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Communicative Functions and Linguistic Forms in Speech Interaction

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List of PROLAB symbols used for prosodic annotation in KIM

The definitions of prosodic annotation symbols used in the monograph and in the website materials are listed here in relation to the various prosodic categories they represent. Prosodic symbols are inserted in orthographic text or in segmental phonetic transcription as bold characters, preceded by the prefix **&**.

(1) Sentence accent (see 2.2, 2.3)

At the centre of prosodic annotation is the marking of words that are highlighted in utterances and therefore receive sentence accents. Accented words are prefixed by one of four accent labels, without a space. **&0** may be left unmarked.

label	**prosodic category**
&0	*unaccented (defocused)*
&1	*(partially) deaccented (partially foregrounded)*
&2	*default accent*
&3	*reinforced accent*

Examples

&2Anna **&0**came **&0**with **&2**Manny. **&1**Anna **&0**came **&0**with **&2**Manny.
&0Anna **&0**came **&0**with **&3**Manny. **&3**Anna **&0**came **&0**with **&1**/**&0**Manny.

(2) Downstep and upstep (see 2.4)

Successive **&2** accents within a prosodic phrase are by default downstepped, i.e. lowered in pitch, This default downstep is not marked. Downstep may be broken at any point for information structuring within the prosodic phrase, by stepping a **&2** accent up to, or above, the level of the preceding **&2** accent. This upstep is marked by putting | before the number.

Example

&2Anna **&0**came **&0**with **&|2**Manny.

(3) Lexical stress (see 2.5, 2.6)

English and German have lexical stress which marks a place in the syllable chain of a word where a sentence accent docks when the word receives one.

label (put before syllable nucleus)	**prosodic category**
'	*stressed - primary*
"	*stressed - secondary*
(unmarked)	*unstressed*

Examples

'increae (noun), incr'ease (verb); b'uttercup (flower), b'utterc"up (butter dish); f'ourt'een, j'ust fourt'een, f'ourteen p'ounds

(4) Intonation (see 2.7, 2.8)

Sentence accents rceive intonation markings, for (rise-)falls (peak patterns) or rises (valley patterns) or (rise-)fall-rises (peak-valley patterns) or level pitch. The markings have two components, the direction of pitch movement and the synchronisation of peak maxima (in peak and peak-valley patterns) and of valley minima with the timing of supra-glottal articulation in the stressed syllables of accented words. There are three levels of peak descent: to the speaker's low pitch range or to a middle pitch range or levelling out at high pitch. Valleys and peak-valleys are either low or high risning.

label	**prosodic category**
&2./1./0.	*peak*
&,/&?	*valley*: *low* or *high rising*
&.,/&.?	*peak-valley*: *low* or *high rising*
(&-) &0.	*level*

The direction marker is put before the next accent or before a **P**hrasin**G** marker **[&PG**], always with spaces before and after.

Peak(-valley) maximum synchronisation has three location ranges: before accented vowel onset, shortly after onset, late in the accented syllable. Valley minimum synchronisation has two location ranges: before or after accented vowel onset. There is, of course, no difference in level synchronisation. The synchronisation labels are put after the number in the accent labels.

label	**prosodic category**
peak(-valley)	
&3)/&2)/&1)	*early* (fall begins at or before accent-vowel onset)
&3^/&2^/&1^	*medial* (central rise-fall in the accent vowel)
&3(/&2(/&1(	*late* (late fall in the accent vowel, or in a following syllable, depending on timing constraints, preceded by extensive rise)
valley	
&3]/&2]/&1]	*early* (rise begins at or before accent-vowel onset)
&3[/&2[/&1[	*late* (rise begins in the accent vowel)
level	
&3-/&2-/&1-	accent strength is signalled by other properties (duration, enery)

Examples

&2) Yes **&2. &P** **&2)**Yes **&1. &PG** **&2^**Yes **&2. &PG** **&2(**Yes **&2. &PG**
&2^Yes **&2., &PG** **&2]**Yes **&2, &PG** **&2[**Yes **&2, &PG** **&2]**Yes **&2? &PG**
&3-Yes **&0. &PG**

(5) Concatenation of pitch patterns (see 2.9)

The different accent-intonation patterns can be freely concatenated to code communicative functions. A special concatenation is the sequencing of peak patterns without a dip in between. The result are *hat patterns* with **&0.** at the first peak maximum. Since the characteistic feature of the *early paek* is its high-low descent into the accented syllable, it cannot occur in first position in a hat pattern. Similarly, since the characteristic feature of the *late peak* is its low rise before the late fall it cannot occur in second position.

When a hat pattern is rotated around a central frequency line in a time-frequency display we get a *tub pattern*. It may be analysed as a concatenation of two *low valleys* without a high point between them. The direction feature of the first valley is labelled **&0,** analogous to **&0.** in the *hat pattern*.

Examples
&2(Anna came with **&0. &2)**Manny **&2. &PG**
&2[Anna came with **&0, &2[**Manny **&, &PG**

(6) Prehead and register (see 2.11)
Unaccented words before the first accent in a prosodic phrase form its prehead, which may be either high or low pitch. High prehead is maked by **&HP** prehead initially.

A speaker may change to a higher or a lower register from a default middle one, for example to signal asides, or to expressively foreground long stretches of talk n interaction. These departures from a neutral register are labelled as **&HR** and **&LR**, put at the beginning of the prosodic phrase in which the change occurs.

(7) Prosodic phrasing (see 2.12)
Information structure is coded by prosodic phrasing with different bundlings of F0 direction, duration, energy and phonation at the junctures between phrases. Four separation rarnges, from weak to strong, are distinguished: **&PG1-4**.