Cultural Influences in Decision Making

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Abstract

Often people from one culture are surprised by the decisions that people from other cultures make. Such surprises arise when people are unaware of the factors that people in another culture consider when evaluating the attractiveness of an action. This lack of awareness can lead to decisions that undermine the cohesiveness of multi-cultural coalitions.

To address this problem, EBR developed and applied a method to determine and characterize the cultural factors that can impact people's evaluation of an action's attractiveness, and developed a way to depict these factors in "persuasion-focused" belief maps. This representation of beliefs makes explicit the factors people use to evaluate the attractiveness of an action. Given these representations, planners can identify tasks that coalition team members from different cultures would most likely find appropriate.

EBR applied the methodology to develop and represent beliefs about a hypothetical action: an intervention to an undeveloped nation to support an oppressed minority. We developed belief maps on this issue for four cultures: UK and US military officers and Indian and People Republic of China graduate students studying in the U.S. The resulting maps showed significant differences among the four cultures with respect to this issue. The study predicted, but did not test, the effectiveness of several arguments intended to persuade people from each culture to endorse such an intervention. Many arguments likely to be effective in one culture would be predicted to be counterproductive in another.

INTRODUCTION

Cultural Logic is the understanding of a culture's fundamental beliefs and the ways that those beliefs interact with each other, with new information, and with the perceived desirability of alternative actions. This understanding is key to any activity in which people from diverse cultures interact. It is especially important whenever people from different cultures wish to impact each other's behavior through persuasive communications.

Cultural logic is of particular value in identifying culturally sensitive arguments that attempt to influence a target population's behavior. Currently, identifying effective communications remains an art practiced by experienced and talented people. For example, developing effective psychological information operations today requires a "knowledgeable and creative staff" that seek to find ways to evoke "specific behaviors from a target audience" (Kerchner, 1999).

Because of its importance, multi-cultural persuasive communications is supported by a large literature in political science, anthropology, persuasive communications, and social psychology. The research reported here, coordinated with the Center for Human Sciences at the Defence Evaluation and Research Agency (DERA) in the United Kingdom (UK), draws on this literature and on modern theories of decision making to develop a cultural logic methodology and tool to help decision makers identify actions that increase the cohesion of U.S. multi-cultural coalitions and that improve information operations, both public and targeted on elites and militaries.

This research:

- Specified the nature of "belief maps" that organize and depict culture-based beliefs in order to improve persuasive communications.

- Developed knowledge elicitation procedures for efficiently acquiring the information needed to populate belief maps.

- Developed exemplar cultural logic maps for four cultures: UK and U.S. military officers, and graduate students from the People's Republic of China (PRC) and from India.

- Compared the beliefs in these exemplar maps.

- Demonstrated the plausibility of using these belief maps to support psychological information operations.

BELIEF MAPS TO SUPPORT PERSAUSIVE COMMUNICATIONS

In this research, EBR developed persuasion-focused "belief maps" that represent and organize beliefs that have a significant impact on behavior. Of primary concern are the beliefs that tend to be more stable over time; e.g., beliefs that reflect a culture's shared traditions and values. Those beliefs concern such important issues as the expected behavior of responsible adults, the obligations members of society have to one another, respect toward authority and the extent to which their guidance should be followed, the role of religion, and the importance of consensus.

The belief maps specify: 1) culturally dependent individual and group beliefs; 2) relationships among those beliefs; and 3) linkages between beliefs and actions. They show the impact of new information on current beliefs and the impact of updated beliefs on evaluation of the desirability of an action.

These belief maps are organized to help commanders and staffs identify arguments that can affect a target audience's behavior by influencing their decision making. Each persuasion-focused belief map is organized around a possible candidate action a target could decide to take and which, if taken, will lead to the desired behavior. Because people choose to do what they perceive as most desirable, the maps show those beliefs relevant to a target audience's evaluation of the desirability of that action. In particular, they show the target audiences' beliefs about the:

1. Usual outcomes that an action leads to, and conditions under which the action actually leads to these outcomes;

2. Usual desirability of outcomes, and conditions under which these outcomes actually are desirable;

3. Action suitability/effectiveness criteria and conditions when these criteria are applicable; and

4. Credibility of various information sources.

The third item, action suitability/effectiveness criteria, describes the criteria people use to evaluate an action's desirability even when they do not explicitly consider the action's outcome. Decision research (Klein 1993) has shown that the use of such criteria is pervasive. In familiar situations, people use them much more often than explicit consideration of action outcomes. The belief maps developed here organize these criteria into a set of "appeals": tradition, authority, precedent, sympathy, flattery, and feasibility.

