Chapter 14 Cross-Cultural Dimensions, Metaphors, and Paradoxes: An Exploratory Comparative Analysis

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Abstract We elicit the views of 37 experts who compare three distinctive approaches to the study of cross-cultural understanding: dimensions, cultural metaphors and paradoxes. Underlying this survey, although not openly stated and hopefully invisible to the expert respondents (and confirmed by informal meetings with some of them after they completed the survey), is the assumption that complexity of understanding increases as one moves from dimensions to cultural metaphors and then to paradoxes, with feedback loops connecting them. Prior research supports this progressive perspective based on feedback loops. Also, these three approaches are among the most popular, if not the most popular, methods for describing and analyzing cross-cultural differences, similarities and areas of ambiguity. Indeed, other approaches to cross-cultural similarities and differences can be subsumed in this progressive perspective. This chapter starts with a background discussion of the rationale for focusing on these three approaches, and the justification for analyzing in a comparative manner the major issues that have surfaced about these three approaches relative to their respective strengths and weaknesses. There is then a discussion of our reasons for selecting the 19 survey items, followed by a description of the methodology used, including sample selection and statistical procedures. Since this is an exploratory study of experts, we report only the major findings. However, in the final part of the review we offer suggestions about the manner in which this progression of cross-cultural understanding (via feedback loops) can be applied in the areas of research, teaching and practice, with particular emphasis on modeling human behaviors.

Keywords Cross-cultural understanding • Dimensions • Metaphors Paradoxes • Human behavior modeling • Exploratory analysis

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14.1 Introduction

There are numerous approaches to the study of cross-cultural understanding, almost all of which can be broadly classified as either *etic* or *emic*. Theorists and researchers who employ the dimensional or bipolar approach in the cross-cultural area exemplify the *etic* or culture-general perspective. Outstanding illustrations include the 53-nation study by [18] and the GLOBE study of 62 nations or national societies [19]. Such researchers primarily employ a standardized questionnaire whose items are then used to create dimensions along which these nations can be scored, ranked and compared to one another. By the very nature of this methodology such an approach is general rather than specific.

14.1.1 Cultural Metaphors

By contrast, an *emic* perspective looks at each national culture in depth and simultaneously accepts and attempts to go beyond such broad cultural profiling by exploring the unique and distinctive features of each culture. This perspective employs the idea of a cultural metaphor, which is any institution, activity or phenomenon which members of a given culture consider important and with which they identify cognitively and/or emotionally. Geertz's description of Balinese culture in terms of the metaphor of the cockfight received widespread attention [16]. More recently, [15] have examined 34 national cultures in depth using a distinctive cultural metaphor for each of them. Indeed, a review of the cross-cultural research literature over the last 50 years reveals that while dimensions still represent the dominant approach, metaphors have re-emerged as the most popular *emic* approach [30].

Gannon and Pillai [15] provide several examples of cultural metaphors in their book. Thus, the Swedish *stuga* is a simple, unadorned weekend and vacation home that is found throughout the countryside in this nation. For the Swedish national culture, these distinctive/unique features include the love of untrammeled nature and tradition, individualism through self-development and an emphasis on equality. These authors also provide other interesting examples that help us better understand the concept of cultural metaphors: how the complex rules of American football illustrate the complexity of the many rules and laws of corporate America; how the extraordinary complexity and finesse of French wine capture the intricacies, subtleties and nuances of a historically-rooted, highly evolved and fast-changing culture; how the dance of *Shiva*, a preeminent deity in the Hindu pantheon, represents a cycle of activity that reflects both creation and destruction, and how it shapes the Indian perspective on the cycle of life and reincarnation, and so on.

Popular music, such as the 'samba' in Brazil, the 'tango' in Argentina, or the 'calypso' in the West Indies, can also provide unique examples of cultural metaphors. Similarly, the 'opera' might be uniquely representative of Italian culture, as

the pageantry and spectacle of the opera are reflective of the high expressiveness, emotions and animated nature of the average Italian [15]. Further, [5] edited a Special Issue of the *International Journal of Cross-cultural Management* containing five articles, each of which employed a distinctive cultural metaphor to describe either the Caribbean in entirety or one of its national cultures. These metaphors include the *ackee* (the national fruit of Jamaica), the "no ball" concept in cricket, Yoruba proverbs, calypso, and liming (a leisure activity during which members of a group create shared, spontaneous meaning through verbal exchanges reinforced with humor).

14.1.2 Paradoxes

In recent years there has been an increasing interest in a third approach, namely the paradoxical approach [6, 27, 29]. Although there are a few basic types of paradoxes, most cross-cultural experts emphasize one type: a statement seems to be untrue due to the vicious circle created by inconsistent or contradictory elements, when it is in fact true. Operationally, a paradox represents "both-and" thinking (rather than "either-or" thinking) involving inconsistent and/or contradictory elements. Paradoxes are often framed as sentences; an example is the paradox popularized by the Bauhaus school of modern architecture that says, "less is more."

Similarly, [7] analyzes the Chinese negotiating style in terms of a paradox: why do Western negotiators simultaneously consider Chinese negotiators as both very deceptive and very sincere? His answer revolves around three explanations: the long and tortuous history of China, the resulting view of the marketplace as a highly unpredictable and dangerous place similar to a battlefield, and the ideal Confucian gentleman who emphasizes sincerity. Similarly, some cultures see time as involving in a linear progression that goes from past to present to future, while other cultures represent time as only one circle in which there is no distinction between the past, present and future. Both elements of a paradox can exist simultaneously within a single culture in spite of the fact that they are in opposition to one another, particularly in such areas as perception of reality and cross-cultural negotiation. Major world religions follow these divergent paths in trying to explain reality [26]. In the case of Buddhism, there is not even a distinction between past, present and future; one circle rather than three is the Buddhist representation of this concept.

