TONAL ACCENT RULES FOR COMPOUND STRESSED WORDS IN THE MALMÖ DIALECT

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The function of tonal accents in Scandinavian dialects

According to the traditional phonological view there is an opposition of two tonal accents - acute accent (accent 1) and grave accent (accent 2) - in the majority of the Swedish and Norwegian dialects and also in some Danish dialects. The primary phonetic difference between the accents is found in the tonal curve (fundamental frequency curve) of the syllable sequence carrying the accents; hence the term "tonal accent". The tonal curves of the accents show, however, great interdialectal variations. The constant feature is that in every single dialect there is an opposition of two accents, independently of the actual manifestations of the difference (Malmberg 1959). The phonemic status of the accents is based on a number of minimal pairs, mainly disyllabic words stressed on the first syllable, the only distinctive factor being the accent characterizing the syllable sequence, e.g. Sw. á n d e n ("the duck") - à n d e n ("the ghost")*. This distinctive function of the tonal accent could be said to be of limited communicative importance. This depends upon the fact that the two words of a minimal pair (in Swedish as few as 350 pairs, Elert 1971) do not normally appear in the same context, and that one of the words is rather unusual as a rule. That the accentual distinction is dispensable is shown by the fact that in those dialects where it is missing, e.g. some Swedish dialects in Finland, the absence of the distinction will hardly cause any difficulties for intelligibility (Malmberg 1966).

*The symbol ´ over the stressed vowel is used to designate the acute accent and ` is used to designate the grave accent.

Although the tonal accent is not necessary from a communicative viewpoint, it may be of help in a morphological identification of phoneme sequences (Elert 1970). The typical feature of the grave accent is that it presupposes and characterizes at least two syllables. When perceiving the tonal pattern characteristic of the grave accent of a first syllable, this indicates to you – if you are a speaker of the actual dialect – that there will follow at least one further syllable belonging to the same word as the first. This function of the grave accent is called connective (Elert 1970, Malmberg 1966). Thus the grave accent signals connection between syllables within the same word. This connective (or constructive) function of the grave accent may be regarded as the most important, as it possesses communicative relevancy in every utterance (Elert 1970). The acute accent on the other hand does not give any information about further syllables after the stressed syllable. Further syllables may follow, but this is not necessary. Any syllables that follow the acutely accentuated syllable can belong to the same word but may also begin another word. The acute accent is therefore called isolating (Malmberg 1966).

The phonological status of the tonal accents

It is often only grave accent that is regarded as a true tonal accent. Acute accent is identified with stress. Any occurrence of grave accent presupposes stress, and grave accent has been described as stress plus a tonal feature modifying the tonal pattern characteristic of stress (= acute accent) and as a result giving another, usually more complex tonal pattern typical of the grave accent (Haugen and Joos 1952, Haugen 1967). This way of looking at the matter is identical to regarding the acute accent as the unmarked member and the grave accent as the marked member of the accentual opposition. Other reasons have been proposed in describing

the acute accent as the unmarked accent as against the grave accent. It has been pointed out that the grave accent has a restricted distribution. It is neutralised in monosyllabic and final stressed words and also in the so-called secondary stress position of compound words (Malmberg 1966, Haugen 1967, Lindau 1970). During the last years, under the influence of generative phonology, the question of the predictability of the tonal accents has come into focus, and their phonemic status has been questioned (Öhman 1966, Haugen 1967, Lindau 1970, Elert 1971, Linell 1972). In many cases acute and grave accent are shown to be predictable by general rules, taking into consideration both phonological and other grammatical information. Hence they are superfluous in an underlying phonological form and may be dispensed with as phonemes. From this point of view the minimal pairs are fictitious, as one hardly finds any single pair, where the members have the same morphemic structure (Elert 1966, Haugen 1967). In a typical pair like Sw. á n d e n - à n d e n the acutely accentuated word form consists of a monosyllabic stem 'and' plus the definite article, while the corresponding gravely accentuated word form is a disyllabic stem 'ande' plus the definite article. If the definite final article in the underlying form is postulated to be only consonantal /n/, we have in the above mentioned type pairs a difference in the number of vowels (= syllables), which Öhman interprets as decisive of the tonal accent: "De grava och akuta tonernas funktion är huvudsakligen den att återspegla huruvida stammen + närmaste flexionsändelse är en mång- resp. envokalisk enhet" (Öhman 1966:77).

The dependence of tonal accent on the post-tonic syllable

Rischel (1963) has emphasized the importance of the post-tonic syllable for the tonal accent in a word form. His observations concerning East Nor-

wegian seem to be applicable to the corresponding cases in other Scandinavian dialects as well. According to Rischel it is of limited value to use the term 'word tones' for the tonal accents. The tonal accent is not necessarily associated with the word as an indivisible unit. A lexical word may have different accents depending upon the inflectional ending, e.g. Sw. s ì t t a ("to sit") with grave accent, s í t t e r ("sits") with acute accent. In compounds the elements often lose their tonal characteristics, e.g. Sw. m á t ("food") + s á l ("room") = m à t s a l ("dining-room"). Rischel shows that in non-compound words it is not always enough to identify the root or the stem of a word form and not necessary to take into account all the morphs of a word form to determine the tonal accent of that word form. The important thing is that the tonal accent is predictable, if the morph occupying the post-tonic syllable is known. A monosyllabic stem, e.g. Sw. b a c k ("football back") can be said to be neutral with respect to the tonal accent, although monosyllabic words have the acute accent: in inflected forms the tonal accent may be shifted depending on whether the post-tonic syllable contains a "tone-bearing" suffix (^{2}), i.e. causing accent shift, or not (^{1}). For example Sw. b a c k + ^{1}def art = b á c k e n will have acute accent, while b a c k + ^{2}plur = b à c k a r will have grave accent. Suffixes added to the post-tonic syllable cannot affect the accent in the word form, e.g. Sw. b a c k + ^{2}plur + ^{1}def art = b à c k a r n a. The tonal accent of a disyllabic stem with the stress on the first syllable, e.g. Sw. b a c k e ("slope") (grave accent) is already determined by the fact that the post-tonic syllable is located to the stem. Any inflectional suffixes in this case will not be able to affect the tonal accent e.g. Sw. b a c k e + ^{1}def art = b à c k e n, b a c k e + ^{2}plur + ^{1}def art = b à c k a r n a. The importance of the post-tonic syllable being located to the stem or not is further em-

phasized by the following example: b ò n a ("to polish", disyllabic stem), b o ("nest")+^{1}plur + ^{1}def art = b ó n a. I will return below to the discussion about the role of the post-tonic syllable in connection with an analysis of factors determining the choice of tonal accent in compound stressed words in the Malmö dialect.

