

# EVIDENCES OF SEMANTIC DETERMINANTS OF PROSODIC FEATURES IN ENGLISH

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The complexity of structural-semantic-attitudinal-prosodic relationships is evidenced by Crystal (1969). Others, in particular Uldall, posit tempo-voice quality effects on attitudinal judgments in intonation.

I showed (*Maître Phonétique* 125, 126 [1966]) (a) one contour expounding anger/delighted enthusiasm, irrespective of grammatical mood, and (b) 23 attitudes (Uldall 1964) expounded by one contour. Some semantic influences on contour range were indicated in Report 2 of the Department of Phonetics, Leeds (1970).

The attitude-prosodic complex yields somewhat, in one idiolect, from combinations clearly semanticising certain attitudes. A hypothesis of prosodic combinations for twelve attitudes, each one from an appropriate binary opposition, appears in Figure 1, and contrastive semantic and prosodic characteristics in Figure 2.

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M	occurrence of pretonic pitch falls or rises									
T	Tempo ( <i>Faster, Average, Slower</i> )									
R	Range (1 high, m <sup>l</sup> or somewhat above; 2, about d <sup>l</sup> ; 3, about m; 4, d <sup>l</sup> , natural lowest pitch)									
V	Volume ( <i>greater, normal, quieter</i> )									
P	Phonation ( <i>tense, resonant, lax</i> )									

  

	M	F	A	S	1-4	2-4	3-4	g	n	q	t	r	l
Interested	M	F			1-4			g				r	
Rude		F					3-4	g			t		
Timid	M	F					3-4		q				l
Tense		F			1-4			g			t		
Disapproving	M		A				3-4		n		t		
Deferential	M	F			1-4				n			r	
Impatient	M	F			1-4			g			t		
Emphatic	M		S		1-4			g			t		
Disagreeable		F					3-4	n			t		
Authoritative			S			2-4		g			t		
Pleasant	M	F			1-4				n			r	
Weak			S				3-4		q				l

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Fig. 1. Attitudinal Meanings and Prosodic Exponents.

Tonics Underlined — Rise i, Fall ii, Fall-rise iii, Rise-fall iv.

I	<i>Deferential</i>	I'm only too <u>l</u> ready to <u>l</u> serve you in <u>l</u> any way you <u>say</u> . (a)
	(Contrast)	I'm only too <u>l</u> eager to <u>l</u> punish him in <u>l</u> any way you <u>sug'gest</u> . (b)
1.	S 3-4 q l	(a) i to iv (submissive), (b) i to iv (menace)
2.	M F 1-4 n r	(a) i to iv (b) i to iv? (insincere)
II	<i>Impatient</i>	I <u>l</u> absolutely <u>l</u> need the <u>l</u> furniture <u>today</u> . (a)
	(Contrast)	I <u>l</u> certainly <u>l</u> need the <u>l</u> furniture <u>sometime</u> . (b)
1.	A 2-4 q l	(a) — (b) i to iv (patient)
2.	M F 1-4 g t	(a) i to iv (b) i to iv (sarcastic)
III	<i>Authoritative</i>	I <u>l</u> say this without any <u>l</u> fear of <u>contradiction</u> . (a)
	(Contrast)	I <u>l</u> suggest this without any <u>l</u> certainty <u>of acceptance</u> . (b)
1.	M F 3-4 q l	(a) ii ? (b) i to iv (doubt)
2.	S 2-4 n t	(a) ii (b) —
		(a) i, iii (challenging), iv (somewhat weakened)
IV	<i>Pleasant</i>	It's ex <u>l</u> tremely <u>l</u> good of you to <u>call</u> on us like this. (a)
	(Contrast)	It's ex <u>l</u> tremely un <u>l</u> fair of them to <u>sponge</u> on us like this. (b)
1.	S 3-4 g t	(a) — (b) i to iv (cold, indignant)
2.	M F 1-4 n r	(a) i to iv (pleasant) (b) i to iv (angry, indignant)

Fig. 2. Semantic Determinants and Prosodic Exponents (Contrasts).

It appears evident that (a) semantic items and prosodic combinations together (e.g. II, 1; IV) denote the speaker's attitude and that (b) nuclear tone distribution is more complex than hitherto suggested: often all four tones considered are possible for one utterance (very likely expounding different situations).

Sometimes *insincerity* (e.g., I, 2, b) and *sarcasm* (dissimulation) (e.g., II, 2, b) show content/prosody disharmony.

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## REFERENCES

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1964 *Dimensions of Meaning in Intonation* (London: Longman).

## DISCUSSION

JÜRGENSEN (Copenhagen)

Does this mean that you are ready to give up the 'established' rules concerning the attitudinal content of the Tunes — in other words, are — in your opinion — those rules (descriptions) 'amorphous'?

TIBBITTS

1. Various writers (e.g. Kingdon 1958; O'Connor and Arnold 1961; Halliday, 1967) have diversely formulated numerous 'rules' governing pitch/attitude characteristics.

2. These 'rules' are greatly at variance (University of Leeds, Department of Phonetics, *Report No. 2*) and, without further evidence, no one of these formulations could, as yet, be considered established. Any validation of them appears most unlikely especially without examination of other prosodic parameters in combination with the pitch features concerned. Earlier assignments of attitudes to tunes are indeed amorphous.