Another study employs the yin-yang perspective (which has traditionally been considered a paradox) as the supposed key to defining culture itself in a dynamic and holistic fashion [8, 9]. Fang's perspective, though debatable, should be pursued, especially in light of the large number of definitions of culture, many of which are inconsistent with one another. Indeed, echoing Fang's perspective, [27] point out that the starting point of a paradoxical methodology for researching groups is that opposition, polarities and conflict are part of the DNA of organizational life. [21] elaborate on these ideas in the following manner: "The idea of change and transformation between two opposite states is the main theme of the *I Ching* ... or *Book*

of Changes. The book not only discusses change in one direction (from young to old or from small to large) but also discusses changes from one extreme to another extreme. For example, when a moon is full, it starts to wane; when a moon is new, it starts to wax. This is the relationship between yin and yang: when yin reaches its extreme, it becomes yang; when yang reaches its extreme, it becomes yin. ... Therefore, yin and yang are dependent upon one another, and transformations between the two occur when one of them becomes extreme." From this paradoxical perspective, it is argued that human beings, organizations and cultures should accept paradoxes to develop in a healthy and mature fashion. Thus, culture is "both-and" rather than "either-or." Similarly the dynamics of yin and yang apply to such paradoxical categories as masculine and feminine, long-term and short-term, individualistic and collectivistic, and so forth.

Another perspective to paradoxes was offered by Gannon [11], who summarized 93 cross-cultural paradoxes by employing the fact that there appears to be three major ways for understanding a paradox and hopefully resolving it. First, we can accept both truths and elements in each paradox, even though they are contrasting and even contradictory. Second, an individual can reframe the situation, which is the method that Bertrand Russell used to understand the famous Liar's Paradox: "all Cretans are liars; I never tell the truth." Russell demonstrates that each of these statements is valid but in different contexts and at different levels of analysis. In the third and final method, the individual accepts the paradox but looks for a higher unifying principle to understand it. Gannon [11] employs this third method, and emphasizes cross-culturally based research to identify a unifying principle for each of the 93 paradoxes, as the following examples drawn directly from the book demonstrate.

For example, one principle that is developed is that of 'value paradox' (e.g., Germans love freedom but feel that too much freedom can lead to disorder) and how it reflects the distinction between the desired and the desirable in life [6]. Thus US advertisements that target supposedly-individualistic Americans usually focus on group activities at home or in a social setting. Another example relates to whether multi-ethnic groups impede or facilitate the formation of national cultures. On the one hand, having several ethnic groups in a culture can lead to conflicts. On the other, countries like the USA, Canada and Australia have benefitted enormously from the contribution of new ethnic groups (e.g., German Jewish professors fleeing Europe before World War 2 contributed to the intellectual growth of US universities). This paradox extends to how immigrant groups can integrate into their adopted society. Thus US society encapsulates the idea of the 'melting pot' in which all groups integrate to form one single culture, while Canadian society is seen as a 'mosaic' wherein each ethnic group can retain its individuality and yet become an integral part of the whole.

Another paradox relates to how languages across the globe are both flourishing and dying. Thus, languages are dying at an alarming rate, from an estimated 20,000 one hundred years ago to 4000 today. However, major language groups such as English and Chinese have flourished. Similarly, globalization, or the increasing integration of national and ethnic cultures, has occurred over the past 200 years,

though simultaneously differentiation is occurring. For example, in 1946 there were 76 sovereign nations, while today there are 197. Other examples of paradoxes include how an individually-based need hierarchy can exist in collectivist cultures, how a national culture can value both freedom and dependence, how nations are simultaneously becoming more powerful and less powerful as a result of globalization, how collectivists can also be self-centered and selfish, and so forth. We have presented these examples as illustrations only. However, they serve to underscore the point that paradoxical thinking is especially useful, as it emphasizes a sophisticated understanding that moves beyond mere categorization, e.g., male and female, sincerity and deception, linear and non-linear time, or the integration and differentiation of national and ethnic cultures.

14.1.3 Feedback Loops

Gannon [13] also argued that sophisticated cross-cultural understanding and knowledge proceed from dimensions through cultural metaphors to paradoxes. This sequencing idea also finds empirical support [24, 25]. This sequence also encompasses other recent emphases in the cross-cultural literature, such as the bi-cultural and multi-cultural frames of reference by individuals (e.g., [4]). As these framing mechanisms mature through the acquisition of two or more languages and direct experience in cultures other than the one in which a person is born, sophistication increases. Such results have been reported or at least described at least since the 1950s, and are, at this point in time, well-accepted. Below, we further explain the idea of feedback loop by means of an example.

The United States is consistently ranked as either #1 or in that vicinity in the multi-dimensional studies since Hofstede's original survey of 49 nations and the four territories he treated as the equivalent of nations; in the Hofstede study, the U.S. was #1 in terms of individualism. However, the cultural metaphoric approach provides a more nuanced and deeper understanding through the specification of the particular type of individualism and the distinctive features of the metaphor. As in football, the U.S. is an aggressive, competitive and individualistic culture in which inequality is more acceptable than in egalitarian national cultures, and it is little wonder that the U.S. ranks at or near the top in extrovertic behavior given this type of individualism [23]. At the same time, Americans are taught to work together, even though the reward structures tend to be unequal, with a few players receiving vastly more compensation and acclaim than other players. Also, the focus on the group working together is strengthened by the view that football is war and, by extension, so are other key activities of American life requiring cooperative groups such as business and its "winner take all" mentality.

The weeks-long football training camp prior to the actual season, during which each member of the team must learn his part in each of the complex plays, sometimes numbering at or near 200 plays, reflects this orientation. Football is the only game in the world where all offensive players must synchronize their

interdependent motions (when they do not see what other offensive players are doing) if the play is to be successful. Further, the pre-game and half-time lavish entertainment exalting the team's virtues are designed to maximize group effort by team members, and even huddling after each play—the only game in the world that has this distinction after each play—helps to strengthen group effort. Analogs in the business world are the Walmart-influenced daily 10-minute early-morning standing meetings designed as both a pep talk and a clarification of responsibilities, and the periodic meetings during the year at which awards are presented and individual and group efforts are lauded. And, finally, football is treated as religious, even to the extent that devotees term all of the complex activities "the church of football," echoed in comparable talks by politicians and business people justifying the American ideology, e.g., emphasizing a religious rationale to justify specific actions such as a declaration of war or the existence of social inequality.

