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STRESS AND INTONATION IN HINDI

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I. INTRODUCTION /problems and method/

Stress and intonation play an important part in Hindi. In spite of this we see that the opinions of the certain Indian and foreign authors are very different as regards the judgement of the character of Hindi stress and intonation. This is shown well also by R.K. Misson's<sup>1/</sup> article, in which the author quotes five statements from professional literature regarding the character of stress in Hindi, differing from each other.

In choosing my theme I was guided by the endeavour to possibly elaborate such a uniform and comprehensive system, which removes and explains the contrasts to be found in professional literature regarding the subject and which comprises Hindi stress and intonation into a uniform whole.

In my work I have utilized the valuable observations of investigators dealing with the subject previous to me, as well as my own observations and experiments made in India. My statements are based mainly on Hindi as spoken in Banāras, because in my opinion

the Hindi language spoken there has more or less preserved the original phonetic characteristics and singing character of Hindi.

Banāras is situated in the eastern half of the Hindi language territory. It was a centre of Indian culture already about the 11th century A.D., that is at the time of the development of Hindi. Here met the scientists, philosophers and grammarians of the different regions of the country, as well as the masses of Hindu pilgrims. On account of its central geographical situation it was, on the one hand, the place of contact of the various dialects of Hindi, and on the other hand it remained rather apart from foreign cultural and linguistic influences, and thus it could preserve more purely the characteristics of the Hindi language, including also the original character of stress and intonation. In this respect Banāras was in a more favourable position than for example Delhi, which became the centre of the Moghul rulers and in respect of the language was strongly influenced by Persian. Later on it was chosen also by the British coloniz<sup>ers</sup>~~ators~~ as their centre. The capital of the country is affected also today by more foreign /especially English/ linguistic influence, while Banāras situated farther to the east is less exposed to this

influence.

Studying the history of the development of the Hindi language, we see that it always had to struggle against the hostile surroundings and foreign political influence. It did not enjoy the support of the rulers. However, being the language of the people and thus having great vitality, it succeeded to overcome the obstacles and to ensure its further development. Practically the whole of the Hindi language territory was in the hands of foreign conquerors. Thus the political and cultural influence had an unfavourable effect on the Hindi language. The Hindu religious movements played a very important part from the viewpoint of counterbalancing the foreign influence. These relied upon the language of the people, strived for clarity and thus they also promoted the spreading of the use of Hindi. Especially important is here the role of Banāras as a Hindu cultural and pilgrimage centre. The different eastern and western dialects of Hindi /Kharī Bolī, Brajbhāṣā, Avadhī, Bhojpurī, etc./ also met here and broadened the possibilities of the use of Hindi. In spite of the fact that Banāras is situated in the territory of the Bhojpurī dialect, in the city itself the Hindi language, the Hindi literary language is dominating and its influence era-

diates also to other parts of the Hindi language territory.

In the course of the centuries several such famous writers and poets were born, or acted here, whose influence spread practically over the whole territory of India. Such was for example Kabīr /born about 1400 A.D./, the great religious reformer, who preached his doctrines not in Sanskrit but in the simple language of the people. He spent a considerable part of his life in Banāras. After his death his Hindu followers were organized by Surat Gopal into an order, whose centre was Banāras. Tulsīdās, the famous poet of the 16th century, author of the Rāmcārītānās, the Hindi /Avadhī/ version of the Rāmāyana, also settled down in Banāras. The Hindi Rāmāyana has a great influence on the millions of Hindus even today. Bhāratendu Harīscandra /1850-1885/, the founder of modern Hindi prose writing, was also born in Banāras and lived there in the last century, just like Jayānkar Prasād /1889-1937/, by whom Hindi play-writing was further developed on European models. Last but not least, Premchand /1880-1936/, the eminent figure of Hindi novel writing, was also born in a village near Banāras.

Banāras, the intellectual capital of India, where the flow of pilgrims streamed throughout the whole year,

like some other cities of India, developed at the same time also to a great industrial and commercial centre. It became famous especially on account of its silk-textile industry, coppersmith's work, etc. Besides this pilgrimage also contributed to the strengthening of the feeling of national unity.

All these facts promoted the amalgamation of the different dialects, the preservation of the linguistic traditions and thus also the development of Hindi as a connecting language. As Banāras was a Hindu place of pilgrimage, therefore it was visited first of all not by foreigners but by Indians. This circumstance also decreased foreign linguistic influence and contributed to the preservation of the original characteristics of the Hindi language.

The facts enumerated above have justified my decision to base my studies first of all on my observations carried on in Banāras.

In my observations I applied the direct method. With the certain experimental persons I carried on conversations on the problem I wanted to clarify, so that the <sup>p</sup>ollies could be concluded from the spontaneous manifestations of the experimental persons. I adopted this method, as I have observed that in case I definitely asked the experimental persons for ex-

ample where the accent is in a given word, immediately doubts arose in them and their answers became uncertain. Therefore, in most of the cases I initiated such conversations in which the problems to be clarified were included without telling this to the experimental persons. Then I tried to check up my observations gained this way in everyday life, in the street, in shops, in the cinema, the theatre, at the university and in society.

To my knowledge, the subject has not yet been discussed in such a detailed and comprehensive ~~form~~ <sup>form</sup> either in India or outside India. In case I have succeeded in bringing the subject nearer to its final solution, it is due in many respects to my Indian and Hungarian colleagues to whom I extend my gratitude also from this place.

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## II. STRESS

### O. GENERAL VIEWPOINTS

Stress is an important property of language. According to Laziczius<sup>2/</sup>, when we speak about the stress of a language, we must always think about emphasis, because the changing of the strength of the emphasis gives the essence of stress. Classical phonetics differentiates between word stress and sentence stress. This standpoint is represented by Laziczius<sup>3/</sup> and by many others. A new conception is followed by L. Deme, when in connection with the Hungarian language he states about word stress that "in reality there is no word stress".<sup>4/</sup> He further states that in the course of Hungarian speech any of the words can be stressed or unstressed. "If a word receives stress in the course of speech, it does not receive it as a word, but as a part of the sentence to which for some reason prominence is given."<sup>5/</sup> The standpoint of L. Deme in connection with word stress is held by us important because, as we shall see later on, we also represent a similar standpoint in connection with Hindi word stress.

The importance of stress is supported by L. Bloomfield's<sup>6/</sup> statement on the phonemic character of stress.



According to him stress is a secondary phoneme. H. A. Grierson, Jr.<sup>7/</sup> draws this conclusion from the examination of the so called minimal pairs of words. In connection with Hindi we only state here that the phonemic character of stress can be pointed out also in Hindi, but its explanation is not exactly the same, what is for example shown in English and German on the basis of the usual examples /English: permit - permit; German: übersetzen - übersetzen/.

According to Laziczius<sup>8/</sup> quantitative and qualitative differences, as well as differences in the pitch level also go together with stress. This is also supported by the acoustic investigations of I. Kónagy<sup>9/</sup> on the basis of recordings made by him on the Hungarian, French, Italian, Rumanian, German, Russian and English languages. He states that there is a positive relationship between the stress, on the one hand and loudness, pitch level and length, on the other. Length and pitch level are closely associated with stress also in Hindi. However, it is noted that, while for example in Russian within a word only the stressed syllable is pronounced long and all the other syllables are short, in Hindi every long syllable of the word is pronounced long, whether they are stressed or not.

1. REVIEW OF PROFESSIONAL LITERATURE ON  
STRESS IN HINDI

1.1. Syllabification

The problem of the characteristic Hindi stress has been discussed by many investigators, although we can hardly find any work which expounds in detail all problems connected with stress in Hindi.

The opinions of the certain authors agree with each other in many respects, however they frequently arrived also at different and even contrasting conclusions.<sup>10/</sup> One of the reasons for this is that in determining the number of syllables in a certain word they very often did not start out from the spoken language but regarded the characters of the devanāgarī script, the akṣaras, as syllables. This is correct in the Sanskrit language, but not in Hindi. In fact, in Hindi the inherent a /usually pronounced ə/, which is to be pronounced after the certain consonant akṣaras without any further marking, frequently is silent at the end of the words and also inside the words. Thus the number of the akṣaras does not always correspond to the number of syllables.

The authors of the recently published more important works already observe more or less the reduction or elision of the inherent a /ə/ and the even-

tual changes of the stress resulting from this.

However, there still occur such explanations which - especially for those whose mother tongue is not Hindi - disturb the syllabification and the establishment of stress. Thus for example, according to Kāntāprasād Guru<sup>11/</sup> the consonant preceding a reduced a is pronounced somewhat longer and if at the word end there is a reduced a, then stress falls on the penultimate syllable. E.g. in the words घर /ḡhar/ 'house', झाड़ /jhār/ 'bush', सड़क /səṛək/ 'road', etc. Even these examples show that Kāntāprasād Guru also belongs among those authors, who in certain cases identify the akṣaras with the syllables. It can be found with him and with several other Indian authors that they regard two such words as one word, which are apparently to be regarded as separate words, and they draw conclusions concerning the number of syllables from the words thus written together. Such words are for example बोलकर /bolkər/ 'having spoken' and दिनभर /dinbhər/ 'the whole day'. The बोलकर, correctly बोल कर, is an analytically formed absolute, viz. root of the verb बोलना /bolnā/ 'to speak' + the root of the verb करना /karnā/ 'to do', 'to make'<sup>12/</sup>; and the दिनभर is correctly दिन भर, where the दिन 'day' is a noun and the

भर 'whole' is an adverb. Thus the explanation, according to which in the above two examples the inherent a falls out inside of the word, that is from the end of the बोल and the दिन, and therefore are the first elements of the two phrases stressed, is not correct either. In reality, in both cases the first element is a separate word and thus the inherent a falls out from the word endings and not inside of the words. In this case the establishment of the place of stress is correct, but the explanation given to it is not correct.

An interesting explanation is given to the syllabification of the words by S.G. Rudin,<sup>13/</sup> who deals with the problem of stress in Hindustani /Hindi/ more thoroughly. Rudin, while underlining on the one hand that there is a difference between "syllable" according to our conception and akṣara according to the Indian conception,<sup>14/</sup> arrives at the conclusion that the terminal consonant of a closed syllable forms a separate syllable with the reduced inherent a following it, because the reduced a never disappears entirely in the pronunciation.<sup>15/</sup> According to him in such cases there is no difference between syllabification and division according to akṣaras. In my opinion Rudin's observation is inasmuch correct as in

certain cases the terminal reduced inherent a can really be heard very slightly in the pronunciation, but this reduced a does not form a separate syllable with the consonant preceding it.

## 1.2. Character of Stress in Hindi

As we have already mentioned, the most diverse and sometimes contrasting views have come to light as regards the character of stress in Hindi /Hindustani, Urdu/. S.N. Kellog<sup>16/</sup> in his detailed Hindi Grammar deals only briefly with the question of stress. According to him stress in Hindi is much weaker than in English and it has a quite subordinate role in comparison with length. In his opinion in Hindi every syllable is pronounced with the proper length, that is the long syllable is pronounced long even if it is unstressed. From the short definition of H.C. Scholberg<sup>17/</sup> we can conclude that stress in Hindi is brought by him into connection with the interference of foreign languages. According to a considerable part of the more recent authors<sup>18/</sup> there is stress accent in Hindi, but the character of it is explained by them in different ways. In general they agree in the point that stress in Hindi /Hindustani/ is not as distinct as for example in English.<sup>19/</sup> The investigators also emphasize that unstressed vowels, if they are long, must be pro-

nounced as long and as distinct as the stressed ones.<sup>20/</sup>

The BGMH<sup>21/</sup> explicitly says that in Hindi: "As a general rule only one syllable in a word is accented." The explanations of H.C. Scholberg<sup>22/</sup> and V. Porizka<sup>23/</sup> in an implicit form are already near to the assumption of several stresses. And according to H.G. Rudin<sup>24/</sup> in certain exceptional cases there is also secondary stress.

### 1.3. The Place of Stress

As the majority of the authors, in an explicit or implicit form, assume the existence of only one stress in a word, it would be necessary to establish the place of word stress.

In this question Rudin, as it is stated by himself, follows the views of G.A. Grierson, Kāntāprasād Guru, T.Grahame Bailey, E. Greaves and H.W. Fallon.<sup>25/</sup> He mentions as a general rule that each word consisting of more than one syllable has accent, and sentence stress can also fall on a monosyllabic word. This stress is permanent, it does not change its place with the change of the phonetic form of the word, or in case suffixes, formative syllables, postpositions, etc. are added to it. In this connection Rudin's examples are as follows: 'jānā 'to go', 'jākar 'having gone', 'jāũ 'I should go', 'jāũgā 'I shall go', la'pāī 'war',

la'raiyā 'wars', la'raio mē 'in wars', etc. If the last syllable of the disyllabic word is a reduced short a, then stress always falls on the first syllable. E.g. 'tat 'shore', 'rāt 'night', 'sattya 'truth', etc. Here Rudin starts out from the number of akṣaras in establishing the number of syllables. Kāntāprasād Guru<sup>26/</sup> and Dhirendra Varma<sup>27/</sup> are of similar opinion. Of the difficulties in the establishment of the place of stress caused by the syllabification starting out from the akṣaras, characteristic is the case when stress falls on the last syllable. According to the BGMH<sup>28/</sup> the last syllable can be stressed only if it is the only long syllable in the word. Rudin, on the other hand, mentions also several such words, in which the last syllable can also be stressed. These are mentioned by him as exceptional cases. According to him such are the disyllabic absolutes and imperatives of the causative verbs, e.g. ba'nā 'made', 'make', su'nā 'told', 'tell', etc., as well as the negative particle na'hī 'not', and the following adverbs of place: ya'hā 'here, hither', va'hā 'there', ka'hā 'where?', ja'hā 'where', etc. Rudin also mentions a few such words in which, in our opinion, the stressed syllable is the last /second/ syllable, viz.: ki'sān 'peasant', vi'cār 'idea'. Since, however, he identifies the

number of syllables with the number of akṣaras also here, he holds these words trisyllabic /ki-sā-nā, vi-cā-rā/ and thus according to him the stress is not on the last syllable but on the penultimate syllable.<sup>29/</sup>

According to the majority of the authors the place of stress in Hindi is unfixed, not like in French where stress is on the final syllable, or in Hungarian where stress is on the first syllable of the word. However, it is mentioned by several authors that the verbal roots in Hindi are always stressed, regardless of the changes of the phonetic form of the verb. This is the view of A.P. Barannikov - P.A. Barannikov,<sup>30/</sup> who mention the following examples to support their opinion: jānā 'to go', kāregā 'he will do', śuntā 'hearing', mārā 'beaten', bolnevāīā 'speaking, speaker'. In their opinion, if the verbal root is disyllabic or polysyllabic, then stress is on the final syllable of the verbal root, e.g. śunānā 'to cause to hear, to tell' /causative form of śunnā 'to hear'/, paḥāñcānā 'to take' /causative form of paḥāñcā 'to arrive'/.  
S.G. Rudin<sup>31/</sup> is also of the same opinion, but

he generalizes even more when he says that in Hindustani /Hindi/ the place of word stress is fixed, that is the place of stress usually does not change, if to the word New Indian grammatical suffixes, diminutive



suffixes, or postpositions are added, e.g. 'jānā 'to go', 'jākar 'having gone', 'jāū 'I should go', 'jāūgā 'I shall go', la'raī 'war', 'tit<sup>ā</sup>lī 'butterfly', 'tit<sup>ā</sup>liyā 'small butterfly'.

According to V. Porizka<sup>32/</sup> the certain forms of the deverbative verbs /verbs formed from verbs/ are distinguished by stress from the verbal forms with identical phonetic forms of those verbs from which the deverbative verbs were formed. E.g. चला calā /ca'lā/ 'having driven' /e.g. a car/ and चला calā /'calā/ 'gone'; '/he/ went'. In our opinion it would be more correct to explain this with the general rule, according to which in the case of the verbs the stress is always on the verbal root, and if - as in the present case - we have to do with a deverbative verb which has a disyllabic root, then the stress falls on the second syllable of the verbal root. Thus the first calā is a verbal root, while the second calā is a past participle. This explanation applies to the whole verbal system.

Explanations of meaning differentiation by stress can also be found with Kantāprasād Guru and Dhirendra Varma

R.C. Mehrotra 33/  
and

#### 1.4. Historical Aspects of Stress

John Beames<sup>34/</sup> writes about the historical aspects of stress and in this respect he compares Hindi and the other Aryan languages of Northern India with the Romance languages. According to him it can be observed that in the Romance languages, for example in French, stress is very often on the same syllable as it had been originally in Latin. On the analogy of this Beames gives an interesting explanation of early and later tadbhava words in Hindi. He mentions that in Hindi the tadbhava equivalent of the Sanskrit oxytone word क्षुर /kṣura/ 'knife' is घुरा /churā/, which is also oxytone, while on the other hand, the Hindi tadbhava equivalent of the word क्षेत्र /kṣetra/ 'field', which is also oxytone in Sanskrit, is खेत /khet/. Here the originally stressed final vowel is dropped and the word ends in a consonant. According to Beames in the first case we have to do with an early tadbhava and in the second case with a late tadbhava.<sup>35/</sup>

The conception of Beames, according to which in the old adoptions of words the stress was preserved in its original place, is supported by Sanford A. Schane<sup>36/</sup> in the French language. He compares the stress relations of such words which in certain

dialects end in schwa and in literary French in a consonant. In accordance with the general rule within the word stress is placed in all cases on the last pronounced vowel, e.g. petit /pət'ɪ/, petite /pət'it/, naturel /natyr'ɛl/, naturelle /natyr'ɛl/. In those dialects in which final schwas are pronounced, the stress falls on the penultimate syllable, e.g. /pət'ɪ/, /pət'itə/, /natyr'ɛl/, /natyr'ɛlə/. This also shows <sup>stress</sup> that the stress possibly remain<sup>s</sup> on the originally stressed syllable quite apart from the fact whether this is the last or the penultimate pronounced syllable. According to Schane many of the phonological changes are a consequence of stress. This can be seen also in one of the examples mentioned by Beames in which the Hindi tadbhava equivalent /churā/ of the Sanskrit word ksura preserved its terminal vowel exactly as a result of the end stress. At the same time the terminal short a became long /a > ā/, because otherwise according to the phonetical rules of Hindi it ought to have become silent.

Beames also touches the development of the formative syllable ā of the Hindi causal verbs, however he does not explain the character of stress in Modern Hindi.

### 1.5. Observations on Stress in Hindi Resulting from the Survey of Literature

From the survey of literature we can establish that the authors deal in general with word stress in Hindi, while sentence stress is almost entirely disregarded by them. Sentence stress appears only in the works of V. A. Chernyshev<sup>37/</sup> and R. C. Mehrotra. However, Chernyshev does not define the place of stress in the word to which prominence is given, he only defines the place of the word to which prominence is given in the sentence.

The majority of the authors state in an explicit or implicit form that there is only one stress in a word, that is only one syllable of the word is stressed. An exception is S. G. Rudin, according to whom in certain exceptional cases secondary stress can also exist, as well as H. C. Scholberg and V. Porizka<sup>✓</sup>, whose explanations are already near to the assumption of several stresses.

No uniform opinion has been formed about the definition of the place of stress either. Here it is disturbing that part of the authors identify the syllables in general with the aksharas and thus they frequently<sup>show</sup> more syllables in the certain words than the number of syllables to be established on the basis of

actual pronunciation. The meaning differentiating role of the stress is mentioned by almost all authors in some form. However, only R.C. Mehrotra<sup>38/</sup> deals with this subject in the framework of the sentence.

Summing up the aboves, on the basis of literature we cannot form a uniform picture on stress in Hindi or on its place and function in the sentence.

## 2. WORD STRESS OR THE PHONETIC BASIS OF SENTENCE STRESS

### 2.1. There is no Separate Word Stress in Hindi

As we have seen, the authors reviewed in general have observed that there is something in Hindi stress what is difficult to grasp and what differs from the stress system of the European languages known to us. The linguists and grammarians tried to approach this question in different ways.<sup>39/</sup>

On the basis of my experiments and observations carried on in the Hindi language territory, I have arrived at the conclusion that in Hindi words not only one but also more syllables can be stressed. This stress on the different syllables can be of equal or of different strength, as a result of which the Hindi words show a certain fluctuation in regard to stress. As we have already mentioned, Scholberg<sup>40/</sup> very likely

hints at this when he says: "Rising and falling inflections are much less marked than in foreign languages. In Hindi quantity is rather to be observed than accent." V. Porizka's<sup>41/</sup> remark also refers to this:

"a/ It is wrong to place strong accent on one syllable while articulating other syllables indistinctly."

Thus stress in Hindi can be explained not so much with individual stress, but rather with the alternation of the relative strength of stress, and the Hindi words in speech appear as the complex of relative differences of emphasis. It is caused exactly by this fluctuation or pulsation that word stress in Hindi can be heard only indistinctly and that there is a more distinct stress only on that word which, as a result of prominence or in the case of sentences consisting of one word, is the vehicle of the sentence stress.

The frequently contradictory statements found in professional literature regarding word stress in Hindi can very likely be explained also with this characteristic.

Starting out from the above consideration, in my opinion, separate word stress does not exist in Hindi but it asserts itself only in coherent speech as sentence stress. However, since within the sentence always

some word, or one of its syllables, is the vehicle of sentence stress, therefore in this sense word stress still plays an important role as the phonetic basis of sentence stress.

## 2.2. General Principles on Syllabification

Since - as already mentioned above - word stress in Hindi is the phonetic basis of the sentence stress and the word to which prominence is given is the vehicle of the sentence stress, we have to ascertain whether there are such general rules, which define the place of sentence stress in the word to which prominence is given.

For this it is first of all important to make the syllabification on the correct basis. According to us this is only possible according to the phonetic form of the word pronounced in speech, and not according to the akṣaras. Thus the words घर ḡhar 'house' /two akṣaras/, लोग log 'people' /two akṣaras/, बात bāt 'affair', 'matter' /two akṣaras/ are monosyllabic; the words जरा zarā 'a little' /two akṣaras/, पहला pahlā 'first' /three akṣaras/, पर्वत parvat 'mountain' /four akṣaras/ are disyllabic; the words पढ़ाना parhānā 'to teach' /three akṣaras/, महाराज mahārāj 'great king' /four akṣaras/, कचहरी kacāhrī 'court' /four akṣaras/, कहावत kāhāvat 'proverb' /four

akṣaras/ are trisyllabic; and the words वाचनालय  
 vācanālay 'reading-room' /five akṣaras/, पवित्रता  
 pavitratā 'sanctity' /four whole akṣaras and one ab-  
 breviated akṣara/, प्रदर्शनी pradarśanī 'exhibition'  
 /four whole and two abbreviated akṣaras/ are quadri-  
 syllabic.

In connection with this we turn again to Rudin's<sup>42/</sup>  
 opinion, according to which in Hindi pronunciation  
 the so called inherent a is frequently reduced but  
 does not disappear entirely and therefore we must count  
 with its presence. This view can strongly influence  
 the syllabification, as well as the establishment of  
 the number and length of syllables. In fact, Rudin  
 acts according to this and just therefore he arrives  
 at the conclusion that in most of the cases there is  
 no difference between the number of syllables and the  
 number of akṣaras.<sup>43/</sup>

As regards the reduction of the inherent a, as  
 we have already mentioned, we agree with Rudin's  
 statement inasmuch as the inherent a is not always  
 dropped entirely in terminal and medial position after  
 a closed syllable. According to us, however, the re-  
 duced inherent a can only be regarded as syllabic, if  
 it is terminal and is preceded by a consonant cluster,  
 as for example pat-rə 'letter', cit-rə 'picture',



svāsth-yə 'health', etc. In other cases the reduced inherent a is not syllabic from the viewpoint of stress. In prosody, on the other hand, according to the characteristic scansion the reduction of the inherent a is really not taken into consideration, that is the inherent a is always pronounced, just like in Sanskrit, but in a reduced form, as ə. This, however, does not affect the phonetic character of general speech, and thus here the number of syllables cannot be generally identified with the number of akṣaras.

2.3. The Place of Stress in the Word to which Prominence is Given - Syllabic Length and Stress - Stress Relations of Nouns, Adjectives and Adverbs

We have seen that word stress in Hindi is the phonetic basis of sentence stress. Word stress asserts itself as the stress of the word to which prominence is given, that is as sentence stress. Let us see now, whether there is such a general rule which gives us orientation as regards the place of stress in the word to which prominence is given. To this, first of all we must know, on the one hand, that in the word to which prominence is given only one syllable is the vehicle of sentence stress, and on the other hand that in Hindi in general in the words /to which prominence is given/ consisting of more than one syllable this stress is always on the longest syllable, wherever this

syllable may be in the word.

2.3.1. As syllabic length - the relative syllabic length - in Hindi is definitely connected with stress, we must examine what are the possibilities of the relative syllabic length and what decides that a syllable is long or short in Hindi. In the Hindi language, proceeding from the shortest syllable to the longest one a certain progressivity can be observed. From the viewpoint of length the syllables show four grades. The short open syllable /short vowel/ is the shortest, the short closed syllable /short vowel + consonant/ is somewhat longer, the long open syllable /long vowel/ is even longer, and finally the long closed syllable /long vowel + consonant/ is the longest. These syllabic lengths, proceeding from the shortest one towards the longest one, are marked by me with the following numerals:

1, 2, 3, 4

For the sake of orientation the above numerals are written above those syllables to which they relate.

E.g.: <sup>2</sup> sən-<sup>4</sup>gīt, <sup>2</sup> ər-<sup>1</sup>thə, <sup>3</sup> bā-<sup>2</sup>lək, <sup>1</sup> sə-<sup>3</sup>mā-<sup>4</sup>cār.

2.3.2. Before continuing the analysis of the stress relations of the word to which prominence is given, it is remarked that the stress relations dis-

cussed here relate only to the nouns, adjectives and adverbs. The inflected and suffixed nouns, however, are not discussed here. We deal with the stress relations of suffixes, formative syllables and postpositions separately. The stress relations of verbs are also discussed by us separately, as the stress of the verbs is fixed, viz. in the majority of the cases it is on the verbal root.

