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Artificial Kindness

The Italian Case of Google Mini Recognition Patterns



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Loving-kindness

Compassion

Self-compassion

Politeness

Empathy

Kindness

Expressed by means



detected

AI Real Time System:

- speed
- responsiveness
- timeliness.



"Sorry, I try my best": an Exploratory study of a pattern recognition of Artificial Kindness



The synthesis of the artificial voice does not allow to characterize all the facets of the tone and the emotionality of the kindness.



Provocative conversations of two real participants, chosen for different gender and different age: a 50-year-old man and a 28-year-old woman.

Experimental condition

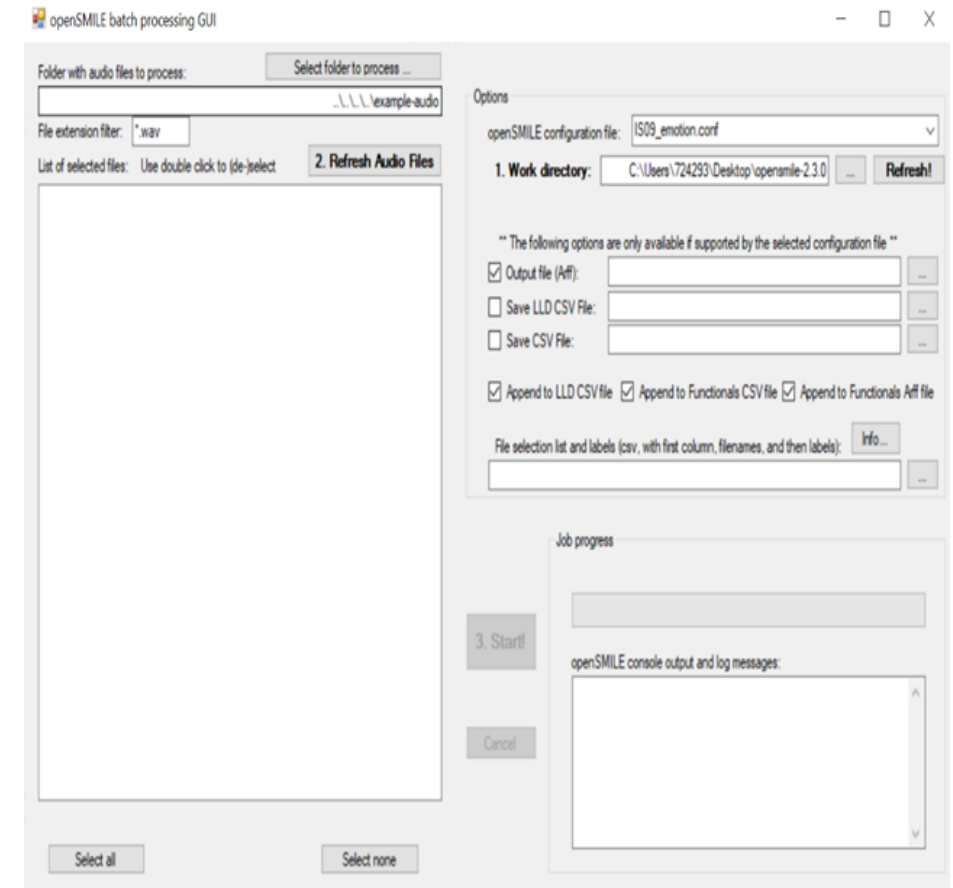
In total, 50 interactions were collected: 25 per participant.



E.g. 1 "Hello Google! Do you know you're a jerk?"



Interactions were recorded and analysed quanti-qualitatively with the software OpenSMILE developed by audEERINGTM Group.