However, even though cultural metaphors are very complex with many distinctive and unique features, inevitably paradoxes emerge. To go back to the example of US football, individual rewards are emphasized in football but within a rigid group structure. If a highly-valued player's behavior off the field is suspect, his team will dismiss him quickly to ensure that the team or group is not harmed. To provide another example, generosity in sharing with those who have been less fortunate is widespread in the activities of the churches and non-profits in the U.S., contrary to the image that the US only champions individualistic behaviors. Warren Buffet, and Bill Gates and his father, have spearheaded a unique group activity among highly successful families in which a wealthy person bequeaths at least half of her assets to charity, clearly a paradox if one goes by the dimensional notion of the US as an individualistic nation. No other nation in the world has such a group. Thus the initial understanding of cross-cultural behavior that is obtained through the dimensional approach, and deepened through the use of the cultural metaphoric approach, is enriched by incorporating the paradoxical approach. The resultant feedback loops capture the dynamic interactions among these three approaches. In effect then, only the use of all three approaches rather than only one approach has the potential to deepen cultural knowledge and provide the framework to understand human decision processes and behaviors in situations where individuals from different cultural backgrounds may need to interact.

Smith and Berg [27, 28], in their classic work on paradox within small groups, describe some of these feedback loops when discussing paradoxes involving individualism-collectivism within a cross-cultural context. For example, they point out that individual human beings are social animals. As such, they only very rarely live in total isolation from other human beings. An individual wants to feel accepted by the group, at least to some degree. If he is not accepted, he or she will perceive the group in a different manner, and will react negatively to a group that is either too individualistic or collectivistic for him. Hence the feedback loop goes back from the paradox of individuality to culture-general dimensions. Similarly his or her new view of the group tends to create a different narrative or perception of the cultural metaphor that is dominant in the group. Hence the progressive and feedback elements combine to produce cultural knowledge, which is not as limited as that

provided individually by cross-cultural dimensions, cultural metaphors or cross-cultural paradoxes.

Thus, given the importance of such sequencing or progression, we decided to undertake a preliminary study of expert perspectives on the major strengths and limitations of each of these three approaches: dimensions, metaphors, and paradoxes. Results are reported below, and implications for research, teaching and practice are developed.

14.2 The Study

It must be emphasized that this exploratory comparative study focused on issues related to these three approaches rather than the testing of a specific theory or theories. Our own experience in teaching managers and students as well as our experiences in navigating across different cultures suggested that each of these three approaches has both strengths and weaknesses, and that cross-cultural understanding is enhanced by the use of all of them. Similarly, Gelfand (in [10]) divided her cross-cultural university class into two groups, one of which argued the case for dimensions and the other did the same for cultural metaphors. The dimensional approach's general strengths included the following: a common metric to compare cultures and a structure to understand an immense amount of detail; quantifiable and verifiable; and amenable to large-scale multi-country studies. This exercise also indicated that: it is hard to keep the Hofstede 5-dimensional model of culture in mind; frequently we look at one dimension separately, yet culture is a complex whole; dimensions can be a-theoretical; one dimension is overwhelmingly emphasized, that is, individualism/collectivism; dimensions are extremely broad and miss important elements; and dimensions can obfuscate within-culture diversity and the dynamics of culture.

Further, Gelfand's students indicated that cultural metaphors afford a rich, detailed and in-depth understanding of a culture, and may include elements not captured in the dimensional approach; provide a dynamic view of culture, which includes actual experiences and vivid images that capture many of the five senses, thus helping to see how people participate in culture; help to create an integrated view of culture that captures the interrelationships among dimensions and how they relate to culture; and are very useful for cross-cultural training and for early-stage research (gaining understanding, for both theory and method). However, Gelfand's students also highlighted some weaknesses of cultural metaphors: They do not easily allow for comparisons; by definition, metaphors highlight some aspects of reality and ignore others; they are more susceptible to stereotyping, and it may be harder to change stereotypes based on cultural metaphors than on dimensions, which can also be stereotypical, because they are vivid and may stick; some metaphorical mappings may be a stretch; and metaphors have been described mainly at the cultural level and not at the individual level. Gelfand's students concluded that the dimensional approach and the cultural metaphoric approach are 320 M.J. Gannon and P. Deb

complementary and need each other to make sense of cross-cultural similarities and differences. As mentioned earlier, by also incorporating paradoxes in addition to dimensions and metaphors, we extend this logic to provide a sequential (or progressive) understanding involving feedback loops, arguing that cross-cultural knowledge becomes more sophisticated as it moves from dimensions to cultural metaphors to paradoxes, with feedback loops tying them together in a dynamic manner.

14.2.1 *Methods*

In this paper, we report the results of a survey that was completed by 37 cross-cultural experts. We developed 19 items to test the strengths and weaknesses of the three approaches, and grouped these 19 items on an a priori basis into six general categories (discussed in detail below). However, as indicated above, in the survey we simply listed the 19 items in a random fashion without providing any information on the six general categories into which we heuristically placed them before sending out the survey. We e-mailed the short survey comprising the 19 simply-worded items to 58 experts and received 37 usable surveys (63.8% response rate). Note that in the actual survey wording (below), we deliberately altered the sequencing, bringing 'paradoxes' before 'metaphors'. This was done to ensure that respondents' views were not influenced by the authors' perspective of the sequencing order as dimensions, metaphors and then paradoxes.

Our e-mail stated: "(The second author) and I would like to ask you for a special favor, namely filling out the attached short survey in Excel that takes five minutes or less to fill out and return to me as an attachment to e-mail. The responses by experts such as yourself will be used to compare the relative advantages and disadvantages of three approaches to national cross-cultural understanding. The first approach, cross-cultural dimensions, is well-known and represented by the work of Hofstede, the GLOBE study, etc. The second, cross-cultural paradoxes, is newer. After reviewing many definitions, we define a paradox as follows: It is a statement, or set of related statements, containing interrelated elements that are opposed to one another or in tension with one another or inconsistent with one another or contradictory to one another (that is, either/or), thus seemingly rendering the paradox untrue when in fact it is true (both/and). The key elements of a paradox are that it:

- (a) is a reality that can be expressed in a statement or set of statements;
- (b) contains interrelated contradictory or inconsistent elements that are in tension with one another:
- (c) leads to the creation of a reality, and any statement or set of statements about this reality or paradox that is seemingly untrue due to the "vicious" circle generated by the contradictory or inconsistent elements is in fact true; and,

(d) is framed or conceptualized as an either-or choice that is better framed as a both-and choice.