Thus, as we have already mentioned, in the stressed word consisting of more than one syllable the stress /sentence stress/ is on the comparatively longer syllable. In accordance with this, in the case of nouns, adjectives and adverbs, stress as regards succession can fall on any of the syllables, even on the last syllable. Therefore, in this sense stress in the Hindi nouns, adjectives and adverbs is not fixed. Let us see now the stress relations of the stressed word first in disyllabic, then in trisyllabic and finally in quadrisyllabic words.

2.3.3. In the case of disyllabic words as regards syllabic length three combinations are possible:

a/ the second syllable is longer than the first one according to the formulae below:

/1 + 2/, /1 + 3/, /1 + 4/,

/2 + 3/, /2 + 4/, /3 + 4/;

b/ the first syllable is longer than the second one:

/2 + 1/, /3 + 1/, /4 + 1/,  
/3 + 2/, /4 + 2/, /4 + 3/;

c/ both syllables are of equal length:

/1 + 1/, /2 + 2/, /3 + 3/,  
/4 + 4/.

In the case of a/ stress is on the second syllable, that is at the end of the word. E.g.:

'  
1 2 ↓  
pə-tāng 'kite', 1 3 ↓  
pə-tā 'address, trace',  
↓  
1 4  
lə-kīr 'line',  
↓  
2 3 ↓  
kən-yā 'girl', 2 4 ↓  
tənk-vāh 'salary',  
↓  
3 4  
cā-lāk 'cunning'.

In the case of b/ stress falls on the first syllable, on the initial syllable of the word. E.g.:

↓  
1 1  
pət-rə 'letter', 3 1 ↓  
rī-ti 'custom',  
↓  
4 1  
kār-yə 'work',  
↓  
3 2 ↓  
sā-həb 'master', 'lord', 4 2 ↓  
mādh-yəm 'means',  
↓  
4 3  
ād-mī 'man'.

In the case of c/, that is when the two syllables are of equal length, stress is on the first syllable.

E.g.:

↓	↓
1 1	2 2
prā-tī 'copy',	bān-dhān 'tie',
↓	↓
2 3	4 1 4
mā-tā 'mother',	bād-sāh 'emperor'.

2.3.4. In the case of trisyllabic words the position is already more complicated. Here the derived and compound words are already more frequent and in practice we cannot always substitute adequate words for the formulae of the syllabic combinations. As regards the place of stress there are three possibilities. Stress can be on the initial syllable of the word, on the medial syllable and on the terminal syllable.

Stress is on the first syllable of trisyllabic words, if this is the longest syllable in the word.

E.g.:

↓	↓
3 2 1	4 3 2
ā-pṭ-tī 'disaster',	kān-yā-lāy 'office',
↓	
3 1 2	
ā-dhu-nik 'modern';	

as well as if in the word two syllables are equal in length but longer than the third one, and one of them

is the initial syllable of the word. E.g.:

↓  
3 1 3 'human', ↓  
4 3 4 'conversation'.

The medial syllable of trisyllabic words is stressed, if this is the longest syllable. E.g.:

↓  
1 2 1                      1 3 1  
mə-nu3-yə 'man', pə-d3-ti 'pedestrian',

↓  
1 3 2                      1 4 1  
ə-d3-lət 'court', pə-d4-thə 'material';

as well as, if the medial and the terminal syllables are equal in length, but longer than the initial syllable. E.g.:

↓  
1 3 3                      1 4 4  
pə-r3-sī 'neighbour', bə-l4-k4r 'oppression',

↓  
2 3 3  
(m2-z3-3 'jacket');

and also if all the three syllables of the word are equal in length. E.g.:

↓  
1 1 1                      3 3 3  
pr1-g1-t1 'progress', p3-j3-m3 'trousers',

Stress is on the terminal syllable of trisyllabic words, if it is the longest syllable in the word.

E.g.:

↓  
1 2 3                      1 2 4  
ə-v3-th3 'age', u-p1-n2-y4s 'novel',



nation, but in the case of quadrisyllabic or polysyllabic compound words there are.

Trisyllabic compound words:

↓  
4                    1 1  
lākhpatī /lākh + pā-tī/ 'millionaire',

↓  
4                    3 1  
rājnīti /rāj + nī-tī/ 'politics',

↓  
3 2                    4  
prātānkāl /prā-tāh + kāl/ 'morning'.

As we have already mentioned, the quadrisyllabic words show much more possibilities of combination than the trisyllabic words. The first word - the vehicle of stress - can be monosyllabic, disyllabic or trisyllabic and within this, according to the rules already reviewed, stress can fall on different syllables.

The first word is monosyllabic:

↓  
3                    2 1 3  
domānzilā /do + mān-zi-lā/ 'two storied',

↓  
4                    2 1 3  
dūrdarsitā /dūr + darsitā/ 'foresight'.

The first word is disyllabic, stress on the first word:

↓  
1 1                    2 3  
bāhurāngā /bā-hu + rān-gā/ 'multicoloured',

↓  
2 1                    2 1  
ālpā buddhi /ālpā + bud-dhi/ 'stupid',

↓  
2 1                    4 1  
ārthāśāstrā /ār-thā + śās-trā/ 'economics',



↓  
 bārāhsingā /bā-rāh + sin-gā/ 'stag',

↓  
 nākābāndī /nā-kā + bān-dī/ 'guard',

↓  
 khetībārī /khe-tī + bā-rī/ 'agriculture',

↓  
 ātmakāthā /at-mā + kā-thā/ 'autobiography',

↓  
 kāryakartā /kā-ryā + kā-r-tā/ 'worker',

↓  
 ātmāghātāk /at-mā + ghā-tāk/ 'suicide',

↓  
 āgyāpālān /āg-yā + pā-lān/ 'reliable'.

The first word is disyllabic, stress on the second syllable:

↓  
 māhākṛti /mā-hā + kr-ti/ 'great work',

↓  
 māhājānī /mā-jā + jā-nī/ 'usury',

↓  
 prajātantrā /prā-jā + tān-trā/ 'republic',

↓  
 nāsābāndī /nā-sā + bān-dī/ 'prohibition',

↓  
 yathāyogyā /yā-thā + yog-yā/ 'adequate',

↓  
 kāroraṭi /kā-ror + ṭi/ 'millionaire',

↓  
 varṅīkaraṇ /var-ṅī + kā-raṇ/ 'classification',

āyatkārtā /ā-yāt + kārtā/ 'importer'.  
                  3 4           2 3

The first word is trisyllabic, stress on the first syllable:

ākramānvād /ā-kra-mān + vād/ 'aggressivity',  
                  3 1 2           4

sāhityāpreṃ /sā-hit-yā + preṃ/ 'love of literature'.  
                  3 2 1           4

The first word is trisyllabic, stress on the second syllable:

mānasyāghāt /mā-nas-yā + ghāt/ 'homicide',  
                  1 2 1           4

śāyābghar /ś-jā-yāb + ghar/ 'museum',  
                  1 3 2           2

pālāyanvād /pā-lā-yān + vād/ 'escape from reality'.  
                  1 3 2           4

The first word is trisyllabic, stress on the third syllable:

kālpānavād /kālpā-nā + vād/ 'utopy'.  
                  2 1 3           4

Thus we have seen how important it is to take into consideration the fact of compounding in the case of compound words. Without this the application of the general rule would very often lead to entirely different results. For example, if we would not take into consideration that the word sāhityāpreṃ is a compound word /sā-hit-yā + preṃ/ and that in the compound words

the longest syllable of the first word is the vehicle of the stress of the whole compound word, then we would place the stress on the second word or the last syllable /prēm<sup>4</sup>/ of the compound word, because this is the longest syllable of the whole compound word. Since, however, here we have to do with a compound word, therefore stress is on the longest syllable of the first word /sā<sup>3</sup>-hit<sup>2</sup>-yā<sup>1</sup>/, that is on the first syllable of the whole word composition. In many cases the trouble is not that the place of stress is established erroneously, but the confusion is caused by the fact that attention is not drawn on the separate stressing rules of the compound words, and thus the statements given conflict with the general rule. It is to be noted, however that what we have said about the stress of the compound words<sup>d</sup> applies only to those compound words, in which the fact of the compounding has not become obliterated in the consciousness of the speakers. Thus, for example in the word m̄hārāj 'great king', which in fact is a compound word /m̄hā<sup>1</sup>-hā<sup>3</sup> + rāj<sup>4</sup>/ and therefore according to the rules of stressing of the compound words stress ought to be on the second syllable of the first word, but as in practice this word-composition is felt to be one word /m̄hā<sup>1</sup>-hā<sup>3</sup>-rāj<sup>4</sup>/, stress is placed on the last, longest syllable of the whole

compound word, which is the second word of the word-composition /-<sup>4</sup>raǰ/.

It is also to be noted that words linked together with sandhi are from the viewpoint of stress treated as simple /non-compound/ words. Thus, in this case stress is on the syllable which is the longest in the whole composition. E.g.:

$$\begin{array}{cccccccc} & & \downarrow & & & & & & \\ 2 & 4 & 2 & 2 & 1 & 2 & 2 & & \\ \text{prəs-not-tər} & / \text{prəs-nə} & + & \text{ut-tər} & / & \text{'question-answer'}, \end{array}$$

$$\begin{array}{cccccccc} & & \downarrow & & & & & & \\ 1 & 4 & 2 & 1 & 3 & 2 & 2 & & \\ \text{mə-hot-səv} & / \text{mə-hā} & + & \text{ut-səv} & / & \text{'great festival'}, \end{array}$$

$$\begin{array}{cccccccc} & & & \downarrow & & & & & \\ 2 & 3 & 1 & 4 & 2 & 3 & 1 & 1 & 4 \\ \text{ic-chā-nu-sār} & / \text{ic-chā} & + & \text{ə-nu-sār} & / & \text{'according to wish'} \end{array}$$

2.4.2. The stress relations of the different formative syllables also have to be discussed separately.

Among the preposition-like prefixes there are such - especially privative prefixes - which are always stressed, without regard to the length of syllables following them. Such are for example:

$$\begin{array}{cccc} & & \downarrow & \\ & 1 & 3 & 2 \\ \text{ə-} & \text{ə} & + & \text{śī-mit} & \text{'boundless'} \end{array}$$

$$\begin{array}{cccc} & & \downarrow & \\ & 2 & 1 & 3 \\ \text{dur-} & \text{dur} & + & \text{də-sā} & \text{'disaster'} \end{array}$$

$$\begin{array}{cccc} & & \downarrow & \\ & 1 & 2 & 3 \\ \text{ni-} & \text{ni} & + & \text{kəm-mā} & \text{'useless'} \end{array}$$

$$\begin{array}{cccc} & & \downarrow & \\ & 2 & 2 & 2 \\ \text{nir-} & \text{nir} & + & \text{ə-r-thək} & \text{'worthless'} \end{array}$$

$$\begin{array}{ccccccc} & & \downarrow & & & & \\ & 2 & 2 & 4 & 3 & 1 & \\ \text{ən-tər-} & \text{ən-tər} & + & \text{rə-tri-yə} & & \text{international} \end{array}$$

$\downarrow$   
 $\begin{matrix} 2 & 4 \\ k\bar{a}m- & k\bar{a}m + z\bar{o}r \end{matrix}$  'weak'  
 $\downarrow$   
 $\begin{matrix} 2 & 4 \\ b\bar{a}d- & b\bar{a}d + n\bar{a}m \end{matrix}$  'ill-famed'  
 $\downarrow$   
 $\begin{matrix} 3 & 1 & 4 \\ be- & be + i-n\bar{a}m \end{matrix}$  'deceitful'

On the other hand, there are also such preposition-like prefixes, which are generally stressed.

E.g.:

$\downarrow$   
 $\begin{matrix} 1 & 1 & 2 \\ \bar{a}nu- & \bar{a}-nu + bh\bar{a}v \end{matrix}$  'experience'  
 $\downarrow$   
 $\begin{matrix} 1 & 1 & 4 \\ \bar{a}ti- & \bar{a}-ti + k\bar{a}l \end{matrix}$  'long time'  
 $\downarrow$   
 $\begin{matrix} 1 & 1 & 4 \\ \bar{a}p\bar{a}- & \bar{a}-p\bar{a} + r\bar{a}dh \end{matrix}$  'crime'  
 $\downarrow$   
 $\begin{matrix} 1 & 1 & 4 \\ u\bar{p}\bar{a}- & u-p\bar{a} + n\bar{a}m \end{matrix}$  'nickname'

Besides these there are such suffixes, especially of Sanskrit origin, which added to the endings of nouns and adjectives form new nouns or adjectives from them. Part of these suffixes were originally also nouns, e.g.  $m\bar{a}n$  'weight', 'prestige',  $s\bar{t}i$  'nature', 'character', etc. In compounds these are unstressed, just like the second element of the compound words discussed earlier.

E.g.:

$\downarrow$   
 $\begin{matrix} 1 & 1 & 3 \\ -t\bar{a} & k\bar{a}-vi + t\bar{a} \end{matrix}$  'poem'  
 $\downarrow$   
 $\begin{matrix} 1 & 1 & 3 \\ & gu-ru + t\bar{a} \end{matrix}$  'weight'

- $\begin{matrix} & & \downarrow \\ & 1 & 2 \\ \text{kā-} & \text{ṭhin} & + \text{tā} \end{matrix}$  'difficulty'
- $\begin{matrix} \downarrow \\ 3 & 2 & 2 \\ \text{ā-} & \text{vās-} & \text{yāk} & + \text{tā} \end{matrix}$  'necessity'
- $\begin{matrix} \downarrow \\ & 2 & & 2 & 1 \\ \text{-tāvya} & \text{kār} & + \text{tāv-} & \text{yā} \end{matrix}$  'duty'
- $\begin{matrix} \downarrow \\ & 2 & & 3 & 1 \\ \text{-ālu} & \text{dāy} & + \text{ā-} & \text{lu} \end{matrix}$  'benign'
- $\begin{matrix} \downarrow \\ & 2 & & 1 & & 4 \\ \text{-mān} & \text{bud-} & \text{dhi} & + \text{mān} \end{matrix}$  'wise'
- $\begin{matrix} \downarrow \\ & 2 & & 2 & & 3 & 3 \\ \text{-dāyī} & \text{ut-} & \text{tār} & + \text{dā-} & \text{yī} \end{matrix}$  'responsible'
- $\begin{matrix} \downarrow \\ & 1 & & 4 & & 4 \\ \text{-sīl} & \text{vi-} & \text{cār} & + \text{sīl} \end{matrix}$  'meditative'
- $\begin{matrix} \downarrow \\ & 2 & & 1 & & 4 \\ \text{-hīn} & \text{sāk-} & \text{ti} & + \text{hīn} \end{matrix}$  'powerless'

2.5. Stress Relations of Inflected Nouns -  
Postpositions

Since the stress relations of inflected nouns and adjectives used as nouns also differ partly from the general rule, therefore we discuss also this question separately.

First of all we wish to emphasize that the postpositions, mostly substituting the suffixes in Hindi, are pronounced in speech after the nouns and adjectives used as nouns as if they were the terminal syllables of the nouns and adjectives used as nouns.

E.g.:

ko	'to'	lārkeko	'to boy'
meñ	'in'; among	andhoñmeñ	'among the blind'
se	'from, by'	ādmīse	'from the man'
tək	'till, up to, to'	dərvāzetək	'till the dor'

It is noted that according to the official grammatical rules postpositions should be written separately also now.

In the case of masculine and feminine nouns the stress relations in the oblique forms singular are just like in the uninflected forms, that is in the nominative singular, discussed already. In the nominative plural of masculine nouns there is no change either, but in the nominative plural of the feminine nouns there is a certain change. The feminine nouns get the suffixes -yañ and -eñ, respectively, as a result of which the nouns become by one syllable longer. In the oblique case plural both the masculine and feminine nouns receive the suffix -oñ and this is followed by the postpositions concerned. In the cases discussed here the stress remains in its original place, only in the oblique case plural it slides over to the suffix -oñ, on which there is a definite stress. Let us see now the stress relations of masculine and

then of feminine inflected nouns in the singular and plural of monosyllabic, disyllabic and trisyllabic nouns. In the oblique cases we always use the postposition meñ 'in, into', 'among', which consists of the longest /long closed/ syllable and thus the unstressed character of the postposition is more conspicuous.

2.5.1. Hereinafter we are going to visualize the stress relations of the singular and plural oblique forms of monosyllabic, disyllabic and trisyllabic masculine nouns grouped according to combinations of the syllabic length.

masculine nouns. singular oblique form:

ghər	'house'	↓ 2      4 ghər meñ	'in the house'
ji	'spirit'	↓ 3      4 ji meñ	'in spirit'
bāg	'garden'	↓ 4      4 bāg meñ	'in the garden'

The nouns mentioned above were all monosyllabic. In the following disyllabic and trisyllabic masculine nouns are classified according to syllabic combinations.

pətəng	'kite'	↓ 1      2      4 pə-təng meñ	'in kite'
pətā	'address'	↓ 1      3      4 pə-te meñ	'in address'
pətrə	'letter'	↓ 2      1      4 pət-rə meñ	'in letter'



- ↓

kārya 'work'      kār-yā<sup>4</sup> men<sup>1 4</sup>      'in work'
- ↓

nāyaka 'leader'      nā-yōk<sup>3</sup> men<sup>2 4</sup>      'in leader'
- ↓

mādhyaṃ 'means'      mādhyāṃ<sup>4</sup> men<sup>2 4</sup>      'in means'
- ↓

ādāī 'man'      ād-āī<sup>4</sup> men<sup>3 4</sup>      'in man'
- ↓

pāti 'husband'      pā-ti<sup>1 1 4</sup> men<sup>4</sup>      'in husband'
- ↓

bāndhan 'tie'      bān-dhan<sup>2 2 4</sup> men<sup>4</sup>      'in tie'
- ↓

rājā 'king'      rā-jā<sup>3 3 4</sup> men<sup>4</sup>      'in king'
- ↓

kāndār 'director'      kān-dār<sup>4 4 4</sup> men<sup>4</sup>      'in director'
- ↓

samācār 'news'      sāmā-cār<sup>1 3 4 4</sup> men<sup>4</sup>      'in news' ?
- ↓

kāryālaya 'office'      kār-yā-lāy<sup>4 3 2 4</sup> men<sup>4</sup>      'in office'
- ↓

manuṣya 'man'      mā-nuṣ-yā<sup>1 2 4</sup> men<sup>4</sup>      'in man'
- ↓

pādārthā 'article'      pā-dār-thā<sup>1 4 1 4</sup> men<sup>4</sup>      'in article'
- ↓

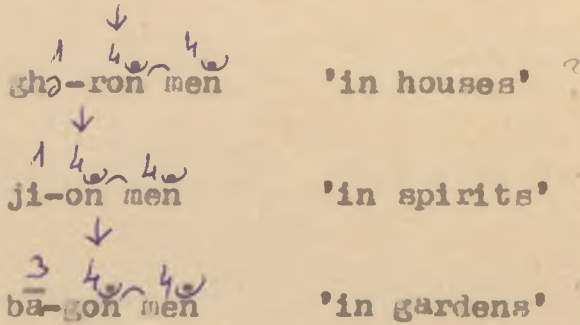
dhanyavād 'thanks'      dhān-yā-vād<sup>2 1 4 4</sup> men<sup>4</sup>      'in thanks' ?
- ↓

prātāhkal 'morning'      prā-tāh-kāl<sup>3 2 4 4</sup> men<sup>4</sup>      'in morning'
- ↓

lākhpāti 'millionaire'      lākh-pā-ti<sup>4 1 1 4</sup> men<sup>4</sup>      'in millionaire'
- ↓

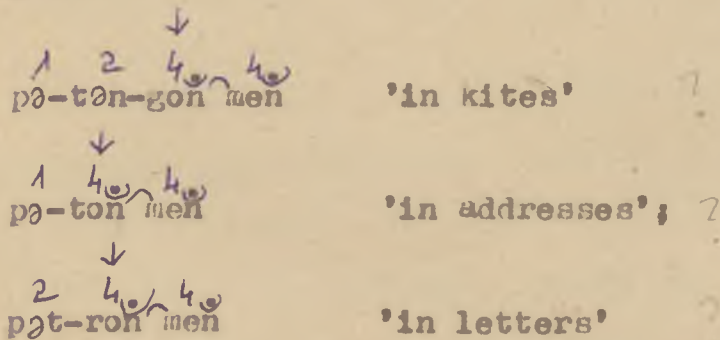
āmāntrāṇ 'invitation'      ā-mān-trāṇ<sup>3 2 2 4</sup> men<sup>4</sup>      'in invitation'

Masculine nouns, oblique plural:



The jolt-like stress becomes even more conspicuous by the circumstance that the suffix -on in the first and third of the above examples changes the syllabic structure. As a result of this the originally longer syllables of the basic words become shorter and thus the stress on the suffix -on is even more underlined.

The oblique plural of the disyllabic nouns shows a diversified picture, but it agrees with the oblique plural of the monosyllabic nouns inasmuch as also here there is a jolt-like stress on the suffix -on, what is even more enhanced by the unstressed postposition following it.



$\begin{array}{c} \downarrow \\ \underline{4} \quad \underline{4} \quad \underline{4} \\ \text{kā-rya-men} \end{array}$	'in works'
$\begin{array}{c} \downarrow \\ \underline{3} \quad \underline{1} \quad \underline{4} \quad \underline{4} \\ \text{nā-ya-kon men} \end{array}$	'in leaders'
$\begin{array}{c} \downarrow \\ \underline{4} \quad \underline{1} \quad \underline{4} \quad \underline{4} \\ \text{mādh-ya-mon men} \end{array}$	'in means'
$\begin{array}{c} \downarrow \\ \underline{4} \quad \underline{1} \quad \underline{4} \quad \underline{4} \\ \text{ad-mi-ya-men} \end{array}$	'in men';

In the above two groups in the word *pātā* 'address' the terminal *ā*, and in the words *pātrā* 'letter' and *kāryā* 'work' the terminal *ā* were dropped before the suffix *-on* of the oblique plural in accordance with the rules of declension. As a result of this the oblique plural forms of these words became by one syllable shorter than the other words enumerated.

$\begin{array}{c} \downarrow \\ \underline{1} \quad \underline{1} \quad \underline{4} \quad \underline{4} \\ \text{pā-ti-ya-men} \end{array}$	'in husbands'
$\begin{array}{c} \downarrow \\ \underline{2} \quad \underline{1} \quad \underline{4} \quad \underline{4} \\ \text{bān-dhā-non men} \end{array}$	'in ties'
$\begin{array}{c} \downarrow \\ \underline{3} \quad \underline{3} \quad \underline{4} \quad \underline{4} \\ \text{rā-jā-on men} \end{array}$	'in kings'
$\begin{array}{c} \downarrow \\ \underline{4} \quad \underline{3} \quad \underline{4} \quad \underline{4} \\ \text{kān-dā-ron men} \end{array}$	'in directors';

In the following we show the oblique plural of the trisyllabic masculine nouns from the viewpoint of stress. Naturally, here even more combinations are possible in respect of syllabic length, but as we shall see, the joint-like stress on the suffix *-on* appears also here.

- ↓

1 3 3 4 4  
sə-mā-cā-ron men 'in news'
- ↓

4 3 1 4 4  
kā-ya-lā-yon men 'in offices';
- ↓

1 2 4 4  
mā-nu-yon men 'in men'
- ↓

1 4 4 4  
pā-dār-thon men 'in articles';
- ↓

2 1 3 4 4  
dhān-yā-vā-don men 'in thanks'
- ↓

3 2 3 4 4  
prā-tāh-kā-loh men 'in mornings';
- ↓

4 1 1 4 4  
lākh-pā-ti-yon men 'in millionaires'
- ↓

3 2 1 4 4  
ā-mān-trā-ṇon men 'in invitations'.

Among the above words, in the words mānuṣya 'man' and pādārthā 'article' the terminal a was dropped before the suffix -on of the oblique plural in accordance with the rules of declension. On account of this the oblique plural forms of these words are by one syllable shorter than the corresponding forms of the other words enumerated.

Examining all the enumerated groups we can see that in all those cases, in which the basic word ends in a closed syllable - e.g. bāg, nā-yāk, sṛ-mā-cār -, as well as in those cases, in which according to the rules of declension the terminal vowel of the basic words is dropped in the oblique plural - e.g. pā-tā,

pət-rə, mə-nuq-yə - , the last consonant of the basic word went over to the beginning of the syllable formed by the suffix -oñ. As a result of this the syllable preceding the suffix became shorter, which makes the stress of the suffix even more conspicuous.

2.5.2. Let us see now the stress relations of the nominative plural, as well as the oblique singular and plural of the monosyllabic, disyllabic and trisyllabic feminine nouns.

Let us take first the nominative plural of the feminine nouns. Here the rule is that the feminine nouns ending in long ī and short i receive in the nominative plural the suffix -yañ and at the same time the terminal long ī becomes shorter. All the feminine nouns having another ending receive the suffix -eñ in the nominative plural.

Nominative of feminine nouns - nouns ending in long ī and short i /as in this category there are hardly any monosyllabic words, therefore we deal here only with disyllabic and trisyllabic nouns/:

↓		↓	
prəti	'copy'	prə-ti-yañ	'copies'
↓		↓	
əgni	'fire'	əg-ni-yañ	'fires'

↓ rīti	'custom'	↓ rī-ti-yāṅ	'customs'
↓ mūrti	'figure'	↓ mūr-ti-yāṅ	'figures'
↓ pātṅī	'wife'	↓ pāt-ni-yāṅ	'wives'
↓ lārki	'girl'	↓ lār-ki-yāṅ	'girls'
↓ petī	'belt'	↓ pe-ti-yāṅ	'belts'
↓ ākṛti	'face'	↓ ā-kṛ-ti-yāṅ	'faces'
↓ āpātti	'disaster'	↓ ā-pāt-ti-yāṅ	'disasters'
↓ rājnīti	'politics'	↓ rāj-nī-ti-yāṅ	'politics'
↓ lārāi	'war'	↓ lā-rā-i-yāṅ	'wars'
↓ kulhārī	'axe'	↓ kul-hā-ri-yāṅ	'axes'
↓ lekhānī	'pen'	↓ le-khā-ni-yāṅ	'pens'

Nominative plural of feminine nouns with other endings:

lāt	'lock'	↓ lā-ten	'locks'
bāt	'talk'	↓ bā-ten	'talks'
↓ lāhār	'wave'	↓ lā-hā-ren	'waves'
↓ dukān	'shop'	↓ du-kā-nen	'shops'
↓ bārsāt	'rainy season'	↓ bār-sā-ten	'rainy seasons'

#	dīvar	'wall'	dī-vā-reṅ	'walls'
	kāthā	'tale'	kā-thā-eṅ	'tales'
	jantā	'people'	jan-tā-eṅ	'peoples'
	āsā	'hope'	ā-sā-eṅ	'hopes'
	āgyā	'order'	āg-yā-eṅ	'orders'
	vastu	'thing'	vas-tu-eṅ	'things';
	kāhāvāt	'proverb'	kā-hā-vā-ten	'proverbs'
	pustikā	'booklet'	pus-ti-kā-eṅ	'booklets'
	vāṭikā	'garden'	vā-ṭi-kā-eṅ	'gardens'
	gurutā	'weight'	gu-ru-tā-eṅ	'weights'
	kāṭhintā	'difficulty'	kā-ṭhin-tā-eṅ	'difficulties'
	komaltā	'softness'	ko-mal-tā-eṅ	'softnesses'
	avasthā	'condition'	a-vas-thā-eṅ	'conditions'
	kālpānā	'idea'	kāl-pā-nā-eṅ	'ideas'
	prārthānā	'request'	prār-thā-nā-eṅ	'requests'

As can be seen from the above examples, as a result of the changing of the syllabic length the stress in the plural sometimes shifts from its original place,

but the suffixes -yañ and -eñ never become stressed.

