## A PHONOLOGICAL SKETCH OF GOREN

## Dissertation Submitted to Jawaharlal Nehru University in partitial fulfillment of the requirements <br> for the award of the degree of

MASTER OF PHILOSOPHY


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## CERTIFICATE


#### Abstract

This dissertation titled " A Phonological Sketch of Koren " submitted by Ms. Lienjang Zeite, Centre for Linguistics, School of Language, Literature and Culture Studies, Jawaharlal Nehru University, New Delhi, for the award of the degree of Master of Philosophy, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institution. This may be placed before the examiners for evaluation for the award of the degree of Master of Philosophy.



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This dissertation titled "A Phonological Sketch of Koren", submitted by me for the award of the degree of Master of Philosophy, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institution.

## DEDICATION

TO APA AND ANU

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## MAP OF MANIPUR <br> SHOWING THE KOREN INHABITED AREAS



## Chapter 1

### 1.0 INTRODUCTION

### 1.1 The Koren Language:

"The gift of language is the single human. trait that marks us all genctically setting us apart from the rest of life."

- Lewis Thomas, The Lives of a Cell.
"Language is among many things - a system of communication, a tool for thought, a medium for self-expression, a social institution. a source of ethnic pride and political controversy. All normal human beings have at least one language, and it is difficult to imagine much significant social, intellectual, or artistic activity taking place in the absence of language. The centrality of language to virtually every aspect of human life gives each of us a reason to want to understand more about its nature and use."'

Language in itself stores much more information in it than is apparent from its structure. It draws bridges across individuals, communities and nations. The power of language goes beyond the space and other far off things. The history of mankind, of past deeds, is recorded by language. Language, in recorded or oral forms has the building blocks to create information of the past, the present as well as the future. Above all, the identity of the community is denoted by the culture, which is expressed by the language.

So the importance of language in a society is indeed undeniable. The two are so entwined with each other but still give out ample space for the world to
' W.O' Grady, J.Archibald, M. Aronoff and J. Rees - Miller: 'Contemporary Linguistics' An Introduction., $4^{\text {th }}$ edition. Bedford. Bedford/St Martin's, 75 Arlington Street, Boston, MA 02116.2001. page 1.
express whether language determines culture of the societies or vice versa. The debate continucs with many experts trying to place culture perception and ordering of the world on one side and cultures language on the other.

Despite being the main vehicle that rotates within the cultures, language change. And change is the only thing constant when it comes to language. The world is changing in such a fast pace that it affects the languages as a result of increasing world communication and the demise of language isolation. Due to such reasons, many societies are becoming concern as to maintain the language that was and is theirs as their real identity is woven with the language they use. The unique sets of traditions and cultures that are inherited from the forefathers arc passed down to generation after generation. And it is required of the community to preserve what is solely theirs. It is possible to see language as a means of ordering culture in the areas of knowledge acquisition, societal roles, and power. Language also functions adaptively as a means of assimilating new ideas and technologics.

And especially when it comes to tribal languages, there is a sea change which is visible even in a span of 50/60 years, as most tribal languages don't have script of their own. So lack of written record to trace the origin as well as the preserved from of the language used during olden times. With the spread of modernization there arises the need to delve into the oral history to know more about the tribe, their past culture and the language. In such cases the existing oral history is the only reliable source to bank upon. The importance of language to a community is undeniable not only because much of the social and cultural behaviors is expressed by means of the spoken word but it is a mark of identity as well language labels each member his or her place within that society or community.

So. the importance of a language in a society is even more valuable if the language belongs to an indigenous community on the verge of losing the authenticity of the language. In a way, there is a threat to that society and can be passed off more or less as an endangered language that needs to be preserved.

### 1.2 Name and its Derivation:

The Koren language is almost unknown to linguistic scholarship. No attention has been given like many of the tribal languages in the country due to lack of awareness for detailed research as well as inadequate information on the language. The language is known as Koren as also the tribe. Grierson, wrote about the derivation of the name "Koireng", thus: "Kolhen" become "Kolren" which means tribe from the East (Kol-'east'; ren-'tribe'). The word somehow changes to Koren, the name which the tribe gave to itself, and 'Koireng', as they are known to outsiders as probably a Manipuri corruption of this name. The tribe is believed to have migrated from the south East Asian from the pre-historic times down to Manipur, India. "The Korens were referred to by earlier British writers who were administrators under the colonial British rule; John Shakespeare (1913) called them for Kolhen. Greirson also mentioned about the tribe in his Linguistic Survey of India"' Despite being one of the oldest tribes in Manipur, the Korens remain one of the smallest tribe

### 1.3 Cultural Information:

Like most of the tribes in North-East India, the Korens, despite the absence of written literature have preserved a large number of traditional literature, mythology, legends, folktales and songs which are mostly not historical but could

[^0]be regarded as the non-literate people's style of bequeathing history to posterity. It may be said that if history is the collective memory' of a community, the Koren history is their traditions, folklore and songs. "According to Koren tradition. the supreme being or supreme father known as 'Pathien' is believed to be the creator of the universe, the earth and mankind. Pathien made two beings, male and female out of mud, gave them life and surfaced them out on the earth from subterranean region." As the legend continucs, the emergence of eight clans is seen, which forms the name of the week as well. There are also claims of linguistic affinities between the Koren and Karen tribes of Myanmar which required further studies.

The Korens have a rich cultural heritage as manifested through their beautiful dance and rich music, their festivals and ceremonies, dress and customs and games and sports. Their love for beauty and life, their sense of color and refinements in their own style, their expression of joy at the changing seasons, on victory over enemies, hunting, raising stone megalithic are expressed in different forms of fine arts, music, dance and many sports, though small number, their rich culture has preserved their distinctive identity among the myriad of tribes as in this part of India.

Festivals to celebrate harvesting, coming of age, warding off diseases are an important part of their life. Various dance forms and traditional musical instruments, games and sports makes up a riot of colors in the canvas of their life. The mode of worshipping God was through a series of sacrifices rites and ceremonies. They believed in the one supreme God. However after the coming of Christianity, there occur some changes in the cultural as well as traditional front. The use of alcohol, sacrifices was not the norm to be followed by Christians.

[^1]"Historical incident happened at Thangching in Manipur. The Korens were quite populous and came in contact with the Meities of Moirang. They fought against the Moirang king who was several times defeated by the Korens with the help of a sword with miraculous power. Later on, this king by a stratagem stolc away the magic sword and the Korens were defeated. Then the king cursed to the Koren. Some believed that this resulted in diminishing population. But this is yet to be investigated. ${ }^{* 1}$

### 1.4 Language: Situation and Position:

The Koren tribe of the North-East state of Manipur, India, is one such indigenous community which does not have any reliable written records to prefer to for information about the tribe as well as for further research. With the change of time, the value of the language within the Koren society is changing in the sense that the language has undergone is clearly visible in just 60/70 years gap. The old traditional folk songs, tales and certain ritual chants are unintelligible to the current generations. The Koren language spoken as of today is a diluted form of the original one.

The reasons for change in the language are mainly due to the amalgamation with other communities, especially with the Meities (Manipuries) as well as the influence of Christianity, of modernization and the new technologies. The issue of preserving language and exploring it is introduced to the importance of one's language and the various facades or significant features it has. As mentioned before, it becomes an issue of the society. And linguistics always increases the beauty of a language group. So a linguistic research is not only the answer to the

[^2]language in detail but is also a way to study and bring out the significant features of the language which will benefit not only the speakers, society or community but . will also be a contribution in the ever interesting and informative world of language and linguistics.

Here is where the need of an intensive study of the Koren language. because language has been the carrier of culture for a society based on oral tradition. From time immemorial, the folk songs and folk tales have been the only vehicle to preserve the cultural beliefs and practices of the tribe/community since there is no script of their own. And so, it is possible that with the passing of generation, socio-cultural norm and customs of the tribe will lose its authenticity unless an effort is taken to linguistically record the oral tradition into written materials which will be much more effective in cultural history that is very much cmbedded in the language.