The purpose of the work

The present work will treat the distribution of the tonal accent in the South Swedish dialect of the city of Malmö in compounds and other words having the same stress pattern as compounds. The distribution of the tonal accent in words not having compound stress will only be treated in outline. This type of word seems to be governed - on the whole - by the same tonal accent rules in the Malmö dialect as in Standard Swedish (Elert 1971, Linell 1972) and many other Swedish dialects as well. With regard to words having compound stress we can point at several interesting differences concerning the distribution of the tonal accent. The aim is to investigate the predictability of tonal accent 1 and tonal accent 2 and try to give rules for the occurrence of these accents. Furthermore I will analyse the factors determining the tonal accent in compound stressed words. Is it only a question of phonologically determining factors, or could we find cases using other grammatical information? In this connection it is of interest to point to differences and correspondences between the Malmö and other Scandinavian dialects and on the whole try to contribute towards completing the picture of the function of the Scandinavian tonal accents. Finally I will join the discussion about cyclical or non-cyclical rules in phonology. The necessity and suitability of cyclical application for the prosodic rules of Standard Swedish has been questioned. I will discuss the

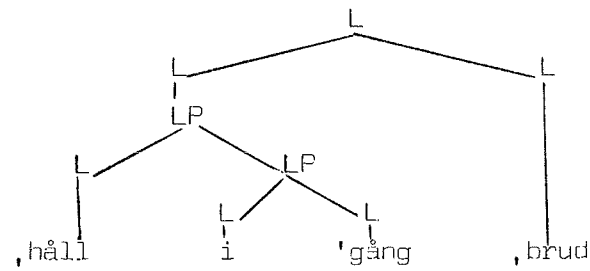
consequences of cyclicality for the tonal accent rules in the actual South Swedish dialect. Phonetic aspects on the tonal accent question will not be dealt with in this study (for phonetic studies of South Swedish dialects see Malmberg 1953, Malmberg 1955, Malmberg 1959, Hadding-Koch 1961, Hadding-Koch 1962, Gårding 1970, Johansson 1970, Gårding and Lindblad 1973).

Compound stress

In the following discussion I assume that one syllable in every ROOT and in stressable AFFIXES will be assigned stress by rules, the form and predictions of which I will not deal with here (see Linell 1972!) but presuppose in every single case. Compounds and certain derivatives (see below) will hereby receive stress on at least two syllables. The stress patterns of these words will, however, not be finally determined by these stress rules. I also assume the existence of deaccentuation rules, which will bring about that one stressed syllable in - for example - a compound will dominate (Linell 1972). The syllables having been deaccentuated in this way are, however, not regarded on a par with unstressed syllables. The deaccentuated syllables have certain features in common with the stressed syllables not present in the unstressed syllables, e.g. potential opposition of quantity and absence of strong vowel reduction, but they differ from the stressed syllables by the neutralisation of the tonal accent opposition. The stress rules and the deaccentuation rules determine the canonical form of the words (Linell 1971), where we can distinguish three types of syllable with reference to the degree of stress: stressed (') - so-called main stress -, deaccentuated (,) - so-called secondary stress and unstressed. I disregard here the effects of phrase accent and rhythm rules, which can change the prominence patterns of the canonical forms.

In this study I will primarily treat the occurrence of tonal accent in words having what is called compound stress. The characteristic feature

of this type of construction is that it will have dominance to the left (Linell 1971) after the application of the deaccentuation rules, i.e. the main stressed syllable will occur in the first element of the compound. The other stressable syllables will have secondary stress. In the canonical form there is no difference between the deaccentuated syllables, so that we can distinguish there between strong secondary stress on the last stressable syllable and weaker degrees of stress, which will result after the application of rhythm rules. Compound stress is by far the most common kind of stress pattern in words having (at least) two stressable syllables, e.g. 'm a t ,s a l ("dining-room"), 'r å d,h u s ,t o r g ("town hall square"). The important thing is to distinguish compound stressed words from words receiving so-called lexical phrase stress (dominance to the right), i.e. the only stressed syllable that is left will be found in the last element of the compound, while the rest of the stressed syllables will be deaccentuated (Linell 1971). To this category belong the above mentioned lexicalised lexical phrases, e.g. ,h å l l i 'g å n g ("non-stop party"). Some compounded place and personal names are accentuated this way too, e.g. ,L a n d s 'k r o n a (city name), ,L a r s - 'G u n n a r (first name) as well as some other kinds, e.g. ,s j u t t i o 'f e m ("seventy-five"), i.e. compounded numerals generally, ,s y d 'v ä s t ("South West") etc. Only in the case where these lexical phrase stressed constructions in their turn make up an element of a compound, will the resulting compound have left dominance, e.g., ,h å l l i 'g å n g ,b r u d ("go-go-girl")*:



*L = Lexical category; LP = Lexical phrase category.

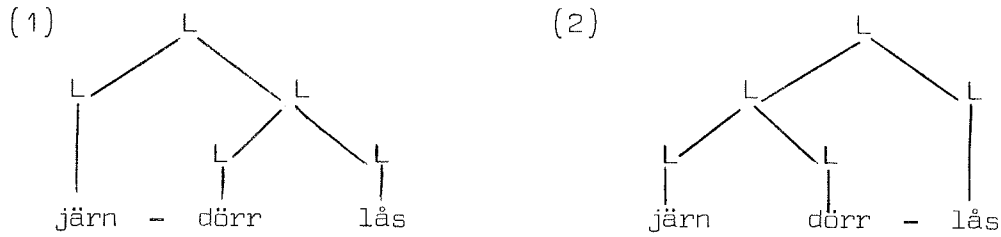
Among derivatives with compound stress we find on the one hand those having stressable prefixes and suffixes and a stressed stem at the same time, e.g. 'å l d e r ,d o m ("old age"), 'h y p e r ,f a r l i g ("hyper-dangerous"), and on the other hand words having non-stressable affixes, but where the stem is compounded containing at least two stressable syllables, e.g. 'i n ,v i g n i n g ("consecration"). Consequently within this group are not included derivatives with stressable suffixes depriving the first element of its stress, e.g. ,b r y g g e 'r i ("brewery"), ,v ä 'n i n n a ("female friend"). These words will receive lexical phrase stress like the lexicalised lexical phrases. Lexical phrase stressed compounds and derivatives and also derivatives having only one stressable syllable are treated together with the simple words as for the assignment of tonal accent. The so-called formal compounds, e.g. 'a r ,b e t e ("work"), 'ä v e n ,t y r ("adventure") have, in spite of the fact that they can be regarded as consisting of only one morpheme, two stressed syllables and will receive compound stress.

The common denominator of the constructions that are the object of our present study is consequently that they are words having two stressable syllables within their domain and receiving compound stress, whether they are compounds, derivatives or formal compounds. When it is necessary to talk about these constructions as a unit, they are called compound stressed words. Relevant information for the grave accent rule for compound stressed words, which will be discussed below, is, among other things, that there must be two stressed syllables within its domain. The deaccentuation rule giving left dominance to a construction and thereby destressing all stressed syllables except that of the first element may therefore be assumed to be ordered after the grave accent rule (see below). By ordering the lexical phrase stress rule before the grave accent rule we will avoid applying the grave accent rule to the lexicalised

lexical phrases and other words with lexical phrase stress. Thus at the point where the grave accent rule will be applied, compound stressed words have the following structural condition: $([_L .. [+ \text{stress}] .. [+ \text{stress}] ..]_L)$.

