

Development of Phonology

Unit 5



Phonological development

- How children learn to organize sounds into meaning
- Learn to segment stream of sound like */timronamkehonani/* into segments “timro”, “nam”, “ke”, “ho”, and “nani”
- Distinguish between “nam”, “dam”, “nak”, and “bam”
- Starts from the womb



Categorical perception

- 1 month: Infants are sensitive to phonemic contrasts like voiced vs voiceless (/p/ vs /b/ in native English speaking family)
- 10-12 months: Sensitive to non-native contrasts too



- Learn not to pay attention to different acoustic variants of the same phonological category due to inter-speaker variability
- E.g., Treat /a/ produced by a male to be the same sound produced by a female



10-12 months

- Perceptual system tuned to the native language
- No more sensitive to the phonemic contrasts of non-native language that falls within the same category in the native language
 - E.g., Nepali child may no longer be able to distinguish between different variants of “s”



18-20 months

- Distinguish similar sounding words (phonologically similar words),
e.g., “mala” and “bala”
- When presented as meaningful words rather than sequence of sounds



Phoneme production

- Vowel production starts at 2 months
- First back consonants (e.g., [g], [k]) at around 2–3 months
- Front consonants (e.g., [m], [n], [p]) appear around 6 months

		Bilabial	Labiodental	Dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Stage 1	Stops	p b			t d			k g	
1 – 2+	Fricatives		f		s				h
years	Nasals	m			n				
	Glides	w				j			
Stage 2	Fricatives		v	θ ð	z	ʃ ʒ			
3.5 – 5+	Affricates					tʃ dʒ			
years	Nasals						tj		
	Liquids				l,r				