When the whole situation draws upon a linguist, the urge to work on the issues becomes more or less a necessity. And as a speaker and member of the Koren tribe and being a student of Linguistics I can experience the urgency in exploring the language to bring out the essence of its unique features and stress upon bringing out what comprises the language which in turn is the reflection of the culture. Since the setting of Christianity and influences of other communities, there have been dramatical changes in the influence of Christianity, living in close proximity with the Meities and other communities had a huge impact in the change of language as the Korens had a close associate with them since the British regime. The change is a slow process but every time an elderly dies he carries away the valuable knowledge of the language and culture as they have not been recorded and it is at the risk of being lost forever. In fact, it is an endangered language of an indigenous tribe.

To the best of my knowledge. there is no systematic phonological and morphological study of the language. The Department of Linguistics at Manipur University has carried out individual post-graduate level studies on noun phrase. negation and question tags. A thorough structural account of the language nceds to be done. The only existing literature words are a history of the Korens which has many irrelevant information, a few books of folk songs and tales. The language is in such a state that any linguistic research will be a building block for the community.

### 1.5 Speakers and Dialects:

Due to the scattered situation of the Koren community in different area of the state, it is very difficult to have the exact number of speakers and the census always features inaccurate numbers of speakers. Sometime it's a little too high and sometime it's less. Despite being one of the oldest tribe of the state, its population does not seem to grow that as fast as other communities. According to 2001 Census of India, the total population of Manipur state was $2,388,634$ out of which only about 2000 were speakers of Koren ${ }^{1}$. The current number of speakers is not available but others sources reveal a not so striking numbers of speakers. ${ }^{2}$

Rather than geographical conditions or locations, the dialect varies according to the villages the variation in the language is there, more or less, dialectal differences arises due to the existence of the villages alongside other village community. The difference in dialect is not that prominent. The degree of the difference is hardly seen as it sounds like words with just one meaning.

[^3]However, the speakers stick to their dialects. but do not apply to all the speakers in the village.

The following are some of the dialectal differences:

1. For the word 'bag'

Places
a) Longa Korens - $\left[\mathrm{k}^{\mathrm{h}^{\mathrm{ococo}}}\right]$
b) Kamu Korens - [paitu]
c) Other Korens - $\left[\mathrm{k}^{\mathrm{h}} \mathrm{o}\right]$
2. For the sentence 'when are you leaving'?

Places
a) Utonglok Korens - [əŋtiké ce?in ?]
b) Longa Korens - [ əntiké ce?inte?]
c) Other Korens - [əntiké cenite ?]
3. For expressing surprise:

Places
a) Sadu Korens - [òbə́í ]
b) Other Korens - [ənù ]
c) Longa Korens - [əjənù]

These are employed by speakers of particular places but do not necessarily apply to all the speakers of each place as there $s$ always the case of exception. The example cited above is based on the understanding of subtle language variation, the Kamu Korens speak in a slow, elongated manner, while the Longa Korens put stress on every word that makes it sound a bit harsh to the ear. The differences are just dialectical differences.

### 1.6 The Distribution and Location:

At present, the Korens are distributed over settlements in Manipur statc. India. They are Utonglok, Sadu Koireng .Iril Mapal, kamu Koireng, I.onga Koireng, Awang Longa Koireng in Senapati district, Tarung in Sadar hills. Lamphel Koireng colony at Imphal, Ngairong at Churachandpur district. and a couple or so households in Ekpan (Senapati district) and Litan district in Chandel district.

Other than Lamphel Koireng, the rest of the settlements are in the hilly areas or slopes of varying heights. The Korens live in small settlements. They are found distributed in four districts of Manipur (Senapati, Imphal, Churachandpur and Chandel. They reside permanently in their villages.

### 1.7 Scopes and Objectives:

This dissertation will basically deal with the phonological sketch of the language, including the segmental phonology, syllable structure, word-stress and also the distribution and realization of tone and intonation as the language is a tone one. This area is chosen for the research because through this topic, the language can be studied from the sound system as well as the word level.

### 1.8 Methodology:

The study would require methods that involve fieldworks, translation in Koren traditional approach. Fieldwork, to collect primary and secondary materials/data through interviews, audio recordings and questionnaires. For the
collection of data visiting of different villages and interviewing people from different age group is included. keeping in mind the changes and influences through religion. contact with other languages, mass media etc. adopting of PRAAT for difficulties in identification of phonetic features. The main method is the collection of linguistic corpus and data analysis and description. The work includes identification of sound systems (consonants, vowels, diphthongs, etc.) of the language. Labeling of linguistic corpus can't be done due to time constraint.

### 1.9 Fieldwork and Data Collection:

First of all. data was collected in the form of a basic word list, which numbers more than 350 words. The data is enlarged by adding in some sentences and recordings of songs, stories and chants. For this collection, various Koren settlements were visited. Data was collected from places of complete Koren settlement like Sadu Koireng in Senapati district to Imphal area and as far as Litan where only a couple of Koren speaker households are there. The collection of data was done to keep in mind the historical facts that were passed down from generation to generation by choosing the elders as first priority informants. It was an enriching experience about the community which becomes more enchanting and interesting as the history unfolds. The beauty in unlocking the otherwise obscure to a younger age, by the old and experienced was indescribable. Most of the data, besides the songs and stories, are from my knowledge which comes without effort as a speaker. Only for historical information or accuracy of certain things need the help of elders and for comparative features from the younger generation. The journey through dusty narrow roads across the fields to the villages was another experience altogether.

Sometimes the sickness of an informative and experienced elder hampered the data collection. In such cases. I had to convince the elders from running away midway as they don't see the purpose to do a research. Then I also encountered a group, almost an entire village, claiming they no longer belong to the Koren community despite still speaking the same language and their reluctance to be associated with Koren was disheartening as they don't seem to stress much upon the importance of one's language which is one's identity. The problem of letting informants sit for a while when they feel they have better things to do. Then there was also the strain to grasp some old unfamiliar sounding words that sometimes have long explanation as well.

### 1.10 Data Analysis:

Analyzing and repetition of examples an umpteen times was very time consuming. Even as a speaker, when certain words or sounds are repeatedly uttered, the ascent does not come clear. The analysis of the data was also taxing as for every phoneme needs referring to the entire set of word list numerous times. Almost the entire way of analyzing involve running through the words list, searching for possible sounds that changes under some circumstances sometimes realizing that analysis takes lots of time even if one speaks the language. After sound systems for the minimal pairs as well as tone differences were done. A thorough study of the language was also done. Playing of the recorder for sounds and finally recording voice samples for determining the properties of phonemes and tones are simplified by the software PRAAT. And above all, nothing matches the ever analyzing of sounds and examples all the time and this is were the knowledge of linguistics becomes immensely useful.

## Chapter 2

### 2.0 ABOUT THE LANGUAGE

### 2.1 The Language:

According to Grierson', the Koren language belongs to the Tibeto-Burman. Kuki-Chin group of languages. The Koren language shares many essential features with other languages like Aimol, Kharam and Hmar. The following properties of the language will show the foundation of the Koren language.

### 2.2 Some Impressionic Observations - Pronunciation:

The vowels and consonants are pronounced rather distinctly. Thus, sari (seven); əpo:l - (blue); ləmpì - (road); kokmä: - (a sour fruit); zuk há - (alcohol), etc. but sometime consonants and vowels appears indistinctive as well. For example: $k$ ə-nu: or ki-nu: - (my mother), the vowel sound in the prefixes becomes barely audible sometime that it might perhaps be denoted by means of as ' $\partial$ ' or ' $i$ ' above the consonant ' $k$ ', thus, $k^{a}-n u$ : or $k^{\prime}-n u$ :

The two consonants ' $j$ ' and ' $\mathcal{F}$ ' are interchangeable most of the time. Thus, 'ja:n' or ' $\exists a: n$ ' both mean 'night'; sam ja:k or sam $\exists a: k$ which means 'jaggery'. But the two phonemes are not always exchangeable for example; əfer means 'to

[^4]fry while a jer does nor mean anything, when a post position beginning with a vowel is added to a word ending in a vowel, there is usually a contraction. Thus. əpa:n for әpa: in which means 'by the father'. An cuphonic ' $j$ ' is inserted after ' $e$ :' and ' $i$ ', thus, ace: ja: - (going); leija: - (in the field). The word for "to come out' can be pronounced as 'su:wok', 'su:ok' and 'sok'. Double $/ \mathrm{m} /$ and $/ \mathrm{n} /$ are sometimes pronounced almost as single.

