A Reflection on Alternative Approaches to Interface Technology

Alternative Approaches to Interface Technology – Steve Gibson

Gibson discusses the relation between machines and humans and different ways of how humans can interact with machines and digital systems. He also stated that the research field of interface technology had been mostly populated by ergonomic research. The reason why Gibson had decided to research these alternative approaches was because of his own personal interests in technology and “cyberculture”. The alternative interfaces that Gibson mentions is for handicapped people and how things like these were experimental at the time. He also explains that the experimental systems are available for a lot of people.

Gibson goes on to discuss the ‘Cybernetic System’. This is described as a user being physically connected to a computer or a system or even a digital environment. He explains that we have relationships with machines, thus being a ‘cybernetic’ relationship. An example of cybernetics that Gibson describes is of Sterlac and how he has turned himself into a cyborg.

In short, Sterlac basically turned himself inro a cyborg by having a system that allows him to control electronic devices, and devices that control him. Gibson chooses to discuss one part of the many electronic devices that Sterlac uses, this being the “Third Hand”. This device works using electrodes that are connected to different parts of Sterlac’s body, and allows the hand to move when his muscles move even in the slightest. Sterlac’s goals behind this was an attempt to enhance the human body and the human-machine interface. This can definitely be grouped as being an alternative to interface technology.

Gibson begins to focus on something opposite from Sterlac, this being a hands-free device, invented by Will Bauer. This technology makes use of Sonar. A signal from a band that is strapped to a user’s arm can communicate with a device. This device can be used for many other fields of technology, as it is simple and is responsive.

MIDI Instruments are also discussed as being alternative interface technologies, these are (Musical Instrument Digital Interface). This is used in in instruments to transmit sounds, but the actual audio Is not being transmitted, but rather textual information that describes how to play the sound. Gibson discusses visual music as an alternative interface to be able to communicate with a system in a different way. Gibson discusses that there are different approaches that have been created and are actually being used in live performances.

This research paper discusses how different methods of immersion had been explored, in order to broaden our scope of communication with machines. Gibson mentions that these original systems are way too standardised and more research and experimentation should be discovered in order to be able to do many more different things, as humans communicating with machines. I believe that this is true, technology research is mostly based on the standard techniques of communication, rather than more innovative ways of communicating with technology, and getting the same, or even different, outcomes.

# References

Gibson, S., 2004. Alternative Approaches to Interface Technology . In: A. B. a. A. N. Robert Burnett, ed. *Perspectives on Multimedia: Communication, Media and Inforamtion Technology.* London: John Wiley and Sons, pp. 17 - 39 .