**SEDIVY, ch. 4, p 120 - 40**

**ALLOPHONE distribution** across languages

**complementary distribution** within a language is driven by rules of adjusting sounds in the flow of speech

natural perceptual biases

babies adapt their hearing within 6-12 mo to their mother L and reorganize their sound perception while sorting out phonemes

E follows along this bias for C voicing vs. Mandarin

E…. for r – l vs. Korean

**PHONEME**

Are infants **perceiving sounds categorically or continuously?**

Experiment: Why do they get bored hearing b-sound (or any other) over and over, as shown in less intensive pacifier-sucking with repetitions of B because they recognized it as “same” although its repetitions were always a tiny bit different;

* infants don’t deal with the task of considering every possible sound difference as potentially meaningful but focus on the PHONEME that they, as if, hear over and over and “ignore” its variation.

> the variation is predictable and rule-driven (i.e., nasalization of vowels, devoicing of word-final consonants, non-releasing word-final stops, palatalization etc.)

> it's normal and correct to have variable pronunciations of sounds, depending on one's social and geographical dialect;

**Phoneme** is an abstract generalization over its actual pronunciations that differ depending on the sound environment (among others)

= “dramatic learning” and “perceptual reorganization” over the 1st year of life (prior to mapping SOUNDS onto MEANINGS in learning words)

CATEGORICAL PERCEPTION is the efficient way of perceiving sounds

PROBLEM:

Do babies spot the difference btw *night rate* and *nitrate*? Or *The truck cleare****d ice*** and *throw* ***dice***? What is the **word boundary** difference?

VOT = **time between** releasing C stop and the onset of voicing the C stop, or…

**GAINING the NAMING INSIGHT and MUTUAL EXCLUSIVITY bias**

Sounds deliver meaning only when patterned into words, suffixes, etc., they don't mean anything when they stand alone!

the vowels in *pin pan pen*change word meanings but are meaningless when they stand alone;

babies memorize stable but meaningless sound clusters but don’t pair them w meaning until they get the „naming insight“

the sound clusters are fuzzy **holistic impressions** of sounds that become **containers for meaning**

14-mo olds confuse sounds if hearing them in unfamiliar/rare words

e.g. *líf – neem* vs. *bih – dih* where they **hear** but **ignore** the difference

* Babies’ representations of meaningful words don’t contain all the phonetic detail at first – they don’t commit all that to long-term memory from which word-meanings are retrieved;
* Babies’ “lexical representations” depend on how mature is their memory, built gradually along with “improved” “lexical representation”: children are learning that “small” differences do count in differentiating meanings (*bad* vs. *dad*).

Matching words to meaning is difficult: experiment w 17-mo-olds – p. 150

Familiarization phase – listening to artificial l.

Phase 2 – learning new words when paired with pictures but only if previously encountered in the stream of artificial l.

According to what cues do babies form conceptual categories?

And according to what cues do babies form grammatical categories?

MUTUAL EXCLUSIVITY bias and getting the “naming insight” p. 165

2 pictures & 2 words: the babe’s thinking: since I know that the one object is a hammer, the other must go by the other word that I don’t know yet

vs. adults don’t just respond to the knowledge of words based on associations but to one’s expectation abt what the other speaker is likely saying:

the hammer can go by all sorts of names but since the most natural name for it was used it must apply to the hammer-O and not to the other O – adults base understanding on expectations that babies don’t have yet

an example of a pattern is using the plural suffix spelled S but pronounced S, Z or IZ, depending on the consonant preceding the sufix: *trucks, beds* and *watches – now, sound the words out*!

another rule is simplifying certain clusters of consonant sounds - e.g. *hands* gets to sound almost same as *hens*

What are the possible allophonic realizations of final consonants across languages? Do they turn out to be voiced or voiceless, or “released” or unreleased in the actual pronunciation? What class of consonant sounds is affected?

How are vowels adjusted when followed by nasal consonants? What are the crosslinguistic differences?

What are some other rules driving sound variation in the language you know?

Do “minimal pairs” concern phonemes or allophones, and what does their existence imply?

Is aspiration in English determined phonetically or phonemically? What natural class of sounds does it affect?

Why do speakers have “accent” and how can it be explained? Are you aware of having accent when speaking another than mother language?