Stress relations of oblique singular and plural of feminine nouns:

The phonetic form of feminine nouns in oblique singular does not show any change as compared with the phonetic form of the nominative singular, they only receive the postposition concerned, which is unstressed. Thus the place of stress does not change either as compared with the nominative singular.

E.g.:

↓ prəti meñ	'in copy'
↓ ləraɪ meñ	'in war'
↓ bāt meñ	'in talk'
↓ dukañ meñ	'in shop'
↓ kəlpəñā meñ	'in idea; etc.

Thus the stress is everywhere on the same syllable, on which it was in the nominative singular.

The oblique plural of the feminine nouns is also formed with the suffix -eñ just like that of the masculine nouns. In the case of feminine nouns ending in long ī and short i the glide -y- is inserted between the terminal vowel and the suffix -eñ and the termi-



nal long ī becomes shorter just like in the nominative plural. In the case of the feminine nouns ending in other vowels or in any consonant the suffix -on of the oblique plural is added to the unchanged form of the word. The stress shifts over on the suffix -on or -yon also in the oblique plural of the feminine nouns, just like in the case of the oblique plural of the masculine nouns.

Let us see now a few examples on the oblique plural of feminine nouns ending in long ī and short i, and then on the oblique plural of feminine nouns ending in some other vowel or in consonant:

↓ prāti	'copy'	↓ prā-ti-yon men	'in copies'
↓ ākṛti	'face'	↓ ākṛ-ti-yon men	'in faces'
↓ petī	'belt'	↓ pe-ti-yon men	'in belts'
↓ lekhānī	'pen'	↓ le-khā-ni-yon men	'in pens';
↓ bāt	'talk'	↓ bā-ton men	'in talks'
↓ dukān	'shop'	↓ du-kā-non men	'in shops'
↓ vāstu	'thing'	↓ vā-tu-on men	'in things'
↓ kāthā	'tale'	↓ kā-thā-on men	'in tales'
↓ lāhār	'wave'	↓ lā-hā-ron men	'in waves'

↓	2	1	3	↓			
pustikā	'booklet'	pu	ti	kā	on	men	'in booklets'
↓	2	1	3	↓			
kālpnā	'idea'	kā	lp	nā	on	men	'in ideas'
↓	1	3	1	↓			
masibāt	'disaster'	ma	sī	bā	ton	men	'in disasters'

Among the above examples in those words, which end in a closed syllable, the terminal consonant goes over to the beginning of the syllable formed by the suffix -on.

## 2.6. Stress Relations of Verbal Roots and Verbal Forms

2.6.1. As we have already mentioned, the stress relations of the Hindi verbs differ to a certain extent from the stress relations of the nouns and adjectives. Therefore we hold it important to analyse this question in some detail.<sup>44/</sup> A survey of the literature on the problem shows that the authors in general point out the fact of stress carried by the verbal roots, but they do not discuss the question in detail. A.P. Barannikov - P.A. Barannikov<sup>45/</sup> deal with the stress relations of verbs briefly but separately. They show that in the Hindi verbs the stress is always on the verbal root, and if the verbal root consists of two or more syllables, then stress falls on the last syllable of the verbal root. However, they do not discuss in detail the stress relations of the certain

verbal forms, the various verbal nouns /participles, absolute/, and especially the stress relations of the compound verbal forms and the compound verbs. Besides them Kāntāprasād Guru,<sup>46/</sup> Dhirendra Varma,<sup>47/</sup> Aryendra Sharma /BGMH/,<sup>48/</sup> as well as S.G. Rudin<sup>49/</sup> and Z.M. Dymshits<sup>50/</sup> also dealt with the subject. For example Rudin<sup>51/</sup> and Varma<sup>52/</sup> characterize the stress relations of the verbal root by comparing the monosyllabic and derivative polysyllabic /so called causative/ verbal roots, but a more detailed and systematic explanation is not given by them either.

2.6.2. The detailed analysis of the stress relations of Hindi verbal forms seems to be so much the more important as, on account of the analytic character of conjugation and partly of the formation of verbs in Hindi, the certain verbal forms very frequently consist of several constituent elements and thus the stress relations of these goes beyond the framework of word stress in the stricter sense. Besides this, the clarification of the stress relations of verbs and complexes of verbs is important also from the practical point of view. In fact, on account of the phonemic character of stress, correct accentuation promotes, while incorrect accentuation disturbs the intelligibility of speech.

2.6.3. Thus according to the general rule outlined in literature there is permanent or fixed stress on the verbal root. In the case of the disyllabic and polysyllabic verbal roots this is always on the last syllable of the verbal root. We get the verbal root by omitting the terminal -nā of the infinitive.

The general rule mentioned above holds good in many cases but not in all cases. Therefore let us take the monosyllabic, disyllabic and trisyllabic verbal roots one by one and let us see where the general rule holds good and where it does not hold good. In the following we shall examine the stress relations of monosyllabic, disyllabic and trisyllabic verbal roots in the verbs below.

Monosyllabic verbal roots:

sunnā	'to hear'	-	verbal root: sun-
ānā	'to come'	-	verbal root: ā-
dekhnā	'to see'	-	verbal root: dekh-

Disyllabic verbal root:

sunānā	'to relate'	-	verbal root: sunā-
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Trisyllabic verbal root:

pāhuñcānā	'to convey'	-	verbal root: pāhuñcā-
-----------	-------------	---	-----------------------



In the examples after the verbal root the following verbal forms will be enumerated, in which all the morphologically different elements of the Hindi verbs occur: /1/ infinitive; /2/ present participle; /3/ past participle; /4/ indicative present, general; /5/ indicative present, progressive; /6/ present perfect; /7/ future tense; /8/ optative; /9/ imperative, simple; /10/ imperative, polite; /11/ absolutive /verbal root/ + kār; /12/ infinitive + vālā; /13/ absolutive /verbal root/ + <sup>modifying</sup> subsidiary verb.

Monosyllabic verbal roots:

↓  
sun-

- ↓                                    ↓                                    ↓                                    ↓  
-      /1/ sunnā; /2/ suntā; /3/ sunā;  
         ↓                                    ↓                                    ↓  
         /4/ suntā hūn; /5/ sun rāhā  
         ↓                                    ↓                                    ↓  
         hūn; /6/ sun hē; /7/ sunūngā;  
         ↓                                    ↓                                    ↓                                    ↓  
         /8/ sunūn; /9/ suno; /10/ sunie;  
         ↓                                    ↓  
         /11/ sun kār; /12/ sunne vālā;  
         ↓  
         /13/ sun lenā.

As can be seen, the monosyllabic verbal root consisting of a short closed syllable does not preserve its stress in each case. In the case of the optative /8/, the simple imperative /9/ and the polite imperative /10/ the stress shifts from the verbal root to the last syllable of the verbal form. This applies to all those

E.g.:

↓  
suno bhāī! /no answer/  
listen friend!

↓  
bāt suno! kyā tum merī bāt nə sunte ho?  
listen to me! don't you hear my word?

or:

↓  
cəlo! /no movement/  
come!  
↓  
cəlo! həm cəleñ!  
come on! let us go!

Let us see now the stress relations of the monosyllabic verbal roots consisting of one long open syllable and one long closed syllable, respectively, or more exactly the stress relations of the synthetic and analytic verbal forms of these verbs, on the basis of the examples mentioned above.

↓  
ā-                    -    /1/ ānā; /2/ ātā; /3/ āyā;  
                              ↓                    ↓  
                              /4/ ātā hūñ; /5/ ā rəhā hūñ;  
                              ↓                    ↓  
                              /6/ āyā hɛ; /7/ āuṅgā;  
                              ↓                    ↓                    ↓  
                              /8/ aūñ; /9/ ao; /10/ aie;  
                              ↓                    ↓  
                              /11/ ā kər; /12/ āne vālā;  
                              ↓  
                              /13/ ā jānā.

verbs the root of which consists of one short closed syllable.

E.g.: cāl<sup>↓</sup>nā 'to go'; gir<sup>↓</sup>nā 'to fall'; likh<sup>↓</sup>nā 'to write'.

verbal root:	cāl-;	gir-;	likh-
optative:	cāl <sup>↓</sup> h̄;	gir <sup>↓</sup> h̄;	likh <sup>↓</sup> h̄
simple imperative:	cāl <sup>↓</sup> o;	gir <sup>↓</sup> o;	likh <sup>↓</sup> o
polite imperative:	cāl <sup>↓</sup> ie;	gir <sup>↓</sup> ie;	likh <sup>↓</sup> ie

Let us see now the stress relations of the monosyllabic verbal roots consisting of a long open syllable and a long closed syllable, respectively, or more exactly the stress relations of the synthetic and analytic verbal forms of these verbs, on the basis of the examples mentioned above.

- ↓  
ā-
- /1/ ānā; /2/ ātā; /3/ āyā;
  - /4/ ātā hūh̄; /5/ ā rāhā hūh̄;
  - /6/ āyā hē; /7/ āh̄gā;
  - /8/ āh̄; /9/ āo; /10/ āie;
  - /11/ ā kār; /12/ āne vālā;
  - /13/ ā jānā.



↓  
 dekh- - /1/ dekhnā; /2/ dekhtā; /3/ dekhā;  
           ↓  
 /4/ dekhtā hūh; /5/ dekh rāhā hūh;  
           ↓  
 /6/ dekhā hε; /7/ dekhūngā; /8/ dekhūh;  
           ↓  
 /9/ dekho; /10/ dekhie; /11/ dekh kār;  
           ↓  
 /12/ dekhne vālā; /13/ dekh lenā.

Thus the above monosyllabic verbal roots consisting of a long open and a long closed syllable, respectively, preserve their stress in each case.

As we have already mentioned, in the case of the disyllabic and trisyllabic verbal roots, according to the rule, the stress is always on the last syllable of the verbal root. In the following we shall see that there is no exception to this rule.

Disyllabic verbal root:

↓  
 sunā- - /1/ sunānā; /2/ sunātā; /3/ sunāyā;  
           ↓  
 /4/ sunātā hūh; /5/ sunā rāhā hūh;  
           ↓  
 /6/ sunāyā hε; /7/ sunāungā;  
           ↓  
 /8/ sunāuh; /9/ sunāo; /10/ sunāie;  
           ↓  
 /11/ sunā kār; /12/ sunāne vālā;  
           ↓  
 /13/ sunā denā.

Trisyllabic verbal root:

- pəhuŋcā- - /1/ pəhuŋcānā; /2/ pəhuŋcātā;  
 /3/ pəhuŋcāyā; /4/ p huŋcātā hūh;  
 /5/ pəhuŋcā rəhā hūh; /  
 /6/ pəhuŋcāyā hē; /7/ pəhuŋcāuṅgā;  
 /8/ pəhuŋcāuṅ; /9/ pəhuŋcāo;  
 /10/ pəhuŋcāle; /11/ pəhuŋcā kər;  
 /12/ pəhuŋcāne vālā;  
 /13/ pəhuŋcā denā.

After these we can already establish that, taking into consideration all the categories of verbs enumerated, in the synthetic forms /consisting of one element/ and in the analytic forms /consisting of several elements/ of the Hindi simple verbs the stress is mostly on the verbal root /in the analytic verbal forms on the root of the main verb/. In the disyllabic and trisyllabic verbal roots the vehicle of stress is always the last syllable of the verbal root. However, the group of monosyllabic verbal roots consisting of a short closed syllable /sun-, cāl-, gir-, likh-, etc./ is an exception to this rule. Here, in those verbal forms, which by their nature contain a certain degree of emotion, viz. optative, simple imperative, polite imperative, the stress shifts from the verbal root to the last /second or third/ syllable of the verbal

form, viz. sunuḥ, suno, sunie. It is noted that the last syllable of the disyllabic and trisyllabic verbal roots /sunā-, pāhunā-, etc./ is almost always a long open syllable /-ā-/, which is generally the longest syllable of the verbal root. Thus, in this case, the stress corresponds also to the general rules of stress in Hindi, at least within the verbal root.

It is also an important observation that in the analytic verbal forms, those consisting of several elements /e.g. suntā huḥ, sun rāhā huḥ, sunātā huḥ, sunā rāhā huḥ, etc./, which in practical speech form the majority of the verbal forms, the stress is always on the root of the verb, the main verb. This is especially important in the case of the verbal structure consisting of the absolute /root of the main verb/ + a <sup>modifying</sup> ~~subordinate~~ verb. It is more or less the Hindi equivalent of the verbs with prefixes in Hungarian and in certain other European languages. In this structure in Hindi one verbal concept is expressed with two verbs, viz. the root of the main verb /absolute/, which is the vehicle of the meaning of the verb, and an additional, <sup>"modifying"</sup> ~~"subordinate"~~ verb which, on the one hand, ensures the conditions of conjugation and, on the other hand, expresses the perfective aspect, definiteness, and eventually the direction and other

perfective verbal

circumstances of the action.

E.g.

↓ sunnā 'to hear'	-	↓ sun lenā 'to come to hear'
↓ sunānā 'to tell /a story/	-	↓ sunā denā 'to relate'
↓ rəkhnā 'to put'	-	↓ rəkh denā 'to put down'
↓ girnā 'to fall'	-	↓ gir jānā 'to fall down'

In such cases verbal forms consisting not only of two elements but also verbal forms consisting of three elements can arise.

E.g.

↓ sun letā hūñ	'I come to hear'
↓ sunā detā hē	'he relates'
↓ rəkh dete hēñ	'they put down'
↓ gir gəyā thā	'it has fallen down'

Thus, as we can see, the stress is here always on the root of the main verb. The verbal forms appearing in the structure absolutive /root of the main verb/ + subsidiary verb are such stressing units, in which the connection of the certain elements is indicated by the stress /the main stress/.

2.6.4. The Hindi language - similarly to Urdu, Persian-Tadzhik and Turkish, and very likely on the direct or indirect influence of these languages - expresses a considerable part of the verbal concepts not in a synthetic but in an analytic way, viz. by compounding. The first, main element of such compound verbs, which is the vehicle of the meaning of the verb, is a noun or an adjective. The second element is some simple verb, which ensures the conditions of conjugation, e.g. kārṇā 'to do, to make', honā 'to be', etc. In these compound verbs the analytic character of Hindi conjugation asserts itself in an even greater degree. Thus here it is even more important to include in some way the verbal forms of compound verbs consisting of more, different, elements in one unit. This is ensured also here by the /main/ stress, which is always on the vehicle of meaning, viz. the noun or adjective. Thus in the compound verbs from the viewpoint of stressing the noun or the adjective plays the role of the verbal root. Let us see for example the stress relations of the following compound verbs:

↓  
bāt kārṇā      'to converse' /to make conversation/

↓  
sūrū kārṇā      'to begin' /to make beginning/

↓  
kōṣī kārṇā      'to try' /to make trial/

- ↓  
sāfāī kārṇā 'to clean' /to make cleanness/
- ↓  
lājjit honā 'to feel shame' /to be bashful/
- ↓  
sāmāpt honā 'to end' /to be completed/

In the following we enumerate such examples, in which the verbal forms of compound verbs in themselves represent incomplete sentences.

- ↓  
bāt kār rāhā hūn I am conversing
- ↓  
surū kārṭā hē /he/ starts /in general, not just now/
- ↓  
kōsī kārūṅgā I shall try
- ↓  
sāfāī kār denḡe we shall clean /absolute + denā as subsidiary verb/  
*modifying*
- ↓  
lājjit ho rāhā hē he is feeling ashamed
- ↓  
sāmāpt ho gāyā thā it has ended

The increased analytic character of the compound verbs can be seen well even from the above examples. Here we find also such verbal forms which consist already of four elements. The stress /the strongest stress/ falls always on the first element of the compound verb, viz. on the noun or adjective. This stress is on that syllable of the noun or adjective, which would be stressed also according to the general rules of

word stress, viz. bat, suru, kosis, lajjit, safai, etc.

The verbal forms consisting of three or four elements brought about in the course of conjugation are combined by the stress into larger stressing units, just like the verbal forms of the simple verbs consisting of several elements.

### 3. SENTENCE STRESS - PLACE OF THE WORD TO WHICH PROMINENCE IS GIVEN IN THE SENTENCE

#### 3.1. Sentence Stress as the Form of Appearance of Stress

On the preceding pages we tried to ascertain on which syllable of the word to which prominence is given the sentence stress can fall. We have stated that in Hindi word stress asserts itself only as the phonetic basis of sentence stress, and it does not exist separately, in an isolated form. In practice the form of appearance of the stress is the sentence stress. Now we investigate, which word in the sentence can be the word to which prominence is given, viz. the vehicle of sentence stress, and what are the criteria on the basis of which this can be determined in Hindi. Before discussing this, however, let us make a short survey of the observations of general validity on sentence stress in professional literature.

### 3.2. Observations of General Validity on Sentence Stress in Professional Literature

Sentence stress has an important role in the languages, thus also in Hindi. In spite of this most of the authors discussed so far do not deal with this question at all. Only A.G. Rudin<sup>53/</sup> mentions sentence stress, when he states that the sentence stress can fall also on monosyllabic words. Therefore in the following I discuss this subject mainly relying upon my own observations and on the basis of comparison with other languages.

The survey of literature offers valuable footholds to the characterization of sentence stress also regarding the Hindi language. The observations found in works on the stress relations of German,<sup>54/</sup> English<sup>55/</sup> and especially Hungarian<sup>56/</sup> furnish useful material to the study of stress relations in Hindi and especially of sentence stress in Hindi. It turns out that the stress relations are analysed by these authors more or less in their grammatical relationships,<sup>57/</sup> although the semantical and psychological aspects are not neglected by them either. In their expoundings in connection with sentence stress they also touch upon the stress relations of the certain kinds of words and morphemes, as well as the syntactic characteristics.



As a result of my observations and comparative studies I have arrived at the conclusion that in the formation of sentence stress in the different languages exactly the grammatical relationships are those factors which show a great degree of parallelism. Therefore in the analysis of sentence stress in Hindi I have also chosen the grammatical relationships as a basis of starting. Of course, I do not strive for completeness, what at any rate would be impossible, but I deal only with the characteristic types of stress in Hindi.

### 3.3. Stress Relations of Kinds of Words and Parts of Sentence

In the Hindi language there are such kinds of words and parts of sentence, which on account of their place in the sentence or their more important or less important role in the sentence are stressed or unstressed.

3.3.1. Among the kinds of words in Hindi sentences the demonstrative pronoun, the interrogative pronoun, the adverb, as well as the negative particle, the prohibitive word and the interjection are in general stressed. All these - on the basis of their original character - draw the attention to a certain circumstance, action, or quality.

In general, in the Hindi sentences the postposition and the conjunction, as mere relationship indicating elements, are unstressed.

As we shall see later, the unstressed elements can in practice also become stressed as pairs of sharp contrasts, etc.

3.3.2. Regarding the stress relations of the parts of sentence we find that none of the parts of sentence can be regarded as stressed or unstressed on the basis of their nature. From the viewpoint of the stress the decisive factor is, how important role the part of sentence plays in the sentence, or in the syntactic context.

Let us see now the place of the word to which prominence is given in the different kinds of sentences.

*Simple*

### 3.4. Sentence Stress of Declarative Sentences

In the following we shall examine the sentence stress first of all in the different categories of declarative sentences.

#### 3.4.1. Simple sentences.

The sentence stress is on such kinds of words,

which are in general stressed:

↓  
Yəh bāt hɛ.                      This is the point.

↓  
Jī hān.                              Yes.

↓  
Jī nāhīn.                          No.

In the above sentences the vehicle of the sentence stress is a demonstrative pronoun, an adverb and the negative particle.

The sentence stress is on the word important from the viewpoint of meaning:

↓  
Thīk hɛ.                              All right.

↓  
Rām jāntā hɛ.                      Rām knows.

↓  
Larkā so rāhā hɛ.                  The boy is sleeping.

↓  
Ghər ūncā hɛ.                      The house is high.

In the above examples the vehicle of the sentence stress is the predicated adjective /thīk, ūncā/ and the verbal root /so/, respectively.

### 3.4.2. Extended simple sentences

Extended simple sentences, extended with adverb, sentence stress on the adverb:

↓  
Məngəl bāg mēn hɛ.

Məngəl is in the garden.

↓  
Larkiyāñ acchī tarah khel rahī hēñ.

The girls are playing well.

Extended simple sentence, extended with adjectival attribute and adverb, sentence stress on the adverb:

↓  
Chotī larkiyāñ acchī tarah khel rahī hēñ.

The small girls are playing well.

Simple sentence extended with an attributive adverb, sentence stress on the subject:

↓  
Prācīn samay meñ ek rājā thā.

In the old time /there/ was a king.

Simple sentence extended with object, sentence stress on the object:

↓  
Rājā ne ek bāndar ko naukār rakhā.

The king employed a monkey.

Simple sentence extended with a demonstrative pronoun, the infinitive of a compound verb and negative particle, sentence stress on the negative particle:

↓  
Ese mūrkhā ko naukār rakhnā ucit nahīñ hē.

It is not reasonable to employ such a fool.

Simple sentence extended with an emphatic morpheme, the sentence stress is always on the word immediately preceding the emphatic morpheme /hī, bhī, aur/, on the word to which prominence is given:

Vah ↓ ek hī bāt hē.

It is all the same.

Larkā ↓ ek bhī nā suntā.

The boy takes no notice of it.

↓ Ek aur bāt hē.

The<sup>re</sup> is still another thing.

### 3.4.3. Complex sentences

Discussing the different coordinative and subordinative complex sentences, we do not strive for completeness either, but we group the certain model sentences according to elements and characteristics typical from the viewpoint of sentence stress in Hindi.

#### a/ Coordinative complex sentences

In Hindi there occur such pairs of coordinative sentences, which are not linked with conjunctions, but the first sentence is a short statement, which is followed by an explanation relating to it. A good

example for this is the following proverb:

↓ ↓ ↓  
Dhobī kā kuttā, nā ghār kā nā ghāt kā.

The washerman's dog, not good for anything.  
/literally: ..., neither of the river-bank,  
nor of the house./

In the above example there are also three sentence stresses. *or clause stress.*

In the following we enumerate such examples in which the coordinated sentences are linked by conjunctions. The most frequent coordinating conjunctions in Hindi are: aur 'and', lekin, parantu, par 'but', 'however', to 'then', phir 'then', 'again', etah 'thus', 'therefore', nā ... nā 'neither... nor', yā 'or', phir bhī 'still', vārnā 'otherwise', arthāt 'that is, namely'.

E.g.:

↓ ↓  
Rām cālā gayā aur phir nāhīn āyā.

Rām has gone and did not come again.

↓ ↓  
Relgārī ruk gayī lekin yātrī nāhīn utre.

The train stopped, but the passengers did not get down.

↓ ↓  
Ek kadam āge, to do kadam piche.

One step forward two steps back.

Vāh ghār meñ gayā, phir ghār se bahār āyā.

He went into the house, then he came out of the house.

Ramesh bahut p̄sā kamātā hē, atah vah nirbhān nahīn hē.

Ramesh earns much money, thus he is not poor.

Kamrā nā bahut bārā hē, nā chotā.

The room is neither too big, nor small.

Kal ham nāgar jāenge, yā ghār par thāharengē.

Tomorrow we shall go to town or we shall stay at home.

Admī bahut nirbāl thā, phir bhī bojhā uthā sakā.

The man was very weak, still he could lift the weight.

Darvāze ko bānd karnā cāhie, vārnā chotā larkā bahār āegā.

The door should be closed, otherwise the small boy will come out.

Vāh patrā layā, arthāt vah patrā lāne ke lie gayā thā.

He brought the letter, that is he went to bring the letter.

The <sup>o</sup>coordinative complex sentences listed above consist of two coordinated sentences each, in both of which there is one sentence stress each.

b/ Subordinative complex sentences

From the multitude of the subordinative complex sentences we mention here only a few to characterize the sentence stress.

In one of the frequent categories of the subordinative complex sentences the subordinate clause is introduced by one of the forms of the relative pronoun jo 'who', 'which', 'what', and the main clause begins with one of the forms of the demonstrative pronoun vah 'that'.

E.g.:

mitrə vāh hē jo vipatti meñ kām āe.

A friend is who helps in the difficult situation.

Jis kī lāthī us kī bhēns.

Who has the stick, he has the buffalo.

Jo bəhut jānnā cāhtā hē, use bəhut pərhñā cāhie.

Who wants to know much, must learn much.



The subordinate clause beginning with the conjunction ki 'that' is frequently preceded by a main clause beginning with some form of the demonstrative pronoun yāh.

E.g.:

Bāt yāh hāki mēn us ko nahīn jāntā.

The position is that I do not know him.

The subordinate clause beginning with the conjunction yādi 'if' is followed by a main clause beginning with the deictic to 'then'.

E.g.:

Yādi āj pānī nā barastā to hām sēr karte.

If it would not rain today, then we would take a walk.

The subordinate clause beginning with the conjunction yadyāpi is followed by a main clause beginning with the conjunction phir bhī.

E.g.:

Yadyāpi ādmī bahut kām kartā thā, vāh phir bhī garīb thā.

