

THE INTONATION OF REPLIES TO WH-QUESTIONS IN ENGLISH

HENNING WODE

My paper constitutes an interim report on work in progress dealing with certain aspects of the relationship between intonation and higher-level linguistic units. The unit to be treated here is composed of a specific type of question and a specific type of answer that complements it.

I shall use the term *INTONATION* as a cover term to include various parameters such as pitch, stress, pause, etc. (Wode 1966). My particular interest here is the intonation of the respective replies. Their intonations will be treated as constructions containing constituents. Three major types of intonational constituents will be discussed: the *CENTER*, the *PENDANT*, and the *POST-CONTOUR*. Cf. (1).

(1)	pendant	center	post-contour
(1a)	you	SEE	John
(1b)	you see	JOHN	

Fig. 1 Schematic display of intonational constituents pendant, center, and post-contour.

In (1a) the center is on *SEE*, in (1b) it is on *JOHN*. The term corresponds roughly to what Hockett (1958) calls the center, or what British writers label nucleus, nuclear glide, or the like (Crystal 1969, and others). In (1a) the pendant is constituted by *you*, in (1b) by *you see*. Thus, the term pendant, as taken from Hockett (1958), refers to the segment preceding the center. Post-contours are segments like *John* in (1a). The term is taken from Pike 1945.¹

The stressed syllable of the center will be marked by capital letters.² No other intonational features will be indicated.

¹ For a more detailed discussion of these intonational constituents cf. Wode 1970.

² It is immaterial to the topic of this paper whether the intonation center is constituted by one stressed syllable, or whether it may include certain subsequent unstressed syllables. Cf. Wode 1970 for some discussion.

As an illustration of my topic, consider (2a-c). Spoken in isolation (2a) may have the intonation center on *pilgrims*.

(2a) His ancestors settled in Princeton soon after the landing of the PILgrims.

The same sequence of morphemes, however, requires a different intonation when uttered as an answer to a question such as (2b).

(2b) Who settled in Princeton soon after the landing of the PILgrims?

(2c) His ANcestors settled in Princeton soon after the landing of the pilgrims.

(2a) as a reply to (2b) would clearly be ungrammatical.

In this paper I shall attempt to outline a few basic intonational rules for a certain type of answer to the so-called information questions, i.e., wh-questions. Though there are grammatical restrictions on the range of possible answers to a given question, it is extremely difficult to determine the underlying rules if the whole set of grammatical answers has to be investigated all at once. Therefore, I have restricted myself to cases where the wh-questions could be described as the interrogative transform of the answer. That is, I have collected non-interrogative sentences, and then turned them into wh-questions. For instance, (2a) is the source for (2b).

These transform questions were typed out on slips of paper the size of a post-card with the original non-interrogative source from which the transform was derived added as the answer. Informants³ were asked to read both question and answer in such a way that the reply answered the question as in ordinary discourse. In addition, we have gone through various other exercises current in linguistic field work.

In short, the present state of affairs can be summarized in terms of three major rules:

(R1) (center placement rule): the intonation center of the reply is on the interrogated constituent.

For instance, on the subject in (2c), if the center is shifted to a different constituent, as in (2a), the resulting utterance becomes ungrammatical as an answer to (2b).

(Ra) (post-contour rule): sequences mentioned in the question and repeated in the reply form a post-contour, if they follow the intonation center of the reply.

As an illustration consider (3a-c):

(3a) Where did his ancestors settle soon after the landing of the PILgrims?

(3b) His ancestors settled in PRINceton soon after the landing of the pilgrims.

(3c) Soon after the landing of the pilgrims his ancestors settled in PRINceton.

In (3b) the sequence *soon after the landing of the pilgrims* forms a post-contour in accordance with the post-contour rule just given. In (3c), however, the same sequence

³ Chiefly speakers of various regional varieties of English in the United States.

precedes the center *Princeton* and does not form a post-contour. Thus (R2) should be amended by adding:

(R2b) morphemic sequences given in the question and re-uttered in the reply form part of the pendant if they precede the intonation center of the reply.

The third rule deals with morphemic sequences which are not given in the question, which are not interrogated and which are added to the reply in post-center position. Consider (4a-b):

(4a) Who settled in PRINceton?

(4b) His ANcestors settled in Princeton soon after the landing of the PILgrims.

Notice that (4a) equals (2b) except that in (4a) the sequence *soon after the landing of the pilgrims* is missing. (4b), moreover, matches (2c) except for the intonation. In (2c) the sequence *soon after the landing of the pilgrims* was part of the post-contour. In 4b it is not. It has its own intonation center on *pilgrims*. Thus we have:

(R3) non-interrogated morphemic sequences not given in the question and added to the reply in post-center position do not form post-contours, but rather have their own intonation center(s).⁴

There are many points which require further discussion. Let me briefly draw your attention to one such problem illustrated in (5). Here the interrogated constituent is manifested by a construction which itself contains two or more constituents. Cf. (5a-d):

(5a) Who settled in PRINceton?

(5b) JOHN settled in Princeton.

(5c) His ANcestors settled in Princeton.

(5d?) HIS ancestors settled in Princeton.

(5a-d) have subject interrogation throughout. In (5b) the subject is manifested by a one-word constituent, in (5c-d) by a construction possessive determiner plus noun. (5c) has the center on the noun, (5d) on the determiner.

My informants have accepted (5d) as a grammatically correct reply to (5a) only when an additional contrast between, say, *his and not her ancestors* was suggested. It is obvious, then, that there are further layers of contextual structure to be recognized (Bierwisch 1968, Wode 1966).