The third approach is termed cultural metaphors. A cultural metaphor is any activity, phenomenon, or institution that members of a specific national culture consider important and with which they identify emotionally and/or cognitively, for example, the Japanese garden. The major features of this metaphor are then used to describe a national culture. A person can use a cultural metaphor for an initial understanding of a national culture and can change his understanding as new data and information are processed. That is, the cultural metaphor is a first best guess.

We realize that all of the experts receiving this short survey are busy, but your knowledge of the cross-cultural field will be valuable in comparing the relative advantages and disadvantages of the three approaches. We plan to list the names of the experts who helped us out by filling out the survey and returning it to us in any paper and/or article that we write. If at all possible, we would like the survey returned by e-mail within two weeks. Thank you in advance for your invaluable assistance."

At the top of the survey, we indicated the following:

Please provide your evaluations of the degree to which each of the 19 items below is attained or occurs using a 1 (low occurrence) to 5 (high occurrence), with the numbers 2, 3 and 4 representing intermediate degrees of occurrence. For each item, please provide evaluations for cross-cultural dimensions, cultural metaphors, and cross-cultural paradoxes.

Originally, we thought of using three separate factor analyses for each of the three approaches. We would have then been able to name factors and look at the individual (raw) ratings for items loading. 6 or above on each factor to obtain insight into the relative strengths and weaknesses of each of the three approaches. However, we had only 37 respondents for 19 items, and factor analysis requires at least a 6 to 1 ratio. As an alternative, we theorized on an a priori basis that the 19 items fall into six broad categories: the perspective on culture; framing culture; theory and related methodology; management education, training and globalization; ease in using each approach; and cognitive complexity. Since the goal of the study was to compare the relative strengths and weaknesses of the three approaches, we felt that the six broad categories and the 19 items within them would provide a basis for coming to some conclusions. However, we did not inform the respondents of this classification and just randomly listed the 19 items. See Table 14.4 for the 19 items subdivided into these six categories.

14.2.2 Explanation of the Six Categories

The six broad categories that we analyzed represent major issues in the cross-cultural area, and we have briefly but only indirectly touched upon them thus far in this chapter, for example, in our discussion of Gelfand's classroom exercise. Category 1, the perspective on culture, includes an item focusing on a detailed,

in-depth description of national cultures as perceived by these experts relative to each of the three approaches. As indicated above, the culture-general or dimensional approach is much less in-depth in terms of describing a national culture than the cultural metaphoric approach. Further, the dimensional approach tends to be static and rarely includes measurements at two or more different points in time, whereas the cultural metaphoric approach suggests that a national culture is critically influenced over time by such elements as its birth rate, male-female ratio, rate of prolonged unemployment, population density, religion or religions, and so forth. Cross-cultural paradoxes have the potential of providing fresh insights into dynamic occurrences in a national culture, as some of the examples provided by [11]'s book cited above suggest, and we included an item on this issue in category 1.

The second broad category, framing culture, refers specifically to the manner in which each of the three methods affects cross-cultural experiences. Each of the three approaches has the potential for distortion and inaccurate stereotyping. However, as [1] points out, all of us stereotype and the issue is whether the stereotype is accurate. She indicates that it is acceptable to stereotype provided the stereotype is a first best guess, is based on data and observation, is descriptive and not evaluative, and if the individual is willing to change or even reject the stereotype as new information and experiences become available. Hence we included an item focusing on this issue of distortion and stereotyping. This second broad category has been heavily influenced by Kahneman and Tversky, who have shown that we tend to take more risks when facing an uncertain outcome rather than when facing a guaranteed positive outcome, and that we are influenced much more by stock market losses than the uncertainty of the market itself [22]. This second category also includes an item focusing on how well each of the three approaches enlarges a person's cultural frame of reference or cultural sophistication, and a second item focusing on how well each of the three approaches strengthens attributional abilities/knowledge, which is related to increased cross-cultural knowledge or understanding.

The third category includes six items focused on theory and related methodology. As we have indicated above, a strength of the dimensional approach is the ease of using statistics to test the basic concepts of the approach, while another strength is to use this approach to compare national cultures (since nations are rank-ordered to one another on one or more dimensions). It is also easy for the dimensional approach to show a relationship between a specific dimension and outcome or outcomes. For example, the rank ordering of national cultures on individualismcollectivism has been shown to be significantly related to airline accident rates per nation: the rate among collectivistic national cultures is double that of individualistic national cultures, and if power distance is added, high-power-distant and collectivistic nations exhibit three times the accident rates of low-power-distant and individualistic nations [17]. However, only the metaphorical method has the research potential to build a grounded theory of national cultures, as it emphasizes an in-depth focus. Hence we included an item to that effect. Further, the dimensional approach ignores intra-cultural differences within a specific national culture, whereas the metaphorical approach with its in-depth lens explicitly recognizes such ethnic, religious and even linguistic differences. We created a sixth item focusing on this issue. Given such results and emphases, we included six items in the survey, which is the largest number of items for any of the six categories.

We also wanted to analyze the broad category of management education, training and globalization, which is our fourth category. Research has demonstrated that individualistic national cultures tend to spend more per capita on management education than collectivistic national cultures [17]. Hence we included two items in this category, the first of which touched upon how well management trainees are able to see how to use each of the three approaches. We also wanted to know how suitable each of the three approaches is in a globalizing world.

Further, we created a fifth category examining how easy the experts thought it was to use each of the three approaches. Specifically, we developed three items focused on how easy it is to remember the specifics of each approach, how easy it is to use each of the three approaches in a person's home culture when interacting with those from different national cultures, and how easy it is for a visitor to use each of the three approaches in a host national culture. As noted above, we had only Gelfand's classroom exercise involving undergraduate students as a source of information, and we felt it necessary to supplement it with the opinions of experts.

