**Abstract**

**Human vs AI irony**

**Research Question:**

How much better do participants perceive irony in AI-voiced utterances than in human-voiced utterances when the irony-containing utterances were created by a human?

**Hypothesis:**

People perceive ironic statements differently when they are voiced by AI and by humans.

**Expectations:**

Human-voiced utterances in irony-containing utterances which were created by a human will be perceived more ironic compared to statements made by the AI ​​voice.

**Method:**

Participants were asked to rate ironic statements in video clips on a scale of 1 to 5, with 1 being the least ironic and 5 being the most ironic.

**Materials:**

videos with context pictures and background voices generated by AI or humans. The person who voiced these statements was specifically chosen as a native English speaker to fully convey the irony presented in the video. The AI's voice and tone were chosen to be as similar as possible to a person and his voice. The utterances, in other words stimuli, and fillers were created by humans and are similar for both groups. They were presented below and presented separately by folder.

**Experiment Design:**

Participants were divided into two groups. One group was presented with video clips containing a picture that acted as a context for an ironic statement and voiced by AI, and the second group was presented with the same pictures with context, but voiced by a human. In other words, participants received only one version of the utterance and the context picture. It was specifically monitored and a conditional question in a survey was asked to control this process. After that, responses were collected by a survey. The mean for each answer was calculated by a statistics written in R. Calculated results were then compared for each individual stimuli.

**Experiment results:**

In examining the results, we observed characteristic samples in which it can be seen equal evaluation of sentences with irony, uttered by both Ai and a real person. Participants evaluated and perceived sentences based on their own perceptions of intonation, tone, emotion, and other factors of irony. It was discovered that the scale of irony showed similar results for both AI and human voiced utterances.

**Discussion**:

Leading to the discussion, the results were different from expected analysis. Although the voice of artificial intelligence has its own subtleties and imperfections, people can still detect the irony in such utterances. It leads to an assumption that the irony of the utterances does not fully depend on the voice factor. One possible explanation for which results may also be the limitation of a single listening and visual presentation of the context. Such data may also influence participants' perceptions of irony, as well as highlight gaps and limitations in the study.

**Conclusion**

Contrary to the hypothesis, the results of this experiment show that there are various features in human speech that contribute to the perception of irony, which may make it difficult to distinguish between the irony of AI and normal human voices. The experiment requires continuation and testing other features that may lead to the identification of irony.