

Exclamation intonation

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An exclamation is a construction that is mirative by virtue of its intonation. Mirativity is the linguistic encoding of the speaker’s exceeded expectation or surprise towards the content of the sentence (DeLancey, 1997; Rett and Murray, 2013). Despite their wide cross-linguistic distribution and the central role intonation plays in their identification and meaning, little attention has been paid to the phonetic details of prosody and intonation in exclamations. We present a series of experiments investigating the intonational properties of exclamation in English, with the ultimate goals of phonetically characterizing the marker of mirativity in these constructions, and contributing to the study of the compositional semantics of intonational marking.

We hired a linguistically naive actor to read a series of exclamations. The sentences varied in syntactic type (sentence exclamation, *wh*-exclamative, inversion exclamative, nominal exclamative); length (short, medium, or long); and in the presence or absence of a discourse particle like *wow*. Two pitch tracks – of a *wh*-exclamative and an inversion exclamative, respectively – are in Figure 1.

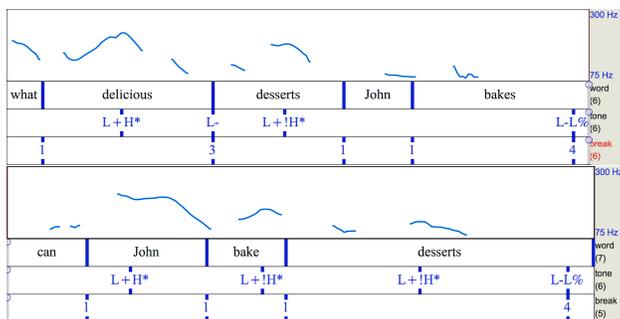


Figure 1: ToBI-annotated pitch tracks of two exclamations

Given the diversity of the syntax in the constructions, we expected to see a corresponding diversity of prosodic contours. This is not what we found, however. The stimuli displayed three strong common characteristics. Exclamations 1) use primarily L+H* pitch accents; 2) have pitch accents with extra-high pitch targets; and 3) have more intermediate phrase boundaries than default declarative prosody.

These three characteristics have in common that they increase the phonetic (acoustic and perceptual) prominence of the words they’re associated with. The steep rise inherent in the L+H* pitch accent renders it the most salient of any pitch accent type (Ayers, 1996). Therefore, using the L+H* pitch accent increases the prominence of the accented word as compared to marking it with an H* pitch accent. Furthermore, the high pitch targets of these L+H* accents are atypically high, again increasing their prominence. Finally, each intermediate phrase in an utterance contains a nuclear pitch accent, the most prominent accent of any given intermediate phrase. By inserting more intermediate phrase boundaries, therefore, more words can be marked as highly prominent than if fewer intermediate phrases were used.

There is a promising tradition of extending compositional semantic treatments to intonational markers, insofar as they affect the interpretation of a sentence and are manifested morphologically in other languages (Pierrehumbert and Hirschberg, 1990; Ahn et al., 2016). We will end by making explicit connections between these prosodic characteristics and the semantic properties of exclamation (Rett, 2017).

References

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