CulturalConversation

Motivation

The conversation we have in our everyday life is very strong medium of exchanging thoughts. Therefore when people are engaged in conversation, they expect to have a very smooth and non-harmful conversation with others. However unexpected results such as misunderstanding and miscommunication do take places while two people with different cultural backgrounds are engaged in conversation even though the context of the conversation might not be harmful to one another. For instance, in colonial age, native American and American were having difficulties finding affordable conversation with another due to difference in their conversational pattern and regardless of the context of conversation. Americans as we all know today tended to find common grounds or interests when they were engaged in a conversation with someone they just met, where as for native Americans, the topics they usually talked when engaged in a conversation with strangers were limited to non-personal topics. Therefore, natives Americans were viewed as being indifference to Americans whereas Americans were viewed as being intrusive to natives Americans, If the context of the conversation does not affect the way conversation is carried out, would the misunderstanding and miscommunication be being affected by the conversational pattern one follows according to their cultural background? If so, can a person learn the difference in conversational pattern among different cultural background and apply to their conversation once the pattern or the pattern is being visualized while they are engaged in conversa-
tion? I would like to find out if there is any factor that might cause difference in conversational pattern.

**Audience**

*CulturalConversation* is designed to be used by second language learners with different cultural background, multilingual with different background and/or more generally third culture kids. The point is that *CulturalConversation* is designed for every one who can communicate and want to communicate with different languages.

**Conversation Clock**

*Conversation Clock* by Tony Bersgtrom has a very similar interface and the way of visualizing the audio. It shows how the conversation is being taken place in real time with regarding how loud the participants in the conversation are talking and keep track of the history throughout the conversation. This is very similar to *CulturalConversation* in a way that it also keep tracks of the history of the entire conversation while visualizing the current events in real time. Both *Conversation Clock* and *CulturalConversation* used bar representation to visualize the history of conversation, which gives more clear and discrete interpretation of how the conversation is like at a specific time. However *CulturalConversation* is distinctively different from *Conversation Clock* in a way such that unlike *Conversation Clock* where the distribution of the amount of conversation is interpreted subjectively from the history whereas *CulturalConversation* indicates very objective and easy-to-understand-interface for the distribution of the amount of conversation among two people.
**Implementation**

*CulturalConversation* has two graphic visualizations that both indicate the pattern of conversation. The first visualization is placed on the upper half of the screen where two circles colored blue and yellow are placed at the end of horizontal line. These circles indicate the current volume of each speaker. In between two circles, a small circle is initially placed in the middle of horizontal line. This smaller circle indicates the amount of conversation that has been taken since the beginning of the conversation. The more the person talks, the farther the smaller circle moves toward the other side and the color of the smaller circle follows the color of dominant speaker. On the other half of the screen, it visualizes the history of the conversation since the begging. Two rectangles of blue and yellows are visualized along the other horizontal bar where each rectangle represents the participant and the height of the rectangle. The more the participant speaks the longer the bar is. If there is an overlap during the conversation, longer bar is placed behind the shorter bar with the blending of two colors, green. Unlike the visualization of circle on the upper half of screen where visualization is represented in terms of volume, the bar representation is by adding certain units of height whenever the input from microphone is higher than calibrated minimum input level. Therefore *CulturalConversation* is able to represent
more clear representation not by the volume of participants, which could be varied but by the actual conversation they have.

**CulturalConversation**

*CulturalConversation* was tested by 3 groups of bilingual people where a couple of people within a group are close friends. Each group was informed about the experiments and how the *CulturalConversation* works. After the info was given, they were asked to have a normal conversation for about 10-15 minutes with a microphone in front of each person.

The first group had two people of Korean Americans whom they claimed their cultural background were more close to Korean and from the observation their personalities were introvert. Figure 1 shows the visualization taken at the end of conversation.

*Figure 1*
Group 2 had two people of Chinese American whom they claimed they consider themselves more americanized even though they do not have problem communicating in Chinese. Also from observation, they were more talkative people than ones in group 1. Figure 2 shows the visualization taken at the end of conversation.

Figure 2
Group 3 had a Vietnamese American and a Filipino American where a person is more extrovert and the other is more introvert and they both considered more americanized in their cultural background. Figure 3 shows the visualization taken at the end of conversation.
Conclusion

The very goal of CulturalConversation was to visualize and be able to see the different that might be caused by cultural background and let a person learn from it. However, from conducting experiences and also due to the size of test groups, rather interesting and unexpected result came out. Unlike what was expected, conversational pattern seemed to be affected more by the personalities rather than their cultural backgrounds. However three figures do show the difference in their conversational pattern does show what seems to be difference caused from cultural background. Figure 1 where participants were culturally Korean seems to have more distinctive turn-taking and interruption whereas figure 2 and figure 3 where participants were more culturally americanized seems to give more interruption and back channeling. It was fortunate that CulturalConversation was able to visualize the difference as in Asian Culture, at least in Korean, interruption during the conversation is considered rude and waiting for their turn to talk is considered courtesy of conversation. In American culture, it seems giving the back channeling indicates that the listeners are indeed paying attention to conversation. Besides the cultural influence, as three figures indicate personalities seem to influence the conversation as well. Introvert people seemed to kick off their conversation rather slowly and seemed to have clearer turn takings(chunk of yellow and blue in figure 1 seemed to take more space than those in figure 2) and less interruption(green bar) than ones from extrovert people. These pattern is more salient at figure 3 where more extrovert person(yellow) seemed to dominate the conversation whereas introvert person seemed to give more back channeling or simply talk less. These unexpected results due to the size of the test groups which were not large enough to determine the exact factor of
influence might indicate the possible hidden factor of influence in conversational pattern, therefore more intense study in future works.

**Future improvements**

Due to time constraints and the size of the user group, the visualization differences was not fully able to demonstrate the difference caused by cultural difference but rather other interesting factor of conversational pattern was found. For the future studies, both cultural background and personalities of participants should be taken into account. Furthermore, the question should be what factors should be the dominant factor in engaging in a conversation with different cultural background? Does the personality dominate the conversational pattern or is it the cultural background that dominates the conversational pattern?

**References**

Conversation Clock by Tony Bersgtrom -http://social.cs.uiuc.edu/projects/conversationclock.html