Measuring Intercultural Competence

©Milton J. Bennett, Ph.D.
Director, The Intercultural Communication Institute, www.intercultural.org, mbennett@intercultural.org
or direct: mjbennett@comcast.net
November 28, 2004

This informal paper is an overview of some topics of interest in measuring intercultural competence. It is not meant to constitute a complete statement regarding either the potential subjects of measurement or the methodology of measurement in intercultural relations. Further, the perspective taken here is derived from intercultural communication rather than from cross-cultural psychology or cultural linguistics, two related but distinct fields.

I will distinguish two classes of phenomena that belong to different logical types (Bertrand Russell, Gregory Bateson) and suggest that the methodology of measurement of those phenomena and the application of that measurement should match their types. Then I will suggest that a paradigm shift at the logical metalevel is necessary to understand and measure "intercultural experience."

The Cultural Level

The first type of phenomenon is variously called subjective culture, cultural worldview, or cultural orientation. These terms refer to the patterns of beliefs, behaviors, and values maintained by groups of interacting people that constitute the internalized product of human socialization (Berger & Luckmann*)*. In the field of intercultural relations, these patterns are commonly described in terms of frameworks originally developed by Edward T. Hall and Florence Kluckhohn and Clyde Strodtbeck to systematize the general idea of cultural relativity (Cf. Boas, Meade). Current formulations of cultural values such as those of Stewart and Bennett, Hofstede, Trompenaars, Harris, and others derive from the general idea that subjective culture can be described at least partially in terms of the assignment of goodness to ways of being in the world, the original Kluckhohn and Strodtbeck idea. Similarly, current formulations of cultural style such as Ting-Toomey's facework framework or Hammer's styles of conflict derive from the general idea that culturally preferred behavior can be placed along various continua, the original Hall idea of high to low context behavior.

The measurement of cultural worldview positions an individual within the categories or continua defined by a particular formulation of cultural values and behavior. This measurement provides the respondent with a profile of his or her own preferences in regard to the defined constructs and perhaps with a contrast to other possible cultural orientations. The logical type of this type of description is first-order. Like any other first-order description, it organizes a set of phenomena into constructs.

The appropriate use of first-order measurements is only descriptive or contrastive. So, for instance, Hofstede's constructs are used appropriately to generate the hierarchies that describe and contrast national cultures in terms of his dimensions. Of course, different first-order measurements yield different configurations of cultures and contrasts. Trompenaars' constructs differ from those of Hofstede, and they therefore generate different cultural orientations.

Some practitioners may fall into the naïve belief that one description of culture is better than another. Of course, such a belief ignores the fact that description is necessarily linked to a defined set of constructs and their measurement. One could (and should) consider the goodness of the underlying constructs in terms of their theoretical coherence and their measurement in terms of its methodological rigor. Further, one could (and should) evaluate a description as being more or less useful than another for some purpose. For instance, the methodology used by Hofstede incorporates national culture distinctions, and so it is particularly useful in considering national culture. Hofstede's dimensions are less useful in describing ethnic, gender, or class culture differences, since his measurement did not incorporate the constructs or the methodology most appropriate to those cultural distinctions.

Cultural orientation measures may be inappropriately overextended from first-order description into second-order analysis. That is, a particular cultural orientation or a greater or lesser contrast of one's own culture with a different target culture may be taken to indicate a greater or lesser degree of intercultural competence or adaptability. This is a confusion of logical type. First-order measurements can only be used to make first-order descriptions: "this is your culture (as conceived by this system), and this is how it compares to other cultures (as conceived by this system)." The ability to deal with cultural differences is at least a second-order operation, since it necessitates a meta-level position vis a vis culture itself. Thus, intercultural (as opposed to cultural) behavior needs to be measured differently.

The inappropriate application of first-order measurement has at least two practical consequences in corporations and other organizations. The first is that a majority of training resources may be expended on the measurement and presentation of cultural orientation in the mistaken belief that the outcome of the measurement will tell participants something about their intercultural competence. In fact, people can be either more or less interculturally competent no matter what their own and the target culture are. And in a second, related confusion of logical type, the organization may seek to create an interculturally competent corporate culture. In fact, any corporate culture can be either more or less supportive of intercultural competence, because intercultural competence does not exist on the same logical level as the values and behaviors that constitute the culture of the organization.

