

Jardar Eggesbø Abrahamsen: Remarks on the occytonic accentual pattern in a West Norwegian dialect.

Artikkel side 25–33 i:

Werner, Stefan (red.) 1998. *Nordic Prosody. Proceedings of the VIIth Conference, Joensuu 1996*. Frankfurt am Main, Berlin, Bern, New York, Paris, Wien: Peter Lang Europäischer Verlag der Wissenschaften.

ISBN 3 631 32713 7 (USA: 0 8204 3549 X)

Dette er manuskriptet. Det er identisk med den prenta artikkelen, bortsett frå at redaktøren slo saman fig. 1 og 2 og retta fotnoten om Randi Solheim i feil retning...

Remarks on the oxytonic accentual pattern in a West Norwegian dialect

Jardar Eggesbø Abrahamsen

In this paper I shall argue that the tonal pattern displayed by «toneme 2 compounds» in the Sunnmøre dialect is phonologically not toneme 2, but an instance of toneme 1 and accentual relocation. I shall not analyse the phonological processes involved in this accentual shift.

1 Model and preliminaries

In the phonological structuring of Norwegian intonational patterns, it has proved useful to apply the Prosodic Hierarchy model, especially in its purely tonal version presented by Nilsen (1992) on the basis of Pierrehumbert and Beckman's (1988) analysis of Japanese tone structure.

In my analysis I shall use the following hierarchical levels: At the top is the Intonational Utterance (IU). This is the domain of the utterance final boundary tone, to which I shall pay no attention. Under every IU there can be a maximum of two Intonational Phrases (IP). This stipulated upper limit is motivated by pragmatic considerations rather than by arguments internal to phonology. The IP (which is called *intermediate phrase* by Pierrehumbert and Beckman 1988:16ff) is the domain for focal accentuation and for declination, i.e. a gradual lowering of the frequency levels of both H and L tones. In the Sunnmøre dialect, this gradual fall in the tone baseline is required in the second IP of an IU, and it often, but not always, occurs in the first IP as well. I have not been able to identify the conditions for declination in the first IP.

An IP may consist of several Accentual Phrases (AP).¹ The AP is the domain of the morpho-lexical word-accent (toneme 1 and toneme 2) and the phrasal accent (which will be defined below). Although the choice of toneme is dependent on the morphological and lexical properties of the first word in the AP, the realisation is linked to the length of the AP (counted in syllables), at least in the dialect here described, the dialect of Sunnmøre.

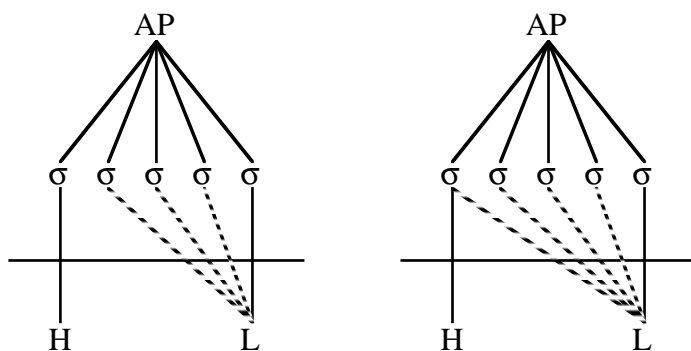
An AP consists of one or more syllables, the syllable being the tone bearing unit in the Sunnmøre dialect. A toneme is realised at the left edge of the AP, H for toneme 1 and LH for toneme 2. The phrasal accent L is realised in the AP-final syllable, and it spreads to all the intervening syllables in the AP. Thus a toneme 1 AP has the tonal pattern HL and a toneme 2 AP LHL.

The term *accent* will be used as a tonal term in this paper, a distinction being made between accent (tonal unit) and stress (metrical property). The word-accent is the tonal unit that displays the two tonemes (H and LH).

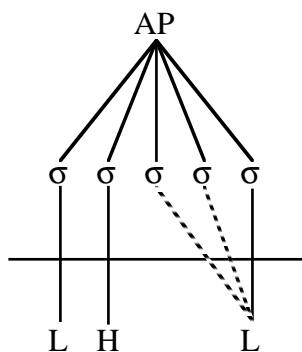
(1) shows the association of tones to syllables in a Sunnmøre toneme 1 AP. (2) shows the same for a toneme 2 AP. I have not been able to identify any phonological conditions for the choice between the two patterns of (1), and the variation between them seems to be free: The phrasal tone L may associate to the first syllable in a toneme 1 AP, but it doesn't have to. In a toneme 2 AP the phrasal L will not associate to the same syllable as the H of the word-accent. This would be possible only in certain instances of *bisyllabic* toneme 2 APs, but in this paper we will not encounter any of those.

