

English Phonetics-II

12. English intonation. An overview

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Lecture outline

- What is intonation
 - Nature of intonation
 - Functions of intonation
- Approaches to intonation
 - Terminological differences
 - Differences in assumptions
- The British contours approach
 - Jones, Palmer, I.Ward
 - Jassem, Delattre
 - Halliday, Brazil, Wells.
- The pitch levels approach
 - Bolinger, Pike
- Intonational phonology. ToBI, ToDI

1. WHAT IS INTONATION?

'a subject difficult and complex' (Roach, 140)

- 'Linguistic use of pitch in utterances' .
Controversial, but pitch fundamental. It is linguistically relevant if the speaker has control over it.
- **Basic premise:** intonation does NOT change the linguistic meaning of a word. Initial hopes (advent of modern phonetics) that foreign learners could be taught rules to use intonation in the way native speakers do. 'Few people now believe this to be possible' (Roach, 1995: 135).

2. NATURE OF INTONATION

- Intonation is both structure and system.
 - **Structure** (each TU (Tone Unit) has its form in intonation, e.g. *Tráeme un café/ solo* has 2 TU + rhythmic feet +syll +phonemes.
 - Boundaries: Cruttenden, (86: 35-42); Crystal (Clearest, 1969:204-7); Brazil et al., little importance to this (p. 45-46- Discourse Inton., and lang. Teaching- Longman, 80.
 - The structure of the tone unit : **pre-head, head, nucleus and tail.**

3. FUNCTIONS OF INTONATION (WHAT IT DOES)

¡Controversial!

There are different views on this. Thus, Roach acknowledges just **attitudinal**, and **syntagmatic functions**, the latter encompassing accentual (similar to the informational –see below) , grammatical and discoursal (p. 163) ` Coulthard, 77; Bazil et al. (80). The following though, are based on Tench's typology.

- **Informational role (management of information: how is organised. Divide and stage (old /new information) .**
Decisions about division, staging (what first, what second...), gradation (more or less amount of info).
- **Grammatical or syntactic function : (for what purpose)**
El matrimonio Obama se verá solo los fines de semana.
(Cruttenden denies this function (p. 60: intonation is affected and reflects grammar but does not alter it), Roach disagrees).
E.g. k " *Se lavó y se cepilló el pelo, el vecino (,) que vive debajo, estuvo insoporsable.*

3.1. FUNCTIONS OF INTONATION (CONT'D.)

- **Communicative or illocutionary:** refers to the speaker's purpose: statements, questions, exclamations, commands, ask, informa, plead...
Importante: speaker dominance vs. speaker deference. (see Brazil's *The communicative value of intonation of English*,(1997 -CUP)
- **Attitudinal (speaker's mood or attitude. How is said: angry, sarcastic, affectionate...).** Very important in the past (Gimson, O'Connor). Is conveyed also by head and pre-head (Tench, 20 +tone) but 'a very difficult thing to teach' (Roach, 168). Cruttenden, 86:n 95-125 a good survey

3.2 PROBLEMS: (SEE ROACH, 166)

- Representative sampling (vast range of attitudes conveyed at times by lexical words –imbécil!
- Attitude in a complex thing, linked to speed, loudness, voice quality, key, body gestures, etc. . Each of them needs a specific treatment.
- Mixing of sequential (e.g. TU, pauses, tone boundaries) and prosodic (they are simultaneous) variables.
- Paralinguistics features of vocal effect type are treated by Crystal as part of intonation, but it is not clear how they are distinguished from prosodic features.

4. APPROACHES TO INTONATION

Two traditions linked to the teaching of intonation to foreigners: British and USA (a 'trivial question' for Cruttenden,1997). A mere problem of 'representation', but they use:

- Different terminology (and use of identical terms with different meaning)
- Different representations: no standard way of writing intonation.
- Different assumptions: emphasis on prediction (USA), vs. emphasis on perception (British)

4.1 DIFFERENCES IN TERMINOLOGY

BRITISH

- P-H: richer taxonomy
 - The H: 1st stressed element
 - The Nucleus or tonic is part of the intonation system, it has a pitch movement called TONE.
 - Different tone realizations: 7 in O'C+A, 5 in Brazil (he includes level tone –awkward to represent it in the USA tradition,
 - Key= levels of pitch range

USA

- P-H: just their pitch level
- H:
 - The nucleus=is part of the stress system, therefore S-stress. It is also called INTONATION
- In discourse: paratones

4.2. DIFFERENCES IN ASSUMPTIONS

- USA model, predictive and prescriptive (specifies rules for proper usage) and
 - explicit connection bt inton & grammar (more simplistic!, hence resort to unmarked /marked argument.
 - A S-level approach
 - Focus on tonic syll. to express disc. Meaning (new/given a property of tonic syll. too.