The dependence of tonal accent on constituent structure

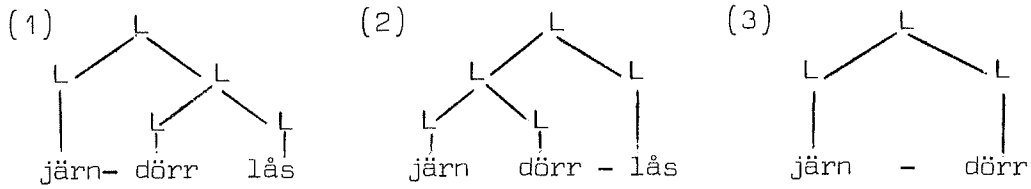
Before penetrating the rules governing the accentuation in compound stressed words in the investigated South Swedish dialect, it might be appropriate to show how the constituent structure of the words may in certain cases determine the choice of tonal accent. Considering a word like j ä r n d ö r r l å s it may receive different accents, depending upon how it is interpreted to be compounded. One interpretation is j ä r n - d ö r r - l å s ("door-lock of iron") and the other is j ä r n d ö r r - l å s, ("lock for iron doors"). The structural difference may be illustrated by the following tree-diagram showing the constituent structure of the words:



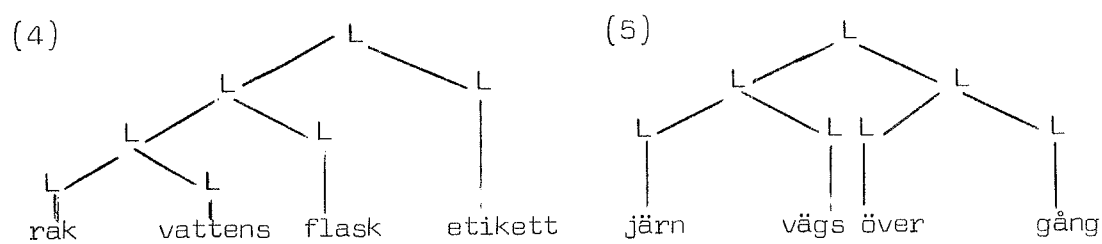
The first compound will be assigned acute accent, while the second will have grave accent. In case (1) j ä r n has acute accent before being compounded with d ö r r l å s, while j ä r n d ö r r in case (2) has grave accent before being compounded with l å s. Having these examples as a starting-point one might guess that the tonal accent of the left hand element before being compounded with the right hand element is not irrelevant to the resulting tonal accent of the compound stressed word. It is evidently a general fact that words having the same constituent structure as (1) will receive acute accent, and words having the same structure as (2) will have grave accent provided they meet further conditions that will be

specified below.

If we consider the compound j ä r n - d ö r r ("iron door") separately, we will find that it has grave accent, although the left hand element has acute accent. Now, what gives j ä r n - d ö r r its grave accent, whereas j ä r n - d ö r r l å s (whose left hand element has acute accent) has acute accent? Considering the tree-diagrams of (1) j ä r n - d ö r r l å s, (2) j ä r n d ö r r - l å s och (3) j ä r n - d ö r r, we find that (2) and (3) are more closely related with regard to the constituent structure:



J ä r n d ö r r - l å s is simply an expansion of j ä r n - d ö r r. The structural similarity may be expressed in terms of dominance. In case (2) and (3) the first terminal L (j ä r n) is dominated directly by an L that also directly dominates the second terminal L (d ö r r). In case (1) we do not have this close connection between the first and the second constituent. Instead the second terminal L (d ö r r) is dominated directly by an L that only in its turn is directly dominated by the same L that directly dominates the first L (j ä r n). Only in the case where the first and the second constituent are directly dominated by the same L will grave accent result. This also applies to words with more complex structures which do have this beginning of the constituent structure, e.g. r à k v a t t e n s - f l a s k e t i k e t t ("label on a bottle of after-shave lotion"), j à r n v ä g s ö v e r g å n g ("railway level crossing"):



Tonal accent in words not having compound stress

The fundamental condition for determining the tonal accent in a compound stressed word in the Malmö dialect is – according to my observations – knowledge of the accent of the first element when it is not an element of a compound but constitutes an independent word. This is, however, not always a sufficient condition, which will become evident below. On the other hand the tonal accent of later elements of a compound, when they stand isolated, seems to be irrelevant to the resulting accent of a compound stressed word. This discovery is by no means unique for the investigated dialect but is generally true of Scandinavian dialects, as far as I know. The accent 1 and accent 2 rules in compound stressed words in the Malmö dialect are consequently based upon knowledge of the accent conditions in simple words and other words not having compound stress that may occur as a first element of a compound. The rules governing the accentuation in words not having compound stress in the actual dialect correspond by and large to those applying both to Standard Swedish and many other Swedish dialects. Here I will briefly sketch the most important regularities. The main grave accent rule in words lacking compound stress in Swedish may be formulated as follows: GRAVE ACCENT OCCURS IN WORDS CONTAINING AT LEAST TWO VOWELS (= SYLLABLES) AND WHERE THE STRESS, WHICH IS IN THE ROOT, IS FOUND ON THE FIRST SYLLABLE (what Linell 1972 calls the "standard solution"; see Öhman 1966, Teleman 1969). Consequently there must always be a syllable after the stressed syllable for grave accent to result. According to this version it is irrelevant, whether the word in question consists of only one root morpheme, e.g. s k ò l a ("school") or consists of ROOT + vocalic derivational or inflectional suffix, e.g. l à g + l i g (legal), ù n g + a (pl. of "young"). Acute accent is simply the accent occurring in other cases, i.e. when a stressed syllable does not meet the grave accent

conditions, e.g. always when the stress is on the last syllable, which includes monosyllabic words. Among the words having both first and last syllables unstressed we will find both accent types. Acute accent is found in e.g. b e f á l l a ("to order"), e g é n t l i g ("proper"), f u n d é r a ("to ponder"), while e.g., v ä n ì n n a ("female friend"), p r o f e t ì a ("prophecy"), p r i n s è s s a ("princess") will have grave accent. Some exceptions to the grave accent rule above are a number of disyllabic or polysyllabic words of foreign origin, but by no means all of them. The tendency to use acute accent for this kind of words seems to be even stronger in the Malmö dialect than in Standard Swedish. A fair-sized number of words having a disyllabic stem ending in -er, -el or -en with the stress on the first syllable will also have acute accent. The words of this category have sometimes been regarded as monosyllabic in an underlying phonological form, since the e-vowel of the second syllable is omitted in certain alternation forms. This way, they do not meet the structural condition for grave accent given above, but will regularly be assigned the acute accent. A vowel insertion rule, ordered after the grave accent rule, then gives them their disyllabic surface form. The definite final article and the present tense ending are interpreted as non-vocalic in the underlying form, and cannot therefore influence the tonal accent.

