Stefanie Tellex

Week 5

The Media Equation

I started reading this book. I think it's extremely interesting research, but they stretch the results too far in some cases. For the politeness chapter, they show humans are polite in a specific way to computers, then from that example jump to the conclusion that "People are polite to computers.", and then extract lots of general guidelines. Most of the guidelines seem based on common sense, but I think its way more than the research warrants. I would be interested in research going the other way, highlighting the differences between human-computer and human-human interactions as well. Coming from both directions would better characterize the relationship. As it is, they show an extremely specific kind of similarity, and from that conclude a general principle.

J. Pineau and M. Montemerlo and M. Pollack and N. Roy and Sebastian Thrun. Towards robotic assistants in nursing homes: challenges and results.

"The US population is aging at an alarming rate." Yup, as quickly as 52 weeks per year. :-)

Strange that only the care-giver can input the plan. Because they're targeting only cognitively impaired elders? But it seems like there might be some elders who are coherent enough to input their own plan, and might welcome the additional control over their day. It's especially strange since the user can modify the plan later...

It didn't seem that there was much focus on a relationship per se in this paper. They talked about the user interface and the interactions, but they didn't focus on either a long term or short term relationship. The robot's function was to obey user commands, and while it tried to be polite, it didn't characterize the kind of relationship desired, or focus on whether it was attained.

They also didn't focus on the caregiver side of the relationship very much. It seems this would be quite important, as the caregiver inputs the initial schedule and bears significant responsibility for the elder's treatment and quality of life.

It's also interesting that people spontaneously talked to the robot. I wonder how much, if any, training they had with users to show them the robot's capabilities before the evaluation. For example, when the robot delivered sweets, did they prompt them to ask about the weather or about TV? Or did people naturally respond with small talk when the robot used voice to greet them?

Toshiyo Tamura, Satomi Yonemitsu, Akiko Itoh, Daisuke Oikawa, Akiko Kawakami, Yuji Higashi, Toshito Fujimooto, and Kazuki Nakajima. Is an Entertainment Robot Useful in the Care of Elderly People With Severe Dementia?

I read their results as saying the toy dog is strictly better than AIBO. The patients interacted with it more, and required less intervention from the therapist. It seems clear the toy was better. The question is why - maybe because there was no fur? Or maybe it was a startle/unfamiliarity reaction? Like last week's study, it would be interesting to compare it to their interaction with a real dog, to try to isolate what about the AIBO turned them off. I think their conclusions are much more understated then are warranted; it is clear the toy was better, but it's as if they don't want to emphasize that part of their results.

"We assumed that the patients understood that AIBO was a quadruped animal or mimicked a dog." They state this categorically earlier in the paper but now it's just an assumption? Did they ask patients afterwards? Are these elders cognizant enough to answer such a question?

Wada, Kazuyoshi and Shibata, Takanori and Saito, Tomoko and Tanie, Kazuo. Effects of Robot Assisted Activity to Elderly People who Stay at a Health Service Facility for the Aged.

This is pretty poor English.

Paro is really big.

I think the questionnaire might translate differently - "Paro is the best friend for me."

They need more placebos. They should compare with people receiving no therapy, and people meeting without a robot. Maybe it was spring time, and everyone was happier. Maybe meeting in a group lead to more human socialization, and made them happier no matter what the purpose. They should report significance tests between the two Paros, to say whether it was chance or not. The robot sounds cool, but I think their methodology has serious problems - namely they don't compare to a placebo without a robot at all.

Holly A. Yanco. Wheelesley: A Robotic Wheelchair System: Indoor Navigation and User Interface

This work is especially relevant to my own interests. It will be important to figure out ways around the poor quality of the speech recognizer, and to have fallbacks so the user can stop the chair if it fails to understand a voice command. The types of wheelchair users are also interesting. I think a voice interface could be helpful to people using the sip-blow system.

Again this work does not focus on the relationship; it doesn't learn about its rider or anything. It is simply a well designed, robust user interface, without an attempt to learn the user's preferences or develop a relationship over time.