3. In particular cases (e.g., III 1a, 2a of Figure 2) a tonal feature, TOGETHER WITH OTHER APPROPRIATE PROSODIC PARAMETERS plays a major part in expounding an attitude. However, which tones play such a part in which cases cannot be discovered without a model which includes parameters in addition to pitch, and the author's model is proposed as a step towards establishing valid attitude/exponent rules.

JONES (Buffalo, N. Y)

I profited greatly from Professor Tibbitts' paper. As well as illustrating that irony can be due to opposed prosodic and lexical meanings, he also has amply demonstrated that pitch contours must be studied together with the other intonational features that accompany them. These are important insights.

In contrast, although in the substance of his work Tibbitts has uncovered a few interesting facts, I think his general approach to meaning is neither productive nor illuminating. I have no idea what his (or anyone else's) attitudinal labels themselves mean. In fact I think they can never possibly signify anything useful.

Terms like 'interested', 'rude', 'timid', and so forth refer to inner, psychic states, which are inaccessible to observation and hence operationally meaningless. Everyone

knows when he himself feels 'tense', 'impatient', or what have you. But without clairvoyance, how can anyone ever know the experience of another person's consciousness? He can only guess — often quite accurately — from language, body motion, and other clues. In our capacity as scientists, these perceivable bits of behavior are all we can responsibly deal with.

Then, how can we study intonational meanings? One useful point of departure is that prosodic features often indicate interactional stances. Sometimes, though not always or necessarily, these can correspond to what the speaker and hearers are feeling; so we can examine either stances or attitudes. In this decade — now that Erving Goffman, Gregory Bateson, Harvey Sachs, and others have studied these matters extensively — it seems absurd to prefer a vague, probably invalid psychological approach over an empirically testable one. In interactional terms, for instance, we can easily explain why 'joyful enthusiasm' and hot-blooded 'anger' have such similar intonations: The two attitudes, seemingly so different, are slight variations within a class of social events that we might most naturally call 'reduced restraint' or 'letting go'. Intonation is only one manifestation of the varying degrees of situational restraint. Since many of the other correlates are already described, we can check our hypotheses about intonational meaning by simply relating the prosodic features to other observable behavior. There is a bonus: we will completely avoid such problems as whether the speaker's 'enthusiasm', 'anger', or whatever was genuine or merely feigned. Certain situations will call for certain kinds of intonation. The state of the speaker's psyche, non-physical and unknowable, need not enter in.

Like most other treatments cast in the same frame, Tibbitts's description of prosodic meanings is circular as well as unempirical. The linguist infers an attitude from an intonation; then he characterizes that intonation as expressing that attitude. He will get no farther, I think, if he tries to pursue objectivity by asking large numbers of speakers to read sentences 'rudely', 'timidly', and so on, tape-recording their renditions, and then asking many listeners to judge what attitudes were being expressed. These tasks are a far cry from normal speech behavior where speakers and hearers use language to participate in social encounters. Our linguist would have them doing something quite different: performing named attitudes and labeling the performances. Unfortunately, these are highly specialized skills which most people neither possess nor need. The investigator would be studying not prosodic meanings, but rather the lexical meanings of a few stereotypic attitudinal categories — useful only in gossip, psychiatry, and cheap literature — which experimental subjects can be induced to apply to the rather artificial speech of acting and dramatic oral reading. These genres use conventions quite foreign to normal conversational language. Accordingly, although results of the studies might be internally reliable, they could never possibly be valid.

In short, no matter how it might be elaborated, Tibbitts' attitudinal framework leaves prosodic meanings as obscure as they were before the labels were applied. The approach might even tend to discourage further research since the neat categories

suggest that we are close to knowing the semantic answers. In reality, we have barely begun to ask the right questions. As Professor Tibbitts states, a speaking situation can be crucial to the meaning of a prosodic pattern that occurs within it. It seems imperative, therefore, to examine interactional situations — in all their ramifying variety — with as much care, rigor and sophistication as we can muster. Only then, I think, will we be equipped to describe the semantics of intonation.

#### TIBBITTS

1. I am glad to note that Mr. Jones corroborates three main issues: (a) the importance of studying prosodic parameters in conjunction with pitch features, (b) as a corollary of (a), the ambiguity of a contour alone as an exponent of, e.g., *enthusiasm* ~ *anger*, and (c) the statement of a mechanism for *sarcasm*.

2. On the wider issues, in the search for governing principles, the GENERAL efficiency of affective communication in speech justifies examination of prosodic combination intuitively accepted by naïve speakers to expound widely diverse attitudes (see below, 5).

3. This Congress has noted that truly spontaneous utterances in emotionally highly charged interactions are virtually unobtainable in representative sample over a wide range.

4. Mr. Jones distrusts the intuitive insights of trained actors in speaking quasi-colloquial language (as they have done quite efficiently for centuries). The author does not distrust their insights. Accepting that colloquial/dramatic style divergences exist, he finds them not to be so deviant in contemporary British English as to invalidate overall tendencies.

5. It has become evident in this preparatory investigation that, for attitude definition, some cross-category factors operate. The proposed model is likely to elucidate any broader based affective categories cogent to the issue.

6. Mr. Jones will observe that for interactional factors the model is open-ended and apt for elucidating situational determinants.