¹Nilsen (1992) uses the term Tonal Foot, or just Foot (F), in accordance with the Trondheim approach to intonology. I see no strong reason not to use the less confusing term of Pierrehumbert and Beckman (1988), which is the Accentual Phrase.

(1) Toneme 1 in the Sunnmøre dialect.



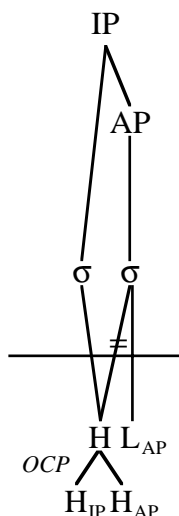
(2) Toneme 2 in the Sunnmøre dialect.



In the figures (1) and (2) I have drawn a solid line from the phrasal accent L to the last syllable in the AP and dotted lines to the other L syllables after the word-accent. This represents the presupposition that the phrasal L is not a part of the word-accent but is a separate tonal unit with a primary link to the last syllable and a subsequent spread to the left. For the purpose of this paper I could just as well have drawn solid lines only.

There is however a motivation for this presupposition: Most syllables are AP-dominated, but sometimes a syllable is dominated directly by the IP node, as demonstrated by Fretheim's (1990) analysis of East Norwegian intonation. In the West Norwegian dialect of Sunnmøre the IP node will licence a High tone to the IP-dominated syllable (Abrahamsen 1996). When an IP-dominated syllable is followed by a *monosyllabic* toneme 1 AP (which will licence the tones HL) the OCP-merged H (from the two High tones in H HL) will not associate to the AP-internal syllable, and thus it leaves us with an AP without realised word-accent. The only tone realised on the AP syllable will be the phrasal L. This does not happen in toneme 1 APs with more than one syllable, where an H will always be realised on the first one. In the monosyllabic instances of AP-internal H loss we are presumably witnessing an H tone that does not associate to a syllable already occupied by the phrasal L unless the H otherwise would remain floating (which it will not as long as it associates to the IP-dominated syllable anyway). This is illustrated in (3); the H tones before the application of OCP (along with the L tone) have been indexed to show which node in the Prosodic Hierarchy they have been licenced by.

(3) Loss of AP internal H.



This is the motivation for assuming a primary link of the L tone to the last syllable in the AP and a subsequent spread to the left. In a polysyllabic AP the first syllable is not pre-linked to the phrasal L, and so the H tone will associate to it even if it would after all not have remained floating. This will be illustrated in (7) and (9) below.

Note that, if there are several IP-dominated syllables, only the last one will be assigned a tone if they occur IP-initially, and there will be a transitional rise through them. IP-finally, such IP-dominated syllables will all be assigned an H tone.

2 The tonal patterns of compounds

As illustrated in (2), a toneme 2 AP in the Sunnmøre dialect will display the tones LHL, with the first L tone on the first syllable, the H tone on the second syllable, and the final L tone on the rest of the syllables. This is also the case in many other West Norwegian dialects, including the more southern but closely related dialect of Ytre Sogn.

Norwegian APs headed by a compound have toneme 1 or toneme 2 dependent partly on inherent properties of the first element of the compound. Thus a monosyllabic word, like *brann* ‘fire’ or *snø* ‘snow’, will always trigger toneme 1, while the compounds *brannmann* ‘fire man’ and *snømann* ‘snow man’ will trigger toneme 1 and toneme 2 respectively. The distribution has been analysed i.a. by Kristoffersen (1992), and I shall discuss it no further. Instead I will focus on the would-be toneme 2 of compounds in the Sunnmøre dialect.