Elert (1971) presents a "modified standard solution" (Linell 1972) of the main grave accent rule for Swedish. According to this rule grave accent will result in words, where the stressed syllable (which is in the root) is followed by an unstressed syllabic inflectional or derivational suffix. The difference between the standard version and Elert's version lies in the morphological interpretation of disyllabic word stems. While according to the standard version a word like s k ò l a is analysed as one morpheme, Elert makes a division into root and stem formative s k o l + a. Consequently, disyllabic words that cannot be divided into root and stem

formative, especially words of foreign origin like p á j a s ("clown") do not meet the structural condition for grave accent and will regularly receive acute accent. Thus Elert's version does not need to regard disyllabic monomorphemic words as exceptions. Elert therefore interprets grave accent as a juncture, i.e. it signals morpheme boundary (in words not having compound stress), as it is - above all - words with a monosyllabic root followed by a vocalic inflectional, derivational or stem-forming suffix, that are characterized by grave accent. According to this interpretation a monomorphemic word may have grave accent only exceptionally. Grave accent presupposes two syllables and two morphemes. As a consequence of Elert's interpretation certain disyllabic and polysyllabic morphemes must, however, be lexically marked for grave accent, where the standard version would regularly have assigned them grave accent. It is evident that both versions of the grave accent rule have to count a certain number of exceptions.

Tonal accent in compound stressed words in the Malmö dialect

It has been known for a long time (Kock 1885) that certain South Swedish, especially Scanian dialects tend to use accent 1 in compounds to a considerable extent. In this respect they differ from most of the Swedish dialects (including Standard Swedish), where almost exclusively accent 2 is used in compound stressed words. Comparing the accent rules for compounds in Scanian dialects proposed by Kock with those concerning the Malmö dialect presented in the present study we will find many points of agreement. The tonal accent rules for compound stressed words in the Malmö dialect below are categorically formulated throughout, although they should preferably be regarded as strong tendencies rather than hard and fast rules. Variation in the choice of tonal accent may occur both inter- and intra-

idiolectally for certain types of compound words (cf. Malmberg 1972).

Rule (i): WORDS WITH GRAVE ACCENT IN THE FIRST ELEMENT WILL RETAIN THIS ACCENT INDEPENDENTLY OF THE CHARACTERISTICS OF FOLLOWING ELEMENTS.

We can observe that, if the first element has grave accent before the compounding takes place, this accent will not be shifted in a compound, independently of the prosodic structure of following elements: the tonal accent of following elements and the position of stress are unimportant. The only thing that is required is presence of a second element. Thus we need not have a special rule for these cases of compound stressed words. The correct accent is given already by the rule assigning tonal accent - in this case grave accent - to simple words and other words not having compound stress. E.g. s ò m m a r s t u g a ("summer cottage"), l ì n g o n s k o g ("cowberry forest"), k à f f e s e r v i s ("coffee-set"), t ì d n i n g s b u d ("newspaper-boy"), v ä r d ì n n e r o l l ("hostess role").

Rule (ii): WORDS WITH A MONOSYLLABIC FIRST ELEMENT DIRECTLY FOLLOWED BY A STRESSED SYLLABLE IN THE SECOND ELEMENT HAVE GRAVE ACCENT.

If the first element is monosyllabic and consequently lacks grave accent, a compound in which it occurs may have grave or acute accent depending upon the position of stress in later elements. Grave accent will result, if the second element is monosyllabic and stressed. If the second element is disyllabic or polysyllabic with stress on the first syllable, the whole compound will also receive grave accent, independently of the tonal accent of the second element. Further elements that may be added to this first compound do not change these predictions. E.g. s k ò l s a l ("schoolroom"), v å r b l o m m a ("spring flower"), b à d h u s v å g ("bath-house scales"), r å k v a t t e n s f l a s k e t i k e t t ("label on a bottle of after-shave lotion").

Rule (iii): WORDS WITH A MONOSYLLABIC FIRST ELEMENT DIRECTLY FOLLOWED BY AN UNSTRESSED SYLLABLE IN THE SECOND ELEMENT WILL RECEIVE ACUTE ACCENT.

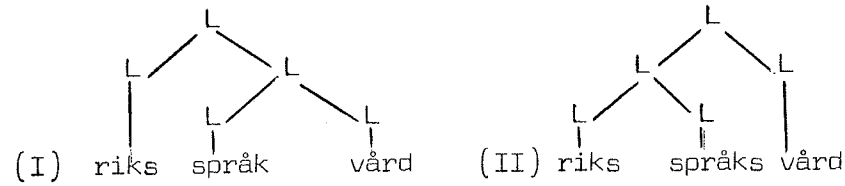
If we consider a word having a monosyllabic first element and the second element of the word consists of more than one syllable and at least the first syllable of the second element is unstressed, the condition for grave accent disappears, and the acute accent of the first element is retained. This is true not only of second elements consisting of simple words having these characteristics but also of second elements consisting of derivatives with an unstressed prefix or a stressable suffix depriving the root of the stress or also lexical phrase stressed compounds. It is immaterial how many unstressed syllables will precede the stressed syllable in the second element. E.g. g á s p e d a l ("accelerator pedal"), g r ú p p t e r a p i ("group therapy"), h j ä́ r n k a p a c i t e t ("brain-capacity"), l á g f ö r s l a g ("law proposal"), f l ý g v ä r d i n n a ("air stewardess").

Rule (iv): WORDS WITH A MONOSYLLABIC FIRST ELEMENT FOLLOWED BY A SO-CALLED "JOINING"-S WILL HAVE ACUTE ACCENT.

A monosyllabic first element having a genitive-s in the junction before the second element (a so-called "joining"-s) will block the grave accent, independently of the position of the stress and the tonal accent of the second element. E.g. r ú m s r e n ("house-trained"), d á g s t i d n i n g ("daily newspaper"), t í d s k o n t r o l l ("time control").

Other first elements with acute accent will also retain their acute accent in compounds with a joining-s between the first and the second element. These cases would still receive acute accent by other applicable rules; hence we do not need to treat them separately. Even if a word with a joining-s added to the first element consists of more than two elements,

the accent will not be altered. In a minimal pair like r i k s s p r å k-v å r d ("language standards in a national scale") and r i k s s p r å k s-v å r d ("language standards of the approved dialect") the contrasting words will both have acute accent, in spite of the difference in constituent structure illustrated below:



Thus the presence of a joining-s after the first element will neutralize the accent contrast in these cases, where otherwise only (I) would have received acute accent (cf. rule (v) below).

Rule (v): WORDS WHERE THE SECOND ELEMENT IS MORE INTIMATELY RELATED TO SUBSEQUENT ELEMENTS THAN TO THE FIRST, AND WHERE THE FIRST ELEMENT IS MONOSYLLABIC WILL RECEIVE ACUTE ACCENT.

