

Kindersprache, 2

24. Opposition Nasal ~ Oral in Cons. and Vowels

First innovation. Open nasal cavity plus obstructed oral in *m*. Combines C and V. Nasal V has a double open cavity, increasing V quality — much more complex. Like cons. with double obstruction (ejective or glottalized) these are late.

m — nasal groan, cry, moan, dissatisfaction, calling for mother, etc. ~ oral cry of stronger emotion. The oral stop has only communicative nuance and signals real language.

The half-nasal cons, a variant of the stop, disappears when *m* appears. As does the labio-lingual click — in between *p* and *t*, when the dentals appear. This latter never appears in languages.

25. Splitting of C's and V's

Here is Jakobson's *colored hearing* theory, later abandoned for acoustic distinctive features.

Chromatism = big sound. Other pole is light ~ dark (pitch). Vowels are chromatic, *a* the most so. Narrow (high, close) V *u, i* less chromatic, more subject to light ~ dark. *u ~ i* is the line of pitch, with *u* low and *i* high; *a* is saturation of color. The *i – e – a* system is a continuum from less to more chromatism.

It is possible for languages to have only the vertical line in vowels (chromatism), but not only the horizontal line (pitch). The pitch line is supposed to be the 'basic process', yet cannot occur alone in vowels. In consonants, the horizontal or pitch line is basic, with the chromatism line secondary. It can occur alone.

V ~ C is like spectral colors ~ hueless gray series.

The *a*-line is really the fundamental and basic one in vowels, not the pitch line. And, indeed, the pitch line in consonants is fundamental and basic; the other line (*k*) sometimes is lacking. Labials are dark, dentals are light. The dark labials are the optimum consonant (the one we would use if we had nothing else).

Dentals owe their lightness to a divided resonator and a widened back orifice (the pharynx) — see diagrams. Darkness of velars and labials from a long undivided resonator and a narrower back orifice.

Children tend to palatalize the (light) dentals and thereby increase their lightness. In palatalization there is an accessory flattening of the resonator, intensifying the higher pitch. So this is the optimal dental. See diagram. If palatalization does not belong to the feature system of the model, it is soon abandoned. See Russ palatalized nursery terms.

First, Consonants appear, split on the pitch line in *p, t*. This is the basic line. Then the vowels appear, grouped along the vertical line by chromatism. This explains the precedence of the basic process over the accessory chromatic process. Variegated colors are joined only later to the basic hueless black-white series.

Note: of course, with *p, t* there are already a variety of vowels, but they are disorganized and essentially variants of *a* conditioned by the adjoining consonant.

26. Splitting of C into front and back

The labials and dentals are achromatic, and more so than the velars and palatals. So the front C's are *maximally achromatic*, the back, *minimally achromatic*. Back C's are far from the basic pitch line and they are less likely to split by pitch into separate classes. Palatals are lighter, velars are darker, but many languages lack palatals.

The two back classes are a little bit like *a*: more force, more audible, a bit of chromatism.

Similarity between the minimally chromatic *u, i*, and the minimally achromatic *k, sh*. This is note 23 — I'm not sure I understand or agree.

Glottis — the elongated space between the vocal cords
epiglottis — the fold of flesh over the glottis

When *p* and *t* are filtered out in acoustic experiments, *k* remains as a dry knocking noise, like a glottal stop. Note the interchangeability of the two in languages. Czech rhyme *kominík má flek, kominice ne* (glottal stop at end), the chimney sweep has a spot, the chimney sweep's wife, no'. Note *u – u* and *a – a*, with glottal stops before each vowel, > Russ *kuku, kaka* 'cuckoo' and 'defecation'. Russ *kaka* becomes *tata*, in child language.

27. Sound and Color

Audition colorée. Chromatic vowels and the colors, esp. *a* and red, and *u, i* with lighter colors or even black-white. Note that data are not consistent here. See also Nabokov in his memoir *Speak, Memory* on colored hearing.