Sophisticated interculturalists face a challenge in dealing with first-order cultural orientation measurements. People like these measurements, and there are a lot of them around. And the descriptions they generate are useful for cultural self-awareness and knowledge of other cultures. But the temptation of the organizations (and some interculturalists) is to stop at this level. Long-term effectiveness studies of such truncated programs are unlikely to show improvements in intercultural competence, because both cultural self-awareness and cultural knowledge must be placed in a second-order context to be useful constituents of intercultural competence.

The Intercultural Level

The addition of "inter-" to "cultural" signals the shift to a second-level of logical type. Whatever it is called – intercultural (or cross-cultural) competence or adaptation; or more particularly intercultural knowledge, attitudes, and skills – this type of phenomenon exists on a meta-level to culture. Intercultural

operations assume that one's own and other cultures have been defined and described, and that the attention is now on how to manage relations among them.

Regarding the construction of intercultural phenomena, we should remember that they depend on the prior construction of cultural phenomena. It may be that organizations and their consultants do not only err in overextending the application of first-order phenomena, as suggested above. They may also err in not defining the first-order phenomena sufficiently before moving to the second-order considerations. That would mean that training programs or other interventions (e.g. executive coaching) jump too quickly into skill development without a sufficiently defined conceptual structure for "culture" itself. Long-term effectiveness studies of such preemptive programs are also unlikely to show improvements in intercultural competence, because the attempted development of second-order skills lacked a sufficiently coherent first-order foundation.

Measurements of intercultural phenomena have depended heavily on the assumptions and methods of cross-cultural psychology (see Ward in Handbook of Intercultural Training, Third Edition (HIT3) for a good summary of these efforts). Cross-cultural psychology shares the assumption with psychology in general that certain "psychological" variables such as personal traits, or constellations of cognitions, affective conditions, and behaviors can be correlated with certain outcomes so as to establish either a causal or at least somewhat predictable relationship between the two. Depending on a particular school's paradigmatic bent, the psychological variables may be assumed to be stable descriptions of universal human phenomena (e.g. the Big Five personality traits) or, alternatively, the variables may be assumed aspects of schema or other mental constructs. In any case, a major effort of cross-cultural adaptation research is to discover or define the relevant psychological variables that cause/explain/predict the effective management of cultural difference.

Conceptual overextension may occur if there is not a good theoretical basis for relating a particular set of constructs to intercultural outcomes. For instance, according to Richard Brislin (personal communication) there is no reason to assume that personality as measured by the Meyers-Briggs Type Inventory is either universal or has anything to do with intercultural adaptation. Yet that instrument is commonly used with the implication that information generated by it will be useful in an intercultural context.

Interculturalists are likely to be familiar with two types of instruments based on cross-cultural psychology methodology (See Paige in HIT3 for a complete overview of instruments used in intercultural training). One type is the traditional measurement of traits or characteristics that are theorized to be connected with intercultural effectiveness. Measurements of prejudice, open-mindedness, and similar constructs would fall into this category. The other is criteria-referenced measurement, which seeks to measure characteristics that have been shown in other research to be associated with some kind of intercultural effectiveness.

A good example of a criteria-referenced instrument is the Cross-Cultural Adaptability Inventory (CACTI, Colleen Kelly). The four dimensions measured – emotional resilience, personal autonomy, flexibility/open-mindedness, and perceptual acuity – were chosen because they appeared to have the strongest relationship to intercultural outcomes in traditional correlational studies. By assessing how people self-attribute strengths in these areas, an inference is made about their general aptitude for cross-cultural adaptation.

The CCAI and other criterion-referenced instruments limit the potential for conceptual overextension by linking their dimensions to actual demonstrations of connection to intercultural

outcomes. However, in the process they may lose conceptual coherence. For instance, the theoretical connection between personal autonomy and perceptual acuity is unclear, even if each of those constructs correlates relatively well with outcomes. As such, criterion-referenced measurements are necessarily limited in their explanatory power.

Since the methodological requirements are similar for any credible psychometric instrument, the real questions are 1) what constructs are being measured, and 2) what indicators (inventory items, usually) are being used to measure them. The plethora of instruments of this type attests to the many answers possible to these questions. However, according to Mitchell Hammer (private communication), no combination of constructs and indicators has much better than a .40 correlation with any outcome of intercultural effectiveness. According to Hammer, this degree of correlation is sufficient to demonstrate a relationship between the variable(s) and the outcome, but it is far from the "holy grail" of causative explanation for effective intercultural behavior.