Although the man worked a lot, he was still poor.

From the above examples we can see that the sentence stress never falls on the relative pronoun or on the subordinative conjunction. But in certain cases the reference word /vah/, or conjunction /phir bhī/ in the main clause can be the vehicle of the sentence stress, (clause stress).

### 3.5. Sentence Stress of Exclamatory Sentences

The exclamatory sentence usually contains a high degree of emotion and is very frequently a short simple sentence also in Hindi. One of its important characteristics is the stronger stress than the usual. The exclamatory sentence frequently begins with an interjection.

E.g.:

↓ ↓  
oī, Rām ā gayā!

Behold, Rām has come!

↓ ↓  
Ore, kāu hō gayā!

Indeed, the work has been done!

↓ ↓  
Sābās, gārī cāl pāī!

Excellent, the car has started off!

In the above sentences the conjunction and the main verb /its root/ of the verbal form expressing the action or happening are the vehicles of the sentence stress.

From the viewpoint of stress, the exclamatory sentences differ from the declarative sentences mainly in respect of the stronger emotion.

### 3.6. Sentence Stress of Desiderative Sentences

The desiderative sentences resemble in many respects to the exclamatory sentences. They are generally introduced <sup>by</sup> the desiderative modifying words yādi 'if', kās ki 'if', 'I wish', or the sentence mēñ cāhtā hūñ 'I wish'. In English these are uniformly translated with the desiderative clause 'I wish'.

E.g.:

Yādi vah hindī boltā!

I wish he would speak Hindi!

Kās ki mujhe āj pātrā milā hotā!

I wish I had received a letter today!

Mēñ cāhtā hūñ ki us pustak ko nā pārhā hotā!

I wish I had not read that book!

As can be seen from the above examples, of the phrases indicating desideration the kās ki and the mēñ cāhtā hūñ are stressed, while the conjunction yādi is unstressed. Besides this, always that word of the sentence is the vehicle of the stress to which the desideration relates.

### 3.7. Sentence Stress of Imperative Sentences

The demand or order can be direct or indirect. There is a whole scale of demand /direct demand/ in Hindi.

E.g.:

bol! - speak! /only to children and inferior subordinates; occurs also in poetry/

bolo! - speak! /informal demand between friends, etc./

boleñ! - /please/ speak! /polite demand/

bolie! - /please/ speak! /most polite demand/

The strength of emphasis of the sentence stress depends on the strictness or definiteness of the demand or request.

E.g.:

↓  
Halke svar meñ bol!

Speak in a low voice!

↓  
Uñce svar meñ na bolo!

Don't speak in a loud voice!

↓  
Ap hindi meñ bat karen!

/Please/ speak Hindi!

Kṛpā kārke dhīre-dhīre bolie!

Please speak slowly!

Kṛpā kārke bolie!

Please speak!

As we see from the above examples, in the sentence always that action, or its modifying word /which can also be a prohibitive word/ carries the strongest stress to which the demand or request relates.

The other form of demand is the indirect order, prohibition or request. Here the introductory part of the sentence is also a demand and can have the same variations as the direct order. The structure and stress of the introductory part are fairly uniform. The order to be conveyed itself is the second part of the sentence. This can also be a prohibition, when the prohibitive word is the vehicle of the sentence stress.

E.g.:

Us se kār dhīre ki cup rāhe.

Tell him to keep silent.

Enikoñ ko āgyā do ki us ghar meñ nā jāeñ.

Give order to the soldiers not to go into that house.

To the stress relations of these sentences more or less the same rules apply as to the sentences containing direct orders.

The order or warning relating to future time is expressed in Hindi with the infinitive. In sentences of this kind the sentence stress is on the word or phrase modifying the action.

E.g.:

↓  
Sāmāy p̄r ānā!

Come in time!

The following demand is in fact the manifestation of a decision.

↓  
Hm̄ ko jāne do!

Let us go!

In sentences of this character the sentence stress is always carried by the infinitive, to which the decision is directed.

### 3.8. Sentence Stress of Interrogative Sentences

In Hindi we can distinguish two main types of the interrogative sentences, viz.: sentences containing questions under consideration and sentences containing questions to be completed. Both groups are characteristic from the viewpoint of stress and intonation.

3.8.1. In the following the stress relations of the question under consideration will be examined by us in such sentences, which essentially contain the same question under consideration with certain slight differences. Because of the simplicity of the sentences the shades of the question are generally expressed by indicatory morphemes.

E.g.:

Kyā yāh ādmī Māngal hē?

Is this man Mangal?

Yāh ādmī Māngal hē nā?

This man is Mangal, isn't he?

Yāh ādmī Māngal hē yā nahīn?

This man is Mangal, or not?

Yāh ādmī Māngal hē ki nahīn?

This man is surely Mangal?

In the first sentence the interrogator leaves the decision of the question entirely to the questionee. The morpheme kyā, which should not be translated, indicates in the beginning of the sentence that an interrogative sentence follows. Otherwise the word order is identical with the word order of the declarative sentence.

In the second sentence the opinion of the inter-

rogator is also expressed. He expects a positive answer from the questionee, but he himself does not decide the question. Here the characteristic Hindi interrogative particle nā is at the end of the sentence. The word order of the sentence agrees also here with the word order of the declarative sentence.

In the third sentence the opinion of the interrogator is also expressed, but the indicative morpheme yā nahīn at the end of the sentence expresses uncertainty.

In the fourth sentence the interrogator already takes up a definite position and expects from the questionee to confirm his opinion.

There is stress on the words used as indicative morphemes in all the four cases. The other most emphatically stressed word of the sentence is the word appearing to be questionable /or doubtless/.

3.8.2. In the sentences containing questions to be completed we can always find also some interrogative word /interrogative pronoun, adverb/, which indicates to what the question relates. The question can relate to persons, objects, place, time, quantity or manner.



E.G.:

↓  
Kaun boltā hē?

Who speaks?

↓  
Mangal kyā kartā hē?

What does Mangal do?

↓  
Kitne baje hē?

What is the time?

↓  
Us ke kitne bacce hē?

How many children has he?

↓  
Relgārī kab āegī?

When will the train come?

↓  
Pustak kahān hē?

Where is the book?

↓  
Vah kēse boltā hē?

How does he speak?

In the above sentences the sentence stress is always on the interrogative pronoun or on the adverb. We find in the first two sentences interrogative pronouns and in the other sentences adverbs.

A structurally separate form of Hindi interrogative sentences is that sentence containing a question

to be completed, the first part of which is some state-  
ment, and its second part is such a question to be  
completed, which relates to the closer definition of  
the statement in the first part of the sentence.

E.g.:

Rām Dillī calā gayā yāh āp ko kis ne batāyā?  
Rām to Delhi went, this you who told?  
/Who told you that Rām went to Delhi?/

From the viewpoint of the sentence stress, to the first part of the sentence the stressing rules of the declarative sentences and to the second part the stressing rules of the sentences containing questions to be completed are valid.

### 3.9. Meaning Differentiation by Sentence Stress

3.9.1. In Hindi, just like in other languages in general, we frequently meet with the phenomenon of meaning differentiation by stress. This property of stress is connected with the phonemic character of stress mentioned also by Bloomfield.<sup>587</sup> The differentiation of meaning by stress in Hindi asserts itself in the sentence, thus it is sentence stress. It is not confined separately to some word, but it appears only in words uttered in a syntactic context, which just as a result of meaning differentiation are the vehicles of sentence stress, the means of emphasizing.

Meaning differentiating stress can be of two kinds: 1/ it can relate to a certain syllable in the word to which prominence is given, and 2/ to the whole of a word to which prominence is given in the sentence. In the first case the place of stress changes within the word to which prominence is given, that is it shifts to another syllable from the one on which it originally was. On account of this the meaning of the word changes completely or is only modified. In the second case, as a result of prominence given, the accent falls on the word to which we just want to give prominence, however within this word it falls on the syllable which is to be stressed according to the general rules of stressing. Also in such cases there is a certain difference as regards the conventional place <sup>2</sup> of the accent, however this asserts itself not within the word but in a way that we give prominence to such a word of the sentence to which generally no promi- <sup>2</sup> nence is given. It is just this circumstance that renders it possible to modify the meaning of a word or of a sentence by giving prominence to a certain word .

3.9.2. Professional literature has dealt much with the question of meaning differentiation by stress. Here we take first a few illuminating examples from Hungarian professional literature on the basis of which we

can get nearer to the elucidation of the problem also in Hindi. Gyula Laziczius,<sup>59/</sup> dealing with the phonetics of the Hungarian language, elucidates the question on the basis of examples taken from German, French, English and Russian. According to him in the languages of free accentuation word accent can have an important role from the viewpoint of expression of meaning both on the lexicological and syntactical levels. Laziczius also speaks about contrasting stress which is, however, classified by him not as meaning differentiating stress but as emotional stress, and is apparently regarded by him as word stress.<sup>60/</sup> As we shall see later, the statements of Laziczius can be applied also to the Hindi language especially regarding the so called contrasting stress, however not as emotional stress but as meaning differentiating stress, and not in the category of word stress but in that of sentence stress. Another Hungarian investigator dealing with the subject in connection with the Hungarian language is László Deme.<sup>61/</sup> He also mentions the contrasting stress, but only briefly and similarly relating it into the category of word stress. Deme deals in a much greater detail with meaning differentiating stress<sup>62/</sup> and he does this already in the framework of sentence stress. He also discusses

questions of stressing to be connected with the kinds of words and with parts of sentence. He states that although the character of meaning differentiating stress cannot be undoubtedly connected with the circumstance that the given word is a certain kind of word or a certain part of sentence, still there are such kinds of words and parts of sentence, which are in general stressed or are in general unstressed. As we have pointed out in Chapter 3, this applies also to Hindi and it can be attributed just to this circumstance that the meaning differentiating stress has such an important role in the Hindi language.

Above we have discussed the opinions of such authors who do not deal with the Hindi language. Let us see now the opinions of some Indian and foreign investigators on meaning differentiating stress in Hindi. The majority of the authors discuss this question actually in connection with the stress relations of certain verbal forms, only briefly and in the framework of word stress. According to Kāntāprasad Guru,<sup>63/</sup> if a certain word in Hindi has two different meanings, the difference in meaning is indicated by the changing of the place of stress. Guru gives two examples. The word bṝhā means 'increased' /past participle/ and 'increase' /imperative/. /In the first

case the bāḥnā is the masculine singular past participle of the verb bāḥnā<sup>VI</sup> 'to grow', while in the second case it is the imperative of the verb bāḥnānā<sup>VII</sup> 'to increase' which is identical with the verbal root./

In the first case stress is on the first syllable, while in the second case it is on the second syllable.

The second example of Kāntāprasād Guru is the word kī. Here the feminine of the possessive postposition in regard to the phonetic form coincides with the simple past tense feminine of the verb karṇā 'to do'. Therefore, for the sake of differentiation, in the latter sense the kī is stressed. Dhirendra Varma<sup>64/</sup> discusses the question even more briefly. He only quotes the second example of Kāntāprasād Guru /kī as postposition and as simple past tense/, giving to it the same explanation as Guru. S.G. Ruding<sup>65/</sup> deals with the question also in a similar way as the former two authors, however in a somewhat more detailed form. By way of example he enumerates such pairs of words, in which the first word is the past participle masculine of the simple verb, while the second one is the verbal root of the so called "causative" verb formed from the same simple verb. The two elements of the pairs of words agree with each other in regard to their phonetic form. The infinitives of the pairs of verbs mentioned by him

are as follows:

ugnā 'to grow' - ugānā 'to increase'  
 s̄əm̄jhnā 'to understand' - s̄əm̄jhānā 'to cause to  
 understand', 'to ex-  
 plain'  
 ṭh̄ṭh̄r̄nā 'to stay' - ṭh̄ṭh̄r̄nā 'to quarter'

From these verbs he forms the following pairs of verbs:

<u>past participle masculine</u>	-	<u>verbal root</u>
↓ ugā	-	↓ ugā
↓ s̄əm̄jhā	-	↓ s̄əm̄jhā
↓ ṭh̄ṭh̄r̄	-	↓ ṭh̄ṭh̄r̄

Thus, as can be seen, the two corresponding elements of the above pairs of verbs are identical in respect of their phonetic form, and their meanings are really differentiated only by the changing of the place of stress. From this Rudin draws the conclusion that there is meaning differentiating /phonological/ stress in Hindi.<sup>66/</sup> To support this statement, Rudin quotes in full the relevant statement of Kamtaprasad Guru /Hindī vyākaraṇ (Russian version). Moscow 1957. § 58, p. 66/. As we can see, the authors mentioned so far deal very little with the problems of meaning differentiating stress in Hindi, and completely disregard the meaning

differentiating sentence stress.

R.R. Sisson,<sup>67/</sup> on the other hand, in the course of comparison of the stress relations of the so called "Southern British English" and Hindi, deals already considerably more with the stress relations of Hindi. Sisson<sup>68/</sup> takes his statements on Hindi stress in the first place from R.C. Mehrotra's<sup>69/</sup> article entitled "Stress in Hindi", which according to him is the only comprehensive description of Hindi stress published to date. Mehrotra really deals more thoroughly with the problems of Hindi stress, especially with those of Hindi meaning differentiating stress, than any of the authors discussed by us so far. Mehrotra speaks in the first place about sentence stress, more exactly about meaning differentiating sentence stress, and this can be concluded also from the following passage quoted from him<sup>70/</sup> /for the sake of uniformity I give his examples in the system of transliteration and marking followed by me/:

"In most of the cases, what does a stress in Hindi is that an ordinary meaning is converted into some special meaning of the same lexical unit by the use of it, e.g. /hun/ 'am' vs. /hun/ 'yes, yes, I am'." It is Mehrotra's merit that he approaches the question from many sides. He gives many examples, in which the



change of meaning caused by the meaning differentiating stress is frequently elucidated by him with explanatory words in English, e.g.:

/mē̃h̄ + nahī̃h̄ + thā̄/ 'anybody else might be there but I was definitely not' versus  
/mē̃h̄ + nahī̃h̄ + thā̄/ 'I was not (there)'.

Although Mehrotra's article means a considerable step ahead in the approach of the character of Hindi stress, especially meaning differentiating stress, we definitely miss that he did not try to systematize his statements in some way. He did not deal for example with the question of the generally stressed and generally unstressed kinds of words and parts of sentence, and did not tell explicitly when he was speaking about sentence stress and when about word stress.

3.9.3. In the following first of all we deal with the stress relations of those pairs of verbs, the first element of which is some simple verb, and the second element is the so called causative form of the same simple verb. We have seen that the works published earlier on the subject mention mostly this category as one of the forms of appearance of meaning differentiating stress in Hindi.<sup>71/</sup> Even Mehrotra<sup>72/</sup> mentions such examples and he classifies them as predictable stress. In our opinion the character of this stress

is different from the other forms of meaning differentiating stress. In fact, as we have already expounded in part 2.6., in the case of the Hindi verbs the stress is fixed, viz. it is always on the verbal root, and in the case of verbal roots consisting of more than one syllable it is on the last syllable of the verbal root. The verbal form mentioned here as an example is usually the past participle of some simple verb and the verbal root of the so called causative verb formed from the same simple verb. The phonetic form of these pairs of verbal forms is identical, but just on the basis of the general stressing rules of verbs already mentioned the stress is on the last syllable of the verbal root. Now in the first case the verbal form is not the verbal root but the verbal root + ā, while in the second case the same verbal form agrees with the derived verbal root.

E.g.

↓  
uḡnā 'to grow' - uḡānā 'increase'

In accordance with this:

the past participle	the verbal root
of uḡnā:	of uḡānā:
↓	↓
uḡā	uḡā

similarly:

səṃḡjhānā 'to understand'	-	səṃḡhānā 'to cause to understand', 'to explain'
↓		↓
səṃḡjhā	-	səṃḡjhā

Thus, in view of the fact that the stress actually does not shift here, but the different verbal forms of two different verbs coincide in respect of the phonetic form, we do not classify these cases under the category of meaning differentiating stress.

3.9.4. Let us see now that form of meaning differentiating stress, when the prominence relates to a certain syllable of the word to which prominence is given, and exactly to such a syllable of it which otherwise would not be stressed. Such syllables and morphemes are in Hindi as follows:

- 1/ the plural suffixes -eñ and -yañ of the feminine nouns;
- 2/ the postpositions, where as a result of the process of agglutination the nouns are pronounced together with their relative postpositions, and in recent times *in certain cases* they are even written in one word;
- 3/ the various formative syllables of verbs, viz. -nā suffix of the infinitive; -tā suffix of the present participle; -ā suffix of the past participle, which are originally unstressed.

The meaning differentiation of the above morphemes by stress occurs in the case of the contrast-

ing stress. This asserts itself in Hindi practically always at the end of the word or phrase and always in a syntactic context.

E.g.:

- 1/ the stress shifts to the suffix -ai or -yañ of the feminine noun:

Meñ ne nahin̄ kahā mez, meñ ne kahā  
mezen.

I did not say table, but I said  
tables.

Us ne nahin̄ likhā kursi, us ne likhā  
kursiyañ.

He did not write chair, but chairs.

- 2/ stress is on the postposition:

Kyā lifafā pustak̄ men hē, yā  
pustak̄ par hē?

Is the envelope in the book or on  
the book?

- 3/ the stress shifts from the verbal root to  
the suffix:

Kyā ap̄ ne samjhā calna yā calta?

Did you understand to go or going?

Həm ne nəhĩn̄ sunā jāe, həm ne sunā jāo.

We did not hear he may go but you go.

As we see, each of the above sentences is a compound sentence, consisting of two parts. In accordance with this in such sentences there are two sentence stresses, on the two collated or contrasted word elements.

3.9.5. Now we are going to discuss those cases of the meaning differentiating stress, in which the prominence relates to the whole of the word to which prominence is given. As we have already mentioned, in this case the stress falls on the word to which we want to give prominence. Here the stress is carried by that syllable of the word which is to be stressed on the basis of the general rules of stressing. In such cases prominence is usually given to such a word of the sentence, which otherwise would be unstressed, but practically it can be any word of the sentence. 2 ref.

We are going to examine the various possibilities of the meaning differentiating stress in such types of sentences which in our opinion are most suitable for this purpose. These sentence types are as follows: in the category of the declarative sentences, simple sentences and extended simple sentences; impe-  
porative sentences; interrogative sentences including question under consideration, and question to be

completed. The model sentences to be enumerated will be grouped so that first we are always giving such a standard sentence in which the sentence stress is in the usual place, on the usual kind of word or part of sentence. Then, according to possibility, this sentence is diversified by giving prominence to different words.

Declarative sentence

simple sentences:

Rām jāntā hē.

Rām knows.

↓  
Rām jāntā hē.

Rām knows /not someone else/.

↓  
Ghar unca hē.

The house is high.

↓  
Ghar unca hē.

The house high /and not something else/.

extended simple sentences:

Larkiyāñ zechī tarah  
khol rāhī hēñ.

/Simple sentence extended with adverb, sentence stress on the adverb/

The girls are playing well.

↓  
Larkiyāñ zechī tarah  
khol rāhī hēñ.

They are the girls, who are playing well.

Chotī larkiyā̄ acchī̄ tarāh  
 khel rāhī̄ hē̄.  
 The small girls are playing  
 well.

/Simple sentence  
 extended with ad-  
 jectival attribute  
 and adverb./

↓  
 Chotī larkiyā̄ acchī̄ tarāh  
 khel rāhī̄ hē̄.  
 They are the small girls  
 who are playing well.

Pracīn samaȳ mē ek rājā̄  
 thā̄.  
 In the old time there was  
 a king.

/Simple sentence  
 extended with an  
 adverb modified  
 with attribute./

↓  
 Pracīn samaȳ mē ek rājā̄  
 thā̄.  
 In the old time there was  
 a king, and not in recent  
 times./

Rājā̄ ne ek bāndar̄ ko naukār  
 rakhā̄.  
 The king employed a monkey.

/Simple sentence  
 extended with  
 object./

↓  
 Rājā̄ ne ek bāndar̄ ko naukār  
 rakhā̄.  
 It was the king who employed  
 a monkey.

Rājā ne ek bāndar ko naukār  
rādhā.

/Yes/ the king /really/ em-  
ployed a monkey.

Imperative sentences

↓  
Ap hindī meñ bāt kareñ!

Speak in Hindī!

/Order to accomp-  
lish an action/

↓  
Ap hindī meñ bāt kareñ!

You should speak in Hindī

/not someone else/!

↓  
Unce svār meñ nā bolo!

Do not speak loudly!

/Prohibition of  
some action./

↓  
Unce svār meñ nā bolo!

Loudly do not speak /other-

wise you may speak/!

↓  
Ham ko jāne do!

Let us go!

/Decision./

↓  
Ham ko jāne do!

Let us go /not others/!



Interrogative sentences

Question under consideration:



Māngal kisān hē?

Is Mangal a peasant?



Māngal kisān hē?

Is it Mangal who is a peasant?

Māngal ke pās bahut pēsā  
hē?

Does Mangal have much  
money?

/question under con-  
sideration extended  
with possessive at-  
tribute and adverb  
of degree./

↓  
Māngal ke pās bahut pēsā  
hē?

Is it Mangal who has much  
money?

Māngal ke bācche bāg meñ  
khelte hēñ?

Do Mangal's children play  
in the garden?

/question under con-  
sideration extended  
with possessive at-  
tribute and adverb  
of place./

↓  
Māngal ke bācche bāg meñ  
khelte hēñ?

Are they Mangal's children  
who play in the garden?

question to be completed:

↓  
Māṅgəḷ kyā kartā hē?

What does Mangal do?

↓  
Māṅgəḷ kyā kartā hē?

What does Mangal do

/not someone else/?

↓  
Us ke kitne bacce hē?

How many children does

he have?

↓  
Us ke kitne bacce hē?

How many children does he

have /not someone else/?

↓  
Relgārī kab āegī?

When will the train come?

↓  
Relgārī kab āegī?

When will the train come

/not something else/?

↓  
Āp kya hāl hē?

How are you?

↓  
Āp kya hāl hē?

How are you /not me/?

/Originally the sentence stress is always on the interrogative word./

3.9.6. Thus, as we have seen, the meaning differentiating sentence stress asserts itself in general so that it appears in a place which is different from the usual one. From the generally stressed syllable or morpheme it shifts to the generally unstressed syllable or morpheme, or from the word which is generally the vehicle of the sentence stress, it shifts to some other word of the sentence.

The shifting of the stress in this manner modifies the original meaning of the word or the sentence, it gives more importance to a certain word in the sentence in comparison to the other words, or it corrects or elucidates the meaning of some phrase.

As can be seen also from the examples given above, the word order of Hindi simple sentences and extended simple sentences is <sup>in general</sup> fixed. As a result of this the meaning differentiating stress is much more important in Hindi than for example in Hungarian or in certain other languages, where prominence can be given to a word also by the modification of the conventional word order.

### III. INTONATION

#### 4. GENERAL VIEWPOINTS

Intonation is actually the fluctuation of the pitch level of the syllables following each other, or of the vowels in them. In literature in general the authors distinguish between word intonation and sentence intonation. In Hindi speech, however, intonation has an important role only as sentence intonation, intonation asserts itself only within the sentence, as a constituent of coherent speech. Therefore we also speak here only about sentence intonation even then, if the sentence consists by chance of one word, we hold the fact established by several investigators correct that in the certain languages there is a close relationship between stress and intonation.<sup>73/</sup> Therefore intonation can be studied only in relationship with stress.

On the basis of a survey of the rules of intonation in the different languages, we also represent the viewpoint according to which the syntactic factors also influence and in certain cases determine intonation.<sup>74/</sup> According to our investigations this statement applies also to the Hindi language. The syntactic elements directly determining intonation are called by M. Bierwisch "syntactic intonation

markers" /syntaktische Intonationsmarker - SIM/.<sup>75/</sup>

## 5. A SURVEY OF LITERATURE ON INTONATION IN HINDI

The question of intonation in Hindi, curiously enough, has been discussed so far almost exclusively by non-Indian investigators. Brief observations and explanations on the problem can be found mostly in text-books, but not in all text-books. First we review the most characteristic ones of these in the order of their publication.

First of all we review T.Grahame Bailey's<sup>76/</sup> text-book entitled "Teach Yourself Urdu". The author in his introduction deals briefly also with questions of intonation in Hindi /Urdu/. His observation is interesting according to which the prominence by stress and intonation asserts itself in the sentence with the change in the direction of the course of intonation, viz. up or down. This is expressed by him as follows: "The prominence of Urdu syllables in the sentence seems to be partly due to a slight increase of force coupled with a change in the direction of intonation which may be up or down,...."

A phenomenon similar to Bailey's characterization was observed by Alexander V. Izacenko - Hans-Joachim Schädlich<sup>77/</sup> in the sentence intonation of the

German language. They call this phenomenon the "break of the pitch level" /Tonbruch/, with the remark that this "break" appears always immediately before the stress of the sentence or section of sentence /praktischer Tonbruch/, or after the same /postiktischer Tonbruch/.

V. Torizka<sup>v</sup> 78/ underlines the important role of intonation in Hindi. Although he does not mention sentence intonation in an explicit form, his expounding quoted below still refers to sentence intonation:

"All the more attention is to be paid to the intonation. The range of intonation in Hindi is narrower than in English. In most words consisting of two and more syllables in a sentence the tone of voice usually rises gradually towards the end of the word, in the last word of the sentence the voice falls. In a question, the voice may rise even in the last word.

Correct intonation, which is a very important feature in Hindi, cannot be acquired without listening to a good speaker..."

As it is shown also by the above quotation, Torizka<sup>v</sup> approaches the characterization of intonation in Hindi from another viewpoint, but he does not discuss the question in detail either. What he says, is correct, but naturally it is not in the least suffi-

cient to give a clear picture of intonation in Hindi.

The text-book of Z.M. Dymshits - O.G. Ul'tsiferov - V.I. Goryunov<sup>79/</sup> also discusses the question of intonation in Hindi in a brief form. They distinguish falling and rising intonation. The authors mark the falling intonation with an arrow bending downwards and the rising intonation with an arrow bending upwards in the interspace between two words where the falling or rising of the intonation starts. According to them - quite correctly - the falling intonation occurs in declarative and negative sentences, as well as in such interrogative sentences /question to be completed/ in which there are interrogative words. Rising intonation, on the other hand, can be found in the question under consideration. The falling and rising of the intonation is in the last section of the sentence in each of the cases enumerated. The relationship between intonation and stress is not mentioned by the authors. Briefly so much for the explanations and characterizations to be found in the certain text-books.

