Making Use of Intonation in Interactive Dialogue Translation

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Abstract

Intonational information is frequently discarded in speech recognition, and assigned by default heuristics in text-to-speech generation. However, in many applications involving dialogue and interactive discourse, intonation conveys significant information, and we ignore it at our peril. Translating telephones and personal assistants are an interesting test case, in which the salience of rapidly shifting discourse topics and the fact that sentences are machine-generated, rather than written by humans, combine to make the application particularly vulnerable to our poor theoretical grasp of intonation and its functions. I will discuss a number of approaches to the problem for such applications, ranging from cheap tricks to a combinatory grammar-based theory of the semantics involved and a syntax-phonology interface for building and generating from interpretations.