Thus its omak for ommak - (is not) and ənni: for $\partial n i$ : - (they are). The sound $/ \mathrm{h} /$ seems to be rather faint in some instances in the second specimen; after a preceding $/ \mathrm{n} /$; thus, $\partial n-o \eta-j e i$ for $\partial n-h o \eta-\mathcal{F e i}$, (they have come). $/ n /$ seems to be occasionally dropped in cases of someone or more than one person causing someone or something to do an action as in amisuo for aminsuo (to let go), $\partial m i t h_{e i}$ for $\partial m$ int $h_{e i}$ (to let know) etc.

### 2.3 Morphological Structure:

Some general features of the morphological structure of Koren are discussed below.

### 2.3.1 Prefixes and suffixes:

Most suffixes are used in order to effect the infection of noun and verbs, the same are the case of prefixes. The letters are often used before verbs and their proper meaning cannot always be ascertained. Some prefixes seem to have a rather wide meaning.

Thus, the prefix ' 2 '. which usually seems to be identical with the possessive pronoun of the third. is used in the formation of nouns and adjectives. Thus, ənei - (rich; əna: - (nose): ola:m - (dancing): ola:k - (far). A prelix beginning with $/ \mathrm{k} /$ occurs in numeral and verbs: thus, kinni: - (two); kint $t_{i m}-$ (three); kuruk - (six); kersem - (to share); kermu: - (to meet). The suffix ro is added to verbs when telling someone to do something, for example, $t^{\text {h }}$ oro - (do it); cero - (go); omro - (stay); risumakro - (don't wash); inmakro - (don't drink) etc. but the suffix ro will change to $r \underline{r} u$ if its for plural, thus $t^{h}$ roru, ceru, omru, risumkru, inmakru, etc.

### 2.3.2 Articles:

There are no articles. The numeral $k^{h} a t-(o n e)$ is used as an indefinite article, and suffixes, demonstrative pronouns, and relative clauses supply the place of the definite article. Thus, uik hat - (one dog) or (a dog); $k^{h}$ atso - (the other one); $k^{h}$ athi-(this one).

### 2.3.3 Noun:

Nouns denoting relationship and parts of the body are usually preceded by a possessive pronoun. Thus, kic ənu: (daughter, literally, my daughter); əke - (leg, literally, his leg).

Gender is only apparent in the case of animate nouns. It is, when necessary. distinguished by means of suffixes, or in the case of human beings, also by using different words. Thus, kipa: - (my father); kənu: - (my mother); pəsal - (man); numei - (woman). 'Pa:' and 'nu:' are the usual suffixes in the case of human beings; thus, сәра:-(son); сәпи: - (daughter). The usual suffixes is the vase of animals are $c a l$ and tan for male and pi or $\operatorname{ppi}$ for female. Thus, sakor cal(horse); səkor əpi-(mare); uitə -(dog); uipi-(bitch).

### 2.3.4 Number:

There are two numbers, the singular and plural. When it is necessary to denote the plural some word meaning 'many', 'all' etc. is added. Thus, ənaire $\quad$ khua - (all his younger siblings, ənai-'his younger sibling', reøk'ua-'all'); numeitəm inkuo - (woman many family, family with many woman).

### 2.3.5 Case:

The Nominative and Accusative do not take any suffix. 'ko' probably a demonstrative pronoun, is sometimes added to the noun in order to emphasize it. Thus, keiniko mé camaun - (we meat not eat/we don't eat meat). The suffix -in denoting the agent is usually added to the subject of a transitive verb. Thus, əpa:n əlol pumpaŋ əcapa: kini jieŋ asempekjei - (his father his property all his sons two to he divided gave/ his father divided his property and gave it to his two sons). The genitive is usually expressed by putting the governed before the governing word.

For example orienta kum $\partial n i$ - (the year/the year of the poor); nipa: inna - (your father's house -in). A suffix ta: probably meaning 'belonging to', 'being', is sometimes added to the governed noun. Thus, kipa:ta seló asuok hai - (my father's hired servants all). Other relations are expressed by means of postpositions. Such are: $a$ : (in, to, on); in 'in'; kara - (from); kuпnиojə- (under); le? - (together with, by means of); maitieŋ, ma:tieך and maikuŋà - (before); nuøtieŋ and nuktieŋ - (behind); suпa - (in); jeiŋ-(to); jieŋa-(from), etc.

### 2.3.6 Adjectives:

Adjectives are usually preceded by the prefix $/ \partial /$ and in some cases by $/ \mathrm{m} /$. For example: əsen - (red); ərik - (heavy); mitun - (youngest); ənaiteka: - (near) is an adverbial expression, literally, 'near much in'. A suffix pa: probably forming a relative participle is sometimes added. Thus, mitumpa: - (young being); u-pa: (old being). Adjectives usually follow, but occasionally precede, the noun they quality; thus, acapa mitumpa: - (his son the younger); ala:k ram $k^{h}$ ata - (far country one -in). The particle of comparison seems to be /neka:/; thus, ama neka: kei kira:tdet - (he than me stronger, literally I am stronger than him). Another form of the comparative is - oma:nekinto oma: sadet - (him than he good more/better). Superlative is formed by adding /tək/ - (best), to the adjective. Thus, asa: gtak $t^{\text {tinkup - (the tallest tree). A kind of superlative is also form by adding }}$
kodok - (very/best); for example: əsakodok muhà - (beautiful very woman the). It does not actually means the best but it's a feeling incited by awe and wonder.

### 2.3.7 Numerals:

The numerals are given in the list of words. They follow the noun they qualify. They follow the noun they qualify. The ki/kin in kini/kinni - (two); kinthim - (three), etc. ce: $\eta$ is another prefix used when the number applies to money. Thus, ce: $\eta k^{h} a t$ - (one rupee); celprina - (five rupees). But this is used till cei:クsomlei kuo, i.e., nineteen rupees.

### 2.3.8 Pronouns:

Given below is a table for personal pronouns: -

| Singular | kei-(1) | nay-(thou) | әтa: - (he/she) |
| :---: | :---: | :---: | :---: |
|  | ka, ki-(my) | $n a, n i$-(thy) | əтa:, $a$ - (his <br> her) |
|  | keita: - (mine) | nənta: - (thine) | əma:ta <br> (his'/her) |


| Plural | keini- (we) | $n \partial \eta n i-(y o u)$ | anmani - (they) |
| :---: | :---: | :---: | :---: |
|  | keinita: - (our) | nə⿰nita: - (your) | ənmanita. <br> (their) |

Table 1. Personal pronouns of Koren.

Demonstrative pronouns such as ha: - (and), ko - (that) are often added to the personal pronouns in order to emphasis; thus, əmaha: - (him/her); ənmaniko (they). The objectives case may be formed by adding ' ci ' to the verb; thus, nipemakci - (thou did not give me). The genitive is formed in the same way as with substantives or by means of the possessive pronouns. Thus, keinicon- (our word, of us); nanni sipa - (thou thy service, thy service); nimin - (thy name), etc.
a) Demonstrative pronouns - hi, hiwa: and hiwa hiko - (this); ha and hawa (that). ' ko ' is often added to nouns and pronouns. For example - naipaphai la:mko - (children dance, the children dance of children). In hawa:han ko (thereupon) but hiwahinako means 'from here'.
b) Interrogative pronouns: $k^{h}$ oimo and $k^{h}$ oi jieni - (who?); ane and anmo (what?); ansikmo and ansikeni - (why?); ijatmo and anjatmo - (how many?). Thus, $k^{h}$ oihai ramme ani? - (whose land is it?); amin aneni? (what is his name?); kiwahi anmo niti? - (what do you call this? etc. ijatmo
contains another stem ' $i$ ': it means how much. $\Lambda$ pronoun tumo (who'), may be inferred from tunum - (anyone).
c) Relative pronouns: There are no clear cut views of relative pronouns. Suffixes denote such sentences - hiwa in hi ani nikuma: kiniricok - (this house the last year I bought).