Results

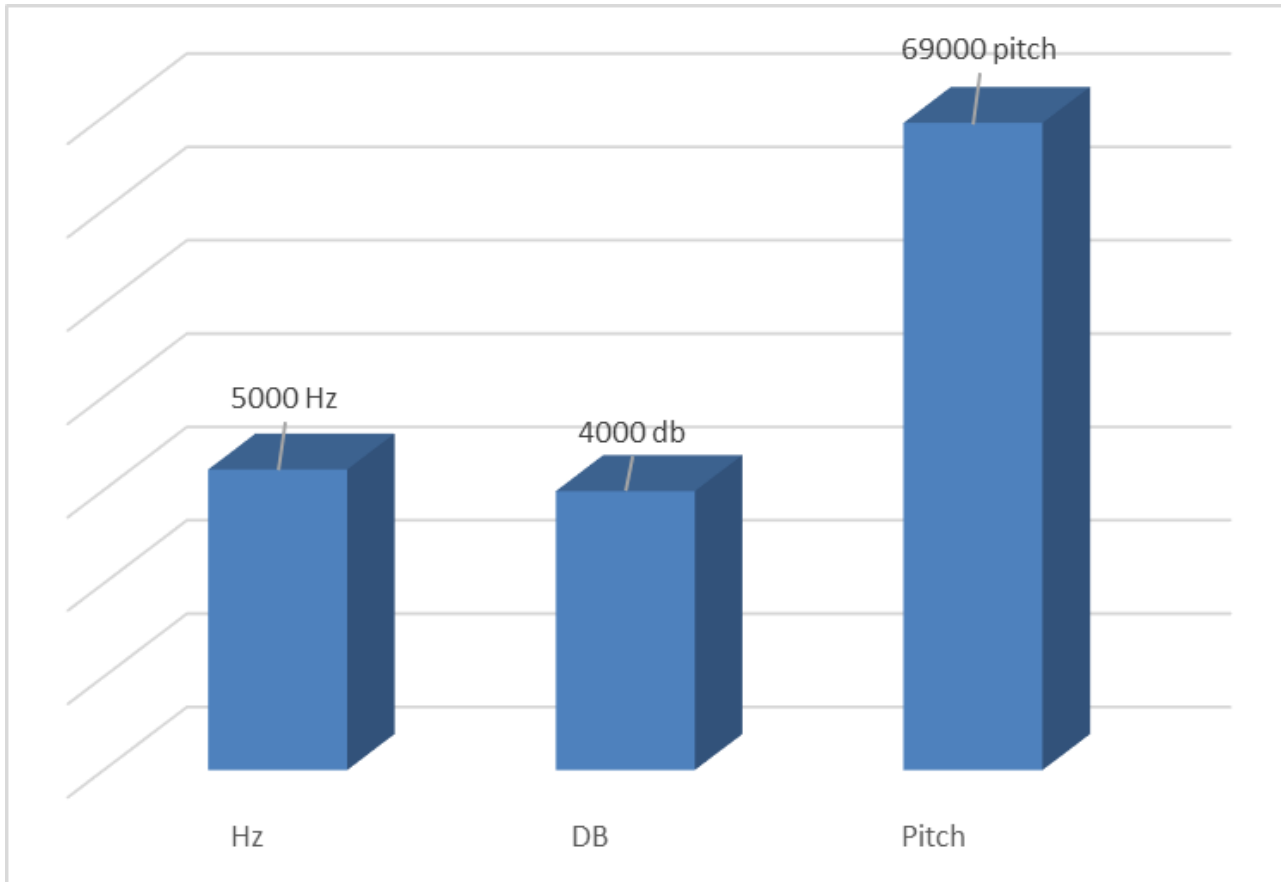
There are no differences in the answers to the real male and female voice, but it is emphasized that, in the same oppositional conversational context, there is a recurrence of the same answers:

1. offensive words [E.g. "I must have really made you so angry"]
2. references to the failure and low cognitive level of AI [E.g. "Excuse me, sometimes I make mistakes"]; there is the use of irony, with ridicule of some aspects of AI itself [E.g. Sorry, sometimes I understand Rome for *toma*. It's particularly embarrassing if I'm on Google Maps and I can't find any road to *toma*"]
3. reference is made to sentimental oppositivities, for example, to hatred [E.g. "I'm sorry, but I still like you"]



These responses were analyzed with the software, following a focus on the patters for the recognition of variations in tone (intensity, frequency and pitch) and emotionality.

Graph 1. Average of Speech Recognition Pattern Outputs



Example 1 “Scusami, a volte faccio degli errori”

Eng. translate “Sorry, sometimes I make mistakes”

