Programming Project 4 - Chatbot

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1. Video Link:

https://youtu.be/SgD2NQv9nOw

2. Site Link:

https://preview.c9users.io/jkocmoud/csce625-project4/chatbot.html

3. Srinivasan's rules

	Behaviors	Cue from Literature	Affordances in Sentence Structure and Timing	Social Gaze Act
1	Start of turn	Start of turn and start of theme (Cassell 98, Mutlu 06, and Mutlu 09a)	Initial word [Start of sentence and start of turn]	Aversion (human)
2	Middle of turn (a)	Start of theme and middle of turn (Cassell 98, Mutlu 06, Mutlu09a)	Word following punctuation : . ! ? [Start of sentence and middle of turn]	Aversion (human) (Probability = 0.73)
3	Middle of turn (b)	Start of rheme and middle of turn (Cassell 98, Mutlu 06, and Mutlu 09)	After 75% of words between punctuations : . ! ? [Towards end of sentence and middle of turn]	Fixation (human) (Probability = 0.70)
4	End of turn	Start of rheme and end of turn (Cassell 98, Mutlu 06, and Mutlu 09a)	Carriage return at end of paragraph [Towards end of sentence and end of turn]	Fixation (human)
5	Robot manifesting interaction	Look at object 800ms to 1 sec before utterance of object (Stuadte & Crocker 09 a,b)	The object tag	Fixation (object)
6	Back-channeling	Ad hoc (Breazeal 03, Sidner 05, and Gu 06)	> tERT Elapsed response time	Concurrence (human)
7	Establishing agency	Set time interval t (Breazeal 03, Sidner 05)	> tIET Idle elapsed time	Scan (environment)
8	Projecting mental state	Robot does not understand (Breazeal 03)	Deleting, retyping	Confusion (human)
	1	3	2	4

By parsing the text into paragraphs and then subdividing it into sentences and then words, we have been able to implement the first four rules. Rule 5 does not make sense in our application as we do not utilize a video feed or even receive input except through text. Likewise, as there is no audio input to the chatbot, rule 6 (concurrence) is not needed either. We did not implement rule 7 as we decided that scanning the environment would incorrectly imply that the bot can perceive the environment. Finally, with the 8th rule the produced reaction would not make sense to the refugees (as it is more directed to the rescuers).

4. Other Thoughts

The more we used BotLibre, the more that we realized how it is so inadequate. It does not try to match up the mouth with the text; rather, it has a simple looped video of the bot's mouth moving randomly. While we have a decent bot, it could be so much better with a real facial animation solution. Unfortunately, nothing like that is open source!