### 2.3.9 Verbs:

Verbs are conjugated on person and number by means of pronominal prefixes. The following occurs: /ka/ and /ki/ - (I); /kin/ - (we); /na/ and /ni/ (thou); /nin/, /nina/ and /nini/ - (you); /a/ - (he/she/it); /an/ and/ana/ - (they). The final vowels in nina, nini, and ana are perhaps an inorganic vocalic sound inserted between concurrent consonants in order to make the pronunciation easier as well as to stress upon the person: ani -(it is/it was), is sometimes added, apparently in order to emphasis that the action really takes place. Thus, onitiani - (he said it is, he said indeed); kini lin $\partial n i$ - (I-plant-it is, I plant it). Sometimes a suffix $/ a /$ is added, for example, keiniko hawa: ramhan kinlei om $a$ : - (we that place we stayed...); sapal kink ${ }^{h}$ a:rra:.. - (fence we put up...). But in these cases the sentences are expected to continue as the 'a:' at the end indicates that there is something that should follow it. The suffix of the past tense is jei, lei, suo, pet.

Thus, $k i$ i en jei - (I see already/I have seen /I saw); kai la: ki lei $t^{h}$ o: - (I song sung); əma: cuon $t^{\text {h}}$ : suo əni - (he worked already/ he already working);
buha kic əpet - (the rice I ate all/ I ate the rice). Something very interesting is that all the words can be used in one sentence to denote an action of the past. Thus, kinlei c əpet suo jei - (we had eaten finished). However, jei, lei, suo and pet can be used to dente the present time when the action is denoted as a completed or established fact. Thus, nəsik kiti jei - (sick I have said/ I am about to get sick); əmaral $\begin{aligned} & \\ & \text { ni } \text { ei-(his guilty he is } \mathrm{it} / \text { it is his guilt). }\end{aligned}$

A present definite and an imperfect are indicated by adding /om/ - (to be) to remain, to the principle verb. The principle verb takes the form of a participle or verbal noun. /om/ is apparently used as an impersonal verb. Thus, ənsinna: $\partial \mathrm{n}$ om - (they making they are/they are making).

The future is formed by adding in, sik, and ron, which probably means 'will', 'going to', etc. conveying the force of a future or an imperative. To these forms are added the verbs $/ n i /$ - (to be); ta:, te and $t i-$ (to say/to do) etc. Thus, $t^{h_{e i}}$ $k^{\text {h }}$ iekin kite $-\left(\right.$ (fruit plucking I will); wasualin kita - (cooking I will); $t_{\text {tron }}$ kiti $j e i$, (dying I said/ I am dying). The suffix of the imperative is ro or $r u$, and in the $1^{\text {st }}$ person singular and plural ron and roi respectively. oninlan omroi - (sitting let us remain).

### 2.3.10 Particles:

The relative participle has been mentioned in connection with relative pronouns. Adverbial participles are formed by adding the postposition ' $a$ :' thus, əhoi ja: - (merrily/happily); nəlei səlei ja: - (without ill health or safety). The
same is used as a conjunctive participle, thus, ace jei ja: ahon nol - (he having been gone again come).

In passive voice, not all the sentences that are possible in English cannot be applied. But the language does have passive voice, thus:-

- Active voice - naitonin mizu: at ${ }^{h_{a t}}$ - (cat the rat killed)
- Passive voice - mizuha gaito: ŋin at ${ }^{h}$ at - (the rat cat by killed)
- Active voice - mirikipin $\partial m a$ : andei - (everyone he they like)
- Passive voice - $\partial m a:$ hi mirikipin $\partial n d e i$ - (he everyone they like)

Compound verbs are freely formed in order to modify the meaning of the principal verb. Thus, asem pekjei - (he divided gave); əhoŋ ki:rjei-( he came he returned/he came back); ənhoŋ ce - (they came-went/they went). There are prefixes that denotes motion towards, example, hei $t^{h} a k$ - (to send); hei en - (to look); hei he ro: - (to throw), etc. lei does not give a clear meaning when used alone but in sentences like lei se ro - (ahead you go/you go ahead); lei tən ru:\{ahead cut you (pl), you (pl) go ahead and cut (something) \}. The prefix $/ \mathrm{min} /$ forms causatives, for example. on min $\sin j e i-$ \{they cause to make-they made (let someone make) $\}$; min risu ro - \{cause (someone) wash-let (someone) wash $\}$. Another prefix /ni/ is found that denotes request, for example, ni hoy pek ru- \{you (pl) some please $\}$; ni la:m pek ro - \{you (sgl) dance please/ you please dance $\}$.

'ni can be combined with other prefixes such as /ri/ in ni ri cok (to bury): ni ri kel - \{(you) to buy $\}$, etc. with transitive verbs - 2niti $\partial n i$ - (he-said-it is/he said indeed); ənisem $\partial n i$ - (he distributed it is/he distributed). wa: is a verb meaning 'to go', 'to come'. It is often prefixed to other verbs and conveys the idea of motion, example, awa a?om - (he came he sithe came and sit): wacen lay rilro (go you and say/tell-you go and tell). juop indicates "to go and..." example. juon cenlay honro - (come-go and come-here/you go and come back-hcre); juon ca ro - (go/come and eat). Desiderative are formed by adding nuom. to wish, example, $t^{h}$ eitui ki in nuom - (juice I drink want); me kic $\partial$ nuom me - (I feel like cating meat). Potentiality is denoted by adding $t^{h} e i$, thus, keiko bu saunt $t^{h} e i$ mə'in -- (I am food cook know I not/I don't know how to cook). cuan $t^{h} t^{t_{e}}$ ei mak $u$ : - (work do know not them). suom means together, example, tho suom roi - $\left\{\right.$ do together $^{\text {n }}$ we/let's do (the work) together\}.

The negative particles are mak and məi̛u, mə? uŋ. Thus. nimək - (is not/no); nipemək ci-(you give-not-to me); keiniko cəma? un - \{we are cat not /we don't eat (something) \}. Reduplication of the verb can also be seen, example, nipepek ro - (you give please/please give it).

The word order is subject, object and verb. The indirect object always follows the direct one, example, seri:n reipa:r $\partial k h_{i} e k$ - (Seri flower she plucked).

## Chapter 3

### 3.0 SEGMENTAL PHONOLOGY OF KOREN.

### 3.1 Phonemes:

The following consonants and vowels are what constitute the Koren segmental speech sounds:-

### 3.1.1.1 Consonant phonemes:

There are twenty-six consonant phonemes in Koren, excluding two borrowed phonemes $/ \mathrm{g} /$ and $/ \mathrm{f} /$. The following phonetic symbols are those used in the IPA (International Phonetic Association).

### 3.1.1.2 Consonant chart:

| Articulatio <br> n Place $\rightarrow$ <br> Manner $\downarrow$ | Bilabial | Labiodental | Dental | Alveola | Postalveolar | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop |  |  | $\begin{array}{lll}\mathrm{t} & \mathrm{d} \\ \mathrm{t}^{\text {h }} & \end{array}$ |  |  | c $\quad 3$ | $\begin{array}{ll}\mathrm{k} & (\mathrm{g}) \\ \mathrm{k}^{\mathrm{h}} & \end{array}$ | ? |
| Nasal | m |  |  | n |  | n | $\eta$ |  |
| Trill |  |  |  | r |  |  |  |  |
| Fricative |  | (f) |  | s $\quad 2$ | S |  |  | h |
| Approx. | w |  |  |  |  | J |  |  |
| Lat.Approx |  |  |  | 1 |  |  |  |  |

The parentheses for $(\mathrm{g})$ and (f) indicate their marginal status.

