

## Appendix B: Survey answers by participants (TSD paper number 1023)

**Question:** What cues in the speech made you find it more (or less) robotic?

**Participant 1's answer to question:** The ones that are lower-ranked pronounced each syllable in the word, whereas the higher ones put more or less emphasis on each syllable. Also, the higher ranked ones had more varying voice modulations in regard to punctuation.

**Participant 2's answer to question:** Engine 2: very robotic mechanical sound with distortion. Does not sound like a real person.

Engine 3: Disjointed words. Not much inflection. Words like "rainbow" - second syllable stressed jarringly and unnaturally (male).

Engine 5: Understandable, but mechanical and fast speed.

Engine 4: Mechanical reading, emotionless.

Engine 1: Soft female voice, music pleasing to hear.

Engine 1 and 6: Pleasing female sounds with music in background.

Engine 7: Male sounds younger than male in Engine 3. Clearly enunciated, better than the male in Engine 3.

**Participant 3's answer to question:** The cues that made it sound more or less robotic were the pitch of the voice and how they'd raise certain words to a higher pitch but lower other ones. Also the space between each word and sentence.

**Participant 12's answer to question:** On an overarching basis, the prosody of each recording created the effect of being more or less robotic. Each recording's cadence and the inflection with which each word was pronounced seemed to contribute to a recording sounding more or less like "natural" speech. Even the foreign accented recording - which, I assume, might lend to its own cadence and inflections - seemed to follow such cues.

**Participant 13's answer to question:** Lilt and flow of voices.

**Participant 14's answer to question:** When the prosody and intonation are less monotonous and when there is stress on the appropriate word in a sentence, I rated a sample as less robotic.