Report on Language Development Study on Intonation

Recently, your gave your consent for you child to take part in a study on language development. Now that the findings of the study have been analysed, I wish to take this opportunity to report on the results.

The object of the study was the development of intonation in 3 to 6-year old children. **Intonation**, also called prosody, is the aspect of speech that involve pitch or in other words, the sing-song quality of speech.

One area where intonation has been the topic of public discussions is the infamous phenomenon called ‘uptalk’, in which the usual falling cadence at the end of a statement is replaced with a rising intonation by some, typically young female, speakers, to the annoyance of many others. But intonation, or the control over the pitch in our speech is not only a matter of sociological differences, it has some important aspects that we all need and use regularly in our speech.

To illustrate this, take a sentence like 'Dogs must be carried on this escalator.', which can be seen in some London underground stations. Noone would think that you cannot take the escalator without a dog, but rather, we understand that the sentence really means that if you have a dog, you have to carry it. This is because we instinctively read the sign with the correct intonation placing a pitch accent on the verb ‘Dogs must be CARRIED on this escalator,’ and not on the noun at the beginning of the sentence ‘DOGS must be carried on this escalator.’ There are many examples where intonational differences are important for successful communication. So, we decided to study how such intonational differences are learnt by young children.

**In our study**, children were shown pictures with animals and objects while they heard a statement that was in some way incorrect. Their task was to provide the correction. They loved this aspect of the game and were confidently correcting me when I ‘got it wrong’! Depending on the intonation of my statement, I expected them to correct me differently. So, if I said ‘Birdie has the BOTTLE’, then I expected that they will often correct me by saying ‘No, he has the HAMMER’. But If I said ‘BIRDIE has the bottle.’, then I expected them to often correct me by saying ‘No, HEDGEHOG does.’.

We found that children as young as 3 gave the expected corrections many times. We concluded that certain aspects of intonation, regarding pitch accent placement, are learnt very early, and children are capable of picking up on the subtle communicative functions of pitch accent placement from a very young age.

As a follow-up study, we are now carrying out the same study with children who have Autism Spectrum Disorder. These children are known to be not so good communicators, and they often speak with a characteristic flat intonation. Understanding what aspects of intonation they can and do use should eventually bring us closer to helping them become better communicators.

You and your child have kindly contributed to this research! We thank you for your participation. I am looking forward to hearing from you, if you have any further questions regarding our work.

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