Finally, since the emphasis of our approach was at least partially to develop a progressive and increasingly in-depth understanding of another culture, we created a sixth category, cognitive complexity, with one item focusing on the degree to which each approach was cognitively complex, and one item focusing on the degree to which each approach required higher-order thinking processes. From the viewpoint of optimizing human decision-making processes, cognitive complexity is positively related to cross-cultural knowledge and understanding.

14.2.3 Sample Selection

We wanted to include experts in this study who represented different viewpoints but who were thoroughly familiar with all three approaches and used them in their teaching, research and consulting. However, it was very difficult to define a population from which the sample was to be drawn. For example, the International Management Division of the Academy of Management is so diverse in membership that we felt it was not appropriate, that is, many of its members would probably not be as thoroughly familiar with the three approaches as would be desirable in such a study. Hence, based on our personal professional knowledge of those working in the cross-cultural area, we decided to send the survey to a large number of such experts. Thus our study is exploratory but, as far as we know, the only one that has been completed. Further, we did test some of our findings using both parametric and non-parametric statistics when appropriate, and report the mean values in the final part of the paper where we offer some suggestions in these six broad categorical areas.

Our sample included prominent cross-cultural psychologists, cross-cultural management educators who primarily teach in business schools rather than psychology departments (and may not be cross-cultural psychologists), and experts from different nations. There were very few non-responses to any item except for item 15 (four non-responses), which was "Reinforcement of the other two approaches." We used the average score for each item within each of the three approaches to complete the statistical analysis when data were missing. The names of the 37 experts and their university affiliations by nation are listed in Table 14.1. As mentioned in the e-mail we sent to these experts requesting their participation, we indicated that we would list their names and university affiliations in a table within the article. Of the 37 respondents, 15 are affiliated with non-US universities and 22 with US universities, and at least 11 teach outside of their country of birth.

14.2.4 Analyses

To assess inter-rater reliability, we chose to use two statistics that statisticians suggest, namely a parametric measure, the ICC (intraclass correlation coefficient) and a non-parametric measure that emphasizes ranked data, Kendall's measure of concordance (W) [20]. ICC values are appropriate for 5-point scales that are assumed to be Likert-type, while W values in this study use the mean values to assess the expert rankings. We added the items together within each of the six categories and used the average means to calculate ICC and W values separately for dimensions, paradoxes and cultural metaphors (see Table 14.3). In the final part of the article we discuss some of the mean values for items in the six broad categories (see Table 14.4). However, we do not engage in statistical testing in this final part but do report some striking results in terms of mean values for each of the three approaches analyzed in terms of the 19 individual items within these six broad categories.

14.3 Results and Implications

As shown in Table 14.2, the pattern is very clear, namely modest but statistically significant agreement among the raters at the 001 level for all 19 items and for the items within each of the three approaches, both for ICC and W values. In reading Table 14.3 horizontally, we can see that the raters agreed with one another across the three different approaches (dimensions, paradoxes and metaphors) only in one category, theory and related methodology. Reading Table 14.3 vertically, we can see that the raters agreed with one another only in one of the six categories when the dimensional approach is analyzed separately, namely theory and related methodology. The strongest agreement was in the area of paradox, where both the ICC and W values indicate that the raters agreed, at least statistically, four out of six times.

Table 14.1 Survey respondents by Country and University

	T Survey respondents to	1	1		
	Name	Country	University		
1	Claire Davison	Australia	RMIT University		
2	Paul R. Cerotti	Australia	RMIT University		
3	Tine Koehler	Australia	University of Melbourne		
4	Michael Berry	Finland	University of Turku		
5	Michael Hellstern	Germany	University of Kassel		
6	Reinhard Huenerberg	Germany	University of Kassel		
7	Sonja Sachmann	Germany	University Bw Munich		
8	Anne Marie Francesco	Hong Kong	Hong Kong Baptist University		
9	Primecz Henriett	Hungary	Corvinus University of Budapest		
10	Amit Gupta	India	Indian Institute of Management Bangalore		
11	Cormac MacFhionnlaoich	Ireland	University College Dublin		
12	Patrick Flood	Ireland	Dublin City University		
13	June Poon	Malaysia	Universiti Kebangsaan Malaysia		
14	Laurence Romani	Sweden	Stockholm School of Economics		
15	Yochanan Altman	UK	London Metropolitan University		
16	Amy Kristof-Brown	USA	University of Iowa		
17	Asbjorn Osland	USA	San José State University		
18	Benjamin Schneider	USA	University of Maryland at College Park		
19	Carl Scheraga	USA	Fairfield University		
20	Christine Nielsen	USA	University of Baltimore		
21	Edwin R. McDaniel	USA	California State University San Marcos		
22	Gary Oddou	USA	California State University San Marcos		
23	Glen Brodowsky	USA	California State University San Marcos		
24	Joyce Osland	USA	San José State University		
25	Lawrence Rhyne	USA	San Diego State University		
26	Lois Olson	USA	San Diego State University		
27	Mark Mendenhall	USA	The University of Tennessee at Chattanooga		
28	Michele Gelfand	USA	University of Maryland at College Park		
29	Ming-Jer Chen	USA	University of Virginia		
30	Nakiye Boyacigiller	USA	San José State University		
31	Nancy Napier	USA	Boise State University		
32	Paul J. Hanges	USA	University of Maryland at College Park		
33	Pino Audia	USA	Dartmouth College		
34	Rabi Bhagat	USA	University of Memphis		
35	Rajnandini Pillai	USA	California State University San Marcos		
36	Stacey R Fitzsimmons	USA	Western Michigan University		
37	Walter Lonner	USA	Western Washington University		
		1			

Note We have survey responses from thirty-seven expert raters. Of these, fifteen are from non-US universities and twenty-two from US universities. At least eleven respondents are teaching at universities outside of their country of birth

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Approaches	ICC values	W values
Cross-cultural dimensions	0.22***	0.22***
Cultural metaphors	0.27***	0.26***
Cross-cultural paradoxes	0.29***	0.28***
All approaches combined	0.26***	0.27***