The authors to be reviewed in the following deal with the question of intonation in Hindi already on a more scientific basis. E.g. S.G. Rudin<sup>80/</sup> and V.A. Chernyshev<sup>81/</sup> discuss the problem of intonation in Hindi in a more comprehensive form. Rudin analyses

rather the phonetic aspects of intonation in Hindi, while Chernyshev underlines the semantic and syntactic role of intonation in detail. Rudin's merit is that he definitely points out the important role of intonation. Chernyshev's work, on the other hand, means a step ahead in so far as that it draws the attention to the syntactic role of intonation in Hindi. He shows that in the quite short sentences without verbs the intonation is the basic and only means of predication. He mentions the role of intonation in the distinguishing and separating of sentences<sup>82/</sup> and demonstrates the basic types of intonation also with examples and with the marking of the course of intonation. However, he does not analyse the question of the intonation markers.

Thus, as we have seen, the majority of the authors dealing with intonation in Hindi discuss this question only briefly. They rather strive to give a phonetical characterization of intonation, although its importance is stressed more or less by each of them. Only Chernyshev deals with the syntactic aspects of intonation in Hindi but the different intonation markers - which as we shall see also have an important role in the definition of the character of intonation in Hindi - are not mentioned by him either.




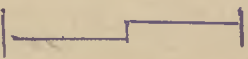
## 6. FORMS OF NOTATION OF INTONATION

### 6.1. Notation of Intonation in the Different Languages

The notation of the different types of sentence intonation has engaged the attention of the investigators for a long time. They tried to illustrate the characteristic forms of the types of sentence intonation with different methods and means. This endeavour asserted itself more or less in two main directions. One of the trends tries to register the whole course of intonation, while the other wants first of all to characterize the certain types of intonation, completely or partly disregarding the elements of secondary importance.

Gyula Laziczus<sup>83/</sup> gives a short summary of the notation of intonation on the basis of examples taken from the Hungarian, English and German languages. He denotes the whole course of sentence intonation by indicating the certain syllables with dots so that in accordance <sup>with</sup> ~~of~~ the pitch level of the certain syllables the certain dots are arranged higher or lower. The whole sentence is put between square brackets, e.g. [ . . . ]. He represents the gliding downwards or upwards appearing at the end of the question under consideration with an arrow pointing downwards or up-

wards.

Izacenko - Schädlich<sup>B4/</sup> deem important the notation of the break of the pitch level before the sentence stress /praktischer Tonbruch/ and the break of the pitch level after the sentence stress /postiktischer Tonbruch/ from the viewpoint of the characterization of intonation. In accordance with this they represent the course of intonation before and after the break of the pitch level with horizontal straight lines and the break itself with a vertical line so that the section of line before the break, the line indicating the break and the section of line following the break form one continuous whole. If the course of the break is falling, then the section of line before the break goes along above the words, then after the break it continues under the words, and if the break is rising, then the section of line before the break goes along under the words and after the break it continues above the words. E.g.   
/falling break of the pitch level/.   
/rising break of the pitch level/. The horizontal lines before and after the break of the pitch level indicate the beginning and the end of the sentence, respectively. The stress is not indicated separately, it follows from the stressing rules of the German language.





M. Bierwisch<sup>85/</sup> also holds the role of break of the pitch level before and after the sentence stress important / From the viewpoint of the determination of the types of intonation in German. However, he indicates the course of the change of the pitch level already more accurately. Therefore he denotes the pitch level of the certain syllables with numerals from 1 upwards under the words. He also indicates the sentence stress with numerals above the words, underlining the close relationship of stress and intonation also by this.

E.g.:

<sup>1</sup> "was war das?" <sub>1 3 1</sub>	<sup>1</sup> "Ein Flugzeug." <sub>1 3 1</sub>
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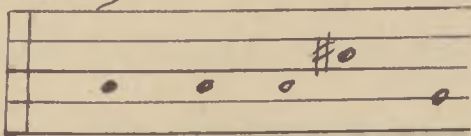
L. Dome<sup>86/</sup> indicates intonation in Hungarian by sections with lines characterizing the course of intonation, which do not show the limits and intervals of the certain syllables. The stress of the sections of sentence is indicated by the letters set in bold type of the stressed syllables.

E.g.:

1. 	2. 	/intonation of question under consideration/;
1. 	2. 	/intonation of declarative sentence/.

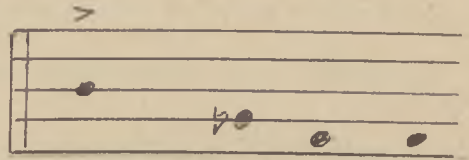
An interesting way of notation is used by Ivan Fónagy - Klára Mardics<sup>87/</sup> to register the melody, the intonation of Hungarian speech. Similarly to the musical notation, they also give the "notes" of the certain model sentences, they represent the intonation of the certain sentences with notes, and indicate the section stress above the stressed syllable.

B.G.:



E - sett az e - ső?

/Question under consideration/



Viz - sza - a - dód!

/Imperative sentence/

## 6.2. Notation of Intonation in Hindi

As we have already mentioned, there are only a few such works which deal also separately with intonation in Hindi. It is a peculiar circumstance that the Indians themselves, whose opinion would be the most competent, have so far dealt very little with this question. Thus, in reviewing the ways of notation of intonation in Hindi we can mention only foreign authors.

T. Grahame Bailey<sup>88/</sup> illustrates the intonation also in two ways, viz. by writing the certain syl-

lables higher or lower in accordance with the pitch level of the certain syllables concerned, and also by registering the pitch level of the syllables in two line spaces, like musical notes.

S.G. Rudin<sup>89/</sup> also uses two line spaces formed by three lines to denote the intonation in Hindi /Hindustani/ and he separates the sections of the sentence with vertical lines. He denotes the syllables with horizontal lines and also indicates the stress.

The notation used by V.A. Chernyshev<sup>90/</sup> resembles to that of Rudin in so far as the syllables are represented with horizontal lines also by him, but he does not use line spaces and does not indicate the place of the stress either. He represents the differences between the pitch levels of the certain syllables with dots corresponding to the number of grades of the pitch level.

E.g.:     :            

As we have already mentioned, Z.M. Dymshita - O.G. Ul'itsiferov - V.I. Goryunov<sup>91/</sup> denote only the most characteristic section of intonation, viz. the break of the pitch level. They indicate falling intonation with an arrow bending downwards /↘/, and rising intonation with an arrow bending upwards /↗/. They put these marks after the word, after which this

change in the pitch level takes place.

## 7. CHARACTERIZATION OF THE COURSE OF INTONATION IN HINDI ACCORDING TO KINDS OF SENTENCES

On the basis of my observations I have arrived at the conclusion that it is most suitable to examine intonation in Hindi, as sentence intonation, in its syntactic relationship, because we can include this phenomenon in an adequate system only this way. Therefore I also examine Hindi sentence intonation in the framework of the syntactic basic forms, the simple kinds of sentences. It is important to know that the order of words in Hindi simple sentences is fixed. The subject with its eventual complements is at the very beginning of the sentence. This is followed by the object with its eventual complements, and then at the end of the sentence is the predicate consisting in general of several elements. The negative particle, the prohibitive words and the interrogative words stand always before the word to which they relate. The adverb is most frequently found before the verb.

E.g.

- /1/ Rām pustak pāṛhtā hē. /declarative sentence/  
Rām book reads.  
/Rām reads the book./

- /2/ Rām pustāk nahīṅ pāṛhtā hē. /negative sentence/  
Rām book not reads.  
/Rām does not read the book./
- /3/ Āp pustāk mat pāṛhie! /prohibitive sentence/  
You book not read!  
/Do not read the book!/  
/4/ Āp pustāk mujhe dījie! /imperative sentence/  
You book to me give!  
/Give me the book!/  
/5/ Rām ne pustāk mez pāṛ kyon rākhī? /question to be  
Rām book table on why put? completed/  
/Why did Rām put the book on the table?/  
/6/ Rām pustāk pāṛhtā hē? /question under conside-  
Rām book reads? ration/  
/Does Rām read the book?/

We find an identical word order in each of the above sentences. Therefore intonation in Hindi has a more important meaning differentiating role than in those languages in which the word order in the sentence is not fixed. This fixed word order in Hindi makes it possible for us at the definition of intonation in the certain sentences to take into consideration only that portion of the sentence which extends from the word to which prominence is given up to the end

of the sentence. This portion of the sentence is called by us the nucleus of intonation. Thus for example if in sentence /1/ the word to which prominence is given, is *pustək* 'book', then the nucleus of intonation will be (*pustək pəʃtā hɛ*). In sentence /2/ the word to which prominence is given, is the negative particle *nəhīn* 'no' or 'not'. Therefore the nucleus of intonation will be here (*nəhīn pəʃtā hɛ*). As we shall see, this portion of sentence contains all those phonetic and syntactic-semantic elements, on the basis of which we can define the type of the whole sentence.

In the nucleus of intonation I indicate the sentence stress, the main stress by putting the mark ↓ above the stressed syllable /as I indicated the sentence stress in the same way also in the part discussing stress/, and to characterize the course of intonation I show the relative pitch levels with the numerals 1, 2 and 3 under the syllables concerned, where 1 means the lowest pitch level, 2 the medium pitch level and 3 the highest pitch level.

Let us see now how the above statements assert themselves in the different kinds of sentences.



7.1. Intonation of Declarative Sentences

In Hindi the intonation of declarative sentences consisting of one word adjusts itself more or less to the main stress of the word.

E.g.:

$\begin{array}{c} \downarrow \\ \text{S}\bar{\text{a}}\text{m}\bar{\text{a}}\text{c}\bar{\text{a}}\text{r}. \\ 1 \quad 2 \quad 3 \end{array}$ 
 News. /Here we find a certain glide  
 of the pitch level downwards  
 at the end of the last syl-  
 lable./

But:

$\begin{array}{c} \downarrow \\ \text{K}\bar{\text{a}}\text{r}\bar{\text{y}}\bar{\text{a}}\text{l}\bar{\text{a}}\text{y}. \\ 3 \quad 2 \quad 1 \end{array}$ 
 Office. /Here the falling intonation  
 is already in harmony also  
 with the word stress./

In the declarative sentences consisting of several words the falling intonation is found already everywhere. We have to remark, however that this falling character applies mainly to the nucleus of intonation, that is to that part of the simple sentence, which contains the essence of the statement and starts with the word carrying the sentence stress.

E.g.:

/7/ Yəh ( $\begin{array}{c} \downarrow \\ \text{p}\bar{\text{u}}\text{s}\bar{\text{t}}\bar{\text{a}}\text{k} \text{ h}\bar{\text{e}} \\ 3 \quad 2 \quad 1 \end{array}$ ). This book is. /This is a  
 book./

As we have already mentioned above, the part of the sentence put in brackets is the nucleus of intonation. With the numerals under the certain syllables we indicate the relative pitch level, and thus the course of intonation, and the sign /<sup>↓</sup>/ above the corresponding syllable of the word to which prominence is given indicates the sentence stress. That part of the sentence which precedes the nucleus of intonation is of secondary importance from the viewpoint of both stress and intonation and therefore we do not furnish this with a special notation. If the sentence is extended, both the nucleus of intonation and the section of the sentence preceding this can be extended.

E.g.:

/8/ Rames' (pərh rəhā hɛ). Rames' reading is.  
/Rames' is reading./

/9/ Rames' (pustək ko pərh rəhā hɛ). Rames' book  
reading is. /Rames' is  
reading the book./

/10/ Rames' pustək ko (mujhe deta hɛ). Rames' book to  
me gives. /Rames' gives  
the book to me./

/11/ Rames' pustək ko (ghər pər pərh rəhā hɛ). Rames'  
book home at reading is.  
/Rames' is reading the  
book at home./





structure of the nucleus of intonation is always the same, viz. prohibitive word + verb in imperative mood, and only the part preceding the nucleus of intonation becomes extended. This is where the prohibitive sentence differs also from the simple declarative sentence and the imperative sentence, in which the nucleus of intonation can be extended.

#### 7.4. Intonation of Imperative Sentence

The imperative sentence is also characterized by the falling intonation. This equally applies to the sentences consisting of one word and to those consisting of several words.

E.g.:

/20/ (Jāo)<sub>3 1</sub>! Go!

/21/ (Kām kəro)<sub>3 2 1</sub>! Work make! /Work!/  
1.2

/22/ Pustək ko (rəkh dījie)<sub>3 2 2 1</sub>! Book put down! /Put  
the book down!/  
1.2

/23/ Is pustək ko (mez pər rəkhie)<sub>3 2 2 1</sub>! This book  
table on put!  
/put this book on  
the table!/  
1.2

### 7.5. Intonation of Interrogative Sentence

Here we have two main types, viz. sentences containing questions to be completed and sentences containing questions under consideration.

7.5.1. The question to be completed has no characteristic intonation typical only of itself. The course of its intonation is also falling just like that of the majority of the declarative and negative sentences, as well as of the prohibitive and imperative sentences. As regards its structure, the question to be completed is distinguished from the question under consideration by the fact that the interrogation is indicated in it always by some interrogative word, or interrogative morpheme. The economy of the language asserts itself also here. It does not allow the use of superfluous marking elements.

E.g.:

/24/ (Kyā huā)? What happened?  
3 2 1

/25/ (Kitne baje hēh)? What clock is? /What time  
3 2 2 2 1 is it?/

/26/ Yāh (kyā hēh)? This what is? /What is this?/  
3 1

/27/ Yāh ādmī (kaun hēh)? This man who is? /Who  
3 1 is this man?/

/28/ Məngəl (kyā kər rəhā hɛ)? Mangal what doing  
 3 2 2 2 1 is? /What is Mangal  
 doing?/

/29/ Rəmes' pustək (kis ko detā hɛ)? Rəmes' book  
 3 2 2 2 1 whom to gives?  
 /To whom does Rəmes'  
 give the book?/

7.5.2. The intonation of the question under con-  
sideration differs from the intonation of all the  
 kinds of sentences discussed up to now. ~~as~~ <sup>Since</sup> here the  
 question is not indicated by any morpheme, therefore  
 a special intonation of fixed form is required to  
 mark the question. This is the so called interrora-  
 tive intonation. The last section of the sentence is  
 the interrogative nucleus,<sup>92/</sup> or the nucleus of in-  
tonation. In this the course of intonation is rising-  
falling. If the word to which prominence is given,  
 the vehicle of the main stress is monosyllabic and  
 is not followed by a postposition, than the pitch  
 level glides upwards in the same syllable /from the  
 relative pitch level marked with 2 to the relative  
 pitch level marked with 3/, and then on the last syl-  
 lable of the nucleus of intonation it falls again  
 back, but somewhat lower than the initial level, to  
 the relative pitch level marked with 1.

/30/ Məngəl (kām kər rəhā·hɛ)? Mangal work doing  
 2 3 3 3 1  
 is? /Is Mangal doing work?/

If the word to which prominence is given is disyllabic, or a monosyllabic word but followed by a postposition, then the gliding upwards of the pitch level does not take place. In such cases the first syllable is of the relative pitch level marked with 2, on the second syllable, and in the case of a monosyllabic noun followed by a postposition, on the postposition the pitch level rises without gliding to the relative pitch level marked with 3 and on the last syllable of the nucleus of intonation it falls back to the relative pitch level marked with 1.

E.g.:

/31/ Kyā yəh ādmī (Məngəl hɛ)? This man Mangal  
 2 3 1  
 is? /Is this man Mangal?/

/32/ Kyā mɛñ (ghər ko jāñ)? I house to should  
 2 3 3 1  
 go? /Should I go home?/

If the word to which prominence is given is monosyllabic /32/, then the main stress, the sentence stress





/35/ Kyā vəh (pāntālīs rupaye detā hε)? He forty-  
 2 3 3 3 3 3 3 3 1  
 five rupees gives?  
 /Does he give  
 forty-five rupees?/

/36/ Məngə1 (mānūsya hε)? Mangal man is? /Is Man-  
 2 3 3 1  
 gal a man?/

/37/ Vəh (səməcār lātā hε)? He news brings? /Does  
 1 2 3 3 3 1  
 he bring news?/

/38/ Yəh (prədārṣṇī hε)? This exhibition is?  
 2 3 3 3 1  
 /Is this an exhibi-  
 tion?/

/39/ Is meñ koī (kəṭhinaī hε)? This in some dif-  
 1 2 3 3 1  
 ficulty is? /Is some  
 difficulty in this?/

In sentences /33/, /34/ and /35/ the kyā is not identical with the kyā 'what' in the question to be completed /24/. The kyā introducing the question under consideration is only a marking morpheme which indicates that it will be followed by a question under consideration. It is not absolutely necessary to use it, but even if it is used, it is not translated into English.

As can be seen from the above examples, the main stress /the sentence stress/ is always on the first word of the nucleus of intonation, on the word to which prominence is given. If this word is monosyllabic, then the pitch level glides upwards at the end of the word. If, however, the monosyllabic word is followed by a postposition, then this gliding upwards does not take place /see model sentences /30/ and /32/ /. In the polysyllabic word to which prominence is given the main stress is in general on the longest syllable, or if two syllables of equal length are the longest syllables, then the main stress falls generally on the first one of these, as for example in model sentence /39/.

A special case of the nucleus of intonation is, when in the question under consideration the word to which prominence is given is the verbal form है 'is'. In this case - as according to the general rules of Hindi word order the predicate /in the present case the verbal form है 'is'/ is always at the end of the sentence - the nucleus of intonation consists of this one word. This is at the same time the vehicle of the sentence stress. The pitch level is the relative pitch level marked with 3, from which a certain gliding downwards can be observed.

E.g.:

/40/ Is meñ koī kəṭhināī (hɛ̃)? This in some dif-  
ficulty is? /Is in  
this some difficulty?/

In the sentences containing a question under consideration the nucleus of intonation can also be a verbal form consisting of one or more elements of a simple verb or a compound verb /noun or adjective + simple verb/. In such cases the sentence stress is always on the first element, in the case of simple verbs on the verbal root, and in the case of compound verbs on the noun or adjective having the function of the verbal root. Otherwise, this is in accordance with the statements to be found in part 2.6. entitled "Stress Relations of Verbal Roots and Verbal Forms".

The nucleus of intonation is a verbal form of a simple verb:

/41/ Kyā Rām (āṭā hɛ̃)? Rām comes? /Does Rām  
2 3 1 come?/

/42/ Kyā Rām (ā rəhā hɛ̃)? Rām coming is? /Is Rām  
2 3 3 1 coming?/

/43/ Kyā Rām (āegā)? Rām will come? /Will Rām  
2 3 1 come?/



The nucleus of intonation is the verbal form of a compound verb:

/47/ Kyā Rām (kām kərtā hε)? Rām work does?  
2 3 3 1 /Does Rām work?/

/48/ Kyā Rām (kām kər rəhā hε)? Rām work doing is?  
2 3 3 3 1 /Is Rām working?/

/49/ Kyā Rām (səfai kəregā)? Rām cleaning-will  
2 33 3 3 1 do? /Will Rām  
clean?/

/50/ Kyā Rām (səfai kərne valā hε)? Rām cleaning  
2 33 3 3 3 1 to do prepares?  
/Does Rām prepare  
to clean?/

/51/ Kyā Rām ne (səfai kər dī)? Rām cleaning has  
2 33 3 1 done? /Has Rām done  
cleaning?/

/52/ Kyā Rām (səfai kəre)? Rām cleaning should  
2 33 3 1 do? /Should Rām clean?/

/53/ Kyā Rām muje (maf kərtā hε)? Rām me excused  
2 3 3 1 makes? /Does Rām  
excuse me?/

/54/ Kyā yəh səmācār āp ko (malūm hε)? This news  
 ↓  
 2 3 1  
 you to known is?  
 /Do you know this  
 news?/

Among the above model sentences in the case of /47/, /48/, /49/, /50/, /51/ and /52/ in the nucleus of intonation the vehicle of the sentence stress is a noun, while in the case of model sentences /53/ and /54/ it is an adjective. As we have already mentioned, in the compound verbs the noun or the adjective has in fact the function of the verbal root. Therefore it is the vehicle of the sentence stress. The sentence stress comprises here the whole verbal form into a larger stressing unit, which is at the same time the nucleus of intonation. As regards the place of the sentence stress within the word the statements made in the part dealing with stress are valid.

## 8. STRUCTURE OF THE NUCLEUS OF INTONATION, PHONETIC AND SYNTACTIC INTONATION MARKERS

While examining the certain characteristics of intonation we observed that the terminal part of the certain kinds of sentences in Hindi, the nucleus of intonation is as regards its structure characteristic of the kind of sentence concerned. The nucleus of intonation contains such phonetic and syntactic elements, on the basis of which we can make conclusions regarding the type and character of the sentence. We call these characteristic elements phonetic and syntactic intonation markers. The intonation markers show that we are in such a section of the sentence /the nucleus of intonation/, the intonation of which indicates the prominence and which contains the word to which prominence is given. Depending on the fact whether these elements are of syntactic or phonetic character, we speak about syntactic or phonetic intonation markers.

### 8.1. Phonetic Intonation Markers

The nucleus of intonation of every kind of sentence contains the sentence stress, which falls always on one of the syllables of the word to which prominence is given. In Hindi the word to which promi-



nence is given stands at the beginning of the nucleus of intonation, that is the nucleus of intonation begins with the word to which prominence is given. The sentence stress, as a permanent element of the nucleus of intonation, is in our opinion a phonetic intonation marker. This circumstance also shows the close relationship of sentence stress and intonation.

The course of intonation, the changing of the pitch level in the nucleus of intonation is also a phonetic intonation marker. Generally this can be in Hindi of two kinds. The course of intonation of the declarative, negative, prohibitive and imperative sentences, as well as of the sentences containing a question to be completed is falling, while the course of intonation of sentences containing a question under consideration is rising-falling. The question under consideration is determined already by the rising-falling intonation alone. The special position of the interrogative intonation and the character of the course of intonation in the Hungarian language are aptly analysed by I. Fónagy - K. Magdics<sup>93/</sup> and L. Deme.<sup>94/</sup>

However, to define the other kinds of sentences, besides the phonetic intonation markers already mentioned also other characteristic elements are required. Such are the syntactic intonation markers.

## 8.2. Syntactic Intonation Markers

As we have seen, the rising-falling course of intonation is such a phonetic intonation marker, which determines the question under consideration already in itself. The falling intonation, on the other hand, is characteristic of several kinds of sentences /declarative, negative, prohibitive and imperative sentences, as well as sentences containing a question to be completed/. Therefore, here further intonation markers are required. These are the syntactic intonation markers. The syntactic intonation markers are characterized by M. Bierwisch<sup>95/</sup> as follows: '...Wir wollen syntaktische Elemente, die unmittelbar die Intonation determinieren, "syntaktische Intonationsmarker" /SIM/ nennen. Von anderen syntaktischen Bedingungen, zu denen in gewissem Sinn ja auch die Grenzsymbole gehören, sind die SIM deutlich zu unterscheiden. Sie sind nicht, wie die Grenzsymbole, lediglich Elemente oder Reflexe der syntaktischen Oberflechenstruktur, sondern spielen eine eigenständige Rolle in der Tiefenstruktur und - mindestens zum Teil - auch in der semantischen Interpretation der Sätze: sie representieren damit genau das, was man herkömmlich unter der "Bedeutung" der Intonation versteht.'

Thus as we see, according to M. Bierwisch the

syntactic intonation markers have an important role in the determination of the character of intonation, of the "meaning" of intonation. The generally known economy of the languages regarding the application of the special forms of intonation asserts itself also in Hindi. This is possible just because in the sentences which do not contain a question under consideration the nucleus of intonation has such syntactic elements, which are characteristic of the certain kinds of sentences concerned and thus they are suitable to distinguish the kinds of sentences with falling intonation.

The syntactic intonation markers of the certain kinds of sentences are as follows:

that of the declarative sentence: verb in indicative;

that of the negative sentence: the negative particle  
nāhīn;

that of the prohibitive sentence: the prohibitive  
words mat and nā;

that of the imperative sentence: verb in imperative  
or subjunctive;

that of the question to be completed: some interrogative morpheme /kyā, kaun,  
kāhāñ, kitnā, etc./.

In the following we give a few examples according to kinds of sentences. In the examples only the nucleus of intonation is given, xxxxxxxxxxxxxxx which contains the syntactic intonation markers listed above, as distinguishing elements.

Declarative sentences:

/55/ (  $\begin{matrix} \downarrow \\ \text{pustək} + \text{hε} \\ 3 \quad 2 \quad 1 \end{matrix} \right)$  noun in nominative + verb in indicative

/56/ (  $\begin{matrix} \downarrow \\ \text{pərh} \text{ rəhā} \text{ hε} \\ 3 \quad 2 \quad 2 \quad 1 \end{matrix} \right)$  analytic verbal form in indicative

/57/ (  $\begin{matrix} \downarrow \\ \text{pustək} \text{ ko} + \text{pərh} \text{ rəhā} \text{ hε} \\ 3 \quad 2 \quad 2 \quad 2 \quad 2 \quad 1 \end{matrix} \right)$  noun in accusative + analytic verbal form in indicative

/58/ (  $\begin{matrix} \downarrow \\ \text{mujhe} + \text{detā} \text{ hε} \\ 3 \quad 2 \quad 2 \quad 2 \quad 1 \end{matrix} \right)$  personal pronoun in dative + analytic verbal form in indicative

/59/ (  $\begin{matrix} \downarrow \\ \text{ghər} \text{ pər} + \text{pərh} \text{ rəhā} \text{ hε} \\ 3 \quad 2 \quad 2 \quad 2 \quad 2 \quad 1 \end{matrix} \right)$  noun in locative + analytic verbal form in indicative

As we see, in each of the examples listed above the verb is in indicative and the nucleus of intonation does not contain any other syntactic intonation marker.

Negative sentences:

/60/ ( $\overset{\downarrow}{\text{nāhīn}}$ ) negative particle  
3 1

/61/ ( $\overset{\downarrow}{\text{nāhīn}} + \text{hε}$ ) negative particle + auxiliary  
3 2 1  
verb

/62/ ( $\overset{\downarrow}{\text{nāhīn}} + \text{jāntā hūn}$ ) negative particle + ana-  
3 2 2 1  
lytic verbal form

Each of the above nuclei of intonation contains the negative particle nāhīn, always at the first place.