Furthermore, (5c) calls for the following refinement of the center placement rule. The center is on the final stressed syllable or stress group of the interrogated constituent.⁵

For the sake of demonstration I have concentrated here on problems of noun

⁴ Except for sequences which form postcontours on other grounds, for instance, non-initial direct addresses, certain types of non-initial sentence modifiers, etc. (cf. Wode 1970).

⁵ Cf. footnote 4 of this article.

phrase interrogation as posed by (some) endocentric and exocentric constructions. As far as I can see at present, the rules seem to cover most of the ground for other interrogable constituents as well. Minor amendments are required, for instance for noun-phrase modifier interrogation in cases where in the reply, the head already given in the question is flanked on either side by a modifier, or for certain types of interrogation involving *very*, etc. Moreover, I have checked the results of these somewhat artificial experiments against several hours of tape-recorded spontaneous speech. In addition, I have during the past few days in English-speaking territory deliberately asked people the type of question under discussion here. I have noted no exceptions to the rules, if the answers were of the syntactic type investigated above.⁶

Englisches Seminar
Universität Kiel

REFERENCES

- Bierwisch, M.
1968 "Two Critical Problems in Accent Rules", *Journal of Linguistics* 4:173-178.
- Crystal, D.
1969 *Prosodic Systems and Intonation in English* (Cambridge).
- Daneš, F.
1960 "Sentence Intonation from a Functional Point of View", *Word* 16:34-54.
- Firbas, J.
in press "A Note on the Intonation of Questions from the Point of View of the Theory of Functional Sentence Perspective", *Proceedings of the International Symposium on Intonology* (Prague, 1970).
- Gunther, R.
1966 "On the Placement of Accent in Dialogue: A Feature of Context Grammar", *Journal of Linguistics* 2:159-179.
- Hockett, C.F.
1958 *A Course in Modern Linguistics* (New York).
- Pike, K.L.
1945 *The Intonation of American English* (Ann Arbor).
- Wode, H.
1966 "Englische Satzintonation", *Phonetica* 15:129-218.
in press "Zur Erzeugung der Tonhöhe englischer Syntagmata", *Proceedings of the International Symposium on Intonology*, (Prague, 1970).

DISCUSSION

NASH (Puerto Rico)

Why can't you simplify your set of rules by stating that the new information gets the stress?

⁶ Daneš 1960 and Firbas 1970 have studied questions and answers from the point of view of functional sentence perspective. It seems to me, however, that their point of view presupposes some kind of analysis along the lines as I have attempted here. For some general problems of intonation in connected English discourse, see Gunther 1966.

WODE

I take it that your term 'stress' refers to my term 'intonation center', because repeated items may well be stressed under certain conditions, such as, for example, specified by (R2b).

Moreover, I would like to warn against the more general notion, one which seems to be quite popular, namely that in general new items are stressed (or 'accented' depending on the choice of terminology). This holds true for restricted cases only, for instance not for (a-b):

(a) It *góes* *góes* *góes* and it is *góne* for a *hóme rún* (frequent in baseball broadcasts)

(b) I dislike these sorts of excuses, *excúses* which not even a schoolboy would venture to offer.

(a) sounds ungrammatical if the second and third *goes* are destressed.

On the other hand, cf. (c-e).

(c) We saw lots of cars, *bláck* cars, *réd* cars, *blúe* cars and *mány* óthers.

(d) We saw lots of cars, *bláck* Cádillacs, *réd* Búicks, *blúe* Fórds, and *mány* óthers.

(e) We saw lots of cars, *bláck* vehicles, *réd* vehicles, *blúe* vehicles, and *mány* óthers.

In (c) the same item *car* is repeated. In (d) the original *car* is substituted by nouns that, semantically, refer to a subset of the noun *car*. In (e) *car* is substituted by *vehicle* which semantically contains the set of cars as a subset.

Apparently it is not simply a matter of repetition or of new vs. old. Rather, in cases like (c-e), the element referring to a subset of the originally given element is stressed; whereas an element referring to the same set (repetition, for instance) or to the set which includes the one originally given as a subset is unstressed (Wode 1966).

VANDERSLICE (New York)

There are many formulae in which the repeated word is not de-accented, such as *búsiness is búsiness*. Also, although in alternative questions one usually gets — e.g., *Is Raquéel séxy or isn't Raquēl sēxy?* — but in special cases where both parts are exactly the same (no negation), one gets *Is Chómsky ríght or is Chómsky ríght?*

WODE

I fully agree. It is furthermore obvious that your examples involve quite specific morpho-syntactic types. They are different from the instances I cited in answer to Dr. Nash; but they are quite in line with the general approach I have tried to suggest.

JÜRGENSEN (Copenhagen)

I would like to know whether the lecturer was surprised that his main rule probably does not apply to answers to yes/no questions.

WODE

I am not at all surprised that (R1) (center placement rule) does not apply to answers to *yes/no* questions. This is a different type of structure with its own intonational

peculiarities. I see no reason why one should expect in advance that all types of questions and answers should conform to a single rule.

JAMES (Toronto)

I am a native speaker of English, but from Great Britain, and when I first came to Canada, I noticed, from listening to North American speakers in real-life situations or on radio or television that there was a tendency to give a more complete answer where I would have given a shorter one. For example, in the case of (2c), where I would have said simply "*his ancestors*", I seemed to notice a tendency to give a more complete answer. Perhaps this is a regional question which I cannot answer, not having sufficient experience with American (U.S.A.) speech patterns.

WODE

I think that this issue will become less crucial when the syntactic properties of such higher level linguistic units as question-answer are investigated more closely. As far as I can see, at least certain types of answers will contain an obligatory element (roughly the interrogated constituents in my examples) plus optional, i.e., deletable elements (among others the post-contour segments of (R2a)).