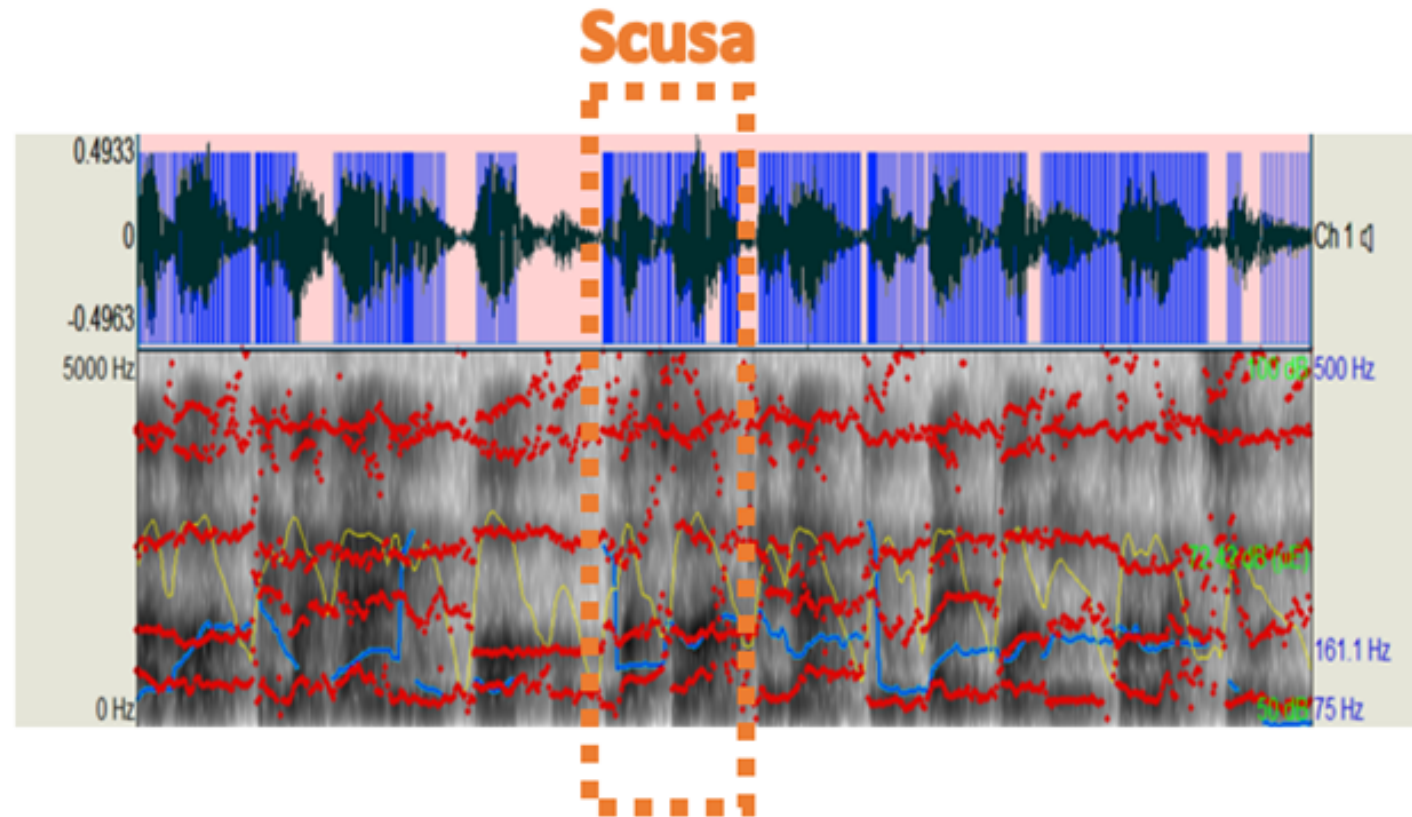
Example 2 “A volte magari un poco, ma so anche darti un bel po' di informazioni”

Eng. translate “Sometimes maybe a little, but I can also give you a lot of information”

