SOME SUPRASEGMENTAL CRITERIA FOR CONTEXTUAL RELATIONS BETWEEN SENTENCES IN ENGLISH

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In the present state of sentence analysis it would seem a promising venture to reconsider some of the theses of the Prague School. Vilém Mathesius's dichotomy of "formal" and "functional sentence analysis"[1], for instance, takes on a new significance in the light of N. Chomsky's controversial notion of "underlying and surface structure".

Mathesius holds that to describe a sentence one must rigidly discriminate an underlying constituent structure, through which all relevant syntactic relations between the parts of the sentence are specified, and a kind of surface structure (*"Mitteilungsstruktur"*), through which certain aspects of the surface structure are determined. The latter is influenced both by the intention of the speaker and by the context. This notion seems to shed some light on the problem of word order, which has not been solved yet by the generativists.

In an interesting article K. E. Heidolph has shown that the arrangement of constituents in a German sentence can be largely derived from anaphoric relations with contextually adjoining sentences.[2] Other phenomena like selection of article, pronominalization, accentuation as well as certain aspects of 'complex sentence formation' can be explained in the same way.[3] In this paper I shall attempt to describe some contextual conditions which must be regarded as relevant for an analysis of suprasegmental features. A formulation of exact rules cannot be attempted here owing to the absence of a complete grammar taking into account contextual regularities. Moreover, these rules would have to refer to the underlying structure of English sentences, a matter still much in dispute.[4]

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[1] This terminology has been used by J. Firbas. Cf. the bibliography in J. Firbas's paper, 'Some Thoughts on the Function of Word Order in Old English and Modern English', *Sborník prací Filologické Fakulty Brněnské University* 6 (A5), 1957, pp. 72—100.

[2] K. E. Heidolph, 'Kontextbeziehungen zwischen Sätzen in einer generativen Grammatik', *Kybernetika*, 3 (1966), pp. 97—109.

[3] Cf. G. Nickel, 'Some Contextual Relations between Sentences in English', to appear in: *Actes du Xème Congrès International des Linguistes*, Bucharest, 1968.

[4] The following studies, while remaining within the framework of generative grammar, contain proposals deviating more or less radically from Chomsky's own version of the theory: B. C. Hall, *Subject and Object in Modern English*, M. I. T. Doct. Diss., Cambridge, Mass 1965; Ch. J. Fillmore,

It can be shown that an NP in a given sentence always carries the primary accent when introduced for the first time. If mentioned for the second time it can only carry a secondary accent. Thus if a sentence S_i contains an NP and is followed by S_j, which has NP$^|$ anaphorically related to NP, NP in S_i receives the primary accent ($/'/$), while NP$^|$ in S_j is given the secondary accent ($/'/$). Furthermore, an NP mentioned for the first time, is normally preceded by the indefinite article and often appears in final position, while NP$^|$ is preceded by the definite article (often realized as *this*) and usually has initial position. Using Vilém Mathesius's terminology, we shall call the former *rheme* and the latter *theme*. Hence we will be able to distinguish between a rhematic and a thematic accent:

(1) Bill had an ápple. (2) This àpple had red chéeks.

If there is no such NP in the antecedent sentence the rhematic accent is automatically given to the verb. (If the verb is accompanied by particles or certain modifications then these parts carry the accent.):

(3) Bill áte the apple.

The proper name in (3) is equivalent to an NP with the definite article additionally marked with the distinctive feature [+ unique]. We may assume that every definite anaphoric NP, even if marked [+ unique], permits the contextual elimination of the head NP. In this case an anaphoric pronoun appears, which can be considered as the form of the definite anaphoric article in isolation. Cf.: (4) *He áte the apple.* (4) has only one accent, viz. the rhematic one. Thus one may assume that the thematic accent as a suprasegmental feature can be eliminated together with the head NP. On the other hand the rheme does not allow pronominalization. Neither (5) nor (6) are equivalent to (1): (5) *John had sómething.* (6) *Bìll had ít.* (6) appears acceptable only if e.g. the neutral gender is contrasted with another gender.

Sentences like (7) *Bìll ate the apple*, and (8) *Bill ate the ápple* can appear in the same context as (3). They do, however, imply additional contextual conditions. Cf.: (9) *Bìll (not Jìm) ate the apple.* (10) *Bill ate the ápple (not the pêar).* It has been pointed out before that sentences like (7) and (8) presuppose others which are often identical except for the constituent carrying the *contrastive accent*.[5] These sentences, as it were, correct antecedent sentences paradigmatically.[6] They are particularly often used in

dialogue.[7] We may assume that the *wh*-question demands equivalent contextual conditions. It differs from the answer given to it only in the NP to which the *wh*-marker refers. This assumption would correspond to the fact that any lexical constituent which can be made the object of a question can have the contrastive accent:

(11) Who polished his shoes? — Jôhn polished his shoes.
(12) What did John polish? — John polished his shôes.
(13) What did John do with his shoes? — John pôlished his shoes.

The assumption that only lexical items can carry the contrastive accent seems to be invalidated by the following sentence: (14) *John dîd see the girl.* However, the sentence makes sense only if complemented, e.g. in the following way: (15) a) *John did not see the girl.* b) *John dîd see the girl.* A change of speaker is also involved. Therefore this type is very common in dialogue. The contrasting of a) with b) can be interpreted as a contextual explication of emphasis, which can refer to the assertive morpheme of the verb.