Table 14.2 Overall 'ICC' and 'W' values by approaches

Note ICC = Intra-class correlations; W = Kendall's coefficients of concordance; *p< 0.05, **p<0.01, ***p<0.001

Table 14.3 Category-wise 'ICC' AND 'W' values for the three approaches

Category	Dimensions		Metaphors		Paradoxes	
descriptions	ICC	W	ICC	W	ICC	W
The perspective on culture	0.04*	0.08	0.01	0.03	0.15***	0.19***
Framing culture	-0.02	0.01	0.19***	0.12*	0.21***	0.14**
Theory and related methodology	0.25***	0.20***	0.33***	0.33***	0.30***	0.26***
Management education, training and globalization	0.01	0.01	0.00	0.00	0.30***	0.29**
Ease in using each approach	0.03*	0.05	0.04*	0.03	0.03	0.06
Cognitive complexity	0.00	0.01	0.17 ***	0.21**	0.06*	0.07

Note ICC = Intra-class correlations; W = Kendall's coefficients of concordance; *p <0.05, **p <0.01, ***p <0.001

Similarly but less strongly, the raters agreed statistically with one another in three of the six categories for the approach of cultural metaphors.

We next focus on the mean values for each of the three areas (dimensions, metaphors, and paradoxes) described in terms of specific items. As we proceed, we will offer some suggestions in the areas of teaching, research and applications. We feel this is the most appropriate way to proceed rather than testing specific theories and hypotheses, given the methodological issues discussed previously.

In terms of the perspective on cultures, the metaphoric approach is perceived by the respondents as far superior to paradoxes and dimensions: The mean values are 4.08 for metaphors, 3.03 for paradoxes and only 2.62 for dimensions for the item focusing on a detailed, in-depth description of national cultures. This result is not unexpected: when cultural metaphors are used correctly in terms of delineating unique or distinctive features of a particular culture, they provide an in-depth insight not possible when using general cross-cultural dimensions or even paradoxes. Paradoxes dazzle when a reader begins to understand them, but they do not

provide the in-depth understanding that metaphors allow. However, paradoxes and metaphors are approximately equal in mean values in terms of a dynamic view of national cultures (3.76 and 3.73). In contrast, the mean value for dimensions is only 2.11. Finally, in terms of an integrated view of national cultures, metaphors clearly are first (3.84) followed by paradoxes (3.03) and then dimensions (2.65).

Based only on these results, one must question why so much research, teaching and even applications are based primarily on dimensions. For the last thirty-five years the emphasis has been on research, where, as we will see, the dimensional approach is highly rated. However, what is generally regarded as substantive issues in cross-cultural understanding emphasizes a detailed, in-depth description of a culture and an integrated view of national cultures, not to mention a paradoxical view of culture. Just reading the New York Times or a similar publication leads inevitably to such a conclusion. Rarely are cross-cultural dimensions the focus of interest. Rather, the focus is on an in-depth description or a paradoxical explanation. Why, then, is this emphasis on researching dimensions significantly different from the results reported directly above?

The answer to this puzzle may possibly be found in the category of theory and related methodology (Category 3). In this category, item 2 shows that it is much easier for dimensional researchers to use statistics to test the basic concepts of this approach (mean value of 4.54) than to use either metaphors (1.89) or paradoxes (2.19). Methodologies have been developed to test both cultural metaphors and cross-cultural paradoxes, but they require much more effort on the part of the researcher, as they cannot rely only on one standardized questionnaire that is employed in numerous nations to test hypotheses. Also, while the respondents felt that both metaphors (3.76) and paradoxes (3.81) emphasize the early stages of grounded theory, the differences between mean values were not as extreme as those reported directly above, as dimensions had a mean value of 2.92 (See Item 1 under Category 3).

These findings bring into focus the largely-unquestioned assumption that dimensions represent the apex of cross-cultural research and understanding. Rather, they may represent only a first step in trying to understand cross-cultural behavior. For example, it is generally accepted that individualism-collectivism, as measured by a standardized survey used in several nations, is the most predictive of the dimensional measures. However, there are so many different types of individualism and collectivism that such a viewpoint is problematic [15]. We need to have culture-general measures in this area of individualism-collectivism supplemented by culture-specific measures and measurements of other dimensions both *etically* and *emically*, and the dimensional approach does not provide such an understanding.

However, what is clear is that the dimensional perspective is clearly superior (mean value of 4.16) to both metaphors (3.35) and paradoxes (2.59) in terms of ease in comparing national cultures (Item 3 under Category 3). Conversely, the dimensional approach is also the highest in terms of ignoring intra-cultural differences within a specific national culture (4.11 versus 3.22 for metaphors and 2.41 for paradoxes) (Item 4 under Category 3). This is a major weakness of the dimensional

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approach, and even some dimensional researchers have tried to take this weakness into account. For example, Robert House, who initiated and led the well-regarded GLOBE study, hired a cultural anthropologist right at the beginning of this research, but unfortunately he was unable to resolve this problem or dilemma.

Still, there is hope, as the respondents indicated that there are fewer differences in mean values when they judged on the issue of the reinforcement of the other two approaches (3.76, metaphors; 3.30 for paradoxes; and 3.00 for dimensions) (See Item 6 under Category 3). Thus there appears to be recognition of the fact that one approach by itself is insufficient. We need all three approaches to obtain a valid description of an ethnic and/or national culture. Nevertheless, one must question why such an inordinate amount of academic research has been focused on dimensions. If all three approaches reinforce one another, why has there been such limited attention devoted to metaphors and paradoxes, especially in the area of testing results?

Perhaps the major reason is that most researchers seem to be unaware that at least one methodology has been developed to measure cultural metaphors. Specifically, [14] developed three surveys completed by undergraduate students in six nations, one survey for two nations at a time: the US (American football) and India (the Dance of Shiva); Germany (the symphony) and Italy (the opera); and Great Britain (the traditional British home) and Taiwan (the Chinese family altar). College students were asked to respond to a lead-in "Most people in my country" followed by items derived from the specific chapters on each of the six nations found in [15], for example "are honest," "are publicly unexcitable," etc. Each student used an 11-point scale to rate his or her degree of agreement with each item, with 0 indicating "do not agree at all" and 10 indicating total agreement, or he or she could choose any other number between 0 and 10. In addition, the researchers developed two paragraphs for each nation, one of which did not explicitly contain the cultural metaphor while the other did. Each student used the same 11-point rating scale to measure disagreement-agreement relative to the two paragraphs. Appropriate statistical tests were then employed to test whether each cultural metaphor was perceived as reflecting the national culture by these students. There was strong support for at least these six cultural metaphors. The instruments are publicly available in [10], Exercises 4.1 and 4.2, and are also reprinted on http:// faculty.csusm.edu/mgannon.

