

- (7) a. * [+F₁] years ago; * [+F₁] meetings later;
 * [+F₁] summers ago; * [+F₁] streets ahead
- b. * The patch is [+F₁] meters long; * this box weighs [+F₁] ton
- c. * It took [+F₁] seconds (years, summers, meetings, etc.)
- d. * I have [+F₁] brothers; * He has [+F₁] warts
- e. * a house with [+F₁] windows⁵; * a girl with [+F₁] brothers/warts
- f. * [+F₁] questions came into his mind; * She draws [+F₁] conclusions
- g. * Ik heb er [+F₁] (lit: I have there Det)
- h. * [-F₂] following books are sold out:

Anticipating a general account of the data under discussion, we can draw some conclusions already. Whatever has been called (in)definiteness in connection with the contexts in (1) - (4) is related to a more general phenomenon, viz. the existence of various contexts restrictive to various subclasses of determiners. If one wishes to deal with (in)definiteness as part of this more general phenomenon, it should be reanalyzed as a notion covering more than one opposition. Definiteness should not be regarded as a monolithic concept. It can be decomposed in at least two factors.

Apart from this, the preceding discussion shows that the distribution of most, neither and sommige sheds an interesting light on the nature of the feature system for natural language determiners. So any theory of determiners which ignores these cases must be regarded as biased.

The features [+F₁] and [+F₂] can be given explanatory modeltheoretic definitions. Cf. De Jong & Verkuyl (1984). It seems that some of the distributional restrictions discussed here are due to semantic aspects rather than to aspects of representation. Hence the correspondence of the distributional and modeltheoretic properties strengthen the idea that within a modular approach to grammar, semantics must be taken as one of the components.

Rhythmic Stress Phenomena in English and Dutch

R. Kager / E. Visch

Since Liberman and Prince (1977), rhythmic stress phenomena occupy a special place in non-linear phonological research. LP propose two kinds of formal representation: binary-branching trees as representations of stress, and metrical grids as representations of linguistic rhythm. Over words, trees are built by special rules, while above the word-level syntactic structure is taken as the point of departure. Grids, in their turn, are translations of trees in ways that we will turn to shortly.

One of the most important empirical claims of LP, and in fact one that we consider in detail in our research project "Metrische aspecten van ritmische klemtoonverschijnselen", is that relative prominence is preserved under embedding. Examples of this phenomenon are cases such as dèw-covered lánw,

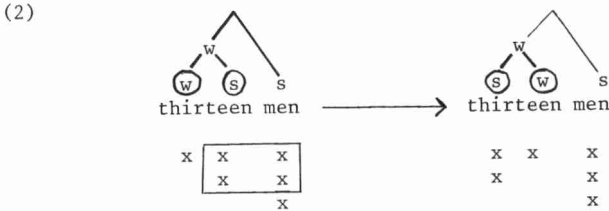
where the relative prominence of the compound déw-covered is preserved in the phrase. There is, however, one significant class of exceptions to this generalization: if in a configuration with embedding two very prominent elements are close, a change in relative prominence follows, as in the examples under (1).

- (1) thirtéén thirtèèn mén → thirteen mén
 Tennessée Tènnessèe áir → Tènnèssèe áir
 achromàtic achromàtic léns → àchromatic léns

LP observe (1977:310):

"Such cases are commonly mentioned in discussions of English stress patterns, often with some reference to the concept of 'rhythm' and the desire to maintain an alternating pattern".

A crucial role in their analysis of these cases is reserved for the notion 'metrical grid', which is considered to be a representation of 'linguistic rhythm'. Grids are translations of metrical trees by a so-called Relative Prominence Projection Rule (RPPR) (see LP (1977):(104), 310) and define a 'stress clash': two adjacent elements on the same level without an intervening element one level down. In (2) we have boxed a case of clash. Clash is considered to be the trigger of stress shift, which itself is accounted for by a rule operating on the relative prominence pattern, reversing the strong-weak relation within one of its constituents (see circled nodes).



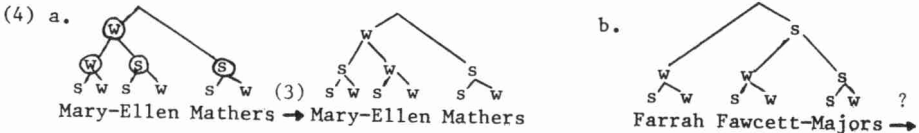
The new tree triggers a new grid, from which the clash has disappeared.