A third and last case of monosyllabic first element receiving acute accent is the following which is somewhat similar to case (iii). If the second element is stressed on the first syllable and is more intimately connected to subsequent elements than to the first, the acute accent of the first element is retained (see section 'The dependence of tonal accent on constituent structure' above). In most cases the stress on the first syllable of the second element will be reduced and therefore words of this type will often have a superficial stress pattern that is similar to case (iii). E.g. b á r n d a g h e m ("children's day home"), f l ý g o l y c k a ("airplane accident"), s p r å k v e t e n s k a p ("linguistics").

Rule (vi): A POLYSYLLABIC FIRST ELEMENT WITH ACUTE ACCENT ON THE FINAL SYLLABLE WILL GIVE ACUTE ACCENT TO THE WHOLE WORD.

First elements consisting of more than one syllable and having acute accent before the compounding takes place will as a rule give acute accent to the whole compound. Within this group we may discern:

I) Final stressed first elements of a compound where, even if the second element begins with a stressed syllable, grave accent is blocked. Belonging to this category may also be considered compounds, the first element of which is a lexical phrase stressed compound. E.g. b a n á n s k a l ("banana-skin"), s i g n á l o f f i c e r ("signalling officer"), h å l l i g é n g b r u d ("go-go-girl"). Final stressed first element in compound stressed words is the only case, where presence of stress in the post-tonic syllable - i.e. in this case the first syllable of the second element - is not an obstacle to acute accent.

Rule (vii): WORDS WITH AN ACUTE POLYSYLLABIC FIRST ELEMENT AND NO STRESS ON THE LAST SYLLABLE WILL RETAIN THIS ACCENT IN COMPOUND STRESSED WORDS.

II) Acute disyllabic or polysyllabic first elements, stressed no later than on the penultimate syllable (including the initial stressed ones) will in most cases give acute accent to compound stressed words. E.g. l á k r i t s s t å n g ("liquorice bar") b á n d y b o l l ("hockey ball"), c á n n a b i s b r u k ("use of cannabis"), n a r k ó t i k a-m i s s b r u k ("drug addiction"), k a d á v e r l u k t ("cadaverous smell").

I have chosen to classify the acute polysyllabic first elements into the two categories described above instead of forming one category of words with an unstressed beginning, including the final stressed ones, and another category consisting of only the initial stressed first elements. In the investigated dialect we do not find, however, any difference between final stressed first elements and other first elements having an unstressed beginning with regard to the tonal accent of the compound. But

there seem to be dialects where a final stressed first element of a compound will determine grave accent, while other acute first elements with an unstressed beginning will not. Disyllabic words ending in -el, -er or -en form a sub-category within category II. Words with a first element from this category must be divided into those receiving acute and those receiving grave accent. It is hard to decide in every single case exactly what determines the resulting accent. I will return to this problem below. There is acute accent in c ý k e l b a n a ("cycle-track"), n é g e r-g h e t t o ("negro ghetto"), and grave accent in h à g e l s k u r ("hail-shower"), f å g e l s k r ä m m a ("scarecrow").

Exceptions to the grave accent rule for compound stressed words

Negative exceptions. A number of compounds can be found that meet the conditions for grave accent according to the grave accent rule for compound stressed words and yet receive acute accent. These are exceptions to case (ii). Within this group we may find some regular sub-categories such as compound color adjectives like b l ǻ g r å ("blue-grey"), v í t r ö d ("white-red"), words with a monosyllabic numeral as the first element like t r é r u m-m a r e ("three room flat"), f é m t i d e n ("about five o'clock"), words with a verbal stem as first element, like s í t t p l a t s ("seat"), r í d h u s ("riding-house"); the past participle of particle-prefix verbs like ó m b y g g d ("rebuilt"), á v b r u t e n ("interrupted"). The list of negative exceptions to the grave accent rule is not exhausted by this brief sketch, but I consider it beyond the scope of the present study to go further into the remaining more or less regular exceptions.

Positive exceptions. As indicated above, the disyllabic words ending in -er, -el, -en with a fugitive e-vowel and having stress and acute accent on the first syllable will cause certain difficulties in predicting the

resulting tonal accent of compound stressed words, where such words occur as a first element. On the one hand we find those receiving acute accent like other words belonging to case (vii), e.g. c ý k e l b a n a ("cycle-track"), t í g e r s k i n n ("tiger-skin"), i.e. retaining the same tonal accent as the simple words c ý k e l and t í g e r. On the other hand there exist words with grave accent, when they occur as a first element of a compound, e.g. f ì n g e r t o p p ("finger-tip"), f å g e l s å n g ("bird song"), although they have acute accent in isolation: f í n g e r, f å g e l. It is interesting to note that the plural forms of these simple words have the same tonal accent in the Malmö dialect as the compound words where they appear as a first element, i.e. grave accent in f ì n g r a r, f å g l a r and acute accent in c ý k l a r, t í g r a r. The predictability of tonal accent in these disyllabic words ending in -er, -el, -en as a first element of a compound is, however, far from total. A separate study will be needed to give an account of the tonal accents of this group.

Analysis of factors governing the choice of tonal accent

A survey of the seven type cases is given in the following scheme indicating whether the tonal accent of the first element is retained or altered in the compounded word:

Accent of first element		Accent of compound	Accent shift?
(i)	s ò m m a r ("summer")	s ò m m a r s t u g a ("summer cottage")	no
(ii)	m á t ("food")	m à t s a l ("dining-room")	yes
(iii)	g á s ("gas")	g á s p e d a l ("accelerator pedal")	no
(iv)	r ú m ("room")	r ú m s r e n ("house-trained")	no
(v)	b á r n ("child")	b á r n d a g h e m ("children's day home")	no
(vi)	b a n á n ("banana")	b a n á n s k a l ("banana-skin")	no
(vii)	b á n d y ("hockey")	b á n d y b o l l ("hockey ball")	no

Is it possible to find a common denominator for the different cases, where the tonal accent of the first element is retained in the types of compound and derivative discussed? It seems to be the case that if the syllable following the stressed syllable lacks stress, there will be no shift of tonal accent. This is independent of whether this unstressed syllable is a part of the first element as in s ò m m a r + s t u g a, b á n d y + b o l l, or of the second element as in g á s + p e d a l. The fact that properties of the post-tonic syllable would govern the choice of tonal accent is in agreement with the observations of Rischel (1963) and Haugen (1967) concerning East Norwegian. If the post-tonic syllable is in the first element, we need not take into account properties of the second element in order to predict the accent of the compounded word. This is found in case (i), where the first element has grave accent and in case (vii), where it has acute accent. In the remaining cases the post-tonic syllable is part of the second element, which must be taken into account in some cases. Presence of stress in the post-tonic syllable of a compound in the actual dialect will determine accent shift (to grave accent) for the compound (case (ii)) with the following exceptions. In the type case, where the first element is stressed on the final syllable and consequently acute, the stressed syllable may be followed by a stressed syllable without this affecting the resulting accent (case vi). Thus the tonal accent of a polysyllabic first element (cases i, vi, vii) will not be altered in a compound. Obviously an unstressed beginning is more powerful than stress in the post-tonic syllable. As is well known an unstressed beginning will have the same effect in the non-compounded words too, as in t à l a ("to speak"), b e t á l a ("to pay"), although in this case it is not a question of two stressed syllables coming together. Besides the phonological factors discussed - positions of unstressed and stressed sylla-