EBR developed example beliefs maps for four cultures: UK and US military, and Indian and PRC graduate students studying in the United States.

Figure 1 depicts the top level of a belief map for UK military. The top level belief map summarizes the major issues. More detailed figures, such as that shown in Figure 2, provide additional information. They list the specific elements of the general categories shown in the top level maps (such as Figure 1), describe the conditions under which people believe the appeals are relevant, show the conditions under which they believe that the action actually leads to the usual outcomes, and show the conditions under which they believe that the outcome has its normal desirability.

The top level belief map has three main parts: the action being considered, people's beliefs about the usual outcomes of the action, and other beliefs (the "appeals") that affect their evaluation of an action's desirability.

Action. The center of the map displays the candidate action being considered: "Intervention in a third world country to protect a persecuted minority." The belief map depicts the factors people consider when they evaluate the desirability of Britain's undertaking this action.

Outcomes. Usual outcomes are listed on the right of the chart. These are what the UK military officer subjects believe are the possible desirable and undesirable outcomes of taking the action. The arrow from the "action" to the "outcome" block signifies that the people we talked to think that the action being considered could lead to these outcomes. The more granular detailed charts (not shown here) describe these possible outcomes in greater detail. For example, the general outcome "Supports UK Strategic Objectives" includes the following seven specific elements:

1. Be perceived as a major player.
2. Establish better understanding of allies.
3. Gain more experience for soldiers.

4. Justify the need for the armed forces.
5. Strengthen partnerships.
6. Preserve European stability.
7. Be perceived as quality, professional armed forces.

The more detailed charts documented in the appendices also qualify the relationships. They describe the conditions under which the action is expected to lead to the outcome and the factors that make an outcome more or less desirable.
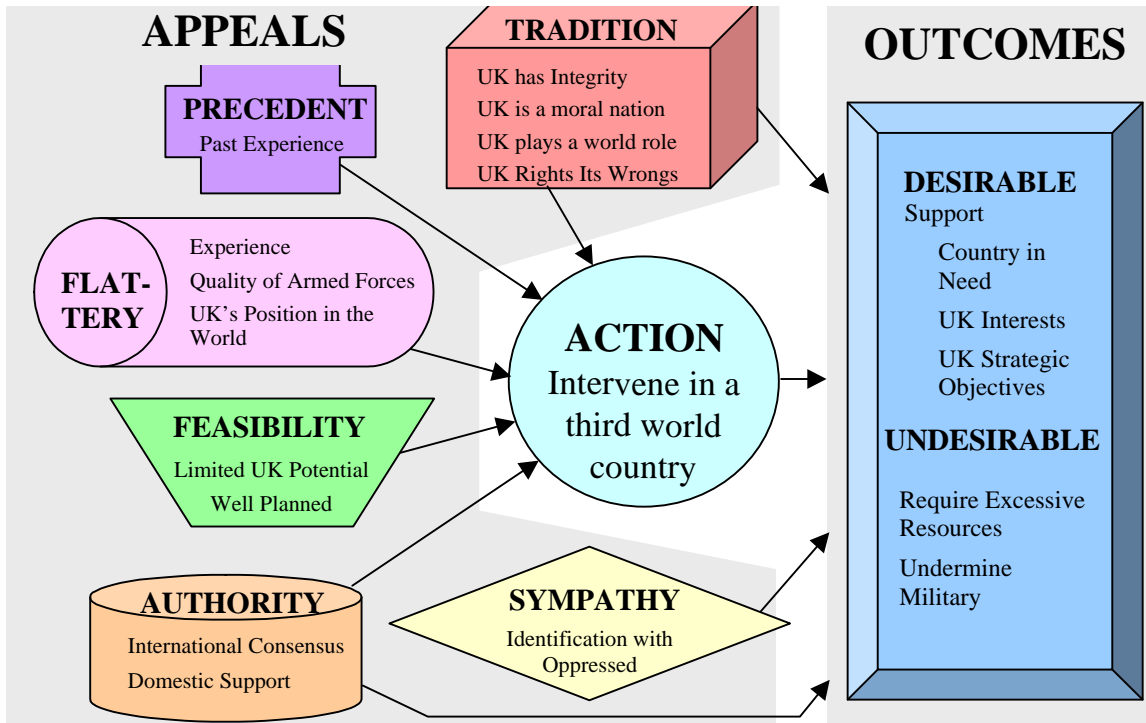

