Interactive Phrasebook, Language and Culture Training

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Cultural-awareness and knowledge of business etiquette in the globalized world is vital in creating successful partnerships. Its importance is demonstrated by the numerous culture and language training books, programs, and consulting companies geared towards the international business market. One problem is that there are nuances within a culture that may dramatically alter the meaning behind communications, but these subtleties cannot be taught effectively in the current teaching formats. Contextual information such as the power distance or familiarity between the speaker and the hearer and their effects are often footnotes in a lesson, despite their considerable influence on the interpretation of the message. This problem can be addressed by computerized training that allows the learner to rehearse situations in an immersive setting. However, current computerized simulations are highly limited in the scope of scenarios and lessons which they can provide. Training scenarios are difficult and expensive to develop, and are highly limited. The result is frequently that a small number of scenarios are provided and these illustrate a few cultural behaviors which are not very adaptable and flexible relative to the range of possible conditions and behaviors that individuals will encounter in real life. We believe a "socially-aware" model is vital in conveying the nuances that are inherent in cross-cultural interactions, and are often lacking in even human-to-human cultural training. A Non Player Character (NPC) in a socially-enabled system can take offense believably if not addressed in a culturally appropriate fashion, may appear recalcitrant or ignorant when it is merely trying to follow its culturally-derived notions of polite turn-taking in discourse.

Our focus is to utilize and expand a computational model and method of achieving and assessing *believable* social interactions between individuals and small groups. This theoretical model, derived from studies of human-human interactions across multiple cultures, can evaluate what constitutes as "appropriate" interaction etiquette based on a number of contextual variables. This technique enables us to create and adapt sets of human-NPC interactions that are believable because they correspond to expectations, yet deviate in ways that mimic human-human interactions. We have created a model and metric of believability based on the concepts of *etiquette* and *politeness*.

Politeness is a technical term and a well-studied phenomenon in anthropology, sociology and linguistics having to do with the processes by which we determine and manage the "threat" inherent in communication and interaction between two intentional agents in a social interaction—that is, agents that are presumed to have goals and the potential to take offense at having those goals thwarted in any interaction where those intentional attributes are relevant. We use the term *etiquette* to refer to the set of expectations about observable behaviors that allow interpretations to be made, in a cultural context, about those who do or do not exhibit them. Observable behaviors are interpreted against a framework of etiquette expectations to allow conclusions about the politeness of those we interact with, while simultaneously, we choose behaviors (consciously or unconsciously) on the basis of the same etiquette framework - which dictates how they will be interpreted by those who observe them. Cultural factors, then, play a role in biasing each individual so that the same observed behaviors may have varied interpretations for individuals with different, or differently weighted "cultural factors", just as individuals of diverse cultures may exhibit dissimilar behaviors for the same situation.

SIFT has designed and created a demonstration of a software tool, called Interactive Phrasebook, which uses the aforementioned model to provide language training in an interactive manner. We have used the politeness and etiquette theory to build a scenario where the learner interacts with virtual actors of

different cultures. The learner may customize the scenario with contextual variables such as social and power relationships between NPCs. The behaviors of the virtual actors will then adjust to reflect the changes.

The world wide market for language training is estimated to be between US$12 – 15 Billion per year[1]. We believe Interactive Phrasebook is highly applicable to at least two large market sectors. Firstly, individuals can use Interactive Phrasebook to train for international business collaboration, rehearse negotiation tactics and explore potential outcomes. Secondly, multi-national businesses can use the application to provide training for their staff. The software framework allows for self-paced and easily customizable lessons, offering the ability for a business to provide consistent training that is customized to different cultural influences. The application is currently a PDA based application seeded with a small knowledgebase of phrases in Modern Standard Arabic. The authors propose to provide a presentation of the underlying theory and demonstrate the software technology.

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[1] Egan, David., *The Many Opportunities of EFL Training*, T+D Magazine v58 n1 p54-59.