Note the Czech woman: a red, o, blue-red, u dark blue, e light green, i canary yellow. (This woman, by the way, was later my Czech teacher at Harvard. Personal note.) Look at the remarkable array of hues and colors she saw for the consonants.

Preference for black and red in early childhood, like bilabial stop and *a*. Pathological agnosia for colors other than black, white and red are like having only *a, p, t*. Partial color blindness in which only red and blue of the colors are recognized is like the linear vowel system. In green-blindness, blue-red-yellow is like the basic V triangle, where *a* is red, *u* is blue, *i* is yellow.

28. Structure and classification of higher units

With oral ~ nasal and labial ~ dental, we have the phoneme as a bundle of features. We now have a cooccurrence of features. *p* is oral and labial, *m* is nasal and labial, *t* is oral and dental. The vowel is still just a concomitant feature. When we get the vertical V axis, then we have vocalic bundles of features: *papa*, *pipi*. The richer the feature bundle, but more the ambiguity of the word recedes. The old “one syllable, one word, one sentence” principle is abolished; the word is subordinated to the sentence.

Children love to play with language transformations of features: *pupsi pipsi titsi tetsi*, *fitsa litsa hitsa totsasa*... In an earlier stage it was only *bibi*, *tete*, *bibibi*, *tetete*, never *bite*, *tebi*.

29. Place of the dentals

The optimal stop is of course the labial, a lax labial stop. (lax is like b, d, but voiceless). As soon as the dentals arrive, the opposition lightness ~ darkness comes into play. This then becomes the foundation for future development; the dentals are the basis for all. Note that dentals are the richest of the series in the languages of the world.

k is as we know, replaced by *t* at the early stage of child talk. This is labial vs. non-labial. *But*, as soon as lightness ~ darkness or pitch comes to the fore, the velars can't so easily be identified with the dentals, as they are dark, like the labials, and the dentals and palatals are light. With fricatives, *x* and *f* and very close, as are *s* and *sh*; the former are dark, the latter, light. The change *k* > *t*, though everywhere in child language, is unknown in the languages of the world. So it is really only a temporary replacement with the child.

The light pitch of the dentals is an *elementary* feature, now. This is the basic consonantal notion, pitch. Now, after this, a labial phoneme cannot arise without the corresponding dental already in place. So we have many langs with *s* and not with *f*. As soon as the distinctive feature bundle is set, the solidarity of the labials is dependent on the dentals. (This is extraordinarily beautiful to me, and profoundly true.)

Early palatalized dentals are designed to contrast maximally with the labial; the palatalization raises the pitch. But as soon as the dentals become the founding member of structure in place of the labials, they cannot have a more complex structure. Hence langs with palatalized dentals have those as more complex, or marked, v. plain dentals.

30. Secondary Gradations

Vowels *u*, *o* and *i*, *e* have two parallel distinctions: back and rounded vs. front and unrounded. (He calls the back *velar* and the front *palatal*). The vowel sound is darkened by the back vowel as a big undivided resonator and narrowing of the pharynx. The rounding narrows the front orifice.

The unrounded V ~ rounded V has a higher second formant

the palatal (front) vowel supplements the formant of the corr. velar vowel with a higher formant.

There is a mutual autonomy here.

Secondary acquisition: rounding and front, or unrounding and back. E.g. ü or Russian **л** (he writes it y). Lacking in many langs.

Cf. fricatives and stops, with two potentially autonomous features *continuous* and *strident*. Mellow frics presuppose strident, e.g. English *th* and *s*.

Liquids are a coupling of cons and vowel. Unknown to some langs.

Liquids and affricates are highly restricted, as also mellow fricatives, and rounded front V.

Palatal and velar nasals much less common and more restricted.

Concluding Remarks

Universal stratification of all systems.

One cannot erect the superstructure without having made the foundation, nor remove the foundation without first removing the superstructure.