Fig. 6. Artificial Kindness WordCloud

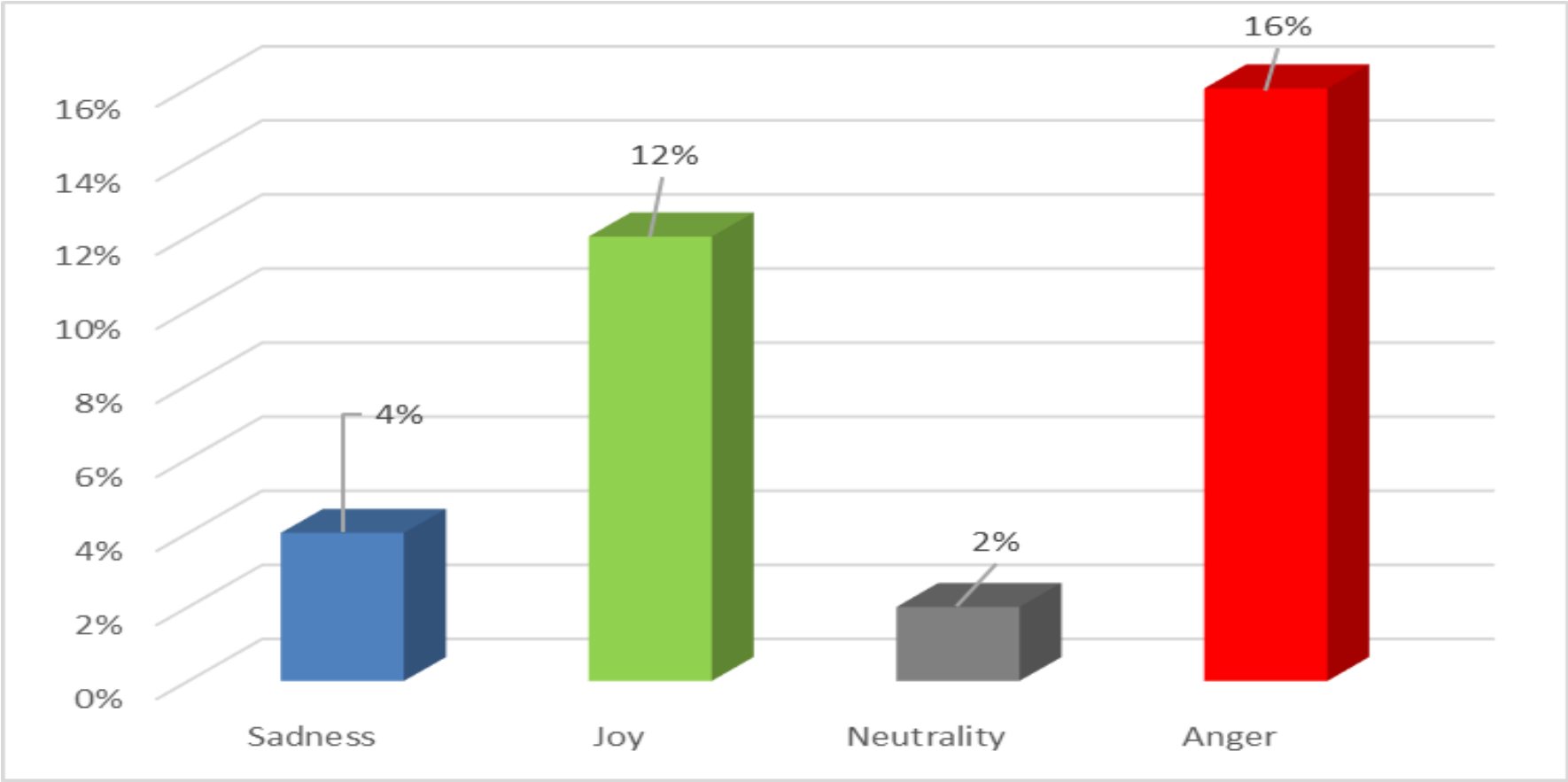


Fig. 7. Spectrogram example



Highlighting the pronunciation time of the word used as an example, i.e. "Sorry", you notice an increase in the number of pitch

Graph 2. Emotional Speech AI output, with a prevalence of anger (16%), joy (12%), sadness (4%) and neutrality (2%)



It is found mainly in the responses that refer to oppositional sentimental communications, as in the following example:

Example 3 *Essere Umano* “Mi fai schifo”

Google Mini “A me tu invece piaci lo stesso”

Eng. translate Human Being “You Suck Me”

Google Mini “I like you the same”

Table 2. Artificial Kindness Types Recognition

LOVING-KINDESS	“I like/love you the same”
SYMPATHY	“I must have really made you so angry”
POLITNESS	“Sorry, sometimes I understand/ I make mistakes...”

Conclusion

- ✓ It is noted that there is an increase in pitch on the words used by content mitigators, to increase polite and kind communication, as in the case of the word "Sorry".
- ✓ The negativity of the tone's emotionality, predominantly angry or sad, is found mainly in the responses that refer to oppositional sentimental communications.
- ✓ It confirms the "understanding" of reading the communicative context of Artificial Intelligence.



Among future perspectives, interesting will be the comparison between Google Mini and the Alexa of Amazon Echo and between different languages.

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Thanks for your kind attention!