Figure 1. Top Level of Belief Map for UK Military

Appeals. The appeals are listed on the left side of the chart. These appeals are the different types of reasons why the action would be considered desirable or undesirable by a culture. Appeals with arrows going to the "action" impact the perception of an action's desirability independent of their estimates of the action's outcome. Appeals with arrows directly to the outcome impact the perceived desirability of that outcome. At present, we partition appeals into six categories: tradition, precedent, flattery, feasibility, authority, and sympathy. The highlights of these appeals are:

- **Tradition.** These include the core values of right and wrong. They define how an honorable person in a society should behave. Traditions often capture the ideals of a society. A tradition in our UK belief map was "the UK supports the underdog." One from the PRC students was "China believes in harmony."

- **Precedent.** One reason to take an action is that "it's the way things have been done in the past." This appeal captures these habits. It also includes policies. A UK precedent mentioned by UK Military subjects is helping Commonwealth countries.

- **Flattery.** Appeals to flattery focus on the reasons why an actor (group or country) is especially well suited to carry out an action, that the success of the action depends on the special skills of that actor, and that without that actor's involvement the action may not succeed.

- **Feasibility.** Appeals to feasibility point out why the action is easy. Negative appeals to feasibility points out why the actor physically can't take the action. The PRC statement that "China is a developing country and cannot do things like this" is a negative appeal to feasibility.

- **Authority.** People sometimes decide to take an action because someone whose opinion they respect recommends taking the action. Celebrity endorsements of a product are an appeal to authority. There are many variants of appeal to authority, corresponding to the many sources of authority. Arguing for an action by citing the Bible is an appeal to authority.

- **Sympathy.** This appeal argues that one should take actions that help or hurt some target group because the people of that group have characteristics that one likes or dislikes. This is an appeal to one's emotions. It often exploits prejudices. An argument that "we should help these people because they're like us" is an appeal to sympathy.

As with the "outcome" section of the chart, the detailed belief map charts in the appendices describe the contents of appeals in greater detail and also qualify the relationships. Figure 2 is an example of the detailed chart for the appeal of tradition. For example, "UK plays a world role" includes two elements:

1. UK "punches above its weight."
2. UK is not the world's policeman (-).

The minus sign following the second item signifies that this tradition argues against the intervention.

The detailed belief map qualifies the relationship between the tradition and the action. The conditionals on the right are beliefs about when a tradition is applicable. For example, the belief that the United Kingdom "supports the underdog" is only relevant when the oppressed minority actually is an underdog, and not if they are just feigning.

BELIEF MAP DEVELOPMENT

EBR collected the information to populate the example belief maps from representatives of four cultures: UK and U.S. military officers, and PRC and Indian graduate students studying in the United States. Information was collected using focus groups of three or four people each. A total of 12 UK military and PRC graduate students, 10 Indian graduate