bles and the tonal accent of the first element - we also find a morphological factor governing the choice of tonal accent, the above mentioned joining-s blocking grave accent under the conditions stated above. Thus also in this case the properties of the second element are of no importance. To these factors must be added also the type of constituent structure (case (v)) which evidently blocks the accent change. This case, as mentioned above, will lose the stress in the post-tonic syllable and is thereby often superficially similar to case (iii), where this syllable, however, does not have any stress from the beginning. The question is, whether it is the stress factor that determines the tonal accent and not the constituent structure typical of case (v), as has been postulated. It is doubtful, however, whether the degree of stress in the post-tonic syllable is lower in case (v), j ä́ r n - d ö r r l å s, with its acute accent than in the expanded case (ii), j ä̀ r n d ö r r - l å s, with its grave accent. For the assumption to be true, that it is the reduced degree of stress in the post-tonic syllable that causes the accent to remain unchanged in e.g. j ä́ r n - d ö r r l å s, it is necessary to show that the stress reduction is performed according to another rule or other principles than those responsible for the stress reduction in j ä̀ r n d ö r r - l å s.

In order to be able to formulate rules for assigning tonal accent in compound stressed words, it is - as has been pointed out above - a prerequisite that we know the tonal accent of the first element. Then we need only formulate rules for the cases, when acute accent in the first compound element is altered to grave accent. First elements already possessing grave accent (case (i)), will always retain this accent in the compounds and derivatives discussed. Even in the above mentioned cases (iii) - (vii), where we have acute accent in the first element, the same accent is retained in the compounded word. The rule for changing the acute to the grave accent in compound stressed words in the actual dialect may then be formulated:

Rule I: ACUTE ACCENT IS ALTERED TO GRAVE ACCENT, WHEN IT OCCURS WORD-INITIALLY IN A MONOSYLLABIC FIRST ELEMENT AND THE SECOND ELEMENT BEGINS WITH A STRESSED SYLLABLE AND IS DIRECTLY CONNECTED TO THE FIRST ELEMENT.

As a first approximation the rule may be formalized as follows:

Rule I': $[-\text{ tonal}] \longrightarrow [+\text{ tonal}] \;/\; [_{\text{L}}\#\,[+\overline{\text{stress}}]\#\,[+\text{ stress}]$

Type words not meeting the structural condition of the rule and therefore passing through it with an unaltered accent are the following: (i) s ò m m a r s t u g a, (iii) g á s p e d a l, (vi) b a n á n s k a l, (vii) b á n d y b o l l. Case (ii) s k ò l s a l is subject to the rule and will receive grave accent. Case (iv) r ú m s r e n and case (v) b á r n d a g h e m incorrectly have their accent changed, as the rule is formulated. In order to exclude even these cases the rule must be further constrained. Here the possibility of a cyclical rule application presents itself.

Cyclical or non-cyclical rules?

The cyclical rule application was introduced into phonology by Chomsky-Halle-Lukoff (1956) to generate stress degrees in compounds and phrases in English, and has since then been used within generative phonology by several authors above all in order to handle prosodic phenomena in different languages. The need for cyclical rules in prosody has been questioned in recent years, as far as Swedish is concerned by Elert (1970: 115): "... en cyklisk tillämpning av de prosodiska reglerna skulle utgöra en oekonomisk procedur. Den viktigaste anledningen till detta är, enkelt uttryckt, att blott en mycket ringa del av den information som ligger i den syntaktiska strukturen signaleras prosodiskt." Also Lindau (1970) and Teleman (1970) have used non-cyclical rules in describing prosodic phenomena of Swedish.

For the Malmö dialect we find a more complicated situation. The possibility of having different accents in the above mentioned example j ä r n d ö r r-l å s depending upon whether it is meant to be 'door-lock of iron' or 'lock for iron doors', might be regarded as an argument for the necessity of having a cyclical rule application in order to generate the correct accents in the Malmö dialect. In Standard Swedish both interpretations of the word have grave accent. The one interpretation j à r n d ö r r - l å s has the same structure as m à t s a l s - b o r d (expanded case ii), while the other interpretation j á r n - d ö r r l å s corresponds to case (v) b á r n - d a g h e m. Besides the grave accent rule in compound stressed words we would have to assume the existence of a deaccentuation rule saying that a stressed syllable between two other stressed syllables will be deaccentuated (see Teleman 1970!):

Rule II: [+ stress] $\longrightarrow$ [- stress] / [+ stress] —— [+ stress]

After the application of the rule in all cycles only the stress of the first and the last element will remain in a compound; the other elements will be deaccentuated. If we assume furthermore that this deaccentuation rule is ordered before the grave accent rule in the cycle, we will have the following derivations:

$[_N[_N$'j ä r n$_N]$ $[_N[_N$'d ö r r$_N]$ $[_N$'l å s$_N]_N]_N]$

$[_N[_N$'j ä r n$_N]$ $[_N$'d ö r r 'l å s$_N]_N]$ — 1st cycle: deaccentuation not applicable, grave accent applicable

$[_N$'j ä r n d ö r r 'l å s$_N]$ — 2nd cycle: deaccentuation applicable, grave accent not applicable

= 'j ä r n ,d ö r r 'l å s

The result for j ä r n - d ö r r l å s will be the acute accent (= stress),

i.e. a retention of the accent of the first element, as the deaccentuation will remove the condition for the grave accent rule in the 2nd cycle. As a result of the deaccentuation of the mid element d ö r r, its grave accent will be neutralized too, as this accent can only occur in a stressed syllable. Thus we can account for case (v) too without modifying the grave accent rule for compound stressed words by letting the rule apply cyclically. The correctness of giving the deaccentuation such a form that the last element will retain its stress may be questioned. It is, however, a necessary condition for a cyclical rule application having the effect intended and giving the correct tonal accent. If the rule is formulated:

Rule III: [+ stress] $\longrightarrow$ [- stress] / [+ stress] ... ——

which should imply that only the stress of the first element would be retained, we would get an incorrect result in one of the two cases, even if the order between the deaccentuation rule and the grave accent rule be changed.

The expansion of case (ii) j ä r n d ö r r - l å s can be handled without a cyclical rule application, but the correct tonal accent will result also with it on the assumptions given:

$[_N[_N[_N$'j ä r n$_N]$ $[_N$'d ö r r$_N]_N]$ $[_N$'l å s$_N]_N]$

$[_N[_N$'j ä r n 'd ö r r$_N]$ $[_N$'l å s$_N]_N]$

1st cycle
deaccentuation not applicable
grave accent applicable

$[_N$'j ä r n ˌd ö r r 'l å s$_N]$

2nd cycle
deaccentuation applicable
grave accent not applicable

= 'j å r n ˌd ö r r 'l å s

The element j ä r n d ö r r will receive grave accent with the cyclical rule application before the stress reduction of d ö r r has taken place.

