

# Some Prosodic Aspects in Hindi\*

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"Intonation like everything else in language is one instrument in an orchestra. " Some consider intonation as only a " peripheral part of communication", whereas according to some others "intonation is 'central' in communication ".

Intonation has been considered to be functioning at different levels of language, *i.e.*, syntactic, lexical, phonological and also in providing information regarding physical condition of the speakers, emotion and others.

Intonation plays an important role in language. The role of intonation in an acquisition of language has relatively little attention, even though it is the first aspect of language to be learned by the child. Intonation has been reported to be facilitating acquisition of both speech reception and production.

Therapy for deaf and aphasics include teaching intonation as it has been found to facilitate acquisition of language. Study of intonation in a given language permits better understanding of the language. Thus there is a need for knowing the intonation used in a language for the purpose of teaching language.

The present study aimed at finding out the different intonation patterns used for

different emotions by speakers of Hindi language.

Five males and five females (all Hindi speakers) b/w the age range of 18-21 years served as the subjects for the present study.

Eight emotions, *e.g.*, surprise, fear, frustration, jealousy, joy, anger, worry and grief were chosen for the study. One neutral was also included. Four sentences were constructed to express each emotion. Thus there were 36 sentences.

Speaker was asked to sit comfortably in a sound treated room and the mic was kept 6 away from his mouth. All speakers were given enough rehearsal before recording. Then the list of the sentences was given to the subject and was requested to say the sentences bringing out the emotion indicated against each sentence. Recording was done on spool tape recorder.

One sentence out of four representing the specific emotion, which was considered as satisfactorily expressed by the experimenter and a judge, was taken for analysis.

For objective analysis these sentences from the tape recorder were fed to pitch analyzer (PM 100) and the visual display of the intonation pattern on its display screen was obtained. Then by moving the cursor of the PM 100, the frequency

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and intensity variations for each sentence were noted.

Subjective analysis was done with the help of three judges who had linguistic background and knew about intonation. The judges were requested to listen to all the 9 sentences spoken by each of the subject and judge the emotion expressed in each sentence and also to note down the pitch contour used by the speakers in uttering each sentence.

The results thus obtained by instrumental-objective analysis and perceptual-subjective analysis were analysed further separately to note down the overall or general pattern of pitch contour used by subjects in expressing the emotion in each sentence.

Further, the results obtained by two methods of analyses have been compared to find out the similarities and differences.

### **Conclusions**

The following conclusions have been drawn based on the results obtained :

- (1) The speakers of Hindi use different intonation patterns to express different emotions.

- (2) The trained listeners can identify the pitch contours occurring in uttering sentences, reliably and validly.
- (3) The intensity variation does not seem to be related to the emotions expressed.
- (4) The perception of pitch variation depends upon the fundamental frequency variation.
- (5) The instrumental analysis (using pitch analyzer) provides even minor details of frequency and intensity.

### **Recommendations**

- (1) The study may be repeated with larger population to make generalization.
- (2) The study of expression of different emotions on the same sentence can be made using both instrumental and perceptual analyses.
- (3) The judges, who do not have any knowledge of Hindi may be used to judge the expression of emotion and the pitch variations.
- (4) Non-emotional conditions may also be studied using instrumental and perceptual analyses.
- (5) Other prosodic aspects of Hindi may be studied.