Thunderwire: A Field Study of an Audio-Only Media Space by Hindus et al

The paper is an introduction to a study about using audio as a means of analysis in a media/social space. In the past, we know that all media spaces have used video and audio together. However, this study selectively picks an only audio media space. The study conducted used a system called Thunderwire, which forced the users to adapt to many audio only conditions. From my point of view, it seems as though they were simulating the experience of a blind person. The paper first illustrates the design of an audio only system, such as Thunderwire. It also describes the unique characteristics of the system, the field study performed around it, and the data that was received. The paper then goes in an analysis of this data based on its social uses and characteristics.

An audio only system would be relatively less complicated to design than a video and audio system. The Thunderwire system, an audio only system, is similar to a conference call or telephone party line. One unique feature of this system is that it provided extremely good quality audio. One was able to hear anything they would hear while sitting directly in someone’s office like bodily noises, low whispers, background noises, even mouse clicks.

The study group involved in Thunderwire consisted of nine people, seven of whom were interested in video editing and analysis. They were all youngsters, generally just college graduates. Interestingly, before the field study all the participants were well aquatinted with one another. However, there were some social dynamics, independent people, outsiders, and followers – all common traits of most social groups.

The system reminded me of the intercom system used by taxi drivers around the world – specifically noticed in Hong Kong. The taxi drivers participate in an audio only system through their radios. With this system, they are able to switch on the radio and listen to the chatter and participate at their discretion. There is no way in knowing who has turned their radio on, unless the party participates. This audio-only social system is extremely similar to Thunderwire.
In Situ Speech Visualization in Real-Time Interactive Installation and Performance
By Golan Levin and Zachary Lieberman

In this article, the authors, Golan Levin and Zachary Lieberman, mention various ways to visualize audio information. The article discusses that people usually tend to characterize words based on different traits. This ability to see the spoken word is very interesting.

Hidden Worlds was a really fascinating piece. The way the interactive audiovisual installation shows people animated graphic figurations appear from people’s mouths. The cloud of voice that appears from a person’s mouth tells one about the speaker’s volume, pitch and timbre. I thought it would be really interesting to somehow record these conversations with a video camera fixed above. You would be able to watch and review the various conversational patterns that capture the shadows on the table. It would be cool if there were a way to color the shadows. Although, one would be able to tell who is speaking by the direction of the speech bubbles.

RE: MARK was interesting and simple to use since it did not require a special instrument such as goggles. The system uses phonemes detection in conversations, and uses then displays the results on a project image. I did not like this visualization as much as Hidden Worlds. Further, I never quite understood why the authors use phonemes.
Seeing More: Visualizing Audio Clues by Bergstrom and Karahalios

When Tony presented the Conversation Clock in class I was very impressed. I could not wait to try it out myself. I have always had a slight speech problem – a stutter. I feel that with such visualization techniques, like the Conversation Clock, can help people with speech disabilities. The physical Conversation Clock Table could help people visualize their speech patterns – variations in pitch, tone and duration of speech. A review of their visualized speech patterns could allow them to gain valuable insight on the way they talk, and allow them to fix such problems. If nothing else, it would give them another tool to view and understand their speech.

To move this idea further I think it would be interesting to have a Conversation Clock application on the iPhone. It would be interesting to have a setting on the application that allows it to randomly record conversations. Through this method you would never know when your conversation is being recorded so psychological factors that may make you talk more, or let other finish their conversation would not play a role. Furthermore, it would also be interesting just to have such an application on your computer so people would be able to practice their speech. You could combine the audio visualization with a web camera app so it would be like a speech practicing software (like talking to yourself in a mirror) that provides a tool for analyzing your tone, pitch, rate of speech and fluidity.

One way to improve the Conversation Clock would be the ability to incorporate a speech to text devise that records the conversation into a document while people are speaking. Then, this document and the visualization should be linked. One would then be able to read through the transcript of the conversation, select a specific section, listen to it and see the visualization. This tool would allow people to go back into the conversation and truly understand what people really meant when they said something. Sometimes when we are talking to someone, we might not be giving him or her our full attention. Perhaps, we are thinking about something else, looking somewhere else or simply not paying attention. Through these tools you would be able to read the transcript, and then look at the visualization that account for tone, pitch and duration of speech. Both these tools combined would allow you to infer the speaker’s true meaning, if it is not obvious
at first hand. Sometimes, even if you are giving someone their full attention, you might not notice a drop in pitch that would indicate that someone is feeling very hurt (for example). This technology would allow you to go back and better understand the conversation. I can see direct uses of this technology in the boardrooms of corporations around the world. I believe that communication problems are the number one reason behind failed businesses and business deals. The Conversation Clock could be the solution.