Thus it is possible to statistically test both cross-cultural dimensions at the culture-general level and specific metaphors for each national culture to obtain a more in-depth understanding. Similarly, at least many if not most cross-cultural paradoxes can be tested. Above we have given examples relative to the death of languages while major language groups are flourishing. Similarly we have put forth the paradox relative to time, which can be measured by a standard instrument. Hence we believe that it is possible for human decision-making researchers to test a model of culture that goes far beyond the culture-general dimensional perspective, and even the cultural metaphoric method.

We now turn our attention to another major category, framing culture (Category 2). In this area we do not see the extreme mean value differences reported above.

All three approaches seem to suffer from a susceptibility to distortion and inaccurate stereotyping, at least as judged by mean values (Item 1 under Category 2). Similarly, while cultural metaphors seem to enlarge the frame of reference (4.24), so too do paradoxes (3.92), although it is questionable that dimensions possess this feature to the same extent (3.27), especially when compared to cultural metaphors (Item 2). Further, there appears not to be major differences in the area of strengthening of attritional abilities/knowledge: 3.81, metaphors; 3.78, paradoxes; and 3.14, dimensions (Item 3).

In the category of management education, training, and globalization (Category 4), the differences are not as wide as those reported above. All three approaches appear to be similar within this category, which includes two items (see Table 14.4). Similarly, the mean values in category 5, ease in using each approach, suggest that all three approaches are useful. For the three items, the metaphoric approach has the highest mean value, but the differences in mean values do not seem practically significant. However, in the final category, cognitive complexity, there appears to be significant differences. Paradoxes have a higher mean value (4.22) than either metaphors (3.43) or dimensions (2.81) (Item 2 under Category 6).

This reinforces the concept that cross-cultural understanding progresses through various stages, beginning with dimensions for cultural-general features

Table 14.4	Item means	by category	for the three	approaches
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Item description		Dimensions	Metaphors	Paradoxes		
I	Category 1: The perspective on culture					
1	Detailed, in-depth description of national cultures	2.62	4.08	3.03		
2	A dynamic view of national cultures	2.11	3.73	3.76		
3	An integrated view of specific national cultures	2.65	3.84	3.03		
II	Category 2: Framing culture					
1	Susceptibility to distortions and inaccurate stereotyping	3.27	3.35	2.97		
2	Enlarges the cultural frames of individuals	3.27	4.24	3.92		
3	Strengthening of attributional abilities/knowledge	3.14	3.81	3.78		
III	Category 3: Theory and related methodology					
1	Research potentiality: early stages of grounded theory	2.92	3.76	3.81		
2	Ease of using statistics to test the basic concepts of the approach	4.54	1.89	2.19		
3	Ease of comparing national cultures	4.16	3.35	2.59		
4	Ignoring intra-cultural differences within a specific national culture	4.11	3.22	2.41		
5	Ease of using statistics to relate the approach to other variables	4.32	2.08	2.19		
6	Reinforcement of the other two approaches	3.00	3.76	3.30		

differentiating national cultures, going through metaphors for specificity, and ending with paradoxes, which provide the sophisticated understanding that is the hallmark of cross-cultural education and training. Admittedly, then, there are feedback loops between these various stages. Still, the natural progression of cross-cultural understanding seems to proceed through a cultural-general phase (dimensions), then through a cultural metaphoric phase (in-depth understanding), and finally to a paradoxical phase that recognizes the importance of both dimensions and metaphors but moves beyond them.

14.4 Conclusion

In this chapter we have put forth a progressive feedback model designed to increase cross-cultural knowledge and understanding that begins with a culture-general approach emphasizing dimensions, moves onto to a more in-depth understanding of a culture through the use of a unique or distinctive cultural metaphor and the specific features of this metaphor, and finally to the third approach of cross-cultural paradoxes that serve as the endpoint of knowledge and understanding. That is, we argue that we can predict human decision-making behaviors and processes in cross-cultural contexts by proceeding sequentially in this manner, and that knowledge created by each of the three approaches feeds back to the other approaches and strengthens cross-cultural knowledge and understanding because of the circularity of the relationships in the model.

For example, [28] agree with many other researchers that individualism-collectivism is a key if not the key dimension in the cross-cultural area. They also argue that there is an inevitable tension between individualism and collectivism, which we see as manifesting itself in the specific type of individualism or collectivism that becomes apparent through the use of cultural metaphors, e.g., the proud and self-sufficient individualism of the Spanish, the interdependent individualism of the Danish, and the competitive individualism of the United States. Inevitably these tensions lead to cross-cultural value paradoxes, e.g., the value paradox such as the high emphasis that Germans place on both freedom and structure.

Further, the respondents generally agreed that all three approaches—dimensions, metaphors, and paradoxes—are useful and add value in trying to understand cross-cultural differences. We likewise believe that all three approaches are useful, especially if tied together in a progressive feedback model maximizing cross-cultural knowledge and understanding. From this perspective, we argue that cross-cultural management education and training should be structured in the manner advocated in this chapter.

Also, given that the dimensional approach's strong suit seems to be the amount of research devoted to it, does that suggest that we need to emphasize research on metaphors and paradoxes more than is currently emphasized if we want to move the field of cross-cultural research beyond where it is today? Will new methodologies need to be developed to test the adequacy of cultural metaphors and paradoxes?

While some methodologies do exist for this purpose, as discussed in this chapter, it appears that much more of an emphasis on methodology in these two areas needs to occur.

There are also other implications that can be derived from our comparison of the three approaches. First, one approach to studying cross-cultural differences and similarities is clearly insufficient. Relatedly, there is clearly interest in the areas of cultural metaphors and paradoxes, judging by conference sessions devoted to them and journal publications. Still, this interest is dwarfed in comparison to that shown to dimensions.