After 1977, discussions both of the empirical and conceptual properties of the LP-model led to various revisions, falling out into three main streams: the tree-only model, the grid-only model, and the tree-cum-grid model. The most important conceptual objection was that the functions and principles of grids as opposed to trees were not independently motivated, making LP's theory vulnerable to criticism on the grounds of redundancy.

Tree-only theory, defended among others by Kiparsky (1979), has to define both stress shift and the immediate cause for stress shift on trees. Kiparsky proposes rule (3), which indeed accounts for cases like (1).



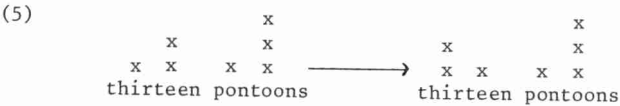
Objections to tree-only theories are both empirical and conceptual. As regards the former, a well-known pair from the literature is (4a,b), which should not be, but nevertheless is treated differently by (3).



As regards to the latter, trees are observed to contain overly rich constituent-information, especially so in those variants (e.g. Selkirk (1980)) that introduce separate constituent-levels, such as Foot, Word, etc. Furthermore, rhythmic principles are hard to define on trees (-only): in grids, binary patterns follow from principles of rhythmic alternation while tree-only theory requires the stipulation that binary feet are unmarked.

Grid-only theory, defended by Prince (1983) and Selkirk (1984), has the opposite task, i.e. to formulate and to constrain the rhythmic rule(s) in such a way that they can operate on grids. And, of course, grid-building rules are required in the absence of grid-triggering trees. In this model, the notion clash is crucial. Grid-building potentially produces rhythmically ill-formed situations, which have to be improved by rhythmic adjustment rules. Prince proposes a general rule of Move x which moves one clashing element in the grid at a time to the first available position. This rule is constrained by several conditions whereby its applications may be blocked.

An important objection against Prince's analysis is that its crucial notion of clash appears to be very ill-defined. Also 'quasi-clashes' as in thirteen pontoons under (5) disappear by Move x, which does not contribute to the reliability of his proposal.



In Selkirk's variant, rhythmic adjustment rules interact with grid-construction, this as opposed to Prince, where adjustment rules apply on a full grid. Selkirk proposes three kind of adjustment rules: rules which move grid-elements, rules which delete them and rules which add them. The application of these rules is stimulated by a principle that expresses an abstract ideal of rhythmic patterns. Selkirk enriches her theory further by also trying to account for pauses and pitch accent, but this desire for completeness raises, in our mind, more questions than it solves. We will abstain from going into these matters here, however.

Finally, tree-cum-grid theory is defended by Hayes (1984). His most important observations on tree-only theories are that they do not fully recognize the notion of linear distance with respect to rhythmic phenomena, and are not capable of expressing the notion of rhythmic wellformedness. Grid-only theories, however, deny the important role of metrical constituency for rhythmically motivated rules. Therefore both theories must be wrong.

We will wind up this note with a number of remarks on Dutch. In Dutch, the phenomenon of stress shift is quite common. Some characteristic examples are in (10).

- (10) a. Lèonie Jánsen sprak met Liselóre
'Leonie Jansen spoke to Liselore'
b. Lìselore Gèrritsen sprak met Leoníe
'Liselore Gerritsen spoke to Leonie'
c. De fònologische áfwijking was speciáal
'The phonological deviance was special'
d. De spèciale áfwijking was fonológisch
'The special deviance was phonological'

Therefore, Dutch qualifies as a potential field of investigation with respect to the above mentioned models. A key observation is the fact that Dutch observes linear distance in stress shift and therefore can not be regarded as strictly 'clash-based'. See (11).

- (11) a. intensief ónderzoek 'intensive research'
b. biologisch ónderzoek 'biological research'
c. ?càrdiologisch ónderzoek 'cardiologic research'
d. ??ànesthesiologisch ónderzoek 'anesthesiologic research'
e. Lèonie Jánsen (name)
f. Lèonie van Bládel (name)
g. Lèonie van der Vliet (name)
h. ??Lèonie van der Genúgten (name)

Dutch thereby provides some evidence for a theory à la Hayes, in which linear distance is a central notion. Furthermore, stress assignment in underived words in both English and Dutch is governed by a principle of binary alternation (feet) in words like (Dutch) èncyclòpedíe, pàrallèllográm, and (English) Apalàchicóla, ònomàtopóeia. English and Dutch also correspond in being sensitive to syllable weight. Word stress in both languages must then be considered thoroughly, as a prerequisite for a theory of stress shift.

