STRONG AND WEAK CONSONANTS
IN OLD AND MODERN GERMANIC

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ABSTRACT
As a phonetic parameter, consonant strength is inseparable from length, aspiration, and voice. Distinctive strength should not be recognized unless it is allowed to function word initially. In Germanic, only southern German has always fulfilled this condition.

In modern Germanic, the idea of consonant strength finds its main support in the functioning of obstruents in southern German dialects. A historian of Germanic observes strength in the study of the Second Consonant Shift, for intervocalic /p t k/ yielded /fl ffl zz xx/. It appears that /p t k/ did not change their place of articulation but were also reinforced. In word initial position, /p t k/ became affricates. To the extent that /p tf ts kx/ are stops pronounced with a lax explosion, they can be looked upon as spliced and drawn out stops, i.e., as sounds homologous with /fl ffl zz xx/. Intervocalic /p t k/ would probably also have become affricates, but they had to retain their independence vis-à-vis the reflexes of old /pp tt kk/, which yielded affricates and in Notker's dialect seek new realizations. Later all the reflexes of the Second Consonant Shift in High German behaved as strong.

Notker's Law also testifies to the presence of the ancient correlation of strength, at least in part of Alemannic. According to this law, word initial /p t k/ occurred in Notker's dialect after a pause and after the nonsonorous final consonant of the preceding word, while sonorous word final consonants were followed by word initial /b d g/ of the next word. Since in Notker's system vowels and /l m n r/ were opposed to all obstruents, the main distinction must have been between sonorous and nonsonorous consonants. For Notker /p t k/ and /b d g/, along with the fricatives and affricates, were nonsonorous, i.e., voiceless rather than voiced, but his /p t k/ did not coalesce with /b d g/, as happened in Central German dialects. The feature distinguishing Notker's /p t k/ from /b d g/ was therefore the degree of sonority, even though it demarcated two classes of voiceless stops.

As pointed out in connection with the history of MHG /l/, in words of the (C)V.CV structure either the first vowel or the intervocalic consonant was lengthened. In the syllables of Middle Danish, intervocalic /l/ prevented vowel lengthening, as it did in MHG: cf. Modern German Hammer 'hammer', Sommer 'summer' and Modern Danish gammel 'old', komme 'come'. In some dialects of Middle Swedish, /p t k/ blocked vowel lengthening (i.e., they resembled strong consonants), while in others they joined /b d g/ (and so resembled weak consonants). But Old Scandinavian had neither consonants like those which arose in High German by the Second Consonant Shift nor alternations of word initial obstruents of the Alemannic type (Notker's Law), and without them we lack the means for reconstructing an ancient correlation of consonant strength.

The similarity between the role /lm/ played in Danish and in German cannot be ascribed to chance, but more convincing arguments are needed to equate the consonant systems of Middle Danish and MHG with regard to strength.

In languages with the correlation of syllable cut (i.e., in all the West Germanic languages and Danish), analogues of the High German fortes and lenes exist too. When the contact is "tight" (stark geschnitten), or after a checked vowel, for example, in English bid, /l/ is phonetically stronger than /b/ and has the "loose" accent (schwach geschnittener Akzent), or after a free vowel, for example, in bead. Even within one and the same prosodic type (bid/bit, bead/bead), vowels are longer before voiced than before voiceless consonants (the reason is the same: the relative weakness of voiced consonants). These distinctions are not supported by the main feature that makes strength in High German an independent entity, i.e.,
by the alternation strong/weak in word initial position. Nor does consonant length go together with the correlation of syllable cut.

It appears that *fortes* and *lentes* in Modern Germanic exist only where they existed of old, i.e., in the southern cant for phonology on the whole: it is sometimes easier to reconstruct past events than to analyze synchronic relations. Here are a few examples. In the opposition /b d g/ /p t k/, /b d g/ are marked if the distinctive feature is voice. Such is, for instance, the situation in Russian. Regardless of whether the word final obstruents of Modern Russian are identified with voiceless phonemes (in which case [prut] prud 'pond' or prut 'switch', sb., are phonemized as /prut/) or assigned to different obstruents on morphological grounds (then prut, genitive pruda, is /prut/ and prud, genitive pruda, is /prud/), or called archiphonemes (then basic /prut/ - all three solutions have been offered - the fact remains that in the position of non-discrimination only voiceless sounds are allowed to occur, so voice appears to be the marker of the opposition.

