Delayed-fall of pitch accents in Japanese Infant-Directed and Adult-Directed Speech

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The present study examined F0 contour and timing of pitch accents in Infant-Directed Speech (IDS) and Adult-Directed Speech (ADS). It has been pointed out that the timing of F0 fall in Japanese sometimes occurs later than the lexically accented syllable (Sugito, 1982). As reported earlier, the amount of delay is larger in IDS than in ADS (Kitahara et al., 2008). Their analysis was based solely on the highest point of F0, however. The present study gives a more detailed analysis of the F0 contour of the whole accentual phrase by fitting a three-piece linear regression (Cho, 2010) for the rising part and the falling part separately. This method gives not only the highest and the lowest points, but also the lower and the upper elbow of the F0 contour.

The acoustic data were taken from Riken Japanese Mother-Infant Conversation Corpus (R-JMICC, Mazuka et al., 2006) and a list-reading corpus spoken by the same group of mothers as R-JMICC. A preliminary analysis of the data showed that the delayed-fall tokens tend to have a delayed-rise as well. It was also found that the timing of the lower and the upper elbows in the F0 contours have a systematic difference in IDS than in ADS. Theoretical implications for autosegmental/metrical phonology based on these results will be discussed.

References

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