Chapter - VI

Summary and Conclusions
CHAPTER-VI

SUMMARY AND CONCLUSIONS

In this chapter, we make an attempt to briefly outline all what has been done in the present thesis. We then end the chapter with the conclusions.

In the introduction, we have dealt with the historical setting of Modern Standard Hindi, the procedures utilized in the collection and analysis of the data, the theoretical principles of Form Content Linguistics that motivates the phonological analysis, and scope of the study in sections A, B, C and D respectively.

In Chapter-I, entitled, “The physiological base of Modern Standard Hindi Phonology”, an attempt has been made to evaluate the role of physiological mechanism in the paradigmatic makeup and the syntagmatic distribution of phonological units of Hindi.

In section A, it has been seen that the communicatively based phonological units of Modern Standard Hindi have been presented diagrammatically in the terms of 9 articulators and 8 degrees of apertures (0 through 8). The degrees of apertures are subjected to two broad divisions, namely; constriction versus opening, and the clearly audible versus less clearly audible. The constriction and less clearly audible aperture are 0 aperture (stops), 1, 1 ½, and 2 apertures (fricatives) and aperture 3 (liquids). The opening and more clearly audible on the other hand, extend from 4
to 8 apertures (vowels/diphthongs). It has been noted that the phonological grid is different from the 'phonemic inventory' which is traditionally based on the substitution distribution criteria used by the American structuralists.

In section B, we have evaluated the impact of the hierarchy of adroitness of articulators on the paradigmatic makeup of the consonantal units and their frequency of occurrences in the monosyllabic words in Modern Standard Hindi. We have set up a scale of adroitness for the articulators, with the apex as the most adroit, the labium (and the dorsum) as more adroit, the medium as less adroit, and the post dorsum as the least adroit. In accordance with this scale relationship, we predicted that the apical consonants should be most favored both in the number of units and in their frequency of usage in the words, followed by the labial or dorsal consonants, the medial consonants, and the post dorsal consonants, in that order. It has also been amply demonstrated through the actual frequency counts that the paradigmatic and the syntagmatic distribution of phonological units of Modern Standard Hindi fully conform to our expectations in terms of this hierarchy of adroitness of articulators.

In Chapter-II, we have dealt with the justification for the paradigmatic makeup and the syntagmatic distribution of
This chapter broadly covers two aspects of human behavior, namely; the relative preference of gross articulatory movements fewer versus more, etc. Over fine articulatory movements and the human behavior justification for the phonological grid.

In section A, we have taken up three main dichotomies among the phonological units of Modern Standard Hindi that are motivated by the human trait of preferring fewer articulators over more articulators. The dichotomies, voiced versus voiceless consonants, unaspirated versus aspirated among the voiceless stops, and oral versus nasal vowels, are characterized by the use of an extra articulator. It is shown that phonological units which employ fewer articulators like the voiceless, unaspirated, and non-nasal (vowels) units are preferred over the voiced, aspirated, and nasal (vowels) units because the latter utilizes more articulators in their production and, therefore, requires greater precision of control.

In section B, it has been shown that the apico-dental (dental) consonants are preferred over the apico-palatal (retroflex) consonants in terms of the human traits, proximate versus remote-point of articulation. As compared to the paradigmatic makeup of the phonological units, the preference for the apico-dental
consonants and the apico-palatal consonants is conspicuously more in the syntagmatic organization of the words.

In section C, we have studied the combinatory aspects of Modern Standard Hindi phonology through the assimilative trait of neighboring phonological units. In view of the general avoidance of fine, precisely coordinated movements of articulators, we predicted that there should be a favoring for the combination of phonological units that become similar due to the impact of assimilation. The vast skewing occurrences in favor of the favored and against the disfavored combinations, fully conforms to our expectations in terms of the assimilative trait of neighboring phonological units.