- UK model, descriptive.
 - Emphasis on communicative choices (social roles) and context.
 - Modest attn to grammar.
 - Prominence, a matter of speaker's choice
 - Focus on nuclear tone choices (new & given a property of the tone –unlike USA's view

5. THE BRITISH CONTOURS APPROACH

- Attitude, key to intonational meaning
- The overall contour, central: thus O'Connor +Arnold suggest 10 tones (contours) made up of specific Pre-head- Head- Nucleus –Tail. Therefore, they are not freely combinable.

5.1 D. JONES' NOTATION (1909)

A Specimen of RP showing Intonation

at 'dis 'moumɛnt ə 'fril 'vois 'kɔ:ld *'doudou frəm ðə 'drɔ:grum
 ''doudou, 'doudou,' it ,kraɪd,
 ''ðə 'man 'brɔ:t mi: 'tu: 'tɛpɪd 'poutft 'egz !
 ''du: sɛn mi ,səmθɪŋ 'els. 'ɪz ðə sɒtʃ ə θɪŋ əz ə 'grɪld 'bəʊn?
 ''ðɪz rɪ'mɑ:kz wə 'spɪ:dɪli ,fɒləʊd 'ʌp
 bɑɪ ðɪ ə'pɪərəns əv 'mɪs *'steɪnz ət ðə 'deɪnɪgrum 'dɔ:.
 in 'wʌn 'hænd fɪ: 'held ðə dɪs'paɪzd 'egz,
 in ðɪ 'lʌðə ə 'kwɔ:ɪər əv 'mju:zɪk ,peɪpə.

5.2 H. PALMER & BLANDFORD (1922)

VII. GREETINGS, POLITE EXPRESSIONS. ETC.

(1) —Hul/lo! (2) —How v̄are you? (3) Good \morning.¹
 —Good /morning.¹ (4) Good after\noon.¹ —Good
 after/noon.¹ (5) Good \evening.¹ —Good /evening.¹ (6)
 —Good \morning.² (7) —Good after\noon.² (8) —Good
 \evening.² (9) —Good \night.² (10) —Good\bye.² (11)
 —See you to\morrow.² (12) /Thank you. \Thank you.
 \Thank you. (13) —Oh \thank you. (14) —Thank you very
 \much. (15) \Thanks. (16) —Oh \thanks. (17) \Thanks
 —so \much. (18) —Much o\bliged. (19) It's —very \kind
 of you. (20) /Sorry. (21) —I'm \sorry. (22) Ex—cuse \me.
 (23) Al\low me. (24) With \pleasure. (25) —How do you
 \do? (26) I beg your /pardon?³ (27). (28)⁵ I \beg your
 /pardon.⁴

5.3. I. WARD (1933)

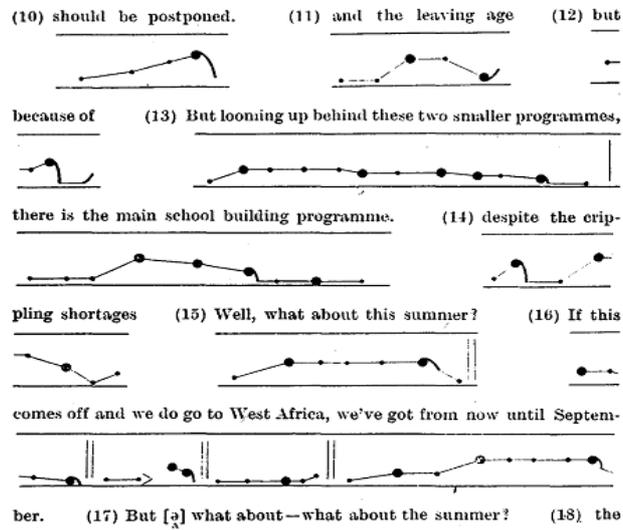
226 THE PHONETICS OF ENGLISH

PRESIDENT ROOSEVELT'S SPEECH: "FIRESIDE CHAT"