Intercultural Experience

The inability of cross-cultural psychology to generate a powerful predictive and explanatory measure of intercultural competence can be attributed to the inherent limitation of a traditional psychological approach to understanding intercultural phenomena. Traditional psychology (including cross-cultural psychology) is heavily invested in positivism and linear causality. This paradigm has already proved inadequate to explain relatively simple group phenomena such as family relationships, where research has turned to the mutual causality approach of systems theory (e.g. Watzlawick, Jackson, the Palo Alto school). I suggest that the traditional paradigm is also inadequate to explain the more complex phenomena associated with intercultural experience.

The consideration of intercultural *experience* adds a "self-reflexive loop" to intercultural phenomena, which already exist at the metalevel of description. In other words, we researchers or investigators are trying to understand how human beings (of which we are ones) go about experiencing our cultural experience of the world as different from other people's cultural experience of the world. Traditional attempts to correlate characteristics with outcomes are logically inappropriate to this task.

To approach "experience," we need to shift to a different paradigm, that of *constructivism*. The constructivist paradigm assumes that experience (including cross-cultural experience) is constructed. This is the central tenant of *cognitive constructivism*, most notably stated by George Kelly in his *Psychology of Personal Constructs*. He pioneered the mid-twentieth century resurrection of the idea that we do not perceive events directly. Rather, our experience of events is built up through templates, or sets of categories, that we construct to organize our perception of phenomena. This idea has been given more current applications by Heinz Von Foerster, Ernst Von Glassersfeld, and Paul Watzlawick, among others.

In addition to providing intercultural relations with the idea of culture as a "template," Kelly suggested the basic idea of ethnocentrism used in the developmental approach to intercultural competence. In his "experience corollary," he states that experience is not a function of being in the vicinity of events when they occur; rather, experience depends on one's construal of the events. So, for instance, an American person who happens to be in the vicinity of Japanese events may not have anything like a Japanese experience of that event, if he or she does not have any Japanese categories with which to construe the events. Instead, he or she will have an American experience in the vicinity of the Japanese events. This is an example of an *ethnocentric* experience, meaning that one's own culture is the only basis for perceiving events.

The original form of cognitive constructivism, including its application by Piaget to cognitive development, was sometimes criticized as being too "mental." A collection of current theoreticians who could be called *experiential constructivists* has extended constructivism into other dimensions of human experience. They include the anthropologist Gregory Bateson, the biologists Humberto Maturana and Francisco Varela, the psycholinguists George Lakoff and Mark Johnson (who in *Philosophy in the Flesh* provide a brilliant modern defense of the Whorf/Sapir hypothesis), the neuroanatomist Antonio Damasio, the communicologist Dean Barnlund, and my some of my own work. All these theoreticians refer to how we "co-create" our experience through our corporal, linguistic, and emotional interaction with natural and human (including conceptual) environments.

In this view, the crux of intercultural competence is the ability to construct alternative cultural experiences. In other work, I have called this ability *intercultural sensitivity* (the *Developmental Model of Intercultural Sensitivity*). Individuals who have received largely monocultural socialization normally have access only to their own cultural worldview, so they are unable to experience the difference between their own perception and that of people who are culturally different. The development of intercultural sensitivity describes how we gain the ability to create an alternative experience that more or less matches that of people in another culture. People who can do this have a more intercultural worldview.

Measurement of experience must be phenomenological. Such measures of subjective experience have traditionally used purely qualitative research methods such as interviewing or non-parametric quantitative methods such as content analysis. In recent work reported in a special issue of the *International Journal of Intercultural Relations*, Mitch Hammer and I with the help of Rich Wiseman have developed an instrument – the *Intercultural Development Inventory* (IDI) – that provides a parametric quantitative measure of intercultural worldview. The instrument uses sophisticated factor analysis to organize items derived from interviews and content analysis into reliable scales with good construct validity. Through this unusual process, the IDI combines third-level phenomenology with second-level methodology to generate a tool that can predict the potential for intercultural competence.

Measurements of intercultural competence that do not take intercultural sensitivity into account are likely to be inconsistent. That is, they will show a correlation of personal characteristics with intercultural outcomes *if* there is sufficient intercultural sensitivity present. Since such sensitivity is sometimes present and sometimes not, the results of such measurements will show significant but mysteriously inconsistent correlations with outcomes. That is, of course, what the current measures show. The measurement of intercultural sensitivity should provide a better prediction of intercultural outcomes, either by itself or in conjunction with other measures of intercultural competence.

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