

TONE-INTONATION RELATIONSHIPS

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1. A language which has a kind of lexical pitch accent is called a tone language. Intonation can be added to any lexical items to impart, jointly with other phonic features such as voice quality, articulatory force, a specific attitudinal meaning to them at one or more than one focal point. So there naturally occurs an inevitable interplay of tone and intonation.

2. In Japanese as in many other tone languages, pitch plays a very important role in determining both lexical and attitudinal meanings.

I have chosen the word *'so'o* (meaning 'so', 'exactly', 'yes', etc.) which is usually referred to as an accented type or as a high-low type or as a head-high type. I think what is relevant here apparently is the geometrical shape of the word *soo*. The first syllable is assumed to be higher in pitch than the second, but no definite pitch register is assigned to either of the two syllables. The magnitude of pitch intervals primarily concerns intonation. And each syllable, by definition, is level.

3. Figures 1-14 show a variety of ways in which I pronounced the word *soo*. I kept in mind each time I did so a certain appropriate context and a shade of meaning that would fit into that context. The fourteen figures presented here are visual recordings of my own voice obtained on the Pitch Indicator at my Institute. For details of the convention of tone-intonation markings and the pitch recordings shown below, see Abe 1966.

Figure 1 *'so'o*, this is a statement in citation form. Here intonation does not come into play.

Figure 2 *'so'o*, this is a neutral statement. A Japanese syllable is very short in duration, so the terminal fall, if any, is not so conspicuous.

Figure 3 *'so:'o*, this is an emphatic statement. The first syllable is lengthened for emphasis.

Figure 4 *'so'o*, this is a 'sarcastic' statement. Note that the terminal portion of the first syllable is raised in pitch (i.e., set on a higher note).

Figure 5 *'so'o*, this is a neutral yes-no question. Because of the brevity of the Japanese syllable, a sequence of 'level and rise' is fused to sound almost as a simple rise.

Figure 6 *'so:'o*, this is a rather elaborate yes-no question. The first syllable is lengthened.

Figure 7 *'so:'o*, this is a surprised echo question. The terminal syllable is lengthened to produce the effect of a complex (level PLUS rise) type of intonation.

Figure 8 *'sq:'o*, this is also meant as a surprised echo question. It differs from the preceding example in that the initial syllable (lengthened for emphasis) is pronounced in a very low key, sounding almost like a deep growl or a heavy whisper. Only in very rare cases would one encounter this. A case of intonation overriding tone. Figure 8 shows that no successful tracing of the pitch curve of the initial syllable was obtained.

Figure 9 *'so'o*, this is a perfunctory statement. The second syllable is cut short, as it were.

Figure 10 *'so'o*, this is a curt, irritable statement. The second syllable is apparently missing. The typical tonal pattern of the word *soo* is disfigured.

Figure 11 *'so'o*, this is an unfinished statement. The second syllable usually does not drop as low as in the second example (see Figure 2).

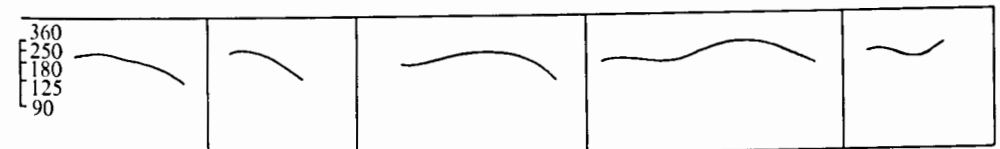


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

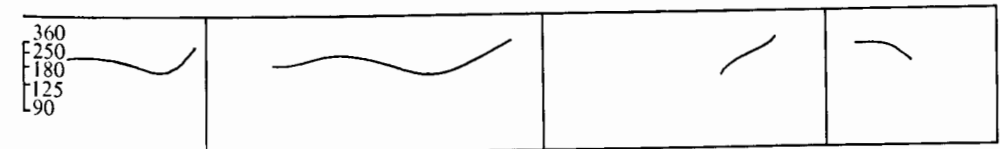


Fig. 6 Fig. 7 Fig. 8 Fig. 9

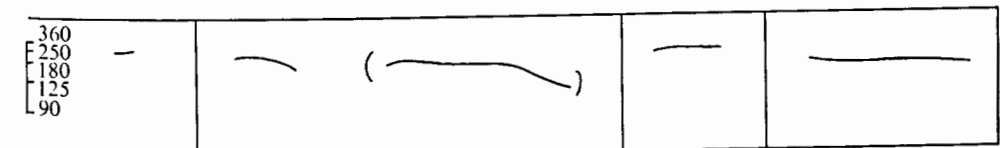


Fig. 10 Fig. 11 Fig. 12 Fig. 13

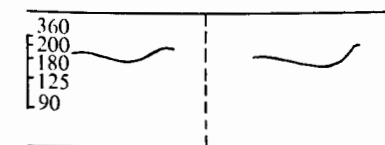


Fig. 14 //

Figure 12 1soo , this is an insistent shout. The two syllables run on an almost level note. The original tonal pattern of the word *soo* is lost.

Figure 13 $so:o$, this is a kind of contemplative type of statement, meaning 'well', or 'let me see'. The first syllable is lengthened, and the two syllables continue on a rather low note. The original tonal pattern is lost.

Figure 14 $^1so:l\acute{o}$, this is also a statement. The second syllable is raised in pitch, as if to clinch the issue. A possible implication is: 'That's final'. The first syllable is lengthened for emphasis.

4. Basing on the forms discussed, we may now draw the following conclusions:

(1) Generally speaking, tones refuse to have their shapes unduly modified by intonation. Otherwise, their lexical meaning will often be misunderstood or even lost. In the case of the sample word I have chosen, the original tonal pattern is retained in most instances in spite of the fact that intonation is given to the relevant syllable or syllables in a variety of ways. See Figures 2, 9, 11, 14, etc.

(2) My experiment has revealed on the other hand that intonation sometimes dominates tones. See Figures 8, 10, 12, 13.

However this does not in the least mean that the same will hold true for all other words of this accentual type. The choice of the word *soo* is particularly appropriate because of its interjectional nature.

We may thus safely assume that tone-intonation interplay involves a melodic change in the SHAPE and/or SCALE of a given tonal pattern.

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REFERENCE

Abe, I.
1966 "General Characteristics of Japanese Terminal Intonation", *Lingua* 16:255-262.

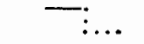


DISCUSSION

DEARMOND (Burnaby, B.C.)

Since in Japanese we find a lexical contrast of $so\bar{ }o$ and $so\bar{ }o$, $a\bar{ }me$ and $a\bar{ }me$, how in each of these intonation contours illustrated on your handout does the basic tone or pitch contrast manifest itself so as to remain distinct, or does the basic tone contrast neutralize?

ABE

Tones are kept distinct most of the time, much less often neutralized.

Figure 10 -- example:  second syllable missing (neutralized)
Figure 14 -- example:  schematically  raised ↑ (distinct)

ELERT (Umeå)

Could not the word *soo*, since it is a kind of interjection and a carrier of expressive tones, behave differently from ordinary words? One can compare the fact that no definite tonal accent can be assigned to Swedish *jaså* 'so' which has been the subject of a phonetic study by Olof Gjerdmán (*Nysvenska Studier* 1927).

ABE

Yes. I specifically pointed out in my paper that what we have observed about perturbation of the tonal pattern of the word *soo* by intonation would not hold true for all other words of this accentual type. The aim of my experiment was simply to see to what extent tones can be modified by intonation.