### 3.1.1.3 Phonetic Distribution of Consonants:

a) $\left[\mathrm{t}^{\mathrm{h}}\right]$ can be replaced by the aspirated $\left[\mathrm{t}^{\mathrm{h}}\right]$ when used in sentences that are uttered with more speed than uttering normal words. For example, $/ \mathrm{t}^{\mathrm{h}}$ oro?/ - 'do it' becomes $/ \mathrm{t}^{\mathrm{h}}$ oro? kiti/ - 'do it I say'. The difference is not that viable, but while uttering the tip of the tongue touched the alveolar ridge in the sentence level and the back of the teeth at the word level. It is too vague to label it as an allophone of [th] because it happens unconsciously and not in all cases that involves the said phoneme $\left[\mathrm{t}^{h}\right]$. More or less it is the speed of the utterance that determinate it.
b) $[\mathrm{t}],[\mathrm{d}],\left[\mathrm{t}^{\mathrm{h}}\right]$ are pronounced differently from dental sounds. The Koren $[\mathrm{t}]$, [ d$]$, and $\left[\mathrm{t}^{\mathrm{h}}\right]$ are dental in nature and not alveolar. But the tip of the tongue touches the back of the teeth slighter than a proper dental manner. But when emphasizing on the word having these phonemes the presence if the tongue increases.
c) [ g$]$ velar nasal is pronounced in the same way as the English [ n ] as in sing [sin]. But the difference between the two is that in English (or for that matter in Hindi too) it does not occur in the word initial position whereas in Koren, it is free to occur in all the three position, initially, medially and finally.
d) $\lfloor\Omega\rfloor$ nasal is an interesting feature and has a restricted occurrence in the Koren language. The phoneme occurs in onomatopoeic words or in describing certain sounds, action or nature of something. It is often reduplicated to emphasize the sound or action. Reduplicating indicates the occurrence of the sound or action more than once. For example, [nepnep] means 'graceful or fluid' in movement, while [nep] means the same but the movement is done once. More examples are: nonnon 'cries of cat': nennen 'melodious voice of a person or a bird or bell' which is not loud and is a bit far away but quite audible. The phoneme occurs in initial position and medial position only.
e) $[r]$ in Koren is uttered more prominently, i.e. the front part of the tongue vibrates more than the English [r]. For example, [mert ${ }^{\text {h }} \mathrm{a}$ ] - 'wings'; [ner] 'lip, etc. The air passed over the raised tongue tip and allowing it to vibrate.

### 3.1.1.4 Minimal pairs for consonants :

A number of minimal pairs that demonstrate consonant contrasts for Koren are given below:-

1) $/ \mathrm{p} /$ and $/ \mathrm{b} /$
a) $[p u ̀]$ - 'grandpa'
[bù]- 'cooked rice'
b) [әра:n] - 'scabies'
[əba:n] - 'arm’
2) $/ t /$ and $/ d /$
a) [tomsik]- 'lesser' [domsik]- 'to lift'
b) [ətèt] - 'to keep'
[ ədet] - 'strong/durable'
3) $/ \mathrm{c} /$ and $/ \mathrm{f} /$
a) [cincin] - 'swaying of something silky'
[ 3 in jin] - 'fluid movement of something'
a) [əcer] - 'sprout'
[əЭer] - 'fry, saute'
4) $/ m /$ and $/ n /$
a) [mé:1] - 'looks'
[né:l] - 'sand'
b) [amay] - 'lost'
[anay] - 'slow'
c) [əmú] - 'to see/saw'
[ənu] - 'mother'
5) $/ n /$ and $/ n /$
a) [ná:] - 'leaf (banana)'
[yá:] - ‘fish'
b) [kellon] - 'to pass' [kellon] - 'open'
6) $/ \mathrm{m} /$ and $/ \mathrm{y} /$
a) [əmom] - 'bud (flower)' [əmon] - 'his/her/its behind'
b) [əmà:] - 'he/she'
[oŋà:] - 'his/her fish'
7) $/ R /$ and $/ t /$
a) [lé? ] - 'and'
[lét] - 'baby burp'
b) [?insik] - 'to be drank'
[tinsik] - 'to be hit'
8) $/ \mathfrak{S} /$ and $/ \mathfrak{f} /$
a) [ə Suay] - 'he see'
[əJuan] - 'to fly'
b) $\left[\partial \int u ̀ m\right]$ - 'his/her wooden mortar'
[ə̧úum] - 'pointed'
9) $/ \mathrm{S} /$ and $/ \mathrm{j} /$
[ $\quad$ Súan] - 'he/ she cooks'
[əjùan] - 'he/ she comes'
10) $/ \mathrm{l} /$ and $/ \mathrm{r} /$
a) [lə̀m] - 'way/road'
[rə̀m] - 'extinct'
b) [elin] - 'to plant'
[ərríy] - 'alive'
11) $/ \mathrm{c} /$ and $/ \mathrm{k} /$
a) [əcòn] - 'handle'
[əkòl] - 'embrace'
b) [əcém] - 'his/her knife'
[əkèm] - 'its husk (of grains)'
12) $/ \mathrm{c} /$ and $/ \mathrm{S} /$
a) $[$ əcim $]$ - 'crumbling in bits'
[ $\partial \int \mathrm{im}$ ] - 'sliding in big amount'
b) [cùansik] - 'to weed out'
[ $\int$ ùansik] - 'to get the pot down from the fire'
13) $/ \mathrm{c} /$ and $/ \mathrm{k} /$
a) [coknəsik] - 'for stirring'
[koknesik] - 'for wrapping'

> b) $[$ [əkok $]$ - 'container' $[$ [əcok] - 'to stir`
14) $/ \mathrm{c} /$ and $/ U^{\prime}$
a) [cetsik] - 'to tear'
[tetsik] - 'to keep'

### 3.1.1.5 Distribution of Consonants:

Environment of the distribution of consonants within the word are given below:-

| Sl.n <br> 0. | Consonants | Initials | Medial | Final |
| :--- | :--- | :--- | :--- | :--- |
| 1 | /p/ | pé:k <br> (give) | əpa:r <br> (flower) | əpop <br> (wound) |
| 2 | b/ | bé:l | cabé:l |  |

${ }^{1}$ One added feature about the pairs $/ \mathrm{c} /$ and $/ t /$ is that there exist two action with similar but yet different meaning, that is,
cokkelet - scooping out something in a place
tokkelet - digging out something in a place
The above examples are the minimal pairs that exist in the Koren language. It can be seen from the examples that it established the existence of a minimal pair for a set of two segments; it may be assume that those two segments contrast or are distinctive. Segment that contrast with each other in a particular language are said to belong to separate phonemes (contrastive phonological units) of that above language. Thus, al the consonants in the above examples belong to separate phonemes in Koren since all of them are contrastive in the language.

|  |  | (pot) | (teapot) |  |
| :---: | :---: | :---: | :---: | :---: |
| 3 | $/ \mathrm{p}^{\mathrm{h}} /$ | $p^{h} e k$ <br> ( a fruit) | $\partial p^{n} \mathrm{ier}$ <br> (to braid) |  |
| 4 | /t/ | tin <br> (back) | nita: <br> (yours) | mo:t <br> (banana) |
| 5 | /d/ | derna <br> (prayer) | ənden <br> (chutney) |  |
| 6 | $/ h^{\text {h/ }}$ | $\mathrm{t}^{\mathrm{h}} \mathrm{in}$ (wood) | $\begin{aligned} & \text { ait }^{h^{\prime} i}: n \\ & \text { (ginger) } \end{aligned}$ |  |
| 7 | /c/ | con <br> (language) | ramcan <br> (forest) |  |
| 8 | 171 | falmun (bed) | ә于ie <br> (pattern) |  |
| 9 | /k/ | ké:l (goat) | riká: <br> (necklace) | cá:k <br> (food) |
| 10 | /g/ | gəməla <br> (flowerpot) | gəŋga (ganga) |  |
| 11 | $/ \mathrm{k}^{\mathrm{h}}$ | $\mathrm{k}^{\mathrm{h}} \mathrm{uo}$ <br> (village) | $\operatorname{meik}^{\mathrm{h}} \mathrm{o}$ : <br> (smoke) |  |
| 12 | /R/ |  | leiləRai <br> (medicine) | le? <br> (with) |
| 13 | $/ \mathrm{m} /$ | mercá: <br> (chilli) | mitmul (eyelash) | əmon <br> (bud) |
| 14 | /n/ | numéi: | kinní | $\begin{array}{\|l\|} \hline \text { won } \\ \text { (belly) } \end{array}$ |