It remains to account for case (iv) r u m s r e n. Also with a cyclical rule application the accent will be shifted, which is an incorrect result. Obviously we must modify the grave accent rule so that a monosyllabic first element with a joining-s will not be subject to the rule. One possibility is simply to put a condition on the rule: Y = joining-s cannot occur between the first and second element for accent shift to take place:

Rule IV: [- tonal] ⟶ [+ tonal] / $[_L$ ## [+ $\overline{\text{stress}}$] Y ## [+ stress]

Another possibility presents itself. If we assume that the constituent structure of r u m s r e n is the following: $[_A[_N[_N rum_N]s_N]\ [_A ren_A]_A]$, we may use this information to block accent shift. The constituent structure will determine the positioning of the word boundary symbols in a construction. According to the convention given by Chomsky-Halle (1968:366) word boundaries will be placed as follows: "The boundary ## is automatically inserted at the beginning and end of every string dominated by a major category, i.e. by one of the lexical categories "noun", "verb", "adjective", or by a category such as "sentence", "noun phrase", "verb phrase", which dominates a lexical category." This would imply that r u m s r e n appears as follows, when word boundaries have been inserted (but with parentheses and labels suppressed): ## ## ## 'r u m ## s ## ## 'r e n ## ##. Between the first and the second stressed syllable there are three word boundary symbols, i.e. one more than in case (ii) m a t s a l, which has the following appearance:

$[_N[_N m\ a\ t_N]\ [_N s\ a\ l_N]_N]$ or ## ## 'm a t ## ## 's a l ## ##

This difference may be used in the rule to prevent case (iv) r u m s r e n from getting grave accent. But now it appears that case (v) after an analysis into word boundaries will also get three word boundary symbols between the first and the second stress:

$[_N[_N$b a r n$_N]$ $[_N[_N$d a g$_N]$ $[_N$h e m$_N]_N]_N]$ or

'b a r n ## ## ## 'd a g ## ## 'h e m ## ##

The number of word boundaries between the elements, being a direct reflex of the constituent structure, may be said to express the degree of separation between them. Both cases (iv) and (v) thus have a higher degree of separation between the first and the second element than case (ii). If we now set a limit - maximally two word boundaries may separate the elements - quite correctly only case (ii) will change accent:

Rule V: [- tonal] $\longrightarrow$ [+ tonal] / $[_L$ ## [+ $\overline{\text{stress}}$] $\#\#^2$ [+ stress]

What we expressed as a direct connection between the first and the second element above, we may now formalize as maximally two word boundaries between the elements. It is not necessary to go via word boundary symbols in order to express the degree of separation between the compound elements. It may equally well be read off directly from the constituent diagrams, e.g. with the aid of the number of parentheses separating the elements, although this may not be an established method in phonology. The important thing is that there is independent grammatical motivation for postulating a difference in constituent structure in the cases discussed. The direct connection, which we found in case (ii) will be signalled by a grave accent (connective function), while in cases (iv) and (v) the absence of grave accent may be regarded as expressing the absence of such a direct connection. But now the necessity of having a cyclical rule application of the tonal accent also in case (v) will disappear, the only case that motivated a cyclical application. It is perfectly possible to let the rule operate directly from left to right. Having the grave accent rule run through every cycle will entail especially for long compounds complicated derivations, as we are first forced to assign tonal accent to every

element meeting the conditions, and later deaccentuate every element except the first one. The cyclical rule application obscures the fact that only properties of the first element and in certain cases of the second element determine the tonal accent of the compounded word, which will be clearly expressed in a non-cyclical application of the grave accent rule.

Somehow we must indicate in the rule that a monosyllabic first element with a joining-s (case (iv)) does not change the accent. Now when we are using for case (iv) the condition "maximally two word boundaries" ($\#\#^2$), this will automatically be applicable to case (v) too. Hereby we will get a simpler description with a non-cyclical than with a cyclical rule application. This may be illustrated by comparing the earlier described cyclical derivation of j ä r n - d ö r r l å s and j ä r n d ö r r - l å s with a non-cyclical one. We assume in a non-cyclical rule application that the grave accent rule precedes the deaccentuation rule. This later rule may be given the form:

Rule VI: [+ stress] → [- stress] / [+ stress] ... ——

This rule deaccentuates all other elements than the first:

I. ## ## 'j ä r n ## ## ## 'd ö r r ## ## 'l å s ## ## ##

grave accent not applicable
deaccentuation applicable

= 'j ä r n ˌd ö r r ˌl å s ('dörrlås av järn')

II. ## ## ## 'j ä r n ## ## 'd ö r r ## ## ## 'l å s ## ##

grave accent applicable
deaccentuation applicable

= 'j à r n ˌd ö r r ˌl å s ('lås för järndörr')

It is hard to see anything speaking in favour of the standpoint that a cyclical rule application is more reasonable than a non-cyclical. We will, however, reach the same result with a cyclical application - if we add a rule deaccentuating the last element too - but the psychological reality

of this procedure may be questioned: Is it conceivable that you have to account for the tonal accent of every element, when only the tonal accent of the first element has any importance to the choice of accent in the compound? A non-cyclical derivation will give this information directly.

Tonal accents in compound stressed words in Standard Swedish

It is a well known fact that in Standard Swedish the majority of the compound stressed words will receive grave accent, which will happen independently of whether the elements building up the compound have acute or grave accent in isolation. Alternatively one might express the above mentioned fact by saying that those initial elements of a compound having grave accent in isolation, will retain this accent in compounds, while acute accent in corresponding cases will be shifted to grave accent (cf. Elert 1971). Thus grave accent will be found in a compound like t à x i-c h a u f f ö r ("taxi-driver"), where the simple words t á x i and c h a u f f ö́ r each has acute accent. It is the stressed syllable of the first compound element that will begin the domain of the grave accent extending to the stressed syllable of the last element. Exceptions to the otherwise highly productive grave accent rule in Standard Swedish are above all lexical phrase stressed compounds and certain lexicalized compounds, i.e. the names of the days of the week, certain place and personal names and yet other words like r í k s d a g ("parliament"), v é r k-s t a d ("workshop"), t r ä́ d g å r d ("garden") etc. Certain lexical phrase stressed compounds may receive grave accent, but the determining factor is not the same in these words as in compound stressed words. The presence of another stressed syllable independently of its position in relation to the first stressed syllable can be regarded as the determining factor for the grave accent in compound stressed words. All of the

seven type cases would in Standard Swedish receive grave accent, while in the Malmö dialect only two cases will have grave accent, as has been pointed out above. Factors other than two stressed syllables are irrelevant to the tonal accent of compound stressed words in Standard Swedish.

Tonal accents in compound stressed words in Norwegian

According to Haugen (1967) the difficulties of formulating absolute rules for the tonal accents in compounds in Norwegian are great. There is considerable vaccillation both regionally, socially and individually. Haugen notes, however, the following tendencies for the distribution of tonal accent in compound stressed words in Norwegian:

1) A compound word with a polysyllabic first element will have the tonal accent of this element. Exceptions to this first rule are disyllabic first elements with a facultative -e- in front of -l, -n, -r and also some first elements consisting of prepositions and adverbs. Thus these exceptional cases have acute accent as independent words, but their accent will be changed, when they occur as the first element of a compound.