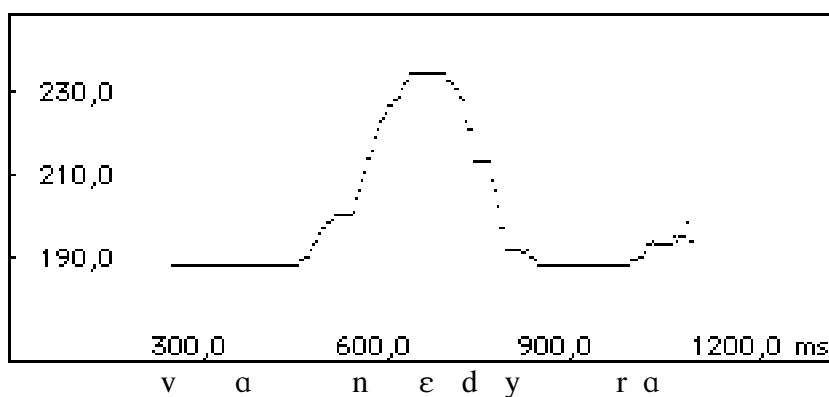
A toneme 2 compound like *snømann* can be analysed as toneme 2 without problems. If however the compound has three or more syllables the analysis is somewhat different. I will use the example *vandedyra* ‘the creatures of habit’, literally ‘the habit animals’ (from *vane* ‘habit’ and *dyra* ‘the animals’).

In the dialect of Ytre Sogn the isolated word *vandedyra* is pronounced with an L tone on the first syllable, an H on the second and an L on the two final ones. This is the normal pattern for a toneme 2 AP with four syllables, both in Ytre Sogn and in Sunnmøre, cf. (2). The Ytre Sogn example is illustrated in (4).

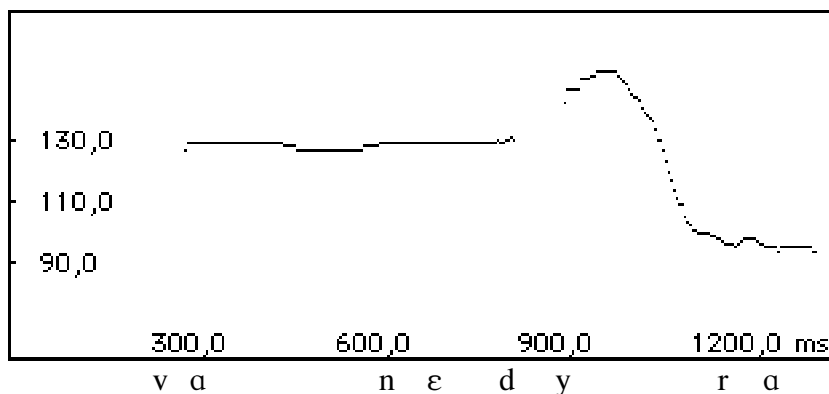
This pattern does however not apply to the Sunnmøre version of the compound, as shown in (5). Whereas a toneme 2 AP in Sunnmøre will have the same pattern as the Ytre Sogn example of (4), (5) has its H tone on the *third* syllable (not the second) of the compound *vandedyra*, seemingly with an L tone on either side.¹

¹Cand.philol. Randi Solheim from Ytre Sogn has kindly produced the acoustic signal of (4) for me. The other contours I have pronounced myself.

(4) *vanedyra* — Ytre Sogn dialect.



(5) *vanedyra* — Sunnmøre dialect.



3 Analysis

In (5) we see the pattern of a tonal transition identical to LHL. The first L is somewhat higher than the final L, but this situation is common also in normal toneme 2 APs. So why not analyse (5) as an instance of toneme 2, but with a morphology-dependent spread of tones? Thus we could imagine the first L tone being associated to the first two syllables, the H tone to the third one and the second L tone to both the third and the fourth syllable.

As noted above (5) is a word pronounced in isolation. Analysing this pattern as toneme 2 implies analysing the first L as a phonologically real tone. My claim is that it is *not* a phonological L but merely a random phonetic tone with no phonological value. If my claim is right then the word-accent is not toneme 2 but toneme 1, and it is realised on the third syllable, leaving the first two syllables of the word to the left of the AP. They will have to be directly dominated by the IU node, as the IP node would assign an H tone to the last of the pre-AP syllables and thus create a gradual transitional rise through them, if they had been IP-internal.¹

If my claim is right it should be possible to identify characteristics of the pattern in (5) as properties of toneme 1 distinct from the properties of toneme 2. Such characteristics can be found, the most obvious being the HL fall on the penultimate syllable which would be ungrammatical in a toneme 2 AP. As noted above, an HL fall in a toneme 2 AP will only occur on the last syllable in certain bisyllabic APs.