|  |  | (female/woman). | (two) |  |
| :---: | :---: | :---: | :---: | :---: |
| 15 | /n/ | nethet | nonnon |  |
|  |  | (sound made by insect) | (cat cries) |  |
| 16 | /7/ | そaitò: <br> (cat) | də̀nká: <br> (moncy) | əboly <br> (short) |
| 17 | /r/ | rumə̀n <br> (dream) | kerda: i <br> (play) | ner <br> (lips) |
| 18 | /f/ | futbol <br> (football) | ofis (office) |  |
| 19 | /s/ | sari <br> (seven) | ninsiet <br> (love) |  |
| 20 | \|z| | zu: <br> (alcohol) | әzi:k <br> (tender shoots) |  |
| 21 | 181 | $\int u m p^{\text {hai }}$ <br> (cloud) | fá: $\quad$ fà:n <br> (mosquito) |  |
| 22 | /h/ | há? <br> (tooth) | cahù:m <br> (husk) |  |
| 23 | /w/ | wa:ncuy (sky) | hiwah (this) |  |
| 24 | /j/ | $\begin{aligned} & \text { jà:mma } \\ & \text { (slowly) } \end{aligned}$ | aja:m (creeper) |  |
| 25 | /1/ | lu: <br> (head) | ənlená <br> (necklace) | kedill <br> (heel) |

g and founds in koren oceur in borrowed words such as gam - gum and futbol-football ete. in the specech of the younger gencration but sometimes older generation pronounced the two phonemes as $/ \mathrm{k} /$ and $/ \mathrm{p} /$.for example. Kam/ as in "gum' or $p^{\text {h }}$ utbol for 'football or op ${ }^{\text {hif }}$ / for "olfice". etc. And the -bol' in 'futbol can also be replaced by -huol' as in futbuol/.

### 3.1.1.6 Gencralization about Consonants:

i) Aspirated phonemes do not occur in word final but extensively in initial and media positions.
ii) $\lfloor g\rfloor$ does not have an original place in Koren. So in typical Koren pronunciation. which the elders above 60 years still used to replace $[9]$ is the velar voiceless $[\mathrm{k}]$. That is for the two alphabets $[\mathrm{k}]$ and $[\mathrm{g}]$. there is only one sound $[\mathrm{k}]$ (but these does not apply to the younger gencration as they pronounced the [g] sound as it is, still that occurs in borrowed words only). So old informants pronounced [g] as [k] in Hindi words such as \{gulab] rose’ i.e. as kulap (in this word the change in linal phoneme is due to un-occurrence of [b] in the final position in Koren language). Even intervocally, it is pronounced as [k] only e.g. [ganga] becomes [kayka].
iii) The fricatives $[s] .[z]$. [ $\left.\int\right]$, [h] fricatives, the dental plosive [d], the continuant [ w ]: the voiced bilabial plosive [ b ], the voiceless palatal plosive [c] are not found to occur in the word final position. The plosive
 and finally.
iv) [?] occurs in the word initial. medial and final. But it mainly occurs before or often a vowel. For cxample. [?om] - 'there is': [?cm]. [lci? 'with" [ha:?] - 'tooth'. ctc.
v) $[z]$ and $\left[\int\right]$ occurs rarely in the language and are always preceded or followed by vowels. Thus, [zeini] - 'tueday', [ $\left.\int a: y \int a: \eta\right]$

### 3.1.2 Vowel phonemes:

Vowels are sonorous, syllabic sounds made with the vocal tract more open than it is for consonants and glide articulations. Different vowel sounds are produced by varying the placement of the body of the tongue and shaping of the lips. The shape of the vocal tract can be further altered by protruding the lips to produce rounded vowels, or by lowering the velum to produce nasal vowels. Finally vowels may be tense or lax, depending on the degree of vocal tract constriction during their articulation. There are eleven vowels in Koren.

Vowels: /ə/, /i/, /e/, /a/, /o//, u/
/i:/, /e:/, /a:/, /o:/, /u:/

### 3.1.2.1 Vowel chart- Monophthongs:

|  | Front | Central | Back |
| :--- | :--- | :---: | :--- |
| Close | i |  | u |
|  | $\mathrm{i}:$ |  | $\mathrm{u}:$ |
| Mid-close | e |  | o |
|  | $\mathrm{e}:$ |  | $\mathrm{o}:$ |
| Mid-open |  | $\partial$ |  |
| Open |  | a | $\mathrm{a}:$ |

### 3.1.2.2. Diphthongs:

The Koren vowels can be divided into two major types - vowels and diphthongs. Simple vowels do not show a noticeable change in quality during their articulation. Diphthongs are vowels that exhibit a change in quality within a single syllable. Koren diphthongs show changes in quality that are due to tongue movement away from the initial vowel articulation toward a glide position.

Diphthongs - There are twelve (12) diphthongs in Koren, /uo/, /ou/, /ei/, /ie/, /ai/, /ia/, /uə/, /əu/, /iu/, /ui/, /oi/, /io/.

### 3.1.2.3 Minimal pairs for vowels:

a) /i/ and /i:/
[əsin] - 'to make'
[əsi:n] - 'small'
b) $e$ and $e$ :
[onem] cheap
[əne:m| soft:
c) $/ \mathrm{a} /$ and $/ \mathrm{a}: /$

Lonà - 'its leaf
[əna:] ‘sick’
d) /u/ and /u:/
[əmu] - 'seed’
[əmú] - 'to see"
e) $/ 0 /$ and $/ 0: /$
[2rol] - 'to insert'
[əro:l]--'glottis'
f) $/ 2 /$ and $/ a /$
[ələl] - burden'
[əlal] - 'guilty’
g) ii/ and $/ \mathrm{e} /$
[insik] - 'to drink'
[ensik] - 'to see'
h) $/ 0 /$ and $/ \mathrm{u} /$
[əro] - 'to roast'

ไəru]. seed
i) $/ \mathrm{a} /$ and $/ \mathrm{o} /$
[əpar] - 'to bloom'
[əpor] - 'over saturated ${ }^{\text {º }}$
j) $/ \partial /$ and $/ 0 /$
[ələm] - 'way'
[əlom] - 'lump'
k) $/ \partial /$ and $/ u /$
[ $\mathrm{t}^{\mathrm{h}}$ əsik] - 'to pluck down'
[ ${ }^{\mathrm{h}}$ usik] - 'to rot'

1) $/ a /$ and $/ u /$
əlam - 'dance'
[əlum] -' hot'
m) /a/ and $/ \mathrm{e} /$
[Jalsik] - 'to sleep'
[jelsik] - 'to cut/chop'
n) $/ \mathrm{e} /$ and $/ \mathrm{o} /$
[emróo - 'be flirty'

Łonról - stay ${ }^{\circ}$
o) $\mathrm{i} /$ and $\mathrm{a} /$
[oril] -he/she speaks
[əral] - 'thirsty"
p) $/ \mathrm{i} /$ and $/ \mathrm{a} /$
[rimhoi] - 'sweet smell'
[rəmhoi] - 'beautiful place ${ }^{-}$
q) $/ \mathrm{i} / \mathrm{and} / \mathrm{u} /$
[əsik] - 'pinch'
[əsuk] - 'punch'
r) $/ \mathrm{e} /$ and $/ \mathrm{u} /$
[əlé] - 'opposite'
[əlu]- 'expensive'