Prohibitive sentences:

/63/ ( $\overset{\downarrow}{\text{mət}} + \text{jāo}$ ) prohibitive word + verb in im-  
3 21  
perative

/64/ ( $\overset{\downarrow}{\text{nā}} + \text{pərhie}$ ) prohibitive word + verb in im-  
3 2 21  
perative

In each of the above two examples we find the prohibitive word, always at the first place.

Imperative sentences:

/65/ ( $\overset{\downarrow}{\text{jāo}}$ ) verb in imperative  
31

/66/ ( $\overset{\downarrow}{\text{kām}} + \text{kəro}$ ) compound verb /noun + simple  
3 2 1  
verb/ in imperative

167/ (  $\begin{matrix} \downarrow \\ \text{āchā} \\ 3 \quad 2 \end{matrix} + \begin{matrix} \bar{kā} \\ 2 \end{matrix} + \begin{matrix} kəro \\ 2 \quad 1 \end{matrix} )$  attribute + compound  
verb /noun + simple  
verb/ in imperative

168/ (  $\begin{matrix} \downarrow \\ kəh \quad dījīe \\ 3 \quad 2 \quad 2 \quad 1 \end{matrix} )$  verb /absolutive + subsidiary  
verb/ in imperative

169/ (  $\begin{matrix} \downarrow \\ mez \quad pər + rəkhīe \\ 3 \quad 2 \quad 2 \quad 2 \quad 1 \end{matrix} )$  noun with postposition +  
verb in imperative

In each of the above examples the verb in imperative appears as a common element.

Sentences containing question to be completed:

170/ (  $\begin{matrix} \downarrow \\ kəun + hε \\ 3 \quad 1 \end{matrix} )$  interrogative word + verb

171/ (  $\begin{matrix} \downarrow \\ kəun + jāntā \quad hε \\ 3 \quad 2 \quad 2 \quad 1 \end{matrix} )$  interrogative word + analy-  
tic verbal form

172/ (  $\begin{matrix} \downarrow \\ kyā + hε \\ 3 \quad 1 \end{matrix} )$  interrogative word + simple verb

173/ (  $\begin{matrix} \downarrow \\ kyā + kərtā \quad hε \\ 3 \quad 2 \quad 2 \quad 1 \end{matrix} )$  interrogative word + analy-  
tic verbal form

174/ (  $\begin{matrix} \downarrow \\ kəhāñ + hε \\ 3 \quad 2 \quad 1 \end{matrix} )$  interrogative word + simple  
verb

175/ (  $\begin{matrix} \downarrow \\ kəhāñ + jāntā \quad hε \\ 3 \quad 2 \quad 2 \quad 2 \quad 1 \end{matrix} )$  interrogative word + ana-  
lytic verbal form

176/ ( $\begin{matrix} \downarrow \\ \text{kis} & \bar{\text{kā}} & + & \text{ghar} & + & \text{hē} \\ 3 & 2 & & 2 & & 1 \end{matrix}$ ) interrogative word with  
postposition + noun +  
simple verb

177/ ( $\begin{matrix} \downarrow \\ \text{kyon} & + & \text{hē} \\ 3 & & 1 \end{matrix}$ ) interrogative word + simple  
verb

178/ ( $\begin{matrix} \downarrow \\ \text{kyon} & + & \bar{\text{atā}} & \text{hē} \\ 3 & & 2 & 2 & 1 \end{matrix}$ ) interrogative word + analy-  
tic verbal form

179/ ( $\begin{matrix} \downarrow \\ \text{kitne} & + & \text{baje} & + & \text{hēn} \\ 3 & 2 & 2 & 2 & 1 \end{matrix}$ ) interrogative word +  
past participle +  
auxiliary verb

In all the examples listed above we find interroga-  
tive word at the first place, which is the vehicle  
of the sentence stress.

### 8.3. Structure of the Nucleus of Intonation

On the basis of the above examples, the various  
types of structure of the nucleus of intonation can be  
systematized and the observations made this way can  
be utilized also in the practical teaching of Hindi.  
In the following the abbreviated sign of the verb is  
V and the abbreviated sign of the noun is N.

8.3.1. The main types of the nucleus of intona-  
tion containing falling intonation are as follows:

Declarative sentence: N in nominative + V in indicative + sentence stress on the N + falling intonation; or V in analytic verbal form, in indicative + sentence stress on the first element of V + falling intonation; or N in adverbial case + V in indicative + sentence stress on N + falling intonation

Negative sentence: negative particle + V + sentence stress on the negative particle + falling intonation

Prohibitive sentence: prohibitive word + V in imperative + sentence stress on the prohibitive word + falling intonation

Imperative sentence: V in imperative + sentence stress on V + falling intonation; or N in accusative + V in imperative + sentence stress on N + falling intonation; or N in adverbial case + V in imperative + sentence stress on N + falling intonation



Sentences containing  
question to be com-  
pleted:

interrogative word + V + sen-  
tence stress on the interroga-  
tive word + falling intonation;  
or interrogative word + N + V  
+ sentence stress on the inter-  
rogative word + falling into-  
nation

8.3.2. The types of structure of the nucleus of  
intonation in the sentences containing question under  
consideration are as follows:

Question under con-  
sideration:

N in nominative + V + sentence  
stress on N + rising-falling  
intonation; or N in different  
oblique cases + V + sentence  
stress on N + rising-falling  
intonation; or V + sentence  
stress on the first element of  
V + rising-falling intonation

#### 8.4. Observations regarding the Structure of the Nucleus of Intonation

From the examples listed on the preceding pages the following can be stated regarding the structure of the nucleus of intonation.

Of the nucleus of intonation of the declarative, negative, prohibitive and imperative sentence, as well as of the question to be completed the falling intonation is characteristic.

In the case of the question under consideration the rising-falling intonation asserts itself.

There is a close relationship between the sentence stress and the intonation. The sentence stress is always on the first word of the nucleus of intonation, on the word to which prominence is given. The place of the sentence stress can change only within the word to which prominence is given, if the word to which prominence is given consists of two or more syllables.

The word to which prominence is given is frequently a noun or an adjective. However, it can also be a verb, in the case of an analytic verbal form the verbal root, and in the case of a compound verb the noun or adjective having the function of the verbal root. This applies first of all to the declarative

sentences, as well as to the imperative sentences and to the question under consideration. In the negative sentences the negative particle, in the prohibitive sentences the prohibitive word and in the sentences containing question to be completed the interrogative word is the word to which prominence is given.

In the nucleus of intonation, in principle, the verb can be in indicative, in subjunctive, in imperative or in conditional mood. In the declarative and negative sentences the verb is always in indicative, and in the prohibitive and imperative sentences in imperative mood. In sentences containing question to be completed and question under consideration the verb can be in indicative, subjunctive or conditional mood.

The course of intonation, as a phonetic intonation marker, in itself determines only the question under consideration. To the definition of the declarative, negative, prohibitive and imperative sentences, as well as of the question to be completed - as we have seen - the course of intonation /falling intonation/ alone is not sufficient. Here different syntactic intonation markers are also required.

#### IV. SUMMARY

The opinions of the certain Indian and foreign authors are very different regarding the character of stress and intonation in Hindi. /Concerning this see Ralph R. Sisson's view in note 1./ The aim of my work is to remove these contrasts and to comprise stress and intonation in Hindi into a uniform system.

According to the majority of the authors stress in Hindi is unfixed. The determination of the place of stress is disturbed by the circumstance that part of the authors identify the syllables with the akṣaras /characters of the devanāgarī script/, although on the basis of the pronunciation this is not always the case. Several authors also point out the meaning differentiating role of the stress and here they start out first of all from the fixed stress of the verbal roots. The problems of the meaning differentiating stress are discussed only by R.C. Mehrotra /pp. 81-82/ in the framework of the sentence, where the meaning differentiating role of the stress unfolds in a wide range.

On the basis of literature we cannot get a uniform picture of stress in Hindi, of its place and its function in the sentence.

According to my observation made in the Hindi language territory, especially in Banāras, word stress in Hindi asserts itself in speech not very distinctly, it appears rather as the complex of relative differences of the stressing. This seems to be supported also by the statements of H.C.Scholberg and V. Pořizka quoted by me /see part 2.1./. In my opinion word stress does not exist separately in Hindi. The stress of a word, as the phonetic basis of the sentence stress, has a more important role only if the word, as a result of prominence given to it, becomes the vehicle of the sentence stress.

For the determination of the place of the sentence stress first of all correct syllabification is necessary /in part 2.2./. In our opinion - unlike the views of Rudin and several other authors - this is possible only on the basis of the phonetic form pronounced in speech and not on the basis of the akṣaras. As the few examples given below also show, the number of syllables is very often not identical with the number of the akṣaras.

घर	ghar	'house' /two akṣaras/ monosyllabic;
पर्वत	pārvat	'mountain' /three akṣaras/ disyllabic;
कहावत	kāhāvāt	'proverb' /four akṣaras/ trisyllabic;

प्रदर्शनी prādarsānī 'exhibition' /four whole and two  
abbreviated akṣaras/  
quadrisyllabic.

The reduced inherent a at the end of the word can only be regarded as syllabic, if it is preceded by a consonant cluster. E.g.: pat-rə 'letter', cit-rə 'picture', svāsth-yə 'health', etc. /In connection with this see the last paragraph of p. 22 and p. 23./

First we analysed the stress relations of the uninflected nouns and adjectives, and of the adverbs. The stress relations of compound words, formative syllables /part 2.4./, as well as of suffixes and postpositions /part 2.5./, and also of the verbs. verbal roots and verbal forms /part 2.6./ were discussed by us separately.

In the word to which prominence is given /uninflected noun and adjective or adverb/, consisting of more than one syllable, the stress /sentence stress/ is on the relatively longest syllable. Thus it can fall on any syllable of the word to which prominence is given, if that is the longest syllable.

In Hindi from the viewpoint of the syllabic length we distinguish four grades: short open, short

closed, long open and long closed syllables. These are marked in increasing order with the following numerals:

1, 2, 3, 4 .

In the case of a disyllabic word to which prominence is given the stress is on the second syllable, if that is longer, e.g.:

↓  
1 3  
pə-tā 'address', 'trace';

the stress is on the first syllable, if that is longer, e.g.:

↓ ↓  
2 1 4 3  
pət-rə 'letter', ad-mī 'man',

and if the two syllables are equal in length, e.g.:

↓ ↓  
1 1 3 3  
prə-ti 'copy', mā-tā 'mother'.

Stress of trisyllabic word to which prominence is given:

stress on the first syllable, if that is the longest:

↓ ↓ ↓  
4 3 2  
kār-yā-ləy 'office',  
↓ ↓ ↓  
3 1 2  
ā-dhu-nik 'modern',

and if one of the two equally longest syllables is at the beginning of the word:

↓ ↓  
3 3  
mā-nə-vī 'human';

stress on the second syllable, if this is the longest:

$\downarrow$   
<sup>1</sup> <sup>2</sup> <sup>1</sup>  
 mə-nuṣ-yə 'man',  
 $\downarrow$   
<sup>1</sup> <sup>4</sup> <sup>1</sup>  
 pə-dār-thə 'article';

as well as if the second and third syllables are equal in length and longer than the first syllable; or if all the three syllables are equal in length:

$\downarrow$   
<sup>1</sup> <sup>3</sup> <sup>3</sup>  
 pə-ro-sī 'neighbour',  
 $\downarrow$   
<sup>3</sup> <sup>3</sup> <sup>3</sup>  
 pɛ-jā-mā 'trousers';

stress is on the third syllable, if this is the longest:

$\downarrow$   
<sup>1</sup> <sup>3</sup> <sup>4</sup>  
 sə-mā-car 'news'.

In the case of compound words the stress is on the first word of the compound word according to the rules described already:

$\downarrow$   
<sup>4</sup> <sup>1</sup> <sup>1</sup>  
 lākḥ + pə-ti 'millionaire',  
 $\downarrow$   
<sup>1</sup> <sup>1</sup> <sup>2</sup> <sup>3</sup>  
 bə-hu + rəṅ-gā 'multicoloured',  
 $\downarrow$   
<sup>1</sup> <sup>3</sup> <sup>1</sup> <sup>3</sup>  
 mə-hā + jə-nī 'usury',  
 $\downarrow$   
<sup>3</sup> <sup>2</sup> <sup>1</sup> <sup>4</sup>  
 sā-hit-yə + prēm 'love of literature',  
 $\downarrow$   
<sup>1</sup> <sup>3</sup> <sup>2</sup> <sup>2</sup>  
 ʒ-jā-yəb + ghər 'museum',  
 $\downarrow$   
<sup>2</sup> <sup>1</sup> <sup>3</sup> <sup>4</sup>  
 kəl-pə-nā + vād 'utopy'.



The words linked with sandhi from the viewpoint of stress are regarded as simple /non-compound/ words:

↓  
<sup>2</sup> <sup>4</sup> <sup>2</sup> / <sup>2</sup> <sup>1</sup> + <sup>2</sup> <sup>2</sup> / 'question-answer'.  
 prās-not-tār /prās-nə + ut-tār/

In Hindi formative syllables can be added to the words initially as well as terminally. Of the initially added, preposition-like formative syllables especially the privative prefixes are stressed:

↓  
<sup>1</sup> <sup>3</sup> <sup>2</sup>  
 ə- ə + sī-mit 'boundless',

↓  
<sup>2</sup> <sup>1</sup> <sup>3</sup>  
 dur- dur + də-sā 'disaster',

↓  
<sup>3</sup> <sup>1</sup> <sup>4</sup>  
 be- be + i-man 'deceitful'.

Another group of the prefixes, on the other hand, are generally unstressed. Such are: nu-, ti-, p -, up -, etc.

E.g.:

↓  
<sup>1</sup> <sup>1</sup> <sup>2</sup>  
 ə-nu + bhəv 'experience',

↓  
<sup>1</sup> <sup>1</sup> <sup>4</sup>  
 ə-pə + rādh 'crime'.

The terminally added formative syllables or suffixes - mostly of Sanskrit origin - are unstressed.

E.g.:

↓  
<sup>1</sup> <sup>1</sup> <sup>3</sup>  
 -tā kə-vi + tā 'poem',

↓  
<sup>2</sup>     <sup>3</sup> 1  
 -ālu     d̄əy + a-lu     'benign',  
 ↓  
<sup>2</sup>     1     4  
 -hīn     s̄ak-ti + hīn     'powerless'.

In Hindi the inflection of nouns and adjectives used as nouns is made with postpositions, or suffixes and postpositions. These are unstressed, with the exception of the suffix /-on/ of the oblique case plural, on which we can observe an impulse-like stress.

Masculine nouns:

↓  
<sup>2</sup>     <sup>4</sup>  
 gh̄ər men     'in the house',  
 ↓  
 1     3     4  
 p̄ə-te men     'in address',  
 ↓  
 1     2     1     4  
 m̄ə-nuṣ-ȳə men     'in man';  
 ↓  
 1     4     4  
 gh̄ə-ron men     'in houses',  
 ↓  
 1     4     4  
 p̄ə-ton men     'in addresses',  
 ↓  
 1     2     4     4  
 m̄ə-nuṣ-yon men     'in men'.

Feminine nouns:

/suffix of plural -yañ/

↓     ↓  
 pr̄əti     'copy',     pr̄ə-ti-yañ     'copies',  
 ↓     ↓  
 peṭi     'belt',     pe-ti-yañ     belts ,  
 ↓     ↓  
 l̄ərai     'war',     l̄ə-ra-i-yañ     wars ;

/suffix of plural -en/

↓ bāt 'talk'	↓ bā-ten 'talks',
↓ dukān 'shop'	↓ du-ka-nen 'shops',
↓ kəlpənā 'idea'	↓ kəl-pə-nā-en 'ideas';

/oblique cases/

↓ prə-ti men 'in copy',	
↓ lə-rā-ī men 'in war',	
↓ du-kan men 'in shop',	
↓ kəl-pə-nā men 'in idea';	
↓ prəti 'copy'	↓ prə-ti-yon men 'in copies',
↓ lekhānī 'pen'	↓ le-khə-ni-yon men 'in pens',
↓ bāt 'talk'	↓ bā-ton men 'in talks',
↓ kəlpənā 'idea'	↓ kəl-pə-nā-on men 'in ideas'.

We deemed important to clarify the stress relations of the verbs, and in a detailed form, of the certain verbal forms, because none of the authors mentioned by us discussed this question in detail.

The general rule - which only in case of a few verbal forms does not hold good - is that the stress is on the verbal root, and in the case of verbal roots consisting of two or more syllables the stress is on the last syllable of the verbal root. We get the verbal root if we leave off the terminal -nā of the infinitive.

E.g.:

↓ sunā	'to hear'	- verbal root: sun-
↓ sunānā	'to relate'	- verbal root: sunā-
↓ pəhuncānā	'to convey'	- verbal root: pəhuncā-

In the examples on page 52 we list altogether 13 synthetic and analytic verbal forms in which all the morphologically different elements of the Hindi simple verbs occur.

Examining these verbal forms we found that among the above three categories the second /disyllabic verbal root/ and the third /trisiyllabic verbal root/ correspond in every case to the general stressing rules of the verbs, e.g.:

infinitive:	↓ sunānā
	↓ pəhuncānā

present participle:	sunā́tā
	pəhuñcā́tā
optative:	sunaun̄
	pəhuñcaun̄
absolutive + kər	sunā́ kər
	pəhuñcā́ kər

In the case of the monosyllabic verbal roots, however, a certain differentiation can be observed. In the following three verbs the verbal root is monosyllabic, but in the first case this is a short closed syllable /sunā́ 'to hear'/, in the second case a long open syllable /ānā́ 'to come'/, and in the third case a long closed syllable /dekhnā́ 'to see'/.

When we examined the 13 verbal forms already mentioned, we found that the verbal roots consisting of one long open syllable and those consisting of one long closed syllable carried stress in every case, while the verbal root consisting of one short closed syllable did not <sup>always</sup> preserve its stress in three cases. These verbal forms are as follows:

optative: sunun<sup>↓</sup>

imperative,

simple: suno<sup>↓</sup>

imperative,

polite: sunie<sup>↓</sup>

*in certain cases,*

Here the stress shifts from the verbal root to the last syllable of the verbal form. These verbal forms contain by their nature a certain degree of emotion.  
*(See also what has been said on pp. 52-53.)*

The Hindi language /very likely partly on the direct or indirect influence of Persian and other languages/ expresses many verbal concepts with compound verbs /noun or adjectiv + simple verb/ /see part 2.6.4./. As a result of the increased analytic character, the clarification of the stress relations of the certain verbal forms is here even more important.

These verbs were examined by us on the basis of the same 13 verbal forms as in the case of the simple verbs. /See the first paragraph on page 52./ In this case we observed that the vehicle of stress was the noun or adjective having the function of the verbal root in all variants of the compound verbs. The different verbal forms of these verbs, just like the analytic verbal forms of the simple verbs, are comprised

by the stress into a larger stressing unit.

E.g.:

- ↓  
bāt kārṇā 'to talk' - bāt kār rāhā hūṅ 'I am  
talking'/now/
- ↓ ↓  
'surū kārṇā 'to start' - 'surū kārṭā hē '/he/ starts'  
/in general, not  
just now/
- ↓  
sāfai kārṇā 'to clean' - sāfai kār denge 'we shall  
clean' /absolutive  
+ denā as subsidi-  
ary verb/
- ↓ ↓  
lājjit honā 'to feel ashamed' - lājjit ho rāhe the 'they  
were feeling ashamed'
- ↓ ↓  
sāmāpt honā 'to end' - sāmāpt ho gayā thā 'it  
has ended'

In the compound verbs the stress is on that syllable of the noun or adjective, which would be stressed also according to the stressing rules of the nouns and adjectives, e.g.: bāt 'talk', 'surū 'start', sāfai 'cleaning', lājjit 'bashful', sāmāpt 'completed'.

On the basis of my observations and comparative studies /works dealing with the stress relations of German, English and especially Hungarian, see pp. 61-63, as well as notes 54, 55, 56 and 57/ I have arrived at the conclusion that in the formation of sentence stress in the different languages exactly the grammatical relationships are those factors which show a great degree of parallelism. Therefore in the analysis of sentence stress in Hindi I have also chosen the grammatical relationships as a basis of starting.

I have stated that among the kinds of words the demonstrative pronoun, the interrogative pronoun, the adverb, as well as the negative particle and the prohibitive word are in general stressed. In the case of the parts of sentence, on the other hand, from the viewpoint of stress the decisive factor is, how important role the part of sentence has in the sentence.

In the following we examined the stress relations according to kinds of sentences. Here, in the framework of the certain kinds of sentence we give only a few characteristic examples.

Sentence stress of declarative sentences:

↓  
Yəh bāt hē. This is the point. /stress on the demonstrative pronoun/



Lər̄kā so rəhā hε. The boy is sleeping. /stress on

the word which is im-  
portant from the view-  
point of meaning,  
the verbal root/

Məngəl bāg men hε. Mangal is in the garden. /stress

on the word which is im-  
portant from the view-  
point of meaning, on the  
adverb/

Rājā ne ek bəndər ko naukər rəkhā.

The king employed a monkey. /stress on the object/

ʒse mūrkhə ko naukər rəkhnā ucit nəhīn hε.

It is not reasonable to employ such a  
fool.

/stress on the nega-  
tive particle/

Vəh ek hī bāt hε.

It is all the same. /stress before the emphatic  
morpheme hī/

Coordinative complex sentence:

Rām cəlā gəyā aur phir nəhīn āyā.

Ram has gone and did not come again. /stress in  
the first sentence on the ver-  
bal root, and in the second  
sentence on the negative par-  
ticle/

Subordinative complex sentence:

Mitrā vāh hē jo vipṛatti meṅ kām āe.

A friend is who helps in the difficult situation.

/stress in the main clause on the demonstrative pronoun, and in the subordinate clause on the word which is important from the viewpoint of meaning, on the noun of the compound verb/

Exclamatory sentence: /short sentences, generally beginning with an interjection/

Sābas, garī cāl pṛī!

Excellent, the car has started off! /stress on the interjection and on the word which is important from the viewpoint of meaning, on the verbal root/

Desiderative sentence:

Meṅ cāhtā hūn ki us pustak ko nā pṛhā hotā!

I wish I had not read that book!

/stress on the root of the verb expressing desideration and on the negative particle/

Imperative sentence:

Āp hindī meṅ bāt kareṅ!

/Please/ speak in Hindi! /stress on the word to which the demand is directed/

Indirect order:

Us se kəh dijie ki cup rəhe.

Tell him to keep silent.

/stress on the verbal root of the introductory sentence and on the adjectival part of the compound verb of the second sentence/

Question under consideration:

Kyā yəh ādmī Məngəl hε?

Is this man Mangal? /stress on the morpheme kyā and on the word to which the question relates/

Question to be completed:

↓  
Kaun boltā hε? Who speaks?

↓  
Kitne bəje hεṅ? What time is it? /stress always on the interrogative word/

We discussed the meaning differentiating sentence stress separately /in part 3.9./ on the one hand because of the phonemic character of the stress mentioned also by Bloomfield, and on the other hand because among the authors mentioned by us only R.C. Mehrotra deals with this question in greater detail. However, Mehrotra did not try either to systematize his statements in some form. He did not deal with the question of the generally stressed and generally unstressed kinds of words and parts of sentence, and did not tell explicitly when he was speaking about sentence stress and when about word stress.

The meaning differentiating sentence stress asserts itself in general so that the stress appears in a different place from the usual: It shifts from the generally stressed syllable or morpheme to the generally unstressed syllable or morpheme; or it will be placed from the word which is generally the vehicle of the sentence stress to some other word of the sentence.

The first variant, when the stress shifts to a generally unstressed syllable or morpheme /suffix, formative syllable, postposition/, occurs in the case of the contrasting stress.

Kyā lifāfā pustāk<sup>↓</sup> men, yā pustāk<sup>↓</sup> pār hē?

Is the envelope in the book or on  
the book?

The other kind of the meaning differentiating sentence stress is, when the prominence relates to the whole of a word, to such a word which in general is unstressed.

E.g.:

Rām jāntā hē.                      Rām knows.

↓  
Rām jāntā hē.                      Rām knows /not someone  
else/.

↓  
Lārkiyāñ əcchī tərəh khel rəhī hēñ.  
The girls are playing well.

↓  
Lārkiyāñ əcchī tərəh khel rəhī hēñ.  
They are the girls, who are playing well.

↓  
Āp kā kyā hāl hē?

How are you?

↓  
Āp kā kyā hāl hē?

How are you /not me/?

We have stated that there is sentence intonation in Hindi that stress and intonation are in close relationship and that the syntactic factors also influence and in certain cases determine intonation.

The question of intonation in Hindi has so far not been dealt with systematically and in proper detail.

We have observed that as word order in the Hindi sentences is fixed, therefore intonation has here a more important meaning differentiating role than in those languages in which the word order is not fixed. This fixed word order in Hindi made it possible for us at the definition of intonation in the certain sentences to take into consideration only the course of intonation of that portion of the sentence which extends from the word to which prominence is given to the end of the sentence. This portion of the sentence is called by us the nucleus of intonation. /The explanation of the fixed word order in Hindi see Chapter 7 entitled "CHARACTERIZATION OF THE COURSE OF INTONATION IN HINDI ACCORDING TO KINDS OF SENTENCES", pp. 107-109./

We have stated that in Hindi the course of intonation in the nucleus of intonation of the declarative, negative, prohibitive and imperative sentences, as well as of the sentences containing question to be completed is falling. Here we give only a few characteristic examples on the types of intonation in the different sentences. I discuss the intonation of the declarative sentences on pages 110-111, and the intonation of the negative, prohibitive and imperative sentences on pages 112-113, 113-114 and 114, respec-



Question to be completed:

Yəh ādmī (kaun hɛ)?

This man who is?

/Who is this man?/

The course of intonation in the nucleus of intonation of the question under consideration is rising-falling.

E.g.:

Kyā yəh ādmī (Məngəl hɛ)?

This man Mangal is?

/Is this man Mangal?/

In the model sentences regarding the nucleus of intonation we presumed three relative pitch levels, which we marked with the numerals 1, 2 and 3 under the syllables concerned. In our opinion this is sufficient for the characterization of the course of intonation in the nucleus of intonation.