Despite the differences between the consonant systems of Russian and German, speakers of German will also agree that /b d g/ are marked and /p t k/ unmarked, for Rad 'wheel' (dative Rode) is related to Rat 'advice' (dative Role) as lb (1 glzlp t kl, English, Swedish, and Norwegian are close to English. There seems to be nothing wrong with recognizing voice as the distinctive feature of /b d g/ in these three languages (then /p t k/ will emerge unmarked), but it is equally plausible to treat /p t k/ as marked (aspirated). With regard to /b d g/ /p t k/, English, Swedish, and Norwegian are so different from Danish that it is preferable to set up models which will highlight rather than blur this difference.

Standard German also defies a unique solution: neutralization points in the direction of marked (voiced) /b d g/, while the factors that are valid for the analysis of English /p t k/ as marked (aspirated) are present here too. In southern German, consonant strength is indispensable for an adequate phonetic description, but the speakers' intuition and a consensus among scholars cannot replace a set of strict procedures. Such procedures (usually, neutralization) are not always available, and when they are, their results may be at variance with other, equally valid evidence.

It is curious that against such a nebulous background a historian of German easily discerns strengthening, for Old High German (OHG) pf/l, is/zz, kh/hh are obviously the reinforced variants of Common Germanic *p, *i, *k. The replacement of distinctive voice by aspiration in Danish, Icelandic and Faroese is also easy to trace. Without this change the voiceless correlates of /m n n/ in Icelandic and Faroese would not have arisen before old /p t k/.

Dynamics can often reveal the nature of oppositions better than the kaleidoscope of phonemes can do it. Phonemes in synchrony are not quite the same entities as phonemes in diachrony. This is why the acquisition of speech by children lend themselves to phonological analysis exceptionally well. A changing phoneme is like a running person: both show the observer their otherwise latent features.

We can now return to Notker's Law, which is an especially characteristic example of the paradoxical interaction between synchrony and diachrony. Since in Notker's Alemannic dialect only word initial /p t k/ occurred after a pause and /b d g/ were disallowed, it follows that /p t k/, rather than /b d g/, were unmarked. This conclusion is borne out by the fact that, according to the rule of "consonant hardening" (Verhärtung), the same /p t k/ occurred in word final position, to the exclusion of /b d g/. (This rule characterized the entire area of High German.) In the opposition /b d g/ /p t k/, markedness belonged to greater sonority. Notker's Law can be reduced to the formula: sonorous after sonorous, nonsonorous after nonsonorous. Next to sonorous sounds (sonants and vowels), stops became quasi-sonorous as well. The active role of sonority also testifies to the markedness of /b d g/. It will be seen that the distinctive role of strength, with weakness being marked, has not emerged from this analysis (sonority sufficed to describe all the phenomena under investigation). Above, strength was tentatively deduced as the feature of /p t k/ from general phonetic considerations, but, in looking at subsequent lengthening, we immediately detect either strength or at least a feature of the same order of magnitude. Since the times of de Saussure linguists have prided themselves on differentiating between synchrony and diachrony. Roman Jakobson has gone a long way toward pointing out the dynamic nature of synchrony and the stable knots of diachrony. Our task consists not in wiping out the line between history and the present-day stage of language development: we should merely profit by certain tensions that exist between the two. In the days of descriptive linguistics, a great deal was said about the nonuniqueness of phonological solutions. The nonuniqueness principle is attractive in that it provides the researcher with a flexible model, but it also opens the door to all kinds of legerdemain. It seems that multiple solutions are the price we have to pay for the complexity of our material. Thus, German /b d g/ are voiceless (and marked) from one point of view and nonaspirated (and unmarked) from another. In all the Germanic languages that underwent vowel lengthening in the structure (C)V.CV, so also in Low German, the voiced intervocalic consonant behaved as though it were weak (see above), but in dialects with Schärfung/Trägersakzente, stimmton/sleeptoon the distribution of accents in and/or groups depends on the presence of voice in the obstruent, and in general nothing indicates that /p t k/ are strong in this area (Rhein-Limburg). Recognition of such contradictions is not a tribute to the hocus-pocus approach. God's truth need not flourish in a strait jacket.

Our material is often indeterminate, and we should use the results of phonetic change for retrospective solutions. For example, the strength of MHG /m t/ follows from lengthenings and gives credence to the idea of Notker's nonsonorous /p t k/ being strong. Synchrony and diachrony remain separate, but we no longer balk at interpreting the make-up of some phonemes in light of what became of them. Classical linguistics took this type of reasoning for granted. Modern linguistics will only gain if it shakes off part of the Saussurean dogma and uses common sense instead of structur-