students, and 8 U.S. military participated. The sessions were open-ended, and tended to last from one to two and a half hours. The sessions were recorded and later transcribed.
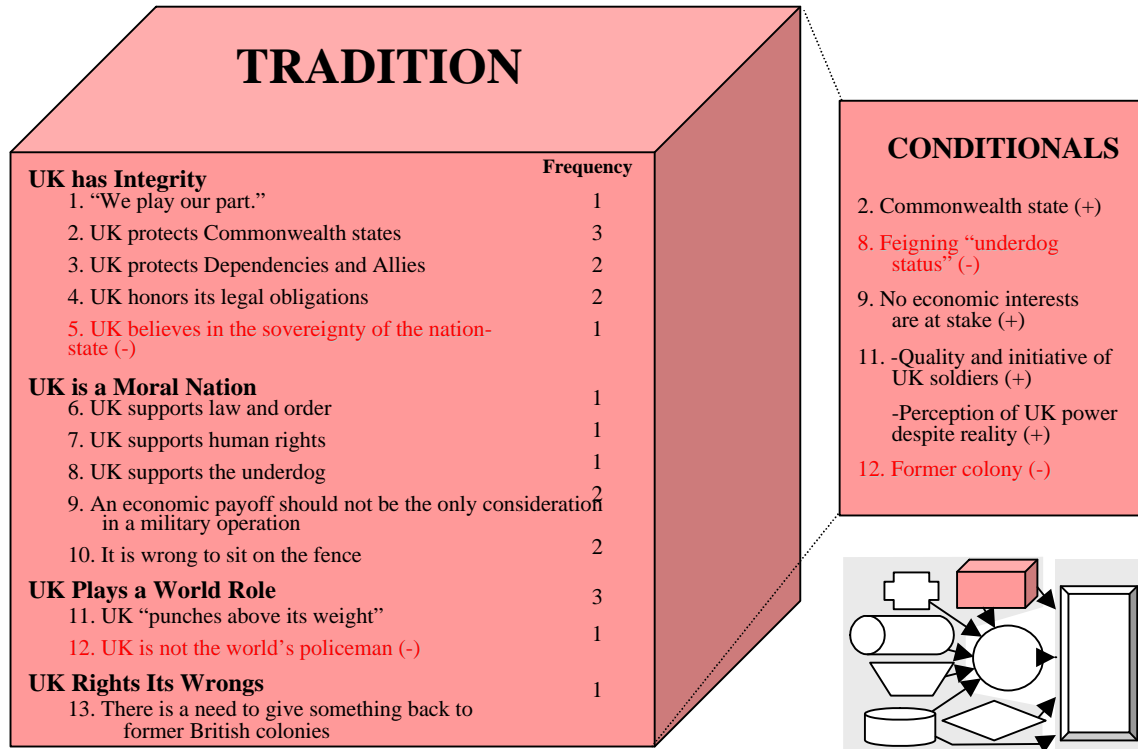

TRADITION

	Frequency
UK has Integrity	
1. "We play our part."	1
2. UK protects Commonwealth states	3
3. UK protects Dependencies and Allies	2
4. UK honors its legal obligations	2
5. UK believes in the sovereignty of the nation-state (-)	1
UK is a Moral Nation	
6. UK supports law and order	1
7. UK supports human rights	1
8. UK supports the underdog	1
9. An economic payoff should not be the only consideration in a military operation	2
10. It is wrong to sit on the fence	2
UK Plays a World Role	
11. UK "punches above its weight"	3
12. UK is not the world's policeman (-)	1
UK Rights Its Wrongs	
13. There is a need to give something back to former British colonies	1

CONDITIONALS

2. Commonwealth state (+)

8. Feigning "underdog status" (-)

9. No economic interests are at stake (+)

11. -Quality and initiative of UK soldiers (+)

   -Perception of UK power despite reality (+)

12. Former colony (-)

Figure 2. Example of Detailed Belief Map for UK Tradition

The sessions were conducted using a set procedure. A hypothetical scenario was read, followed initially by a general question and then more specific ones. The scenario itself was purposely left vague, with the intent of eliciting questions about details from the subjects which they felt were important in forming a decision.

Each group discussed the desirability of a hypothetical action: intervening in an undeveloped nation to help an oppressed minority. The facilitators asked about good and bad possible outcomes of the intervention, about the conditions under which these outcomes would occur, about the suitability/effectiveness criteria for the action, and about the conditions under which those criteria are applicable. Knowing the categories of appeals and outcomes enabled the facilitators to guide the discussion into these areas.

After all sessions were completed for a given culture, their responses were transcribed, categorized by appeal/outcome/conditional, and then entered into argument summary charts. These charts were the middle step which enabled later analysis of belief prevalence and relationships, and ultimately the construction of the belief maps.

