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.

| M | occurrence of pretonic pitch falls or rises |
| T | Tempo (Faster, Average, Slower) |
| R | Range (1 high, m[1] or somewhat above; 2, about d'[1]; 3, about m; 4, d'[1], natural lowest pitch) |
| V | Volume (greater, normal, quieter) |
| P | Phonation (tense, resonant, lax) |
|   | MFAS 1-4 2-4 3-4 g n q t r l |

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

Fig. 1. Attitudinal Meanings and Prosodic Exponents.
Tonics Underlined — Rise i, Fall ii, Fall-rise iii, Rise-fall iv.

1. Deferential
   - I'm only too ready to 'serve you in any way you say.
   - I'm only too eager to 'punish him in any way you suggest.

   (Contrast)
   - I'm only too 'eager to 'punish him in any way you suggest.
   - (menace)

2. MF 1-4 n r
   - I to iv
   - b to iv ?
   - (insincere)

II Impatient
   - I 'certainly need the 'furniture sometime.

   (Contrast)
   - I 'certainly need the 'furniture sometime.
   - (patient)

3. MF 1-4 g t
   - I to iv
   - b to iv
   - (sarcastic)

III Authoritative
   - I say this without any 'fear of contradiction.

   (Contrast)
   - I suggest this without any certainty of acceptance.

4. MF 3-4 q l
   - a to iv
   - (doubt)

5. S 2-4 n t
   - a i, ii (challenging), iv (somewhat weakened)

IV Pleasant
   - It's extremely 'good of you to call on us like this.

   (Contrast)
   - It's extremely unfair of them to 'spend on us like this.

   - (cold, indignant)

   - a to iv (pleasant)
   - b 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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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 restraint. 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 express attitudes (see below, 5).

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 naive speakers to express 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 cognate to the issue.

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