If the question under consideration is directed to the action, then the nucleus of intonation is the verbal form itself expressing the action. In the case of a simple verb the stress is on the verbal root, and in the case of a compound verb it is on the noun



or adjective, which has here the function of the verbal root.

E.g.:

simple verb:

Kyā Rām (  $\begin{matrix} \downarrow \\ \bar{a} & rəhā & hε \\ 2 & 3 & 3 & 1 \end{matrix} \end{matrix} ) ? Rām \text{ coming is? /Is Rām coming?/$

compound verb /noun + simple verb/:

Kyā Rām (  $\begin{matrix} \downarrow \\ s\bar{a}f\bar{a}i & k\bar{a}r\bar{n}e & v\bar{a}l\bar{a} & h\bar{e} \\ 2 & 3 & 3 & 3 & 3 & 1 \end{matrix} \end{matrix} ) ? Rām \text{ cleaning to do} \\ \text{prepares? /Does} \\ Rām \text{ prepare to clean?/}$

compound verb /adjective + simple verb/:

Kyā yəh sāmācār āp ko (  $\begin{matrix} \downarrow \\ \bar{m}\bar{a}l\bar{u}m & h\bar{e} \\ 2 & 3 & 1 \end{matrix} \end{matrix} ) ? \text{ This news you to} \\ \text{known is?/Do you} \\ \text{know this news?/}$

The sentence stress comprises here the whole verbal form into a larger stressing unit, which is at the same time the nucleus of intonation. /A more detailed elucidation of this question see on pages 123-124./

The question of the intonation markers /especially of the syntactic intonation markers/ is discussed in detail by M. Bierwisch in connection with the

German language. According to my observation the nucleus of intonation in Hindi contains phonetic /see pp. 125-126/ and syntactic intonation markers /see pp. 127-132/. Phonetic intonation markers are: the sentence stress and the course of intonation; syntactic intonation markers are: of the declarative sentence the verb in indicative; of the negative sentence the negative particle nāhī; of the prohibitive sentence the prohibitive words māt and nā; of the imperative sentence the verb in imperative; of the question to be completed some interrogative word /kya, kaun, kahañ, kitnā, etc./.

The intonation markers have an important role in the determination of the character and meaning of the intonation. The question under consideration is determined already by the rising-falling course of the intonation alone. The falling intonation, on the other hand, is equally characteristic of the declarative, negative, prohibitive and imperative sentences, as well as of the question to be completed. Therefore, here syntactic intonation markers are also required to determine the character of intonation and at the same time the character of the sentence. In the following, to illustrate the characteristic syntactic intonation markers, we give one nucleus of in-

tonation each for every kind of sentence, each of which contains the syntactic intonation marker characteristic of the kind of sentence concerned. /The detailed elucidation of the problem see on pages 128-132./

Declarative sentence:

( $\begin{matrix} \downarrow \\ \text{pustək} & \text{ko} & + & \text{pərh} & \text{rəhā} & \text{hē} \\ 3 & 2 & & 2 & 2 & 1 \end{matrix}$ ) noun + verb in indicative

Negative sentence:

( $\begin{matrix} \downarrow \\ \text{nəhīñ} & + & \text{jāntā} & \text{huñ} \\ 3 & 2 & 2 & 1 \end{matrix}$ ) negative particle + verb

The negative particle nəhīñ at the first place, is the vehicle of the sentence stress.

Prohibitive sentence:

( $\begin{matrix} \downarrow \\ \text{mət} & + & \text{jāo} \\ 3 & & 2 \end{matrix}$ ) prohibitive word + verb in imperative

The prohibitive word at the first place, is the vehicle of the sentence stress.

Imperative sentence:

( $\begin{matrix} \downarrow \\ \text{acchā} & + & \text{kām} & + & \text{kəro} \\ 3 & 2 & 2 & & 2 & 1 \end{matrix}$ ) attribute + compound verb in imperative

Here the common element, the syntactic intonation marker is the verb in imperative.

Question to be completed:

( $\begin{matrix} \downarrow \\ \text{kya} \\ 3 \end{matrix} + \begin{matrix} \text{karta} \\ 2 \end{matrix} \begin{matrix} \bar{h} \\ 2 \end{matrix} \begin{matrix} \xi \\ 1 \end{matrix}$ ) interrogative word + verb

At the first place the interrogative word, which is the vehicle of the sentence stress.

On the basis of the examples given we systematized the various types of structure of the nucleus of intonation containing rising-falling intonation and of the nucleus of intonation containing falling intonation /see in detail on pages 132-136/. The observations made this way can be utilized also in the practical teaching of Hindi.

On the basis of what has been expounded in the present thesis. I feel that with the formulation of the nucleus of intonation as a phonetic concept I have succeeded in including sentence intonation and sentence stress in Hindi into one uniform system, which shows the close relationship of stress and intonation. The fact, on the other hand that we started out from syntactic-semantic relationships makes it possible to define the certain kinds of sentences from the structure of the nucleus of intonation.

V. PARTIAL REFERENCE MATERIAL

In the following we give three Indian tales in Hindi and in Hungarian version. The tape-recorded texts of the tales in Hindi are also at disposal. The speaker is Mr. Dhodhi, Indian engineer /Gaya, Bihar State/. In the certain tales we marked the nucleus of intonation only in a few more characteristic sentences, indicating the sentence stress and the course of intonation. The continuous text gives a good idea of the characteristic stress and intonation in Hindi.

1. Rājā aur bāndar

Prācīn sāmāy meñ ek rājā thā. Rājā ne ek ( $\begin{matrix} \downarrow \\ \text{bāndar} \\ \text{3} \quad \text{2} \end{matrix}$ )  
 ko naukār rakhā ( $\begin{matrix} \text{2} & \text{2} & \text{2} & \downarrow & \text{2} & \text{1} \end{matrix}$ ). Rājā ke māntrī ne kaha - "Māhārāj!  
 Bāndar ( $\begin{matrix} \text{3} \\ \text{mūrkha} \end{matrix}$  hotā hē). Eise mūrkha ko naukār rakhnā  
 ucit nahīn hē." Rājā ne māntrī kī bāt ( $\begin{matrix} \downarrow \\ \text{nāhīn mānī} \\ \text{3} \quad \text{2} \quad \text{2} \quad \text{1} \end{matrix}$ ).

Ek din rājā so rahā thā. Bāndar pānkha jhāl rahā  
 thā. Udhār se ek mākkhī aī. Mākkhī rājā kī nāk pār  
 bēth gāī. Bāndar gusse meñ ek īnt̄ lāyā. Us ne mān meñ  
 socā ki is mākkhī ko mā r dālūngā. Bāndar ne krodh meñ  
 īnt̄ uṭhāī aur mākkhī pār phenkī. Mākkhī uṭ gāī aur īnt̄  
 rājā kī nāk pār lagī. Rājā ( $\begin{matrix} \downarrow \\ \text{mār} \\ \text{3} \quad \text{2} \quad \text{1} \end{matrix}$  gāyā). Yeh sāmācār  
 sāre nāgar meñ phelā. Sāb logon ne kaha ki mūrkha ko  
 naukār rakhnā ucit nahīn hē.

In the above tale we find in general short declarative sentences and a few negative sentences.

E.g.:

Rājā ne ek ( $\begin{matrix} \downarrow \\ \text{bāndar} \\ \text{3} \quad \text{2} \quad \text{2} \quad \text{2} \quad \text{2} \quad \text{1} \end{matrix}$ ).

The king employed a monkey.

Bāndar ( $\begin{matrix} \downarrow \\ \text{mūrkha} \\ \text{3} \quad \text{2} \quad \text{2} \quad \text{2} \quad \text{1} \end{matrix}$  hotā hē).

The monkey is stupid.

Rājā ne māntrī kī bāt ( $\begin{matrix} \downarrow \\ \text{nāhīn mānī} \\ \text{3} \quad \text{2} \quad \text{2} \quad \text{1} \end{matrix}$ ).

The king did not listen to the words of  
 the minister.

Rājā (mār gəyā).  
3 2 1

The king died.

1. The King and the Monkey

In the old time there was a king. The king employed a monkey. The minister of the king said: "Lord! The monkey is stupid. It is not reasonable to employ such a fool." The king did not listen to the words of the minister.

One day the king was sleeping. The monkey was moving the fan. From somewhere a fly came. The fly sat on the nose of the king. The monkey in his anger brought a brick. He thought in himself that he would kill this fly. The monkey in his rage lifted the brick and threw it on the fly. The fly flew away and the brick fell on the nose of the king. The king died. This news spread over the whole city. Everybody said that it is not reasonable to employ a fool.



2. Ser aur catur khargos

Ek jangal men ek ser rāhtā thā. Ser roz sākron  
jānvāron ko (mār dāltā thā). Jānvār ser se tang ā  
 gaye the. Ek din jangal ke sare pāsū ikatthit hue.  
 Unhon ne ser se kāhā - "Jāngal ke māhārāj! Ek bāt  
 ham logon kī mān lījie!" Ser bolā - "Kyā kāhnā cāhte  
 ho?" Rīch ne kāhā - Māhārāj! Ham men se ek jānvār  
 roz āp ke pās ā jāegā. Us ko khā kār āp āpnī bhūkh  
 sānt kār liyā karen. Is se āp ko sikār khojne men  
 kāsṭ nahīn hogā.." Ser ne kāhā - "(Thīk hē)". Kāl se  
 ek jānvār roz mere pās ā jāyā kare!" Is ke bād prātidin  
ek jānvār (ser ke pās cālā jātā thā).

Ek din ser ke pās jāne ke lie khargos kī bārī āī.  
 Khargos ne āpnā prān bācāne kī ek yukti socī. Khargos  
 bahut der se ser ke pās pāhūncā. Ser bhūkhā thā.  
Khargos ko dekh kār use (bāhut krodh āyā). Vāh bolā -  
 "Tujhe khā kār kyā merā peṭ bhāregā? Ek to chotā jānvār  
 aur itnī der se āyā hē?" Khargos ne kāhā - "Māhārāj!  
 Merā āpārādh nahīn hē. Rāste men (dusrā ser mil gayā  
thā). Us ne mujhe pākarnā cāhā. Men kīsī tarāh bhāg  
 kār āp ke pās ā sākā hūn." Ser ne kāhā - "Is jāngal  
 men dusrā ser kāhān se ā gayā?" Khargos ne kāhā - "Vāh  
 āpne ko jāngal kā rājā bātā rāhā thā." Yāh sun kār  
 ser dāhārne lāgā. Ser ne kāhā - "(Cālō)! Pāhle mujhe ?  
 ?  
 ?

us 'ser ke pās le cəlo! Mēñ use mār kər jəngəl se nikāl dūngā." Khərgos 'ser ko ek kuen ke pās le kər bolā - "Is kuen men voh 'ser rəhtā hε." 'Ser ne jhāñk kər kuen men dekhā. Kuen men panī thā. Panī men (ser kī pərchain pər rāhī thī). 'Ser ne us pərchain ko dūsra 'ser sāmjhā. 'Ser krodh men dəhārne ləgā. Dəhār kər bolā - "Tū mere rājyā men (kis se pūch kər ayā)? Mēñ əbhī tujhe dānd dene ā rəhā hun." Kəhte-kəhte 'ser kuen men kūd pərə aur panī men dūb kər mār gəyā. Khərgos ne əpne sāthiyon ko səb bāt sunāi. Sun kər hirən bolā - "Khərgos bhāi, əpnī buddhi se tum ne hām səb ke prān bəcā lie. Səcmuc duniyā men səb se bəri buddhi hī hε."

The second tale is already longer and the sentences in it are also longer. However, here and there sentences consisting of one word can also be found in it. In such cases the intonation adjusts itself to the stress relations of the word. E.g.:

Voh roz səkron jānvəron ko (mār dāltā thā).

This every day killed hundreds of animals.

(Thīk hε).

All right.

Is ke bād prətidin ek jānvər (ser ke pās cəlā jātā thā).

Hereafter every day an animal went to the lion.

Khargos̄ ko dekh kar use (b̄ahut krodh̄ ayā).  
3 2 2 2 1  
Seeing the rabbit he got very angry.

Rāste men̄ (d̄usrā̄ ser mil gayā̄ thā̄).  
3 2 2 2 2 2 1  
On the way I met another lion.

(Chalō)!  
2 3  
Let us go! /Go!//

Pānī men̄ (ser̄ kī p̄rchāin̄ p̄r rāhī thī̄).  
3 2 2 22 2 2 2 1  
On the water fell the reflection of the lion.

Tū mere rājyā men̄ (kis̄ se p̄uch kar̄ ayā)?  
2 2 2 2 2 1  
Whom did you ask when you came to my realm?

## 2. The Lion and the Cunning Rabbit

In a forest there lived a lion. He every day killed hundreds of animals. The animals became embittered because of the lion. One day all the animals of the forest gathered. They said to the lion: "Lord of the forest! Listen to our word!" The lion said: "What do you want to say?" The bear said: "Lord! Every day one of us will come to you. Devouring that one you may satisfy your hunger. By this you will have no trouble with the tracing of the game." The lion replied: "All right. From tomorrow daily one animal should be sent to me." From this time every day one animal went to the lion.

One day the rabbit's turn came to go to the lion. To save his life, the rabbit thought a trick. The rabbit came very late to the lion. The lion was hungry. Seeing the rabbit, he got very angry. He said: "If I eat you, will my stomach be filled? Such a small animal and it came so late?" The rabbit replied: "Lord! It is not my fault. On the way I met another lion. He wanted to catch me. Somehow I could run away and came to you." The lion said: "From where came another lion to this forest?" The rabbit replied: "He called himself the king of the forest." Hearing

this the lion started to roar. The lion said: "Come! First you take me to that lion! Beating him, I shall throw him out from the forest." The rabbit took the lion to a well and said: "That lion lives in this well!" The lion looked into the well. In the well there was water. The lion's reflection fell on the water. The lion thought the reflection was the other lion. The lion in his anger started to roar. Roaring he said: "Whom did you ask when you came to my realm? Now I am coming to punish you." Saying these the lion sprang into the well and submerging in the water he died. The rabbit told the whole story to his companions. Hearing it, the stag said: "Brother rabbit, with your wisdom you saved the lives of all of us. Really, in the world the greatest thing is wisdom."

3. Calak murgā

Ek lomrī jəngəl kī or jā rāhī thī ki us kī nəzər  
per kī dāl pər bəthe ek murge pər pərī. Yəh socne  
ləgī, is murge ko mār kər khānā cāhie, pər pəkrūn to  
kəse? Murgā per pər hε aur mēn zəmin pər.

Lomrī əpne mən mēn kuch socā aur phir murge se  
bolī - "Əre bhāī! Tum ne əj jəngəl kā dhindhora  
(nəhīn sunā)? Mēn to əbhī dhindhora sun kər hī  
(dər-bhəy ke binā əpne ghər jā rāhī hūn)."  
3 2 2 2 2 2 2 2 2 2 1

Murge ne lomrī se pūchā - "Kəse dhindhora?" Lomrī  
ne kəhā - "Vāh! Jəngəl ke rājā (sər ne hī to dhindhora  
pitvāyā thā). Jəngəl ke səbhī jivon ko dhindhora kā  
2 2 2 1). Jəngəl ke səbhī jivon ko dhindhora kā  
pətā hε aur tumhēn nəhīn mālūm? Dəs roz se ləgātār  
səbhā ho rāhī thī, jis mēn sārē sənsār ke pəsū ikəṭṭhā  
hue the. Səbhā mēn səb ne səpəth khāī ki həm log əb  
se əpəs mēn milkər rəheṅge aur ek dūsre ko nə sətəeṅge.  
Ek prətigyapətrə bhī likhā gayā hε aur səb ke həstākṣər  
kər cukne pər rājā sinh ne us pər əpnī muhər ləgā dī  
hε."

Lomrī kī in bāton ko sun kər murgā gərdən uthā  
kər εsā kurkurāyā māno kīsī sikārī pəsū ko dekh rəhā  
ho. Lomrī ne pūchā - "Tum idhər-udhər kyā dekh rəhe  
ho?"

Murge ne kəhā - "Kuch nəhīn, kevəl de sikārī kutte idhər ā rəhe hēn."

Itnā sun kər lomrī (bhāgne ko huī).  
3 2 2 2 1

Murge ne lomrī ko bhāgnē dekh pūchā - "Kyon, kyon, kəhān jā rəhī ho? Thəhərtī kyon nəhīn? Əb to dərne kī koī bāt nəhīn hē."

Lomrī ne uttər diyā - "Bāt to thīk hē, pərəntu kəhīn in sikārī kutton ko tumhārī tərəh dhindhōrā pitne kā pətā nəhīn ho, to?"

Itnā kəh lomrī jəngəl kī or (tezi se bhāgi).  
3 2 2 2 1

The sentences of the third tale are even more diversified than those of the former two. Naturally, here we have indicated the stress and intonation types in the nucleus of intonation only of a few simple sentences, E.g.:

Tum ne āj jəngəl kā dhindhōrā (nəhīn sunā)?  
2 3 3 1  
Did you not hear today the proclamation of the forest?

Mēn to əbhī dhindhōrā sun kər (dər-bhəy ke  
3 2 2  
binā əpne ghər jā rəhī hūn).  
2 2 2 2 2 2 2 1  
Having heard the proclamation, I am going home without fear.

Jāngal ke rājā (ser ne hī to dhindhorā pitvāyā  
3 2 2 2 2 2 2 2 2  
thā).

The proclamation was promulgated by the king of  
the forest, the lion.

Itnā sun kər lomrī (bhāgne ko huī).  
3 2 2 2 1  
Hearing this the fox ran away.

Itnā kah lomrī jāngal kī or (tezī se bhāgī).  
3 2 2 2 1  
Saying this the fox ran fast towards the forest.



### 3. The Cunning Cock

A fox was just going towards the forest, when her glance fell on a cock sitting on a branch of a tree. She began to think: this cock should be killed and eaten, but how should I catch him? The cock is on the tree and I am on the earth.

The fox thought a little in herself, then she said to the cock: "Hello brother! Have you not heard today the proclamation of the forest? Having heard the proclamation, I am now going home without fear."

The cock asked the fox: "What proclamation?"

The fox replied: "Excellent! The proclamation was promulgated by the king of the forest, the lion. Every animal of the forest knows about the proclamation and you do not know about it? The meeting lasted for ten days continuously, at which the animals of the whole world gathered. At the meeting everybody took an oath that from now on we shall be together and we shall not molest each other. An agreement was also written and after being signed by everybody, King Lion put his seal on it."

Hearing these words of the fox, the cock, lifting his neck, uttered such a voice as if he had seen some beast of prey. The fox asked: "Why are you looking here and there?"

The cock replied as follows: "Nothing, only two hunting dogs are coming here."

Hearing this the fox ran away. Seeing the fox running, the cock asked: "How, how, where are you going? Why don't you wait? After all, now there is no reason to fear."

The fox replied: "This is correct, but what is if somehow, as you, these hunting dogs do not know about the promulgation of the proclamation either?"

Saying this, the fox ran fast towards the forest.

VI. APPENDIX /Instrumental control of the investigations/

Owing to the large area of the Hindi language territory, we could not expect perfectly uniform results from the instrumental control of the statements made in my study. This was rendered difficult also by the circumstance that none of the Indian speakers at my disposal at present came from Banāras, although I based my observations first of all on Hindi as spoken in Banāras. In spite of this - considering the above circumstances as well as the fact that the model sentences were read by the speakers and this is not identical with spontaneous speech - in my opinion the results of the instrumental control can be regarded as positive.

The instrumental control was carried out as follows. First I prepared summarized lists of the characteristic model words and model sentences in my study. This material was tape-recorded in the Phonetic Laboratory of the Institute for Linguistics of the Hungarian Academy of Sciences. The speaker was Shri Anar Kumar Sinha, Indian scholarship-holder /Delhi/. Following this the recording of the stress relations of the tape-recorded material was made with

an instrument recording the level of the sound pressure on recording paper tape, similarly in the above Phonetic Laboratory.

The evaluation of the material recorded this way was made according to figures or model words and model sentences. After the certain figures or diagrams I always give the result of the evaluation, and then - in case this seems to be necessary - I summarise briefly the eventual final conclusions to be drawn from the results received. The different sound pressure levels of the certain syllables are given by me in the percentage of the full breadth of the recording paper tape, so that the full breadth of the recording paper tape is 100 %.

As for the measuring, or instrumental control of intonation the adequate instrument was, for the time being, not available in the Phonetic Laboratory, therefore the results of the relevant evaluations will be presented by me later on, on the occasion of the defence of my thesis.

Fig. 1

Stress of disyllabic word to which prominence is  
given

Fig. 1

↓  
pə-tā 'address', 'trace'

Stress according to expectation on the second, long  
open syllable /-tā/.

Sound pressure level: on the second syllable about  
49 %, on the first syllable  
about 42 %.

FIG. 2

Fig. 2

↓  
ad-mī 'man'

Stress according to expectation on the first,  
long closed syllable /ad-/.

Sound pressure level: on the first syllable 70 %,  
on the second syllable  
about 57 %.



Fig. 3

Fig. 3

↓  
prə-ti 'copy'

Stress according to expectation on the first,  
short open syllable /prə-/.

Sound pressure level: on the first syllable 55 %,  
on the second syllable  
about 36 %.

FIG. 4

Stress of trisyllabic word to which prominence  
is given

Fig. 4

↓  
kār-yā-ləy 'office'

Stress according to expectation on the first,  
longest syllable /long closed syllable, kār-.

Sound pressure level: on the first syllable about

62 %,

on the second syllable about

51 %,

on the third syllable from

50 % decreases to 0.

FIG. 5

Fig. 5

↓  
nā-nā-vī 'human'

Stress according to expectation on the first, long  
open syllable /nā-/

Sound pressure level: on the first syllable about

70 %.

from here it decreases to 60 %.

then to 55 % and finally to 0.

Fig. 6

Fig. 6

ma-nuṣ-yə 'man'  
↓

Stress according to expectation on the second, longest syllable /short closed syllable, nuṣ-/.

Found pressure level: on the second syllable about

74 %.

on the first syllable about 62 %.

and on the third syllable

about 60 %.



Fig. 7.

Fig. 7

↓  
pɛ-jā-mā 'trousers'

Stress according to expectation on the second syllable /-jā-/. All the three syllables of the word are equal in length, long open syllables. In the case of syllables equal in length according to the rule the stress is on the penultimate syllable.

Sound pressure level: on the second syllable 70 %,  
on the first syllable about  
54 %,  
and on the third syllable from  
about 50 % it rapidly decreases  
to 0.

Fig. 8

Fig. 8

sə-mā-cār 'news'  
                  ↓

Stress according to expectation on the last, longest syllable /-cār/. According to the general stressing rules the stress is on the last syllable, if this is the longest. In the present case the last /long closed/ syllable not only relatively but also in its absolute value belongs to the category of the longest syllables in Hindi /it is marked with 4/.

Sound pressure level: on the last syllable 71 %,  
                                  on the first syllable starting  
                                  out from 0 it increases steeply  
                                  and on the second syllable it  
                                  reaches 61 %.

Fig. 9

Stress of compound words

Fig. 9

↓  
lakh + pə-ti 'millionaire'

Stress according to expectation on the first word /lakh/. According to the general stressing rules the first word of the compound words is the vehicle of the stress.

Sound pressure level: on the first, monosyllabic word about 72 %,  
on the first syllable of the second word already only 28 %, and on the second syllable of the second word 20 %.

Fig. 10

Fig. 10

↓  
mə-hā̄ + jə-nī 'usury'

Stress according to expectation on the second, long open syllable of the first word /-hā̄/. This corresponds to the general stressing rules, according to which the longest syllable of the first word of the compound word is the vehicle of the stress.

Sound pressure level: on the second syllable of the first word 70 %,  
on the first syllable of the first word about 58 %,  
in the second word the highest sound pressure level is already only about 54 % and from this it decreases first gradually and then rapidly to 0.



Fig. 11

Fig. 11

↓  
sā-hit-yə + prem 'love of literature'

Stress according to expectation on the first, long open syllable of the first word /sā-/. This corresponds to the stressing rules of the compound words, according to which that syllable of the first word is the vehicle of the stress, which would be stressed according to the stressing rules of the simple words, quite apart from the fact that there is also a longer syllable in the second word /prem, long closed syllable/.

Sound pressure level: on the first syllable of the first word about 61 %, on the second syllable or the first word about 55 %, and on its third syllable about 40 %; in the second word the sound pressure level rises again, to about 53 %, from where it gradually decreases to 0.

Fig. 12

Stress of the words linked with sandhi

Fig. 12

prəs-<sup>↓</sup>not-tər 'question-answer'

Stress according to expectation on the second, longest syllable /-not-/. According to the general stressing rules the words linked with sandhi are stressed in Hindi as if they were simple words. Thus the longest syllable of the whole word /long closed syllable/ is the vehicle of the stress.

Sound pressure level: on the second syllable about

63 %,

on the first syllable 60 %, and

on the third syllable about 45 %.

Fig. 13/a

Stress of prefixes

Privative prefixes /are stressed/

Fig. 13/a

dur-      ↓  
          dur + də-sā̄ 'disaster'

Stress on the privative prefix /dur/, as it should be according to the rule. Here the privative prefix is a short closed syllable, still this is the vehicle of the stress in spite of the fact that the second syllable of the word following it is a long open syllable /-sā̄/, longer than the syllable of the privative prefix.

Sound pressure level: on the privative prefix about 69 %,  
on the first syllable of the word dəsā̄ about 60 %, and  
on its second syllable 49 %.

Fig. 14

Fig. 14

be-      bē<sup>↓</sup> + Ī-mān 'deceitful'

Stress according to expectation on the privative prefix /bē/ in accordance with the relevant stressing rules. The syllable of the privative prefix /long open syllable/ is the vehicle of the stress in spite of the fact that the second syllable of the word following it /-mān/ is a long closed syllable, so it is longer than the privative prefix.

Sound pressure level: on the privative prefix 70 %,  
on the first syllable of the  
word imān 60 %, and  
on its second syllable with small  
fluctuations it continues to de-  
crease to 0.



Fig. 15



Fib. 16

Fig. 16

əpə-      əpə + rādh 'crime'

Stress according to expectation on the word following the prefix. This is in accordance with the general stressing rules.