COMPARISON OF BELIEFS

The four cultures examined exhibited both similar and contrasting beliefs about the circumstances under which such an intervention would be desirable. Table 1 lists the most prevalent beliefs expressed by the representatives of each culture participating in this research. It includes only those beliefs that were mentioned by three of the four UK military and PRC focus groups, by two of the three Indian groups, or by both of the U.S. military groups. Note that the entries in Table 1 are the beliefs extracted from our knowledge elicitation sessions with focus groups. They summarize what people said they believe, which may possibly differ from their actual beliefs.

	Indian Grad Students	PRC Grad Students	UK Military	U.S. Military
Tradition	Act to protect human rights Will not take sides Secular society	*Try to solve problems peacefully* *Mind our own business* *No involvement in war*	Punch above our weight Defend commonwealth territory	Ameliorate suffering
Authority	Support of Indian public (critical) International consensus Invitation from host government UN involvement	Public support has no effect International support Participation as part of UN force	Support of UK public Agreement of all parties UN mandate necessary	Popular support Political support
Feasibility	*Inadequate financial and personnel resources* *Host country is more powerful* Conflict in neighboring country	*As developing country, China not powerful -*	*Inadequate economic resources* *If UK action is unilateral* U.S. involvement	*If lack of defined purpose* *If complex*
Flattery			Experience in N. Ireland	
Sympathy	*Persecuted group is militant and unrepresentative minority*	Oppressed are Chinese *Cause is human rights violation* Hard to make judgment about participants		
Precedent	Involvement in E. Pakistan Involvement in Sri Lanka			*Cold war paradigm doesn't fit*
Desirable outcomes	Stop killing	Stop flow of refugees into China	Keep the peace Restore stable situation Be prominent as a major player	Stop killing/restore order Support U.S. national interests Support allies
Undesirable outcomes	*Get caught in proxy war*		*Get caught in quagmire with steady*	*Long stay* *Conflict resumes after*

	Suffer casualties *Indian Government removed/people revolt* *Forced to leave before solving conflict*		*loses* *Lose soldiers who quit armed forces*	*U.S. troops leave* *Loss of income and credibility* *Embarrassment and loss of morale at home and in military*

Table 1. Sample of Beliefs Comparing the Four Cultures

Each of the items in Table 1 is a belief that is relevant to evaluating the desirability of intervening in an underdeveloped nation to help an oppressed minority. The "tradition" beliefs can be interpreted as statements of a relevant national characteristic; e.g., "we act to protect human rights," which is a reason for evaluating the intervention favorably. The authority beliefs are the people, groups, nations, or organizations whose endorsement is a reason for evaluating the intervention favorably. The non-italicized feasibility beliefs are reasons why the focus group participants believe intervention is possible or practical; the italicized ones are the reasons why they believe the intervention is not feasible. Thus, UK military believes that U.S. involvement makes the intervention more feasible.

These beliefs reflect different aspects of a culture. Some of them stem from deeply held traditions. The PRC students' stated desire to solve problems peacefully was, in their minds, a reflection of Confucian ideals. Others appear to reflect a society's recent political experiences. The UK military desire to "punch above its weight" reflects a desire to retain past international prestige. Other beliefs reflect realistic appraisals of practicality. The Indian students' emphasis on consensus, for example, reflects the relative instability of the Indian government. The concern expressed by the Indians, PRC, and UK groups about adequate economic resources reflects the financial resources available to those nations.

The different cultures had significant differences in the relative frequency of supporting and countering beliefs in each of the appeals and in the outcomes. For example, the "appeals" to flattery were mentioned most often by the UK military, much less often by the PRC graduate students and U.S. military, and not at all by the Indian graduate students. It can be hypothesized, therefore, that arguments appealing to flattery would be most effective for UK military officers. In contrast, they would probably not be believed by the Indian graduate students.

COMPARISON OF CULTURALLY AWARE ARGUMENTS

Because people's beliefs differ, arguments likely to be persuasive in one culture may be irrelevant or even counterproductive in another culture. The belief maps help people identify the arguments most likely to be persuasive and to avoid arguments that may be counter-productive for their target audience.

