Chapter 17
Politeness and Etiquette Modeling:
Beyond Perception to Behavior

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ABSTRACT

If culture is expressed in the patterns of behavior, values and expectations of a group, then a central element in the practical modeling and understanding of culture is the expression of politeness and its roles in governing and influencing behavior. The authors have been developing computational models of "politeness" and its role in power and familiarity relationships, urgency, indebtedness, etc. Such a model, insofar as it extends to human-machine interactions, will enable better and more effective decision aids. This model, based on a universal theory of human politeness, links aspects of social context (power and familiarity relationships, imposition, character), which have culture-specific values, to produce expectations about the use of polite, redressive behaviors (also culturally defined). The authors have linked this "politeness perception" model to a coarse model of decision making and behavior in order to predict influences of politeness on behavior and attitudes. This chapter describes the algorithm along with results from multiple validation experiments: two addressing the model's ability to predict perceived politeness and two predicting the impact of perceived politeness on compliance behaviors in response to directives. The authors conclude that their model tracks well with subjective perceptions of American cultural politeness and that its predictions broadly anticipate and explain situations in which perceived politeness in a directive yields improved affect, trust, perceived competence, subjective workload, and compliance, though somewhat decreased reaction time. The model proves better at accounting for the effects of social distance than for power differences.

INTRODUCTION

Much significant and useful work (e.g., Hofstede, 2001; Nisbett, 2003; Klein, 2004; House, et al., 2004) has been done on characterizing cultures according to deep-seated and, presumably, durable attitudes, values and, perhaps, psychological tendencies. This work can and has been used to train individuals, predict behaviors and even customize devices and human-machine interactions to the culture as a whole. While helpful, such models are nevertheless extremely coarse-grained and provide little guidance at the level of specific interactions between individuals in context.

While these broad and deep descriptions of cultural differences and similarities may be of interest in their own right, that interest becomes practical when we need to get a job done, to communicate information and/or obtain resulting actions from members of another culture. It may be helpful to know, for example, that an individual I'm working with is from a culture with a lower Power Distance Index (PDI: cf. Hofstede, 2001) than my own and that, therefore, s/he is more likely to deviate from or critique an instruction from a superior, but how do I practically convey, with any reasonable hope of success, that any specific instruction I give him or her is critical and it's very important that it be followed exactly?

This makes apparent the role of social interaction "etiquette": that is, interactions based on the social characteristics and assumptions of each agent as an intentional entity and drawing from culturally familiar patterns of expectations about and interpretations of appropriate behaviors among such agents. While the study of culturally-correlated attitudes, cognitive styles, and sense-making mechanisms, not to mention specific attributes and histories of alternate cultures, are all important, action and work across diverse cultures almost inevitably involves communication. Communication means verbal and non-verbal exchange between intelligent agents by means of language and gesture, prosody and posture. Hence these topics and their subtle role in social interaction expectations, interpretations and behaviors, should be a topic of study in multi-cultural interactions, whether they be human-human or human-machine.

It may well be objected that attention to these "superficial" aspects of cultural expression—overt politeness behaviors—will hardly convey a rich or deep understanding of cultural thought, behavior and nuance. This is almost certainly true, but such overt behaviors not only have predictive power and are capable of producing desired (or avoiding undesired) effects as we will illustrate, but they are also perhaps a necessary entry point toward interacting with those of other cultures with sufficient goodwill to enable such deeper learning.

Over the past several years, our work has focused on developing a concrete model of observable human behaviors—specifically communication behaviors having to do with etiquette and politeness—which in turn have relevance for human performance, attitudes and broader decision making. In this paper, we will describe our model and then, briefly, the results of several experiments illustrating its ability to both predict perceptions of politeness and to account for variations in very specific behaviors associated with those perceptions.

BACKGROUND

"Politeness" for Social Interactions?

Our work grows out of the sociolinguistic analysis and modeling of Penelope Brown and Stephen Levinson (1987). After years of data collection across three major language/cultural groups, Brown and Levinson proposed a model to explain and account for the role of politeness behaviors in social interactions. In essence, politeness in their model is the process by which we determine and manage the "threat" inherent in communication between intentional actors which are presumed to have goals and the potential to take offense

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