### 3.1.2.4 Minimal pairs of diphthongs:

| 1 | uo | toul | outside |
| :--- | :--- | :--- | :--- |
|  | ou | roumro? | should burn |
| 2 | ei | mei | fire |
|  | ie | nigsiet | love |


| 3 | ai | ai | crab |
| :---: | :---: | :---: | :---: |
|  | ia | ətia | he/she said |
| 4 | иə | kuər | ear |
|  | әu | meun | shape |
| 5 | iu | mium | man also |
|  | ui | rui | rope |
| 6 | oi | moi | doll/bride |
|  | io | kion | pineapple |

- In the pronunciation of the diphthongs [ei], [ie], a natural sound of $/ \mathrm{J} /$ is realized between the two segments of each of the two segments of each of the diphthongs, making them sound like [eji], [ije]. The $/ \mathrm{J} /$ is optional.
- Three vowel glides -Apart from diphthongs Koren has three forms of pure three vowel glides -
/uoi/, /uia/ and /uəi/

| 1. | uəi | neinuei | earth | atuei | to wipe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. | via | ruiak $^{\text {h }}$ ət | hundred | úiətiə? | a vegetable |
| 3. | uoi | moiruoi <br> $\mathrm{k}^{\mathrm{h}}$ uoini:y | wedding honey | muoida <br> citruoi | flour <br> danger |

## 3．1．2．5 Distribution of Vowels：

| Sino． | Vowels | Initials | Medial | Final |
| :---: | :---: | :---: | :---: | :---: |
| 1 | ә | əla：m | wə＇ák | əくさ̀ |
|  |  | （dance） | （crow） | （cxclamation mark） |
| 2 | e |  | Osen | ake |
|  |  | （to teasc） | （red） | （ lcg ） |
| 3 | a | ai | əra | əma |
|  |  | （crab） | （its fruit） | （him／her） |
| 4 | i | inn | rimhoi | riki |
|  |  | （house） | (aroma) | （horm） |
| 5 | 0 | O］ | kolkái | mitcó |
|  |  | （sit） | （sweet potato） | （blind） |
| 6 | u | upa | zupi |  |
|  |  | （elders） | （coconut） | （seed） |
| 7 | e： | e：Iwar | əse：m | me： |
|  |  | （outshine） | （blow） | （meat） |
| 8 | a： | ar：si | səm〕a：k | əsà： |
|  |  | （star） | （juggery） |  |
| 9 | i： | i：te | asi：n | ni： |
|  |  | （nothing） | （small） | （sun） |
| 10 | o： | o：iney | əco：p | əlò： |
|  |  | （tender／soft） |  | （to earn） |
| 11 | u： | u：m | əhu：m | əmu： |
|  |  | （gourd） | （husk） | （he／she saw ） |

In the distribution of vowels in words. they oceur in the initial. medial and final. without any restrictions and that applies to even the elongated forms of the vowels. But this does not occur in the distribution of all Koren diphthongs.

### 3.1.2.6 Generalization on vowels:

1. All the Koren vowels have two forms, i.e. short and long. for example, [əra] - 'its fruit'; [a:rsi] - 'star'.
2. The vowel[ $[$ ] is used extensively before words in the language which can mean to possess, confirm. indicative express emotions and indicate seconds and third person singular as well. for example [anci] - 'he/shc/it has'; [acer] - 'it sprouts'; [allaRe], [anu:] - 'surprised or shocked expression; [ anijei] -'it is'.
3. Only the change of vowels can also give different meaning in a word. For example,
```
əpir - 'uneven edge'
әper - 'to kick'
 ppor - 'over saturated'
әpər - 'frills/flare'
 ppar - 'to bloom'
```


### 3.1.2.6 One Morphophonological Feature:

When two vowel come together in morpheme boundary -
a) DELETION: one vowel gets dropped, i.e, v \#-\#v->-vFor example, [əna ani] -> [ənani] - 'he is unwell'
[əru ara:n] -> [ərura:n] - 'bones and others'
b) EPENTHESIS: glide is inserted, i.e. $\mathrm{v} \#-\#->v[i] v$ For example, [əpi $\partial \mathrm{pu}]->$ [әрijəpu] - 'grand parents'
[əti əni] -> [ətijəni] - 'he said'

### 3.1.2.7 Vowel Symbolism:

One of the most interesting features of Koren, as of some other languages of the Tibeto-Burman family, is that it has a wealth of words for close distinction of things by changing the vowels; the degree of the thing described can change. This phenomenon appears in many things, from describing different stages of flowers, of texture, state, taste, length, height, oiliness, ways of cutting, patterns, colours, and many others. Even within a category, it can be further sub-divided into different sections. This phenomenon is an example of the importance of expressing culture through language. It also reveals the rich tapestry of the language woven with vivid descriptions regarding various actions or states of things, the way nature and the surroundings are observed at close range that resulted in rich use of vowels. Not only this, the language has various words that reflect many unique features of the Koren culture and tradition, with the keeping of detailed behaviour of the thing that is close to the speakers and in employing the vowels as vehicle to categorize the world around. And it is overwhelming to
know that the language is structured in such a way as to unearth interesting linguistics features. The following examples will highlight the role of vowel in the language in determining the various ways of expressing something. The whole concept of using which vowel to use where is rather predictable but not always.

Emphasis on flower:
A. The budding stage:
a) amombit - a newly emerged bud and small
b) amombet - a slightly better formed bud than before
c) amombot - a half formed bud, not properly formed
d) amombut - a fully formed bud about to bloom
e) amombiel - a shapely formed bud and small
f) amombuol - a bigger shapely formed bud
g) amomsir - many small tight buds in clusters
h) amomser - many better formed buds in clusters
i) amomsor - many half formed buds in clusters but un-uniform
j) amomsur - many full formed buds in clusters
k) amomci:m - clusters of newly formed buds

1) amomcu:m - clusters of bigger formed buds
m) amomci:t - many small tightly closed buds
n) amomce:t - many small better formed buds
o) amomco:t - many small not fully formed buds
p) amomcu:t - many fully formed buds in clusters
q) amomhit - forming out of small newly buds
r) amomhet - forming out of a small bud
s) amomhot - forming out of a bud unknowingly or of a sudden
t) amomhut - forming out of well formed buds
B. Flowering stage:
a) әpa:r uŋ- fully bloomed big flower
b) əpa:r in - perfectly formed smaller flower
c) $\partial \mathrm{pa:r} \mathrm{p}^{\mathrm{h}_{i t}}$ - a perfectly formed small flower
d) əpa:r phet - a small newly bloomed flower
e) əpa:r $p^{n}$ ot - newly bloomed not that fully formed
f) əpa:r $p^{h} u t$ - big newly bloomed flower.
g) əpa:r bit - a recently opened bloom
h) əpa:r bet - a recent slightly opening bloom
i) əpa:r bot - a half opened bloom
j) əpa:r but - a big recently opened bloom
k) əpa:r ien - a properly medium sized bloom
2) әpa:r bom - a bunch, cluster or bough of flowers
m) əbombəlikapa: - heavily laden bough of flowers

Not only are these descriptions but there more to describe the colours of the blooms, the shades and degree of the smell produced etc. Some examples are as follows:
a) əpa:r cékp ${ }^{{ }^{n}}{ }^{\text {it }}$ - small but distinct white bloom
b) əpa:r báyvùr - big white bloom]
c) əpa:rrimhitti-strong and distinct fragrance of the flower
d) əparrimhutti - blooms with fragrance spread wider

Apart from these examples. still more can be added but one thing which can be seen clearly is the role of certain vowels that gives out certain meanings, thus, the vowel, [i] express the sense of smallness, the vowel [e], with slightly a degree more than the small, vowel [ o ] is related with something that is not properly formed or not that impressive, while vowel [u] is related with something with big and visible. These uses of vowels extend to the description or the state of existence or action of other things as well, for example, softness of things or person:
a) ənempir - small and soft
b) ənemper - soft
c) ənempor - soft and unhealthy
d) ənempur - big and too soft
e) ənémdim, ənémci:t - small and soft/supple
f) ənémdèm, ənémce:t - slightly soft and supple
g) ənémdòm, ənémco:t - soft or supple
h) ənémdùm, ənémcu:t - too soft or supple
C. Roundness of things:
a) əceylil - small and round
b) aceŋlèl-slightly small and round
c) əcenlòl - round but unappealing
d) acenlùl - big and round

