

11/06/19

Conscious / Unconscious imitation - can ML quantify this imitation?

There are objective measures of speech similarity, but speech is so variable that objective measures might not reflect the human perception of the similarity.

To that effect: use perceptual measurements gathered from human subjects. These are unfortunately resource intensive, so we ask: can ML perhaps offer these perceptual measurements? (i.e. replicate the distribution?)

Have data of previous speech samples + listeners' responses from XAB tests. Slides specify exact data.

Target data is earnings conference call recordings between CEOs + analysts - these are similar in spontaneity to the gathered data + uniform in topic.

Question: Do CEOs + analysts begin to imitate each other in speech towards the end? Does this speech convergence affect market responses due to these conference calls?

Transcripts are provided for the calls - we can match spectrographs + waveforms to specific words.

XAB - Hear model X, judge if option A or B sounds more similar.

X

A

B

Which is more similar to model?



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