Either kind of special accentuation, contrastive as well as emphatic, often superimposes the contextually conditioned regularities of thematization and rhematization. Consequently, Heidolph in his article has explained contrastive and emphatic statements as synonymous repetitions of antecedent sentences. Every primary accent on a second-mention NP seems indeed to be interpreted as a contrast.

As to intonation, the accents, whose position are contextually determined, mark the points where changes in pitch relevant to the interpretation take place. If it is true that there are only two relevant 'Tonhöhenlagen'[8] then they are likely to be determined by the two prominent points within a sentence, viz. rheme and theme. The thematic accent corresponds to a pre-ictic rising 'Tonbruch': $\overline{/x}$, which according to Isačenko and Schädlich announces a falling intonation at the end of the sentence. Without this falling intonation a sentence remains a fragment. This observation is supported by the fact that an NP with thematization never appears in isolation. This kind of fragmentary sentence differs clearly from the acceptable type of grammatical ellipsis.[9] If sentences with only one relevant 'Tonbruch' are possible,[10] then they must have the post-ictic falling one: $\underline{x}|^-$, which often appears at the end of a sentence, but in any case constitutes the final cadence of a question. This falling intonation may well be regarded as a very important, criterion of the rheme. A falling 'Tonbruch' can be easily isolated in the case of an ellipsis. In an answer to a *wh*-ques-

'A Proposal Concerning English Prepositions', *MSLL*, 19, Washington, D. C. 1966, pp. 19—33; G. Lakoff, *On the Nature of Syntactic Irregularity*, Report No. NSF-16, Harvard University, Cambridge, Mass., 1966; J. Lyons, 'Towards a "Notional" Theory of the Parts of Speech', *JL*, 2 (1966), pp. 209—236; P. M. Postal, 'On So-called Pronouns in English', *MSLL*, 19, Washington, D. C. 1966.

[5] M. Bierwisch, 'Regeln für die Intonation deutscher Sätze', *Studia Grammatica*, 7 (1966), pp. 151f.

[6] Cf. K. E. Heidolph, *op. cit.*

[7] R. Gunter, 'On the Placement of Accent in Dialogue', *JL*, 2 (1966), pp. 159—179.

[8] A. V. Isačenko and H.—J. Schädlich, 'Untersuchungen über die deutsche Satzintonation', *Studia Grammatica*, 7 (1966), p. 58. (Though the authors have only investigated German this seems to apply to English too.)

[9] R. Gunter, 'Elliptical Sentences in American English', *Lingua*, 12 (1963), pp. 137—150.

[10] A. V. Isačenko and H.—J. Schädlich, *op. cit.*, pp. 60f.

tion the NP to which the *wh*-marker refers appears in isolation with the falling '*Tonbruch*': (15)   *Who ate an apple?*

The bóy (ate an apple).

Finally a short remark on selective (= restrictive) and descriptive (=modifying) clauses. In a descriptive relative clause there are usually two rhemes, one of which is the head constituent while the other lies within the descriptive modifying clause. If the modifying clause is not reduced it is preceded by an optional pause:

(16) I'll take the first tráin (//) which stops at the máin station.

This observation might lead us to the assumption that every sentence can have only one rhematized constituent unless there is a sentence pause between the two clauses in question. Here we might have an additional criterion for defining more clearly the descriptive relative clause whose embedding is less complete than that of the restrictive clause. Very often a change in strategy is noticeable in spoken texts.[11] The integration of the following clause is carried through only half way: (17) *I'll take the first tráin. Which stops at the main station.* This is hardly possible with the selective type, which is closely integrated. Here the matrix NP does not carry a rhematic accent: it is closely connected with the selective clause, which carries the rhematic accent. Pauses in this case have to be interpreted in all likelihood as hesitation phenomena.

DISCUSSION

Wode:

Vielleicht könnte man den Begriff der Wiederholung in einigen Fällen durch die zusätzliche Unterscheidung von semantischen Unter- und Oberklassen etwas schärfer fassen. Z. B.
you'll find all sorts of cars: bíg vehicles, smáll vehicles, an óld Fórd, a néw Chrýsler, anything you like.
Die Oberklasse (*vehicle*) bleibt unbetont, die Unterklasse (*Ford* bzw. *Chrysler*) wird betont.

Firbas:

With regard to the problem of the relation between repetition and thematization raised by Dr. Wode in the discussion, I should like to emphasize the necessity of elaborating the criterion of what may be termed the *narrow scene,* i.e. in fact that of the very purpose of the communication. (I have touched upon this problem in Non-Thematic Subjects in Contemporary English, Travaux Linguistiques de Prague 2, Prague 1966, p. 246).

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[11] B. Drubig, *Kontextuelle Beziehungen zwischen Sätzen im Englischen* (Kiel, 1967), M. A. Thesis (mimeographed). I feel deeply obliged to the author for many valuable ideas offered in his thesis and in long discussions. Helpful suggestions were also given to me by my Lektor and informant Roger L. Snook, M. A.