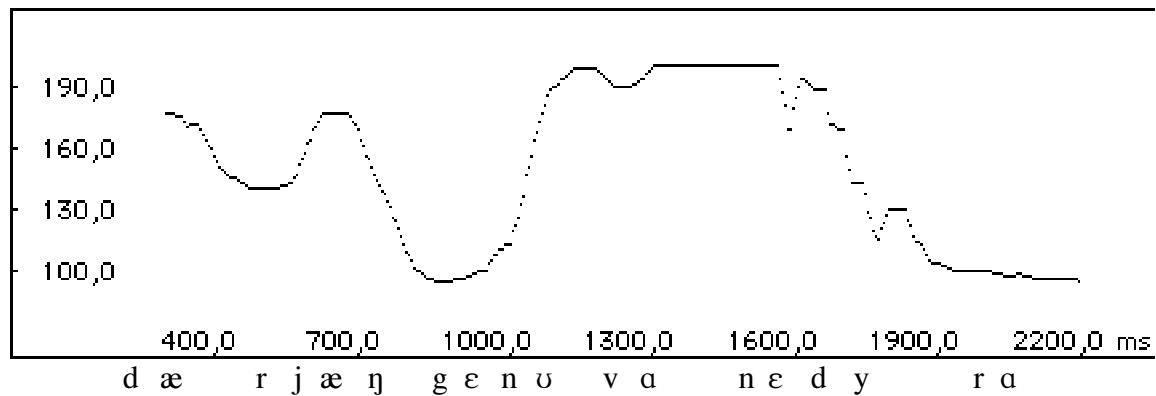
A second argument concerns the tonal properties of the first two syllables, *vane*. The two syllables at the beginning of the word are tonally free because they are dominated by the IU, and

¹Abrahamsen (1996) gives an authentic example of syllables dominated by the IU node, followed by gradual rising IP dominated syllables, before a final AP.

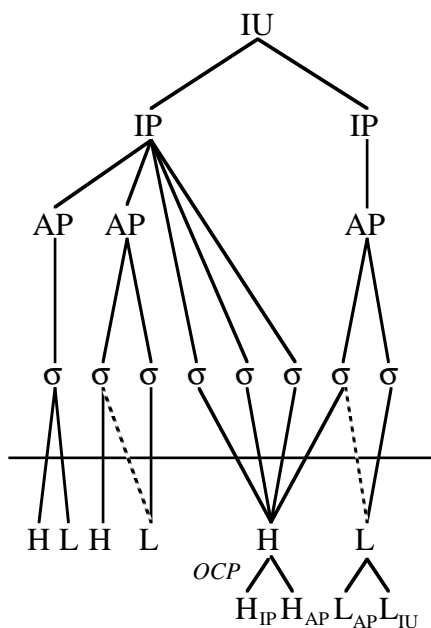
they are dominated by the IU because the word is pronounced in isolation. In connected speech the first two syllables of the word, if a word-accent is realised on it, will belong to the tail of the preceding AP. This claim would however still be difficult to substantiate as the syllables in question would nevertheless be assigned an L tone.

However, the lexical-phonological tonelessness of the two syllables permits us to assign an H tone to them when dominated by the IP node, whereas a fall on the following syllable indicates (or rather defines) the beginning of a toneme 1 AP. If the initial syllables of (5) were phonologically Low, realising the first tone of the word-accent, this tonal substitution would not have been possible. The phonological structure of the example in (6) has been drawn in (7). The example reads: [1dæ:r 1jæŋgɛ nʊ ,vɑ:nɛ1dy:rɑ] «der gjenger no vanedyra» ‘there the creatures of habit are walking after all’. The boundary tone licenced by the IU node at the end of the utterance has been kept Low in this example, and it merges with the L phrasal accent of the last AP.