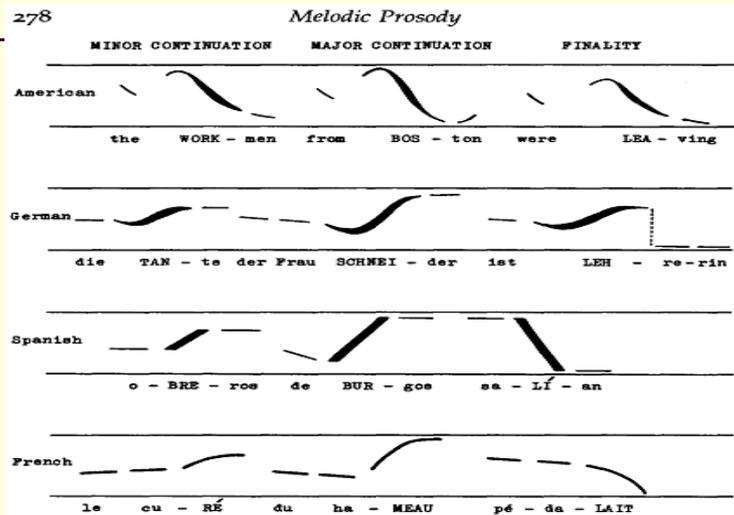
381. *Survey at the time of the special convocation of Congress, Oct. 13, 1937. First side of record.*

maɪ 'frenz, ðɪs 'æftə'nʌ:n aɪ əv 'ɪsju:d ə 'prɒklə'meɪʃn
 'kɔ:ɪŋ eɪ 'speʃl 'seɪn əv ðə 'kɒŋgrəs tu kən'veɪn ɒn
 'mɑ:ndɪ, noʊ'vembə 'fɪf'tɪnθ, 'naɪnti'n 'θə'tɪ 'seɪn.
 a 'du: 'ðɪs ɪn 'ɔ:de tu 'grɪv 'tu ðə 'kɒŋgrəs ən ɒpə'tju:nəɪ
 tu kən'saɪð ɪm'pɔ:tnt lɛdʒɪs'leɪʃn bə'fɔ: ðə 'regjələ 'seɪn
 ɪn 'dʒænjuəri, 'ænd tu ə'neɪbl ðə 'kɒŋgrəs tu ə'vɔɪd
 eɪ 'leɪθɪ 'seɪn 'nekst 'jɪə eks'tendɪŋ 'θɜ: ðə 'sɑ:mə.

5.4 W. JASSEM (1952)



5.5 P. DELATTRE (1965)



5.6 M.A.K. HALLIDAY (1970)

//3, now there / wasn't any / bridge and there //1 wasn't any / ferry-boat and //1 Kangaroo / didn't know / how to get / over . so he //1 stood on his / legs and / hopped //

[//1, he / had to //

//1, he / hopped through the / Flinders . he //1 hopped through the / Cinders . he //1 hopped through the / deserts in the / middle of Aus/tralia . he //1 hopped like a / Kanga/roo //

//3 first he hopped / one yard //3 then he hopped / three yards //1+ then he hopped / five yards . his //1 legs growing / stronger . his //1 legs growing / longer . he //1+ hadn't any / time for //4 rest or re/refreshment and he //1+ wanted them / very / much //

[//3 still ran / Dingo //3 Yellow-Dog / Dingo //3 very much be/wildered //1 very much / hungry and //13 wondering / what in the / world or / out of it made //1 Old Man / Kangaroo / hop //

//1, for he / hopped like a / cricket . like a //1 pea in a / saucepan . or a //1 new rubber / ball on a //1 nursery / floor //

· //1 he / had to //

//3, he / tucked up his / front legs . he //1 hopped on his / hind legs . he //1 stuck out his / tail for a //1 balance-weight be //1 hind him and he //1 hopped through the / Darling / Downs //