Further, there is an existing body of literature about the manner in which these three approaches can be integrated to improve understanding of human behaviors, cognitive processes and value systems in cross-cultural contexts. [2] describe at length how to use these three approaches in eight different contexts, as described below. As we learn to integrate the three approaches within different contexts, we expect that the field of cross-cultural behavior will flourish and will allow experts to offer suggestions about research, teaching and applications that will tend to positively reinforce one another.

In addition, in support of the proposition that there is nothing as useful as a value-added theory or model, we offer the experiences of various teachers and researchers who have emphasized the use of dimensions, metaphors and paradoxes in their training and educational endeavors. A fuller explanation can be found in [2] and [12]. In the [2] series of eight mini-articles, Nielsen begins by describing how she uses cultural metaphors in her "Leadership Across Cultures" course, focusing on how the overlap between the fado metaphor and the Portuguese bullfight provides additional insights into the national culture. Cerotti and Davidson demonstrate how their popular exercise involving posters of cultural metaphors reinforce the idea that cultural knowledge needs to be deep-seated. Scheraga, a well-known economic researcher, shows how he uses dimensions, metaphors and paradoxes to show students how the complexity of culture increases, as described in this article, and how to address the issues raised at each level of analysis through various quantitative methodologies and statistics. Pillai describes a three-hour symposium at the 2009 Academy of Management Conference exploring all three areas of dimensions, metaphors and paradoxes, culminating with a discussion of two metaphors for India, the Dance of Shiva (traditional India) and Kaleidoscopic India (modern India). The Indian Dance Group of Chicago then performed an interpretation of the Dance of Shiva.

Altman goes on to explain how public scandals in France and the USA are viewed, primarily through the prisms of their respective cultural metaphors and their distinctive or unique features (French wine and American football). Rhyne extends the analysis by showing how his student teams incorporate the use of dimensions and cultural metaphors in developing company-specific strategies within a national culture. Köhler and Berry emphasize the role of interpersonal communication using dimensions and cultural metaphors, showing how a well-known 60-minute show on American culture was filled with misunderstandings of Finnish culture, particularly in regard to what silence means (American

football and the Finnish sauna). In 1998 the Midwest Academy of Management's International Conference in Istanbul highlighted the use of dimensions and cultural metaphors, asking teams of academics to use the chapters from Gannon's book to understand American football and the Turkish Coffeehouse (plus Chap. 1 which explains the dimensional and metaphoric approaches), prior to interviewing business executives and asking them questions based on these chapters.

Further, [12] describes how he uses all three perspectives (dimensions, metaphors and paradoxes) in various international MBA programs with which he has been intimately involved. First, he presents a short table describing 15 nations in terms of their rankings on the dimensions proposed by Hofstede. He then says something like: the Hofstede perspective is very useful, but what is incomplete about it? A dead silence usually ensues. He then points out that the two major culture-general features of collectivism that political scientists emphasize, paternalistic and authoritarian, are missing completely from the Hofstede framework. He also points out that there are different types of individualism and collectivism both at the culture-general and the individual levels of analysis, as highlighted in [15]. At this point he emphasizes the area of paradoxes, asking the trainees or students to respond to questions that incorporate one of his 93 cross-cultural paradoxes [11].

Gannon ends by suggesting that a broadened approach encompassing dimensions, metaphors and paradoxes creates a situation in which trainees and students are intimately involved in the learning process, rather than the lecturer merely describing each of them. His examples include Maggi Phillips, a professor at Pepperdine University, who has her students read Chap. 1 of the Gannon and Pillai book and the specific chapter devoted to American football, after which the trainees or students are sent to a mall to observe behavior in terms of what they have read. Similarly, Lois Olson of San Diego State University taught in the Program at Sea during a semester in which students visited several nations while living on a ship. She prepared them for each nation just prior to visiting it by asking them to read the appropriate chapter. Such approaches demonstrate the wide range of applicability that a broadened perspective involving dimensions, metaphors and paradoxes emphasizes. This, in effect, is the key thrust of this article. Rather than automatically rejecting alternative viewpoints, the idea is to emphasize the point that there is nothing as useful as a value-added theory or model encompassing multiple viewpoints.

In summary, we are offering a testable framework of culture (based on feedback loops) that seeks to understand human decision-making processes so that cross-cultural knowledge and understanding are enhanced. We have also shown that it is possible to test the effectiveness of the three approaches through methodologies that currently exist (specifically, we offer some thoughts and evidence on ways to test cultural attributes other than dimensions), but we also feel it is probably best if other researchers not heavily identified with these three approaches do such testing, even to the extent that they develop new methodologies for doing so. While testing all aspects of the framework will require a lot of effort, it is possible to do so and to move the cross-cultural area away from an emphasis on specific approaches considered one at a time to a situation in which at least three of

the major approaches to culture are integrated with one another to enhance cross-cultural comprehension. As we move towards capturing (by collecting data) and testing (through analysis) the depth and variety of human behaviors in diverse national cultures, these three approaches enhance our cross-cultural intelligence, an essential component of human intelligence itself.

Taken to its logical conclusion, combining the etic and emic perspectives to culture will enable us to better understand national cultural differences which can then be incorporated in designing interactive systems. As [3] argue, while "the Artificial Intelligence community uses the term 'common sense' to refer to the millions of basic facts and understandings that most people have", changing the culture or environment can change individuals' perceptions of what is common sense, and the "challenge is to try to represent cultural knowledge in the machine, and have interfaces that automatically and dynamically adapt to different cultures". Knowledge bases for different cultures could be developed by incorporating what is common knowledge in different cultures, and software can be developed for comparing these different knowledge bases (this will allow, for example, a US-based teacher to consult the database while developing instructional content for students based in France, or search engines to use that knowledge base to come up with culture-specific search results) [3]. In sum, in this chapter we identify the basis of the multi-dimensional complexity of human behaviors in various cultural settings and suggest that AI experts should be able to capture some of these cross-cultural differences by developing appropriate machine interfaces.

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