However, Dutch is not only of interest by being prosodically comparable to English, but much more so by its deviations. The vocabulary includes a great amount of finally stressed words, many of which are originally non-native adjectives (speciáal, intensief, dominánt). These words contribute considerably to the class of potential stress shift targets.

Furthermore, Dutch has stress-attracting suffixes such as -baar and -ig (ópblaas 'inflate' - opbláasbaar 'inflatable' and vijand 'enemy' - vijándig 'hostile'), whose stress-properties are partly morphologically governed. For this reason, and others, the relation between phonological rules and word-formation, i.e. the structure of the lexicon, will have to be considered. Rightward stress shift of this kind may interact with leftward stress shift (exemplified above). The degree of interaction seems to be limited however (?? òpblaasbaar kússen 'inflatable pillow', ?? vijandig vóorkomen 'hostile looks').

As a further point of difference with English, Dutch has many schwa-ful inflectional suffixes (speciaal - de speciale aanbieding 'the special offer'). The rhythmic relevance of these schwa's as opposed to non-inflectional schwa's is of interest (de cèntrale]_A vráág 'the central question' - *de cèntrale]_N vraágt 'the station asks ...').

A final rhythmic property of Dutch worth mentioning is the occurrence of rightward rhythmic stress shift, as in (12).

- | | | | | | | |
|------|----|---------|-------------|---|-------------|------------------|
| (12) | a. | vóetbal | 'soccer' | - | záalvoetbàl | 'indoor soccer' |
| | b. | árbeid | 'labour' | - | dwángarbèid | 'forced labour' |
| | c. | pásta | 'paste' | - | táandpastà | 'tooth paste' |
| | d. | ópname | 'recording' | - | bándopnàme | 'tape recording' |

In parallel cases, English may only have equal prominences on the righthand constituent, but never shift of prominence (*spórts contèst, *láv libràry). By allowing for both left- and rightward rhythmic shift, Dutch opens the possibility for these phenomena to interact. The question arises as to the extent of this interaction and its constraints, against the background of the above models. For this reason, Dutch bears considerably on the issue of evaluating grid-only, tree-only, and tree-cum-grid theories.

Views of the Bloomfieldians: Sources and Differences

J. Kaldewaij

Z.W.O-researchproject 'Structuralism and transformational-generative grammar' (17-22-04) has as its goal a description of the several types of relations between several variants of structuralist theories of language, and the TG-model. Against this background, this year's stage of the project dealt with some of the core notions of structuralist theories, and the way these notions have been commented upon in more recent work. Strikingly, these comments are far from uniform, but contain a number of sharp contrasts. This is especially so for those American structuralists usually called the 'Bloomfieldians', for whom one even finds completely conflicting opinions. After Chomsky (1964) and Lyons (1973:6,7), one would have to characterize the Bloomfieldians as follows:

1. Bloomfieldians are concerned with a corpus of utterances not with a linguistic system behind these utterances (in Saussurean terms: not with 'langue').
2. Bloomfieldians only provide descriptions, without theoretical pretence.
3. Bloomfieldians proceed from an 'inductive' model of language description: taking utterances as strings of sounds, they try to arrive at an analysis of the sentence into phonemes, morphemes, and morpheme-groups.

Almost the converse of this characterization can be found in Hymes and Fought (1981:116ff.) and Conrad (1977), who highlight the following properties:

1. Bloomfieldians proceed from a variant of 'language': a system separate from language use.
2. The Bloomfieldians base their descriptions on a large number of theoretical considerations.
3. Next to an 'inductive' model the Neo Bloomfieldians also advocate a 'deductive' model, which would not also allow the description of a corpus, but also that of novel sentences.

An explanation of these differences may at first sight be sought in different attitudes towards the Bloomfieldians: Chomsky (as a linguist) opposes his own theory of language against that of the Bloomfieldians, and thus tends to caricaturize the latter; Hymes/Fought and Conrad, on the other hand, are primarily linguistic