//1, he / had to //

5.7 BRAZIL' DISCOURSE INTONATION

British 'discourse intonation' [Brazil, 1997]

- representation: *the DEAN is in his Office*
- Reflects actual speech
- Four key elements: **tonality, tonicity, key and tone** (fall, rise, fall-rise, rise-fall, level)
- The tonic, not necessarily change in pitch (saliency is enough).
- Tone choices not based on grammar, but on meaning (non attitudinal).
- Use of r – r+ – p, o= referring; referring with dominance/ proclaiming, and level.

5.8 J. WELL'S NOTATION (2006)

A: ¹ \Hey, | ² are you 'going to return those /books of mine you borrowed?
B: ³ \Which books? | ⁴ vI can't remember borrowing any.
A: ⁵ The 'ones about biology and \language.
B: ⁶ \Oh, | ⁷ \those books. | ⁸ Er - | ⁹ 'could I keep them a few more /days?
A: ¹⁰ \Why?
B: ¹¹ Because I 'need them for my \essay.
A: ¹² But you've 'had them for a vmonth | ¹³ already.
B: ¹⁴ 'Just give me until \Monday, | ¹⁵ and 'then you can have them \back. || ¹⁶ 'O/K?
A: ¹⁷ I supvpose so.

6. THE PITCH LEVELS APPROACH: USA

- Attitude, fundamental (like the British)
- Four levels (Pike, 1945) within contours (the meaningful elements of intonation) to handle intonation in AmE. But how they relate to meaning, a thorny question`
- Representation
 - 4 (highest)- 3-2-1 (lowest): only one prominence per TU: the tonic. The rest, very flat.
 - Tonics, always jump up (no something like low key)
 - Deals with single TU utterances

6.1 D. BOLINGER'S NOTATION (1972)

286 *Melodic Prosody*

longing and pity,
If ^{only} I ^{could}, The ^{poor} old ^{fel}low!
suspicion,
There's ^{something} be ^{hind} all this.
wonderment,
I ^{haven't} seen him in ^{hundred} to ^{on} e!
They ^{acted} ^{strange} ly tonight. Would you ^{look} at ^{that} t!

6.2 PIKE'S APPROACH

- **The first really thorough description of the intonation system of any dialect of English** (Crystal, 1969: 47).
- Cruttenden concedes that it has not been surpassed in America for comprehensiveness (Cruttenden, 1986: xi).
- His orientation, like O'Connor and Arnold's, was the attitudinal function. He wrote:
- "In English, then, an INTONATION MEANING modifies the lexical meaning of a sentence by adding to it the SPEAKER'S ATTITUDE toward the contents of that sentence (or an indication of the attitude with which the speaker expects the hearer to react). (Pike, 1945)