2) For compounds with a monosyllabic first element, the first syllable of the second element - i.e. the second syllable of the word - will determine the tonal accent of the whole compound. The second element is normally tone-bearing, i.e. it causes the accent to be changed in the compound, unless a) it has a weaker degree of stress, b) it is a noun or adjective preceded by an inflected noun (in -s) or adjective-adverb (in -t), c) it is a verb preceded by a stressed particle, or d) it is a noun preceded by a verb. The last three subrules have the common feature that the first element is relatively loosely attached to the second element. The lack of grave accent stresses this fact. An example of case 2c) is ú t t a l e ("to pronounce") with the acute accent as against ù t t a l e ("pronun-

ciation"), which is accentuated as a regular compound.

3) Finally a number of compounds of foreign origin or connection are non-tonal, i.e. they have acute accent.

The interesting thing is that the Malmö dialect exhibits a considerably better agreement with Norwegian (East Norwegian) than with Standard Swedish in regard to the distribution of tonal accent in compound stressed words. Five out of the seven type cases have the same tonal accent in Norwegian as in the Malmö dialect. Only case (iii) and (v) will not be found among the regularities described by Haugen. The similarity is not confined to five cases but is also true of certain words belonging to the subcategories of 2) above.

Summary

The distribution of tonal accent in compound stressed words (i.e. compounds and other words having the same stress pattern as compounds) in the Malmö dialect has been investigated. In most cases the tonal accent of the first element of a compound is directly decisive of the tonal accent of the whole compound. Therefore it is important to know the distribution of tonal accent in simple words and in other words that can appear as the first element of a compound in order to determine the tonal accent of the compound. The distribution of tonal accent in simple words in the Malmö dialect is in agreement with that of Standard Swedish, as it is described by Öhman 1966, Teleman 1969 or Elert 1971. The main rule for grave accent in simple words could in one version be formulated: Accent 2 will result, if there is at least one vowel (syllable) following the stressed syllable of the word; in other cases accent 1 will appear. This rule must count a not negligible number of exceptions, but it could be said to be a relatively good approximation.

The distribution of tonal accent in compound stressed words in the Malmö dialect can be described with reference to phonological and morphological factors. The following scheme of seven type cases accounting for the tonal accent in the majority of the compound stressed words and being regarded as productive rules, is based upon information about the tonal accent of the first compound element, the positions of the stressed syllables, presence and position of "joining"-s and the constituent structure:

Case (i): WORDS WITH GRAVE ACCENT IN THE FIRST ELEMENT RETAIN THIS ACCENT.

" (ii): WORDS WITH A MONOSYLLABIC FIRST ELEMENT DIRECTLY FOLLOWED BY A STRESSED SYLLABLE IN THE SECOND ELEMENT HAVE GRAVE ACCENT.

" (iii): WORDS WITH MONOSYLLABIC FIRST ELEMENT DIRECTLY FOLLOWED BY AN UNSTRESSED SYLLABLE IN THE SECOND ELEMENT RECEIVE ACUTE ACCENT.

" (iv): WORDS WITH A MONOSYLLABIC FIRST ELEMENT DIRECTLY FOLLOWED BY THE SO-CALLED "JOINING"-S RECEIVE ACUTE ACCENT.

" (v): WORDS WHERE THE SECOND ELEMENT IS MORE INTIMATELY RELATED TO SUBSEQUENT ELEMENTS THAN TO THE FIRST, AND WHERE THE FIRST ELEMENT IS MONOSYLLABIC, HAVE ACUTE ACCENT.

" (vi): WORDS WITH FINAL STRESSED FIRST ELEMENT RECEIVE ACUTE ACCENT.

" (vii): WORDS WITH POLYSYLLABIC FIRST ELEMENT HAVING PENULTIMATE (OR EARLIER) STRESS AND ACUTE ACCENT RECEIVE ACUTE ACCENT.

The seven type cases are examplified in the following scheme also indicating whether the compound has got the same tonal accent as its first element:

Accent of first element		Accent of compound	Accent shift?
(i)	s ò m m a r ("summer")	s ò m m a r s t u g a ("summer cottage")	no
(ii)	m á t ("food")	m à t s a l ("dining-room")	yes
(iii)	g á s ("gas")	g á s p e d a l ("accelerator pedal")	no
(iv)	r ú m ("room")	r ú m s r e n ("house-trained")	no
(v)	b á r n ("child")	b á r n d a g h e m ("children's day home")	no

Accent of first element		Accent of compound	Accent shift?
(vi)	b a n á n ("banana")	b a n á n s k a l ("banana-skin")	no
(vii)	b á n d y ("hockey")	b á n d y b o l l ("hockey ball")	no

With the sole exception of case (ii) the compound has the same tonal accent as the first element. The factor determining the accent change in case (ii) is the position of the stress in the second element. If the stressed syllables of the second element and the monosyllabic first element are closely connected, i.e. are not separated by an unstressed syllable (case (iii)) or by a morphological factor such as the "joining"-s (case (iv)) or by the closer connection of the second element to the third than to the first element (case (v)), there will be an accent change (cf. the connective function of the grave accent!). If the first element is polysyllabic its tonal accent will be preserved (case (i), (vi) and (vii)). Consequently we need to formulate a special compound rule only for case (ii), i.e. when acute accent is altered to grave. The tonal accent of other compound stressed words is given already by the rules applying to simple words and other words appearing as the first element of a compound. The rule shifting acute to grave accent in compound stressed words may be formulated:

$$[-\ \text{tonal}] \longrightarrow [+\ \text{tonal}] \ /\ [_{\text{L}}\ \#\#\ [+\ \overline{\text{stress}}]\ \#\#^{2}\ [+\ \text{stress}]$$

The constraint 'maximally two word boundaries between the first and the second element' ($\#\#^{2}$) will prevent case (iv) and (v) from accent shift. According to the conventions inserting ## given by Chomsky-Halle (1968) the result for these type cases would be more than 2 ## between the first and the second element:

(iv) ## ## ## 'r u m ## s ## ## 'r e n ## ##

= 3 ##

(v) ## ## 'b a r n ## ## ## 'd a g ## ## 'h e m ## ## ##

= 3 ##

Case (ii) would however meet the condition ($\neq\neq^2$):

(ii) ## ## 'm a t ## ## 's a l ## ##

= 2 ##

For the grave accent rule in compound stressed words a cyclical rule application would have been a less direct way of arriving at the correct result than a non-cyclical application; therefore it could be dispensed with in this connection.

Comparing the compound tonal accent rules for the Malmö dialect with those applying to other Scandinavian dialects we find a considerably better agreement (five out of seven cases) with Norwegian than with Standard Swedish (only two cases), where we find grave accent in almost all compound stressed words.

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