Sound pressure level: on the word rādh about 75 %, on the prefix it rises in two grades, first to 31 % and then to 51 %.

Fig. 17

Suffixes /unstressed/

Fig. 17

-tā      kə-vi + tā 'poem'  
          ↓

Stress according to expectation on the first syllable /kə-/ of the word preceding the suffix, in spite of the fact that the suffix -tā is a definitely longer syllable /long open/ than the short open syllable carrying the stress.

Sound pressure level: on the first syllable of the word kəvi about 65 %,  
on its second syllable about 35 %, and  
on the suffix -tā already only about 11 %.

Fig. 18

Fig. 18

-hīn      s̄ak-ti + hīn    'powerless'

Stress in accordance with expectation on the first, longer syllable /s̄ak-/ of the word preceding the suffix. The suffix -hīn is not stressed in spite of the fact that this is the longest /long closed/ syllable.

Sound pressure level: on the first syllable of the word s̄akti 60 %, on its second syllable 42 %, and on the suffix -hīn about 46 %, which after several small fluctuations decreases steeply to 0.



Fig. 19

The suffixes and postpositions are in general unstressed, with the exception of the suffix -on̄ of the oblique case plural, on which generally stress can be observed:

Fig. 19

ghar men̄ 'in house'

Stress on the noun. The postposition men̄ is unstressed in spite of the fact that this is the longest syllable /long closed/. This corresponds to the general stressing rules.

Sound pressure level: on the noun ghar 70 %, on the postposition men̄ from about 50 % it decreases with small fluctuations to 0.

Fig. 20

Fig. 20

mə-nus-yə meñ 'in man'

Stress on the second, longest syllable /-nus-/ of the noun mənusya , which is a short closed syllable, and not on the postposition meñ, which is otherwise the longest /long closed/ syllable. This is in accordance with the general rule according to which the postpositions are unstressed.

Sound pressure level: on the second syllable of the word mənusya about 68 %, on its first syllable the sound pressure level steeply rises almost without a break to about 55 %, and the sound pressure level of the third syllable is 50 %.

On the postposition meñ the sound pressure level decreases from 41 % with small fluctuations to 0.

Fib. 21

Fig. 21

↓  
ghə-roṅ meṅ 'in houses'

The speaker from Delhi stresses the first syllable /ghə-/ and pronounces the suffix -oṅ or the syllable -roṅ with secondary stress. Although, as I mentioned in the introductory part of the Appendix, on account of the large area of the Hindi language territory such differences occur according to the geographic regions and sometimes also according to individuals, on the basis of my observations the stressing of the suffix -oṅ in continuous speech is more general. This is shown also by the pronunciation of a speaker from Allahabad. In fact, Allahabad is geographically much nearer to Banāras than Delhi, and a great part of my observations were made in Banāras. The slight fluctuation can be attributed to territorial differences. The tape-recording in connection with this is available.

Sound pressure level: on the first syllable of the word about 71 %, then after a certain falling the sound pressure level rises again on the syllable containing the suffix -oṅ, to about 68 %, and on the post-position meṅ it is already only about 45 %, and after several smaller fluctuations decreases to 0.

Fig. 22

Fig. 22

( ? )

mə-nus-yon̄ men̄ 'in men'

According to the pronunciation of the speaker from Delhi the stress is on the first syllable. However, a stress of almost equal strength is also on the syllable -yon̄ containing the suffix -on̄. Otherwise the statements made in connection with figure 21 apply also to this fluctuation of territorial character.

Sound pressure level: on the syllable mə- 70 %,  
on the syllable -yon̄ 68 %.



Fig. 23

Fig. 23/a

Feminine nouns:

/suffix of plural nominative -yañ/

Fig. 23

↓  
lə-rā-ī 'war'

Fig. 23/a

↓  
lə-rā-i-yañ 'wars'

Stress on the syllable -rā- in both the ~~the~~ nominative singular and in the nominative plural. The suffix -yañ of the nominative plural is unstressed. This agrees with the general stressing rules, according to which the suffixes are unstressed.

Sound pressure level: on fig. 23 the highest sound pressure level is on the second syllable /-rā-/ of the noun lə-rā-ī, 78 %, on the first syllable it is about 65 % and on the third syllable 63 %;

on fig. 23/a the highest sound pressure level is similarly on the syllable -rā-, about 78 %, on the first syllable it is 61 %, on the third syllable /-i-/ about 65 %, and on the suffix -yañ from about 56 % with several fluctuations it rapidly decreases to 0.

Fig. 24

Fig. 25

/suffix of nominative plural -en̄/

Fig. 24

↓  
bāt 'talk'

Fig. 25

↓  
bā-ten̄ 'talks'

In fact the stress is in both cases on the same syllable, more precisely in the plural the first syllable is not bāt, but bā-. The suffix -en̄ of the plural is unstressed. This corresponds to the general stressing rules.

Sound pressure level: on fig. 24 on the word bāt 79 %;  
on fig. 25 the highest sound pressure level is on the syllable bā-, about 75 %, and on the syllable -ten̄ containing the suffix -en̄ it is about 45 %.

Fig. 26

/oblique cases/

Fig. 28

↓  
lə-rā-I<sup>u</sup>men<sup>u</sup> 'in war'

Stress according to expectation of the two long open syllables equal in length on the penultimate syllable, on the syllable -rā-. In accordance with the general stressing rules the postposition is unstressed.

Sound pressure level: highest on the second syllable -rā-, about 76 %, on the postposition men<sup>u</sup> it is about 63 %.

Fig. 28/a

Fig. 28/a

lɔ-rā-i-yon<sup>u</sup> men<sup>u</sup> 'in wars'

The speaker from Delhi places the stress on the syllable -rā-. This is also a difference of territorial character, to which the statements made in connection with fig. 21 apply.



Fig. ~~29~~ 31

Fig. ~~30~~ 31/a

Question of stress on the verbal roots

/With a few exceptions the verbal root is always the vehicle of the stress. If the verbal root consists of two or more syllables, then the stress is always on the last syllable of the verbal root./

Fig. 29 31

↓  
sunnā 'to hear'

Fig. 30 31/a

verbal root: sun- ↓

Stress according to expectation on the verbal root sun- and not on the formative syllable -nā, which is a longer syllable /sun- is a short closed syllable and -nā is a long open syllable/. The result to be read from the figures corresponds to the general stressing rules on verbs.

Sound pressure level: on the verbal root sun- 70 %,  
and on the formative syllable -nā only about 55 %.

Fig. 32,

Fig. 32/a

Fig. 32

sunānā 'to relate'

Fig. 32/a

verbal root: sunā-

Stress according to expectation on the second syllable /-nā-/ of the verbal root sunā-. The result to be read from the two figures above corresponds to the general stressing rules on verbs.

Sound pressure level: on the syllable -nā- of the verbal root /fig. 31/ about 74 %, on the first syllable of the verbal root 40 %, and on the formative syllable -nā of the infinitive 60 %;

on fig. 32 on the second syllable /-nā-/ of the verbal root about 62 %, and on its first syllable about 40 %.

Fig. 33

Fig. 33/a

Fig. 33

pəhuŋcānā  
↓

Fig. 33/a

verbal root: pəhuŋcā-  
↓

Stress according to expectation on the last syllable /-cā-/ of the verbal root pəhuŋcā-. The result to be read from the two figures above corresponds to the general stressing rules on verbs.

Sound pressure level: on fig. 33 the sound pressure level is the highest on the last syllable /-cā-/ of the verbal root, about 72 %, and on the formative syllable -nā of the infinitive it is about 54 %; also on fig. 33/a, which shows the verbal root pəhuŋcā-, the sound pressure level shows a rising tendency and it is the highest on the last syllable, about 65 %.

Fig. ~~35~~ 34

Fig. ~~36~~ 35

Fig. ~~37~~ 36





Fig. 37

Fig. 38

In the case of compound verbs /noun or adjective + simple verb/ the noun or the adjective is the vehicle of the stress

Fig. 37

↓  
bāt kārṇā 'to talk'

Fig. 38

↓  
bāt kār rāhā hūn 'I am  
talking'

According to the above two figures the stress is always on the noun bāt. This corresponds to the general stressing rules of the verbs.

Sound pressure level: on the noun bāt on fig. 37 75 %, and the next highest sound pressure level is on the verb kārṇā, 60 %;

on the noun bāt on fig. 38 about 73 %, and the highest sound pressure level on the verbal form following it is about 72 %.

Fig. 39

Fig. 40

Fig. 39

səməpti/honā 'to end'

Fig. 40

səməpti/ho gəyā thā 'it  
has ended'

According to the testimony of the above two figures, the stress is always on the adjective səməpti. This corresponds to the general stressing rules of the verbs. The vehicle of the stress is the second syllable /-məpti/ of the word səməpti, which is longer than the first syllable.

Sound pressure level: according to fig. 39 on the second syllable of the adjective səməpti about 75 %, on its first syllable about 40 %, and on the first syllable of the auxiliary verb honā about 59 %;

according to fig. 40 on the second syllable of the adjective səməpti about 76 %, on its first syllable about 42 %, and on the elements of the compound verb following the adjective the highest sound pressure level is about 73 %.

Fig. 4A

Examples for the sentence stress in various kinds of sentences /the demonstrative pronoun, the interrogative pronoun, the adverb, the negative particle and the prohibitive word are in general stressed, of the parts of sentence the more important part of sentence is stressed/

Sentence stress of declarative sentence

Fig. 44

↓  
Yəh bāt hɛ.      This is the point.

Stress according to expectation on the demonstrative pronoun yəh.

Sound pressure level: on the demonstrative pronoun yəh about 76 %, on the word bāt about 30 %, and on the verbal form hɛ also 30 %.

Fig. 42

Fig. 42

Lər̄kā <sup>↓</sup> so rəhā h̄z. The boy is sleeping.

According to the figure stress can be observed on the first syllable of the noun lər̄kā, as well as on the verbal root so, but in the part of the analytic verbal form following the verbal root so the sound pressure level falls much more definitely than on the second syllable of the noun lər̄kā. Thus the stress of the verbal root is more conspicuous.

Sound pressure level: on the first syllable of the noun lər̄kā 70 %, and on its second syllable about 65 %; on the verbal root so 70 %, and on the further part of the verbal form it reaches only about 51 %, and then it rapidly decreases.



Fig. 43

Sentence stress of coordinative complex sentence

Fig. 4B

Rām cālā gəyā aur phir nahīn āyā.

Rām has gone and did not come again.

Stress according to expectation in the first sentence on the verbal root, and in the second sentence on the negative particle.

Sound pressure level: in the first sentence it is the highest on the verbal root cālā, about 78 %, in the beginning of the sentence about 69 %, and on the verbal part of the sentence following cālā it is about 74 %;

in the second sentence the sound pressure level is highest on the first syllable of the negative particle nahīn, about 70 %, on the second syllable of the negative particle it is already only 60 % and this further decreases up to the end of the sentence.

Fig. 4~~5~~

Sentence stress of subordinative complex sentence

Fig. 44

Mitra vāh hē, jo vipatti meñ kām āe.

A friend is who helps in the difficult situation.

Stress according to expectation in the main clause on the demonstrative pronoun vāh, and in the subordinate clause on the word important from the viewpoint of meaning, viz. on the noun of the compound verb.

Sound pressure level: in the main clause on the demonstrative pronoun vāh 70 %, and on the verbal form hē following the demonstrative pronoun 50 %;

in the subordinate clause on the noun of the compound verb, viz. on the word kām about 64 %, on the words of the subordinate clause preceding this the sound pressure level reaches with fluctuation about 61 %, and on the verbal part āe following the noun kām it is already only about 45 %, with a decreasing tendency towards the end of the sentence.

Fig. 45

Sentence stress of exclamatory sentence

Fig. 45

↓ ↓ ↓  
Sābās', gārī cəl pərī!      Excellent, the car has  
started off!

Strong stress on the interjection sābās 'excellent'. The stress of the verbal root is expressed by the speaker so that he makes a short break before the verbal root cəl and he does not stress the terminal part of the verbal form, the word pərī. Thus the whole sentence is divided more or less into three stressing units, viz. interjection + noun gārī + compound verbal form introduced by the verbal root cəl.

Sound pressure level: highest on the first syllable of the interjection, about 78 %; on the first syllable of the noun gārī about 71 %, and on its second syllable about 66 %; after a short, but definitely perceptible break on the first element of the analytic verbal form, on the verbal root cəl about 61 % and on the second element of the verbal form already only about 39 %.

Fig. 46

Sentence stress of desiderative sentence

Fig. 46

Mēn cāhtā hūn ki us pustak ko nə pərhtā hotā!

I wish I had not read that book!

In the part expressing desideration the speaker placed a stronger stress on the word mēn 'I', but he pronounced also the verbal part of the clause with a high sound pressure level. The negative particle is in the last stressing unit of the sentence. This part of sentence is separated from the preceding part with a short break, which gives a definite emphasis to the negative particle nə immediately following it. The last sentence section is nə pərhtā hotā. Within this sentence section the stress is on the negative particle nə.

Sound pressure level: in the part expressing desideration is the highest, viz. 72 %, 70 % and about 73 %; and in the last sentence section expressing the reason of the desideration on the negative particle nə about 57 % and from here the sound pressure level definitely falls to about 45-46 %, and further to about 25 %.



Fig. 48

Sentence stress of imperative sentence

Fig. 48

āp hindī men bāt kareñ!      Speak Hindi!

Stress according to expectation on the word hindī  
or on the word to which the demand relates.

Sound pressure level: strongest on the first syllable  
of the word hindī, about 73 %,  
on the word āp, introducing the  
sentence about 57 %, and in the  
part following the postposition  
men 51 % and about 42 %, res-  
pectively.

Fig. 48

Stress of indirect order

Fig. 48

Us se kəh dījie ki cup rəhe.

Tell him to keep silent.

Stress on the first element of the analytic verbal form /absolutive + subsidiary verb/ in the introductory sentence, viz. on the root of the main verb /kəh/ and on the adjectival part of the compound verb in the second sentence /cup/.

Sound pressure level: in the introductory sentence on the verbal root kəh about 62 %, on the part preceding this about 56 %, on the subsidiary verb in imperative following the verbal root /dījie/ from 60 % it rapidly decreases to 0; in the second sentence on the adjectival part of the verb /cup/ about 48 %, from which on the last word of the sentence it decreases to 45 % and then further to 0.

Fig. 49

Sentence stress of question under consideration

Fig. 49

Kyā<sup>↓</sup> yəh ādmī Māngə<sup>↓</sup>l hɛ?      Is this man Mangal?

Stress on the marking morpheme kyā, as well as on the word Māngəl to which the question relates.

Sound pressure level: on the marking morpheme kyā 71 %, and on the second syllable of the word Māngəl about 66 %; the sound pressure level of the two words between kyā and the word Māngəl is with a small fluctuation about 60 %, that of the verbal form hɛ following the word Māngəl from about 59 % decreases to 0.

Fig. 50

Sentence stress of question to be completed

Fig. 50

↓  
Kaun boltā hē?      Who speaks?

Stress according to expectation on the interrogative word kaun. This corresponds to the general stressing rules, according to which the interrogative word is always stressed.

Sound pressure level: on the interrogative word kaun 70 %, on the next word /boltā/ about 55 % and on the last word /hē/ it decreases from 50 % to 0.



Fib. 5A

Fig. 5A

↓  
Kitne bəje hən?      What is the time?

Stress according to expectation on the interrogative word kitne, similarly in accordance with the general stressing rules.

Sound pressure level: on the interrogative word kitne about 63 %, in the section of the sentence following hereafter the sound pressure level from about 51 % gradually decreases to 0.

Fig. 52

Some cases of the meaning differentiating sentence stress

Contrasting stress: stress on the generally unstressed postposition

Fig. 52

Kyā<sup>↓</sup> lifāfā pustək<sup>↓</sup>men, yā pustək<sup>↓</sup>pār hɛ?

Is the envelope in the book or on the book?

Stress on the marking morpheme kyā, which introduces the question under consideration, as well as on the otherwise unstressed postpositions men and pār.

Sound pressure level: on the marking morpheme kyā about 74 %, on the postposition men about 62 % and on the postposition pār about 54 %.

From the above three sound pressure levels it also becomes clear that in the longer sentences the stress of the certain sentence sections towards the end of the sentence gradually decreases, but in the certain sentence sections the stress or sound pressure level of the word or morpheme to which prominence is given, is the strongest or highest.

The above sentence consists of three sections, viz.  $\text{Kyā} + \text{lifāfā}$   
 $\text{pustāk} \overset{\downarrow}{\text{mēn}} + \text{yā} \text{ pustāk} \overset{\downarrow}{\text{pār}} \text{ hē?}$

The first section consists of one word, which carries stress, its sound pressure level is about 74 %. In the second section the sound pressure level decreases first from about 61 % to 0, and then ascending to 31 % and to 47 % it goes along towards the stressed postposition mēn, on which it reaches 62 %. In the third section on the conjunction yā 'or' the sound pressure level springs up, and then falling again to 0 it ascends in the last section to 37 % and 51 %, whereafter on the stressed postposition pār it reaches 54 %, from where with small fluctuations it decreases to 0.

Fig. 53

Fig. 54

In the following sentences the prominence relates to the whole of some generally unstressed word. We illustrate the meaning differentiating stress by two kinds of stressing of the same sentences.

Fig. 53

Rām jāntā hε.      Rām knows.

Fig. 54

↓  
Rām jāntā hε.      Rām knows.

In the first variant /fig. 53/ the stress, although it is not strong, still it is on the first syllable of the verbal form jāntā, on the verbal root jān-.

In the second variant /fig. 54/ the stress quite definitely shifts to the first word of the sentence, viz. to Rām, which in this case is the word to which prominence is given.

Sound pressure level: in the variant to be seen on fig. 53 on the first syllable of the verbal form jāntā 71 %, on the initial word Rām 70 %, on the last word of the sentence /hε/ from 52 % the sound pressure gradually decreases to 0.

in the variant to be seen on  
fig. 5~~4~~ the highest sound pressure  
level is on the word Ram, 72 %,  
then the sound pressure level  
definitely decreases on the fur-  
ther two words to 60 % and to  
41 %.



Fig. 55

Fig. 56

Fig. 55

Lərkiyaḥ̄ əcchī tərəh̄ khel rəhī hən̄.

The girls are playing well.

Fig. 56

Lərkiyaḥ̄ əcchī tərəh̄ khel rəhī hən̄.

They are the girls, who are playing well.

On fig. 55 the stress relations are as follows: the first word, lərkiyaḥ̄ is on a high sound pressure level, thereafter, however, a break follows which gives a definite prominence to the next word əcchī; the word tərəh̄ is pronounced quite together with the word əcchī and thus the sound pressure level does not decrease as yet; then a short break follows and the sentence continues already on a definitely lower sound pressure level.

On fig. 56 the stress is definitely on the initial word lərkiyaḥ̄, whereafter without any break the whole sentence continues on a much lower sound pressure level as compared with the previous variant.

Sound pressure level: on fig. 55 on the word lərkiyaḥ̄ steeply decreases from 71 % to

0, and then after a certain break in two grades it ascends to 52 % on the second syllable of the word əcchi and after a short break following the word təṛəh, on the terminal part of the sentence with small fluctuations it decreases from about 48 % to 0.

see fig. 57

Notes

1. Ralph R. Sisson: The Description and Comparison of Stress in Southern British English and Hindi. Linguistics 68 /1971/ p. 40. These statements put side by side illustrate the problem in such and interesting way that we also quote them literally:

"... some of the statements made by the authors and in many instances their only statements are:

The author is not prepared to say it /stress/ does not exist, but he is more and more convinced that what there is is largely of foreign origin. /H. Scholberg: Concise Grammar of the Hindi Language. 14./

Although Hindi lacks phonemic word stress, and its stresses are weaker than in English, it is not an evenly stressed language, nor is its phonetic stress confined to a particular syllable. /C. Masica et al.: A Comparison of the Sounds of Hindi, Tamil and English. Bulletin of the Central Institute of English, Hyderabad 3 /1963/ 81./

Stress is not so prominent in Hindi as in English. However, it is sometimes phonemic and such pairs as /gə'la:/ "throat" and /gəla:'/ "melt"... distinguish only by means of stress. V. Arun: A Comparative Phonology of Hindi and Panjabi. 21./

... Accent, although unquestionably existing in Hindi, is much less strongly marked than in English. /S.Kellog: A Grammar of the Hindi Language. 20/

Stress plays quite a vital part in Hindi, although not as vital as in English, or Russian, or German. /R.C. Mehrotra: Stress in Hindi, Indian Linguistics 26 /1965/ 96./

2. Gy. Laziczius: Fonétika /Phonetics/. Budapest 1944. p. 174.

3. Op. cit. p. 174.

4. László Deme: A mai magyar nyelv rendszere /System of Present Day Hungarian/ /MMNYR/ II. Budapest 1962. p. 458.

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11. Kāmtāprasād Guru: Грамматика хинди. Moscow 1957. p. 65.

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16. S.N. Kellog: A Grammar of the Hindi Language. London 1955. p. 20.

17. H.C. Scholberg: Concise Grammar of the Hindi Language Third ed. Bombay 1955. p. 14.

18. Aryendra Sharma: BGMH p. 13; Dhirendra Varmā: Hindī bhāṣā kā itihās. Prayāg 1958. p. 219; A.P. Barannikov - P.A. Barannikov: Hindustani /Hindi i Urdu/. Moscow 1956. p. 7; V. Porizka: Hindi Language Course I. Prague 1963. p. 33; S.G. Rudin: op. cit. p. 238.

19. BGMH p. 13: "47. In common with most of the modern languages Hindi has only stress accent, although it is not as distinctly audible as, for example, in English." See also A.P. Barannikov - P.A. Barannikov: op. cit. p. 7; Dhirendra Varmā: op. cit. p. 219.

20. A.P. Barannikov - P.A. Barannikov: op. cit. 7. с. : "Важно помнить, что слоги лишённые ударения, должны произноситься так же ясно, как и ударяемые слоги. Отсутствие на слоге ударения не влечёт за собою ни сокращения гласного, ни изменения его качества." \_\_\_\_\_

See also V. Porizka: op. cit. p. 33.

21. BGMH p. 13.

22. H.C. Scholberg: op. cit. p. 14: "... In Hindi quantity is rather to be observed than accent."

23. V. Porizka: op. cit. p. 34: "a/ It is wrong to place strong stress accent on one syllable while articulating other syllables indistinctly."

24. S.G. Rudin: op. cit. p. 261.

25. S.G. Rudin: op. cit. p. 259.

26. Kāmtāprasād Guru: op. cit. p. 65.

27. Dhirendra Varma: op. cit. p. 219.

28. BGMH pp. 13-14; see also A.P. Barannikov - P.A. Barannikov: op. cit. p. 8.

29. S.G. Rudin: op. cit. p. 261, 3.

30. A.P. Barannikov - P.A. Barannikov: op. cit. p. 8.

31. S.G. Rudin: op. cit. p. 260.

32. V. Porizka: op. cit. p. 34, p.251, § 102,

Note 1.

33. Kāmtāprasād Guru: op. cit. p. 66, § 58; Dhirendra Varma: op. cit. p. 220; R.C. Mehrotra: Stress in Hindi. Indian Linguistics 26 /1965/ 97.

34. John Beames: A Comparative Grammar of the Modern Aryan Languages of India, I. London 1872, § 6. The Accent pp. 17-21.

35. J. Beames: op. cit. pp. 19-20: "...Thus we find from Skr. क्षुर "knife" /oxytone/, H. घुरा ; while from Skr. क्षेत्र "field" /oxytone/, we find H. स्वेत , M. शेत , and a consonantal ending in all languages. We should therefore set down the first of these words as an early, the second as a late, Tadbhava."

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38. R.C. Mehrotra: op. cit. 96 ff.

39. R.R. Sisson: op. cit. p. 40.

40. H.C. Scholberg: op. cit. p.14.

41. V. Porizka: op. cit. p. 34.

42. S.G. Rudin: op. cit. pp. 248-249.

43. S.G. Rudin: op. cit. p. 259.

44. A. Debreczeni: Stress Relations of Simple and Compound Verbal Forms in Hindi. Acta Orient.Hung. 26/1972/ 309 foll.

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46. Kāntāprasād Guru: op. cit. pp. 65-66.

47. Dhirendra Varmā: op. cit. pp. 219-220.

48. BGMH, Accent pp. 12-14.



49. S.G. Rudin: op. cit. pp. 239-240, 242-246, 259-260.
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51. S.G. Rudin: op. cit. p. 243.
52. Dhirendra Varmā: op. cit. p. 220.
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58. L. Bloomfield: op. cit. pp. 90-92.
59. Laziczius: op. cit. pp. 176-177.
60. Laziczius: op. cit. p. 177.
61. László Deme: op. cit. I. p. 117.
62. László Deme: op. cit. II. pp. 458-466.

63. Kāmtāprasād Guru: op. cit. § 58, p. 66.

64. Dhirendra Varmā: op. cit. p. 220.

65. S.G. Rudin: op. cit. pp. 242-243.

66. S.G. Rudin: op. cit. p. 242.

67. R.R. Sisson: op. cit. p. 40 says: "Mehrotra in his article "Stress in Hindi", recognizes that stress is a part of the Hindi sound system and he describes it on the word and sentence level."

68. R.R. Sisson: op. cit. p. 42, here he says as follows: This investigator's conclusions about Hindi stress are taken from R.C. Mehrotra's article, "Stress in Hindi", the only comprehensive description of Hindi stress published to date.

69. R.C. Mehrotra: op. cit. pp. 96-105.

70. R.C. Mehrotra: op. cit. p. 96.

71. See Kāmtāprasād Guru: op. cit. § 58, p. 66; Dhirendra Varmā: op. cit. p. 220; and S.G. Rudin: op. cit. p. 242.

72. R.C. Mehrotra: op. cit. p. 100.

73. László Deme: op. cit. II. p. 503; M. Bierwisch: Studia Grammatica VII. Untersuchungen über Akzent und Intonation im Deutschen. Berlin 1966. Regeln für die Intonation. pp. 100-101. "1.2. Akzent und Intonation. Die enge Beziehung zwischen Akzent und Intonation ist ein bekanntes Phänomen. Die Art dieser Beziehung ist für unser Problem entscheidend." etc.

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