Table 2 summarizes the likely effectiveness of several different arguments. In this table, bold type indicates the arguments likely to be the strongest. Non-italicized fonts represent arguments likely to be received favorably. Italicized fonts represent arguments likely to be counterproductive. The predicted effectiveness of these arguments follows directly from the belief maps. For example, the argument that people should help others in other countries is

expected to be counter-productive among PRC graduate students because it conflicts with their belief that people and nations should mind their own business.

As Table 2 indicates, many arguments vary considerably in effectiveness across cultures, there are very few arguments likely to be effective across all cultures, and it would be far more difficult to persuade some cultures (particularly PRC) that an intervention should occur than it would be to persuade other groups. This variation in argument effectiveness and the variation in the difficulty of a successful persuasion underscore the importance of cultural awareness in developing persuasive communications.

Argument	Indian Grad Students	PRC Grad Students	UK Military	U.S. Military
Intervention would demonstrate world leadership	Not believed	*Not desired*	**Extremely important**	Somewhat important
Action will help install new government more favorable to democracy	*Counter-productive*	***Very counter-productive***	Helpful	Helpful
People should help others in other countries	Slightly helpful	*Counter-productive*	**Very helpful**	Helpful
Public supports action	**Absolutely critical**	Irrelevant	Somewhat helpful	Somewhat helpful
UN supports action	Helpful	Almost only useful argument	Helpful	Somewhat helpful
Human rights were violated	Helpful	***Extremely unproductive***	Helpful	Helpful

Table 2. Predicted Effectiveness of Arguments Intended to Persuade Target Audience to Favor Intervention in an Undeveloped Nation

Very few arguments were identified as likely to be viewed favorably by all cultures. One is the involvement of the United Nations (UN). A second is unpremeditated killing of innocent people, though in this case it would be very difficult to persuade the PRC students that the people are truly innocents and not actually "criminals" or revolutionaries, and that the accounts of atrocities are being reported accurately. Note that the PRC reaction to the argument that human rights were violated is probably a reaction to the term "human rights." Focus group participants did support stopping the killing of people.

The arguments that do differ in effectiveness can reflect deep traditions, the practicalities of life in a nation, or recent experiences. For example, in India the support of the action by the population is critical. Lack of popular support could preclude taking the action, since people believe taking such action without public support might bring down the government. In the United Kingdom and United States, support of the population is helpful, but not as important. In the PRC, public opinion is seen as practically irrelevant. Focus group participants said that the government will do what it wants to do for its own reasons, and public opinion matters little.

APPLICATIONS, VALIDATION, AND EXTENSIONS

Applications

Belief maps may be applied to support actions to increase the cohesion of multi-cultural coalitions and to development of persuasive communications for psychological information operations. In the former case, the cultural logic can identify preferred and distasteful tasks to coalition partners. In the latter case, it can help planners develop more effective information campaigns.

The information campaigns most likely to succeed are those that do not require a target population to change their beliefs. These campaigns work by pointing out that a desired action is consistent with a culture's traditions, precedents, and authority recommendations. More challenging are information campaigns over an extended period, particularly those in which the target audience's beliefs are not already fully consistent with the desired actions. Such information campaigns include initial arguments, rebuttals, and counter arguments.

Extensions

Current belief maps support campaigns in which beliefs do not need to be changed. Belief maps that support such campaigns in which beliefs must be changed require information in addition to that described in this paper. They need to include, for example, both the criticality and stability of a belief. Beliefs inconsistent with a desired action may not undermine an information campaign if these beliefs are not too important to the target audience or if they can be changed.

In addition to augmenting the content of belief maps, additional methods for collecting the belief map information must be developed. Additional methods cited by other investigators include analysis of material written by members of the target audience, analysis of news media that cater to that audience, and analysis of popular culture enjoyed by that audience.

Validation

Belief maps may be validated operationally or analytically. Operational validation measures the effectiveness, by measuring the effectiveness of the actions based on the belief maps: actions to increase coalition cohesion or psychological operations. Analytical validation compares the maps developed using focus groups with those cited by others (analysis of written material, of news media, and of popular culture)

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