REASSOCIATION OF SENTENCE MELODIES*

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The only models that so far have dealt explicitly with reassociation of tones to lexical material can be found in Africanist literature on floating tones and similar phenomena, cf. e.g. Angenot (1985), Ahoua (1986)) and in Autosegmental Phonology (cf. e.g. Halle and Vergnaud 1982). The domains within which such associations were accounted for were the syllable, the foot, the word, the phrase, or the sentence.

Here we want to propose that the domain of reassociations should be extended to discourse (cf. Gibbon and Richter 1984), i.e. to utterances, normally consisting of two or more sentences.

Let us start with an example reported by Mansfield (1985:67), an answer given to a telephone call by the business *Harp Heating*, and describe (in a simplified manner) the intonation contour with 4 tones: L (low), M (mid), MH (mid high), H (high).:

(1) Harp Heating. Can I help you?
MH MH M MH M MH H

And let us assume that MH and M have already been assigned to stressed and unstressed syllables respectively, with exception of the clause/sentence/intonation unit final syllable which is reserved for boundary tones (B) (This is a simplification in comparison to Liberman (1978:120ff)). At this inter-

* We are indebted to Grzegorz Dogil for enlightening discussions.

mediary point of derivation we have the associations as in (2):

(2) Harp Heating. Can I help you

MH MH B_1 MH M MH B_2

Now boundary tones are assigned to the final syllable of each sentence or clause (a gross descriptive simplification for our purpose): a) In a discourse final declarative sentence L is assigned; b) in a non-final declarative sentence M is assigned; c) in questions H is assigned. Here b) and c) apply:

(3) ... Heating ... you → ... Heating ... you

MH B_1 B_2 → MH M H

However such routine answers to a client's telephone call can be shortened by deleting the redundant question "Can I help you?", if a trace of the question remains, e.g. the boundary tone of the question. The stability of the question boundary tone can be handled by reassociation:

(4) Harp Heating

MH MN M MH M MH H

But the observed answers are of the type (5a) and not (5b):

(5a) Harp Heating (5b) *Harp Heating

MH MH H MH MH M H

Therefore either the right boundary tone (H) is allowed to oust ("delink" the left boundary tone (M), or reassociation precedes boundary tone assignment

(6) Harp Heating

MH MH B_1 MH M MH B_2

According to the principle of precedential association of the rightmost tone (Halle and Vergnaud (1982:67); Kiparsky (1985:126); Ahoua (1986)) B_2 rather than B_1 is associated to the syllable *-ting*, and then H is correctly assigned to it.

Sim iarly we get either (7a) or (7b):

(7a) Yes: Can I help you? (7b) Yes?

MH M MH M MH H MH H

i.e. we get in (7b) a /MH—H Yes/ distinct from equally isolated /H Yes/, the "telephone" *yes* meaning "please continue!". These tone assignments

(incl. tone reassociation) presuppose that final stressed syllables are stipulated to be able to be associated to two tones.

Similarly we get in Italian (8a) vs. (8b) (′ symbolizes stress):

(8a) Prónto. Desidera? (8b) Prónto?

MH M M MH H M H

'Speaking. (You) want?' 'Speaking?'

In *Desídera*? the second-last unstressed syllable receives an allophonic intermediate tone between MH and H. Similarly in two prestress syllables we get intermediate allophonic tones in (9a) and (9b):

(9a) Alitália. Desídera? (9b) Alitália?

MMHM MMN H MMHH

Of course also in these tone (re)associations on the discourse level association lines may not cross. It seems that a formal system accounting for tone assignments can be profitably extended to the discourse level.

Before continuing in this direction we must discuss the alternative hypothesis that only one single sentence is involved in (6) *Harp Heating*?, (7b) *Yes*?, (8b) *Pronto*?, (9b) *Alitalia*?. These utterances would still be elliptic, but their intonation would be derived from a single sentence contour. However, what should be the monosentential non-elliptic counterparts to (6, 7b, 8b, 9b)? According to native speakers of both languages it would be something like

(6') Is this Harp Heating?
(9b') Parlo con Alitalia? 'Am I speaking with Alitalia?',

i.e. it would be questions asked by a client, not by the respective employee, and their meanings would be quite different from (1, 7, 8, 9).

However, if we stick to our interpretation of a bisentential source then we can recur to the well-known device of elliptic deletion of whole sentences in discourse. Only normally the intonation contour of the sentence preceding the deleted sentence remains intact. In our case the preserved sentence would take over the final contour of the deleted sentence following it.

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