(6) [1dæ:r 1jæŋgɛ nʊ ,vɑ:nɛ1dy:rɑ]



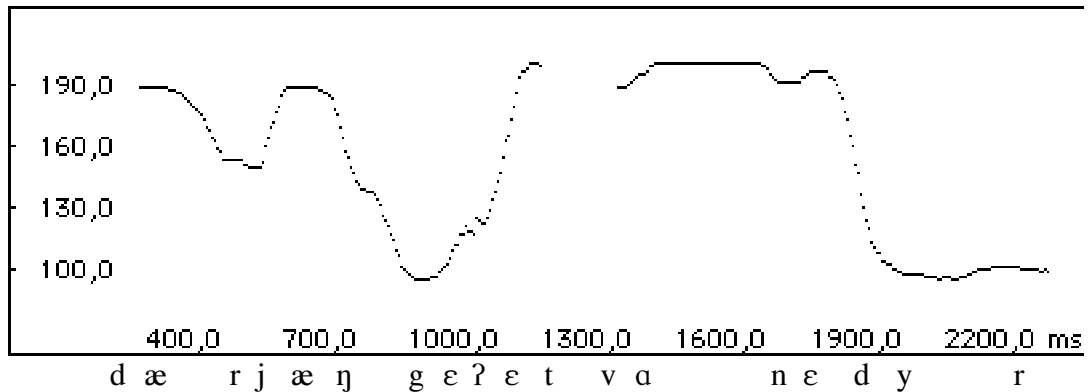
(7) (((1der AP) (1gjenger AP) no vane- IP) ((1dyra AP) IP) IU) L%



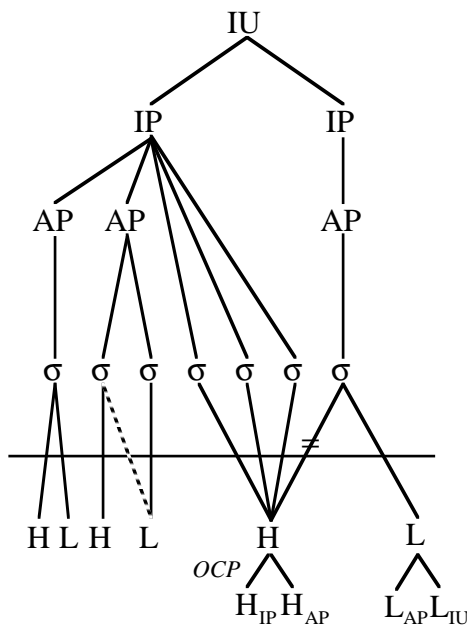
A further test with IP-dominated syllables can also be made. As illustrated in (3), a monosyllabic toneme 1 AP after an IP-dominated syllable will suffer a dissociation of its initial H tone. Both *vanedyra* and its indefinite (singular or plural) counterpart *vanedyr* have an H

tone on the third syllable. If this H tone represents a toneme 1 word-accent then the two syllables *vane* are not a part of the AP, and in the indefinite *vanedyr* the AP of that word-accent will consist of only one syllable: *dyr*. Thus it will not only be possible, but even required, that the syllable *dyr* in the indefinite *vanedyr* have an L tone if *vane* is IP-dominated. And this is indeed the case, as illustrated in (8) and (9).¹ The example is [1dæ:r 1jæŋgɛ ʔet ,vɑ:nɛ1dy:r] «der gjenger eit vanedyr» ‘there a creature of habit (really) does walk’.

(8) [1dæ:r 1jæŋgɛ ʔet ,vɑ:nɛ1dy:r]



(9) (((1der AP) (1gjenger AP) eit vane- IP) ((1dyr AP) IP) IU) L%



All in all, in the compounds *vanedyr* and *vanedyra*, the syllables after *vane* show every sign of being a complete Accentual Phrase. The compounds do not display toneme 2, as they would in other dialects. Instead they display an accentual relocation and a toneme 1 word-accent.

We can even find minimal pairs with and without accentual relocation. The segments pronounced with a toneme 2 word-accent are not compounds, whereas those with a relocated and shifted word accent are, as shown in (10).

¹The last syllable could also display a rise (LH) conditioned by an H% boundary tone licenced by the IU node. In this example I have used an L% boundary tone for the sake of simplicity.

(10) Minimal pairs.

- a. /²li:ke gla:de/: *like glade* ‘equally happy’
- b. /li:ke¹ gla:de/: *likeglade* ‘indifferent’
- c. /²fiske ma:t/: *du fær **fiske** mat til middag* ‘you will just have to **fish** your food for dinner’
- d. /fiske¹ma:t/: *du fær fiskemat til middag* ‘you will be served fish for dinner’

4 A special case

Traditionally Norwegian has been described as permitting the features of stress and word-accent in three combinations:

(11) Permitted syllables in Norwegian according to tradition.

