NATURAL PHONOLOGY AND SOME COMPETING PARADIGMS, WITH PARTICULAR REFERENCE TO SYLLABIFICATION

HANS BASBØLL

Scandinavian Department
Odense University, 5230 Odense M
Denmark

ABSTRACT
In my written contribution, the focus is on syllabification rules, rather than on competing paradigms. Three different kinds of syllabification principles are considered, and the importance of the syllabic peaks are discussed, particularly in terms of vowel strength. Syllabification structures are illustrated, synchronically with examples from Danish and French, diachronically with the Nordic i-Unlaut.

INTRODUCTORY REMARKS ON COMPETING PARADIGMS

Simon C. Dik, /1/, has classified linguistic paradigms into two main types, viz. formal and functional paradigms, the former being represented notably by Chomskyan linguistics, and the latter e.g. by Dik's own "Functional Grammar". In recent years, the importance of work being done within different kinds of functional paradigms in the broadest sense has been increasing. Some important paradigms are, in addition to Dik's "Functional Grammar" already mentioned, Halliday's "Functional Grammar", Givón's work on functional-tyological syntax, and Langacker's "Cognitive Grammar", just to mention a few names and trends. These paradigms all represent a reaction against Chomskyan linguistics, and they use much more space to emphasize in which way they differ from the transformational-generative paradigm than to define their relation to other functional paradigms in the broad sense. Within the Chomskyan paradigm, on the other hand, very little attention is paid to functional paradigms. The examples of functional paradigms mentioned so far have paid little attention to phonology. The most important functional paradigm within phonology must to-day be considered Natural Phonology, in my view, as represented in Dressler's huge integrative effort, /2/. The term 'functional' is in this context vague, of course, but there seems to me to be important common traits, e.g. in the foundation on basic principles outside linguistics proper, and in their use of plurifunctionality and conflicting goals. An integration of insights from different functional paradigms, which have largely been occupied with different aspects of linguistic structure, seems a promising enterprise.

Within prosody, the distinction between the two basic paradigms has not been as sharn as e.g. within syntax or "mornphonology". But this of course does not mean that no differences in paradigm can be distinguished within prosody. In my oral contribution I intend to discuss how the syllabification problems and structures I present in this manner can be handled within different phonological paradigms.

SYLLABIFICATION PROBLEMS AND EVIDENCE

Theo Vennemann, /3/, sees it as a serious mistake to talk about syllabification rules, i.e. rules which syllabify a string of segments, technically e.g. by introducing syllable boundaries: syllabification cannot be due to universal rules, since different languages may syllabify the same string of segments differently, nor to language specific rules, since "in manchen Sprachen Silbenstruktur kontrastiv sein kann". Instead he talks about "Preferenzgesetze" (preferential laws). I agree with the two premises quoted, but not with the conclusion (but this may be mainly a terminological matter). In the many cases where syllable boundaries cannot be contrastive, I think structure building rules and constraints may be alternative appropriate formalisms, and they should at any rate be combined with markedness or preferential principles etc. The problem with the latter type is, of course, their interaction. The difference here is one of viewpoint, just as whether one prefers to talk about grammatical boundaries which determine syllabic boundaries, or about marked syllabification signalling a grammatical boundary; either the sneaker or the hearer defines the perspective.

One specific syllabification problem in Danish (as in many other languages) is whether the division of an interlude into a possible coda followed by a possible onset is a basic principle, or whether the
PRINCIPLES OF SYLLABIFICATION

It is obvious that there are syllabification (or, more generally, "syllable") principles of different kinds. These have been categorized by two different theories: the "syllabification rules" approach of the 19th century, which is the most general (completely unrestricted) form of syllabification, and a more recent theory of "Natural Phonology," whereas the syllabification rules are found in different languages are phonological in nature, whereas the syllabification rules in certain language are thus restricted in nature and phonological in nature, and the rules for syllabification are self-contained by itself and also the way in which different languages handle syllables. I shall classify the syllabification principles into three different kinds, forming a sort of hierarchy, as follows:

1) SYLLABIFICATION DEPENDS ON PHONODONOMIC DOMAINS. This principle is probably not controversial (except for the specific formulation, perhaps). Within a framework of phonodonomically relevant grammatical) boundaries (partly dependent on, but not iso- morphic with, the morpho-phonological boundaries), the principle can be stated as follows: certain phonologically relevant grammatical boundaries are obligatorily syllable boundaries too. Within a framework of phonodonomical domains, /y/, the principle can be stated instead: Syllabification occurs within a certain domain. This domain is language-dependent, e.g. syllabification ignores the distinction between language- and speech-language than in German. It also depends on normality etc. And if syllabification is taken to occur only on a given level, its domains will increase during the time, the ratio of the weakly stressed syllable, viz., consisting of short V plus C, is high. Thus, if the principle proposed in the present paper also has the consequence of letting the stressed short vowel be followed by a syllable the co-wall (even though the principle as stated in the present paper also has the consequence of letting the stressed short vowel be followed by a syllable the co-wall). The following sections illustrate how this principle is stated in the present paper.

