collaborative; participants work together toward common understanding.
Its about winning.	Its about exploring common ground.
Listening to find flaws and make counter-arguments	Listening to understand, find meaning and agreement
Defending assumptions as truth.	Revealing assumptions for re-evaluation
Critiquing the other side's position	Re-examining all positions
Defending one's own views against those of others	Admitting that others' views may improve one's own.
Searching for flaws and weaknesses In other positions	Searching for strengths and value in other positions.
Seeking a conclusion or vote that ratifies your position	Discovering new options, not seeking closure

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ADVOCACY

INQUIRY
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[*] Synthesized and adapted from work of The Public Conversations Project, National Study Circles Resources, The Common Enterprise, and Mark Gerzon, Mediators Foundation and The Fifth Discipline Fieldbook, by Peter Senge.