- [+stress, +word-accent]: primary stress
- [+stress, –word-accent]: secondary stress
- [–stress, –word-accent]: unstressed
- *[–stress, +word-accent]

To resume the preliminary definitions: By «stress» is meant a metrical property. A tonal definition of stress would be incompatible with the tonal and metrical patterns of e.g. the typical polysyllabic toneme 2 AP (cf. (2)), in which the H tone will associate to the second syllable even if it is a light syllable. «Word-accent» is a purely tonal entity.

The word-accents can be realised only on heavy (stressed) syllables, at least according to tradition. An exception is made for a few dialects, but not for the Sunnmøre dialect. Most of the time there is no need to make an exception for the Sunnmøre dialect either, but in some special cases there is.

According to the analysis above the Sunnmøre compound *vanedyra* has its word-accent H realised on the third syllable, i.e. on the first syllable of the second compound element. Both the individual words *vane* and *dyra* are accented on the first syllable. The compound itself will retain a secondary stress on the first syllable.¹ In the Ytre Sogn compound a word accent is still on the first syllable.

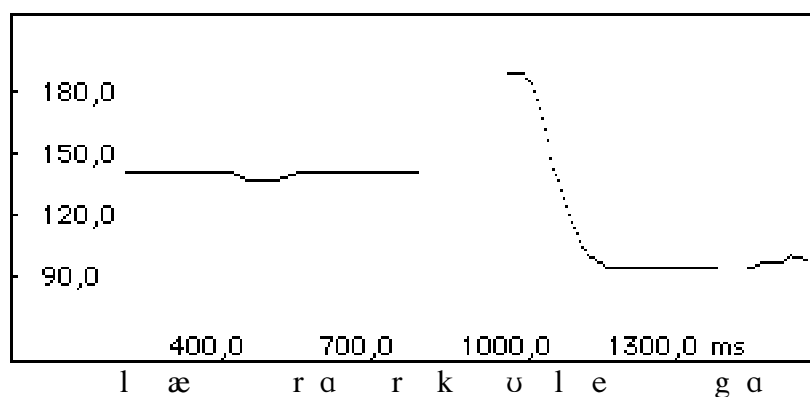
What would happen if the second part of the compound, when pronounced in isolation, had an unstressed first syllable? Such a compound can be made with the words *lærer* ‘teacher’ and *kollega* ‘colleague’. In the Ytre Sogn dialect the compound *lærarkollega* ‘teacher’s colleague’ would be pronounced with a toneme 2 word-accent at the left edge.

In the Sunnmøre dialect however there are two possible ways of accentuating it. One solution is to place the relocated and shifted toneme 1 word-accent on the heavy (i.e. stressed) penultimate syllable, *le*. But the H tone of the toneme 1 word-accent can also associate to the unstressed² syllable *ko*, which is the first syllable of the second part of the compound, this has been shown in (12).

¹In older varieties of the dialect the first syllable will lose even its metrical stress. This has been lexicalised in certain compounds, e.g. *gut-unge* ‘boy-child’.

²Recall that *stress* has been defined as a metrical property. The syllable *ko* is light, and according to this terminology unstressed.

(12) *lærarkollega* — Sunnmøre dialect



I have demonstrated that there is no word-accent on the first two syllables, using the example *vanedyra*, but at the same time there must be a word-accent somewhere in the utterance. The only High syllable in (12) is the third one, and so this syllable is the only candidate for carrying the toneme 1 word-accent, even though it is light.

5 Conclusion

I have argued that compounds displaying toneme 2 in most Norwegian dialects undergo an accentual relocation in the Sunnmøre dialect. This has been done on the basis of a hierarchical structuring of tonal patterns. Thus I have also illustrated the dangers of performing linear analyses of isolated words produced with a complete utterance intonation.

As a special case I presented the tonal pattern of the compound *lærarkollega*, in which the word-accent may be realised on an unstressed syllable. These facts are at odds with the traditional view on the connection between stress and word-accent in Norwegian, but it strengthens the postulated and explicit distinction between the two: Word-accent in Norwegian normally depends on stress, but stress and tone are different entities and it could be useful to keep them apart in prosodic analyses.

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