

Infant-directed speech as a window into the dynamic nature of phonology

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Theoretical frameworks of phonology are built largely on the basis of idealized speech, typically recorded in a laboratory under static conditions. Natural speech, in contrast, occurs in a variety of communicative contexts where speakers and hearers dynamically adjust their speech to fit their needs. The present paper demonstrates that phonologically informed analysis of specialized speech registers, such as infant-directed speech, can reveal specific ways segmental and supra-segmental aspects of phonology are modulated dynamically to accommodate the specific communicative needs of speakers and hearers.

Data for the analyses comes from a corpus of Japanese infant-directed speech, consisting of 22 Japanese mothers' spontaneous speech directed to their infant child (Infant-directed speech, IDS) and an adult (adult-directed speech, ADS). The speech samples in the corpus are annotated with segmental, morphological and intonational information. We will show, for example, that the way intonation is exaggerated in Japanese IDS reflects the intonational structure of Japanese, which is different from that of English. We will also demonstrate that rules of phonological grammar, such as devoicing of high vowels and non-high vowels in Japanese, can be differently affected by the needs of the speaker to accommodate the specific characteristics of the listener.