In section D, we have evaluated the impact of the degree of aperture change on the combinatory pattern of Modern Standard Hindi. It has been argued that large changes of aperture requires less precision of movements. As a results they are favored over small changes of apertures because they requires fine and precise movements and coordination. We, therefore, compared the potential and actual numbers of the CVC, CVCC and CCVC words and demonstrated clearly that the CVC words which involve large changes of aperture are drastically favored. This is perfectly in conformity with our expectations.

In Section E, we have examined how human behavior orientation provides reinforcement to the validity of the
phonological units in the grid in Modern Standard Hindi which is established on physiological factors in terms of the physiological mechanisms.

In Chapter-III, we have dealt with the role of communication as an orienting principle in the phonology of Modern Standard Hindi.

In section A, we have presented the phonemic inventory of Modern Standard Hindi. By way of contrast through minimal and sub minimal pairs of words. We established 56 elemental units of communication ‘phonemes’ for Modern Standard Hindi, of which 36 are consonants and 20 are vowels.

In section B, we have studied the combinatory pattern of the phonological units have been reversed to highlight the role of communication in Hindi phonology. Here, it is discussed, and illustrated with a list of examples, that consonantal interchange in the initial and final positions in the CVC words bring about the formation of two well defined words with entirely different meanings in Hindi.

Through the frequency of usage it has been established that the already disfavored voiced and aspirated units in terms of physiology and human behavior are further disfavored word finally in terms of communication, with regard to the hierarchy of adroitness of articulators. It has been shown through frequency counts that the already favored apical units and the less favoured
non-apical units compete well in the communicatively important initial position, whereas, the same favored units are even more favored word finally and the disfavored units are further disfavored in this communicatively less important position of the word.

In section C, we deal with homonymy as a communicative problem. We have shown that such type of homonymy is easily tolerated by Modern Standard Hindi. We have given examples to show the homonymy being created as a result of final deaspiration at the end of the word.

In Chapter-IV, we have evaluated the impact of some selected acoustic aspects that have a bearing on the makeup and distribution of phonological units in Modern Standard Hindi.

In section A, we have described the acoustic base of the clearly audible distinction of apertures. We present that it is on the basis of this classification of apertures in terms of audibility that the 61 phonological units of Hindi, are divided into 20 vocalic and 41 consonantal units. This classification is reflected in the organization of the phonological units, as shown in the phonological grid in Hindi.

It is noteworthy that the audibility provides the theoretical basis to divide the lexical units into monosyllabic, the bisyllabic, and larger words on the basis of the combination of keystone and flanking units.
In section B, we provided acoustic explanations for medium-dorsum mass as the articulator for vowels. The medium-dorsum mass determines the size of the two resonant cavities which formed within the supraglottal cavity and how significant role these two cavities play in the production of vowels in a language.

In section C, we deal with the acoustic explanation of the lip rounding of back-dorsal vowels.

In chapter V, we dealt with the role of vision in the phonology of Modern Standard Hindi. It has been shown that through frequency of usage in view of visibility, the labial articulator is more preferred at the initial position of the word (where a word requires most communicative distinction), than at the non-initial position of the word. In many cases of the monosyllabic words, labial consonants fell to minimum in the final position of the word.

Conclusions:

The present analysis of Modern Standard Hindi is based on the assumption that phonological units of a language are tied to one another in a non-random relationship, both paradigmatically and syntagmatically. These units are organized in terms of their physiological, psychological, acoustic and communicative bases in the paradigmatic makeup and are characterized by value relationship. The arrangement of phonological units in the syntagmatic is also determined by their physiological, psychological,
communicative or acoustic traits. In other words, phonological characteristics of a language are fully motivated by the orientations.

The evidence that we have presented for the establishment of the phonological grid of Modern Standard Hindi, with 61 units, and for their non-random occurrences in the various positions of the non-syllabic words, in terms of the phonological principles of Form–Content Linguistics, prove this point beyond reasonable doubt. This thesis will contributed towards the explanation of the inner mechanisms of the phonology of Modern Standard Hindi through its explanatory character and quantitative procedures used for validating the phonological analysis supported by the independently verifiable orientations.