6.2.1 PIKE'S MODEL-2

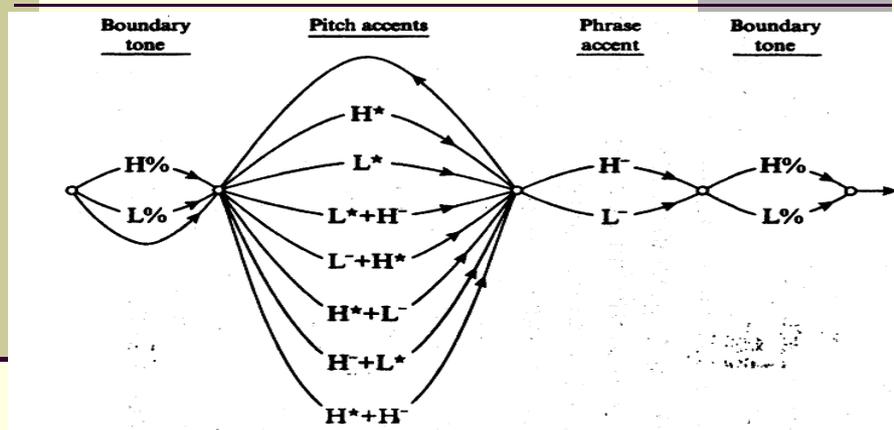
Contours

- falls to 4 \4 finality
- falls from 2 2\ moderate
- falls to 3 \3 non-finality
- one level falls 1\ mild
- falls to 2 \2 lightness
- falls from 1 1\ intense/unexpected
- rises from 3 3/ incomplete
- rises to 3 /3 incomplete
- rises from 4 4/ deliberative
- rises to 2 /2 sequences
- rises from 2 2/ polite
- rises to 1 /1 intense (except 2-1 polite)
-
- fall-rises v implication
- (low) rise-fall ^ repudiation
- levels (in final position) strong implication
- 2-4 + 3-3 ☞ +- mild poignancy
- 3-1 + 4-3 /+☞ encouragement

7. INTONATIONAL PHONOLOGY

- Currently prosodic annotation systems are based on intonational phonology
- Their followers transcribe intonation with two tones H and L and a range of diacritic symbols such as %, +, - and ! (so no pitch contours like British tradition). Not a pedagogical purpose, but for work in speech technology.
- Two examples: ToBI and ToDI
- ToBI based on Pierrehumbert 1980, ToDI on Gussenhoven 1984

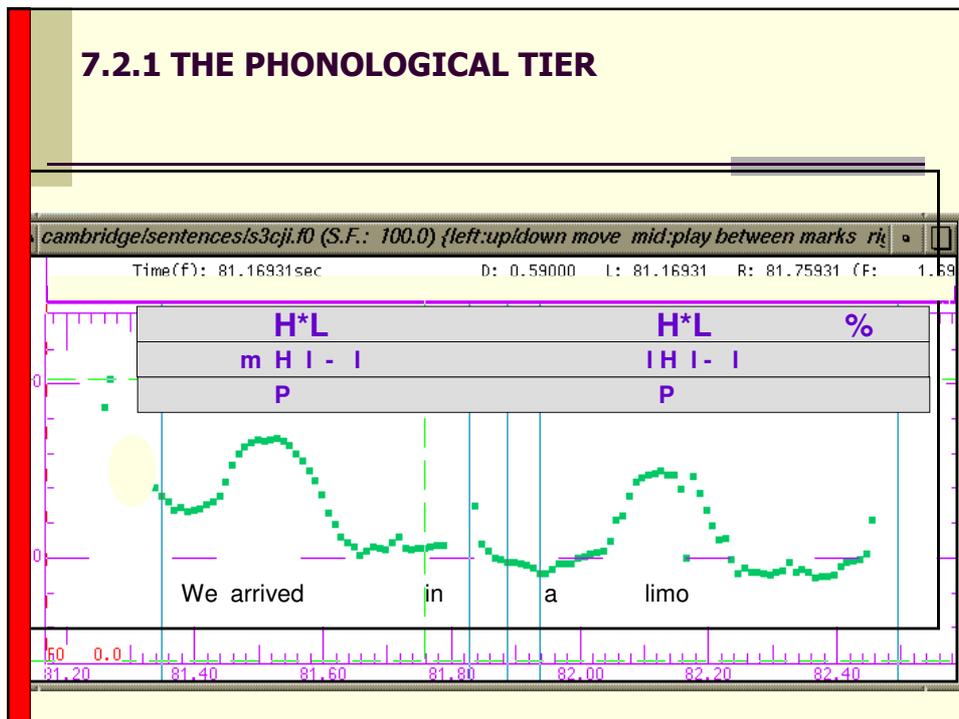
7.1 PIERREHUBERT (1987)



7.2 TOBI AND TODI

- **ToBI:** four transcription tiers: tone tier (intonation pattern = H/L), orthographic tier, break index (=tonality), and miscellaneous
- ToBI transcriptions are a compromise: they reflect a combination of the shape of the acoustic trace and a speaker's phonological choices
- **ToDI:** two transcription tiers: words, intonation.
- ToDI intended for transcriptions of phonological choices - acoustic-phonetic realisation is not transcribed

7.2.1 THE PHONOLOGICAL TIER



REFERENCES

➤ Obligatory reading

Roach, P. (1991). Functions of intonation I and II. In *English Phonetics and Phonology. A practical course*. Chs. 18-19.

➤ Recommended reading:

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