SEMTENAL DETAIL IN CHILDREN’S EARLY LEXICAL REPRESENTATIONS

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ABSTRACT
Perception data from 24 month-old Dutch-learning children showed in Figure 2 and 3 were significantly different from the CP condition. These data suggest a tight link between perception and production.

INTRODUCTION
Production data suggests underspecified early lexical representations [1,2]. Perception of words starting with either /p/, /b/, /t/, or /d/ is higher than in children who have not yet learned to distinguish voiceless and voiced stops [3]. This contrast is acquired late (not yet by 2.6). The perception data show this same asymmetry.

METHOD
Subjects
Forty-eight 24 month-old Dutch-learning children

PROCEDURE
Split-screen Preferential Looking Paradigm

STIMULI
“Kijk naar de poes! Mool he?”
(“Look at the cat! Do you like it?”)

The initial stop of the target word (e.g., ‘poes’) was either:
1. pronounced correctly (CP condition)
2. pronounced with a change of the voice feature (MVoice condition) (“Kijk naar de boes!”)
3. pronounced with a change of the place feature (MPlace condition) (“Kijk naar de toes!”)

Repeated measures ANOVA revealed a main effect of CP versus MP on both place and voice, and significant interactions between voice and condition, and between place and condition. In voiceless and labial, but not in voiced and coronal conditions, the MP conditions showed in Figure 2 and 3 were significantly different from the CP condition.

DISCUSSION
Different mispronunciations were not equal: not all featural changes yield equally strong effects (See also [4]).

Voice: The Dutch voicing contrast is between unaspirated voiceless and prevoiced voiceless stops. The realization of voiceless stops, but not of voiceless stops, can sometimes vary in spoken Dutch [5]. If children know this, it can cause them to ignore voiceless mispronunciations of voiced stops.

Production data from Dutch children show that Dutch voiceless stops are acquired before voiced stops [2]. This contrast is acquired later (not yet by 2.6). The perception data show this same asymmetry.

Place: Research on child language production studies has argued that Dutch children underspecify coronal place of articulation in early lexical representations [1]. This predicts stronger effects for mispronunciations of place on labials than on coronals.

This asymmetry is also reflected in confusion matrices for Dutch. [6] shows that coronals are more often perceived as labials, than the other way around.

CONCLUSIONS
Subjects were able to detect mispronunciations of features in well-known words - but not of all changed features in all MP conditions.

The attested asymmetries between labials and coronals and between voiced and voiceless stops cannot be accounted for by assuming that children merely perceive changes in the phonetic realizations of the target words.

These data suggest a tight link between perception and production.

REFERENCES

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