2) A short stressed V "attracts" a following C more than a long stressed V, illustrating the notion of "closed and loose contact", respectively. This principle is related to what Namenenn, K. (p. 39), terms "PHONOLOGICAL GESTE: Eine (dynamisch) akzentuier- te funktionelle morphosyntaktische Geste, nach ihrer Gewicht bei zwei Morgen liegt." (The vowel lengthening and shortening in Middle German is a phonological gesture, the result of which is still evident in the present day. The vowel lengthening and shortening in Middle German is a phonological gesture, the result of which is still evident in the present day.)

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of syllabification in Danish. The only condition specifically fixed by the principles is /g/ which is manifested as a plosive initially, but as a continuant, a glide, or zero finally. The weak Danish consonant par excellence (cf. plosive than /g/ is denoted with /g/ as their weakest member).

SYLLABIFICATION OF DANISH CONSONANTS BETWEEN A SHORT STRESSED VOWEL AND SCHWA THE SCHWA CONSONANTS /t s n/ are weakly syllabicated in all phonological and phonetic respects, whereas the consonants /t s n/ are phono- logically and phonetically characteristic of the structures proposed, i.e. there is no alternative analysis more justified for the phonetic syllable boundaries. Thus the empirical coverage of the consonants /t s n/ is characterized by phonetic properties which I know of, including those which I have formulated /g/ (cf. I should add that plosives immediately following /s/ are generally not assimilated, but I cannot go into this here.

In fig. 2, at the end of the paper, a number of syllabification structures representative of the whole material are given. Notice that the principles allow correctly to abstract structures like maga /magA/, but that they do not presuppose any such abstraction (cf. the alternative /magA/). The only case (of the more than 140 clusters tested) where the syllabification rules do not immediately give the desired result is frig pronounced /frig/, a completely isolated loan word as if its syllable structure is concerned. If we would give it a phonological structure with /l/ we would suppose that it might be pronounced frig. This results in a deviation from the word. The phonological structure /frig/ would presumably be translated into pronunciation without /l/ (or with /l/). In very conservative standards I do not know of any data indicating that frig would be pronounced as an isolated loan word, and I do not consider the phonological analysis frig /frig/ as valid. The word maga /magA/ must be noted with a phonological structure /magA/, but this has nothing to do with syllabification problems, since the isolated root maga /magA/ has a consistent pronunciation /magA/ in all cases with written frig. Therefore, analysis, simply an incongruity in the phonological-orthography relation.

FRENCH E-AJUSTMENT AS A CONSEQUENCE OF SYLLABIFICATION

Since I have treated this subject elsewhere, /f/, although not within the same framework as the one here presented, I shall just give the principle of the relevant syllabification rules and structures corresponding to /s/ in French.

The syllabification rules apply mainly within the domain of clusters denoted by /g/ boundaries according to my earlier proposals on French word structure. In that sense, those suffixes are more integrated with the stem than pre-fixes, and enclitic subjects more than enclitic possessives. The account presupposes the phonological rules or processes (see below): a /C/ is natalized before a tautosyllabic /f/ (merely in weak syllables which occurs in a co-articulation process or rule), and a segmental consonant /s/ is not treated as a syllable by itself. The latter process or rule is stronger in the sense that it applies across syllables in a more dialectal way. This point is attested in the account of preceding short-syllable stems as well. All /s/ which are not consonants with respect to the processual or phonological nature of the "change": anyhow, the account does not presuppose that the palatalizations involved are phonological, the i-umlaut will be phonological when the conditioning factors are lost. The fact that short-syllable stems with secondary stress in general undergo i-umlaut, agrees well with the syllabification involved: the first /V/ is not so heavy as in the normal case. Notice also that if the intervocalic /C/ in a case like trist is taken to be bisyllabic, it nevertheless cannot be palatalized by the following /f/. Thus the crucial phonological distinction goes between final and non-final /C/ just as in the Danish and French examples discussed above.

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NORDIC I-UMLAUT AND SYLLABIFICATION

Several philologists have discussed the importance of syllabification in relation to the Nordic I-Umlaut, /f/. Here, I may briefly mention the two models (including ambisylla- bic Cs under the heading 'final') undergoes considerable changes according to the true set /t k g v r j/ (resulting in [b d g v r j] respectively). Notice, however, that non-final /t k/ in schwa-syllabification /g/ may be pronounced [b d g] (this is in fact, the case today in Advanced Danish Standard); but its classifi- cation as schwa is justified by the possibility of a contrast between /t k/ and /b d g/ are always pronounced as nolases. I only have to describe all contrasts in the conservative way of the model much easier to falsify (and thus its empirical content higher). Observe also that the principle of the underlined word is grave (/a/), and that short /s/ is [z] before a final C, i.e. in closed syllables. This is the phonetic situation that is more compatible with the structures proposed, i.e. there is no alternative analysis more justified for the phonetic syllable boundaries. Thus the empirical coverage of the consonants /t s n/ is more characteristic of the structures proposed, i.e. knowledge of including those which I have formulated /g/. I should add that plosives immediately following /s/ are generally not assimilated, but I cannot go into this here.

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