The use diphthongs indicates shape as well. for example.
e) acenbiel - shapely and small
f) əcenbuol - shapely and big
D. Crack or split:
a) əkekrak - the crack or split is slightly big
b) əkikrak - the crack or spiit is small
c) əkekre:k - short small crack or split
d) $ə k i k r e: k$ - shorter small crack or split

Here the changes of vowel happen in the second syllable.
E. Oiliness:
a) $\partial t^{\mathrm{h}}$ aidek - slightly greasy
b) $\partial t^{\mathrm{h}}$ aiduk - greasy
c) $\partial t^{h}$ aisir -oily
d) $2 t^{h}$ aiser - a bit oily
e) $\partial t^{h}$ aisor - oily and not that appealing
f) at $^{h}$ aisur - very oily
F. Length [mainly clothes]:
a) acualpir - small and long
b) acualper - slightly long
c) acualpor - long and un-appealing
d) acualpur - very long
G. Dryness:

| 1 | әca:rbir |  |
| :---: | :---: | :---: |
| 2 3 4 | әca:rber <br> әca:rbor <br> əca:rbur | These degrees of dryness is due to lack of moisture and resulted from excessive heat, can be leaves, soil, etc. |
| 1 | əreibir |  |
| 2 3 4 | əreiber <br> əreibor <br> əreibur | Dryness can be a result of prolonged exposure heat or sunlight and also done for other purpose. <br> For example, smoking meat for storage, etc. |
| 1 | əhu:lbir |  |
| 2 3 4 | əhu:ber <br> əhu:bor <br> əhu:rbur | Dryness referring to something that was wet and is aired or spread out or heated. Something that was wet before as in clothes, etc. |

H. Ways of cutting:
a) ətuktən - to cut it off
b) ətuk lek - to cut into bits
c) Dtuk kelek - to curve out by cutting
d) ətuk $t^{\text {their }}$ - to clear an area by cutting
e) ətuk yal - to cut down an area bare
f) ətuk noi - to cut into pulp
g) atuk fum -- to cut sharp edges
h) ətuk cier - cut by leaving marks
i) stuk boy - cut it short
j) atuk $k^{h_{i}}$ iek - to cut it down
k) ətuk $k^{h}$ ur - scooping out by cutting

1) ətuk $k^{h}$ uor --making a depression by cutting
m) $ə$ tuk sət - to cut down with strikes

The above forms might be a different way of expressing the various forms of cutting. Here the pattern does not follow the usual vowels [i], [e], [o] and [u], because all the suffixes does not allow except examples like in (b) [atuklek], which can allow [atuklok] - 'cut off a bit' and [atukluk] - 'cut off a chunk', but [atuklik] is not used.

The whole thing can be a way of highlighting the numerous semantic categories, its use in giving cultural features that is people's interests in flowers, natures and the attention paid to almost everyway of describing a thing or an action. In forming the words the lexical features are given importance as well as the function of those words with the use of certain vowels in the language to convey messages.

### 3.1.2 8 Free variations:

There are some cases of vowel variation sometimes, for example: pu:r, po:r - talkative

```
burr. bo:r - cover/ shell
```

Here both the vowel /u:/ and /o:/ can be used with no effect on the meaning of the two words.

### 3.2 Allophones:

### 3.2.1 Consonants:

i. The consonant [h] has two allophones, [ h ] that occurs when the lexical item has the sense of emphasis, and a vowel follows or precedes it, for example, [aћuat] - 'to scratch', [ tuihip] - 'cold water', [aћai:l] - 'to burn'; [he?] - 'throw', etc. the condition is pragmatic and not grammatically or phonologically conditioned. And [h] occurs elsewhere, for example, [kihe] - 'turn'; [hawaha] - 'that', etc. the [h] is pronounced as [ h ] in normal sense of speaking when emphasis is not given to the item.
ii. The voiced fricative consonant [ $\mathcal{f}$ ] has an allophone [j] which can be interchanged with each other in use, except in some cases, it gives out a different meaning, for example, [ $\mathfrak{a n}$ ], [Jan] - 'night'; [afum], [aJum] - 'pointed (as in objects)'; [afin], [a]in] - 'crack' etc. but in some words when the two phonemes are interchanged they give out different meanings, thus, [a才ati] - 'his/her community' and [Jjati] - 'its paining'. The $/ \mathcal{J} /$ and $/ \mathrm{J} /$ are two different phonemes.
iii. The fricatives labio-dental $[v]$ is the allophone of $[w]$. The two phonemes can be interchanged, especially in emphasizing the word that contains [w], [v] is used. Thus, [wen] and [ven] means 'today'; [awom] and [avom] means 'black'. But native speaker prefer to use [vur] for 'snow' instead of [wur] or [avoi] for 'flesh' instead of [awoi]; [wa:ncun] for 'sky' instead of [va:ncun], and [hawahan] for "there" instead of [havahan] even if both the pronunciation are acceptable.
iv. The fricative $/ z /$ has two allophones, that is, $/ z /$ and $/ 3 /$. For example, in front of diphthong, $/ \mathrm{z} /$ can be replaced by the long $/ 3 /$ as in [ $\partial z u a n]$ and [əzuan] both refers to 'flying'.

### 3.2.2 Vowels:

The vowels have common allophones. All the eleven vowels have the nasalized allophones when they are preceded by the nasals $/ \mathrm{m} /, / \mathrm{n} /, \mathrm{n} /$ and $/ \mathrm{n} /$.

Nasalization of a vowel before a nasal consonant is caused by speakers anticipating the lowering of the velum in advance of a nasal segment the result is that the preceding segment takes on the nasality of the following consonants as in [khẽn] - 'plate'. The Koren language has this type of assimilation that is termed as regressive assimilation, since the nasalization is, in effect moving backward to a preceding segment. The presence progressive assimilation can be seen in the language since the nasality moves forward from the nasal consonant into the
vowel. This results from not immediately raising the velum alter the production of a nasal stop. Some examples are given bellow:

$$
\begin{aligned}
& \text { [nẽ:l] - sand } \\
& \text { [nı̃:] - person } \\
& \text { [nã:] - fish } \\
& \text { [mũl] - fur or hair. }
\end{aligned}
$$

### 3.3 Syllable structure:

### 3.3.1 Canonical Syllable structure:

(C)(C)V(C)

Illustration of possible syllable structure:

| Monosyllabic words: | V | ò | yes |
| :--- | :--- | :--- | :--- |
|  | CV | la | song |
|  | VC | u:m | gourd |
|  | CVC | ban | arm |
|  | CCVC | kren | falling sound |
| Disyllabic words: | CVCV | mei | fire |
|  | VCVC | onor | seven |
|  | VCV | ite | sit still |
|  | CVCCVC | ramcan | nothing |
|  |  |  | forest |


|  | CVCVC | wa?ak | crow |
| :---: | :---: | :---: | :---: |
|  | VCCVC | ink ${ }^{\text {h }}$ ar | door |
|  | VCVC | aithi:y | ginger |
|  | CVCCV | $\mathrm{t}^{\text {tièmpu }}$ | priest |
| Trisyllabic words: | CVCCVCCV | $\mathrm{t}^{\text {hiemmincu }}$ | leach |
|  | VCVCCVC | əka:rrə? | sometimes |
|  | VCVCVC | ət ${ }^{\text {h }}$ eidan | remember |
|  | CVCVCVC | sonəsut | goldsmith |
|  | CVCCVCVC | kinnisu:n | double |
|  | CVCVCCVC | $k^{\text {h }}$ oma:ksa:m | curse |
|  | CVCVCV | səmja:kbəy | sugar |
|  | CVCVCCV | sabəkkai | lion |
|  | VCVCV | ənumei | wife |
|  | VCCVCV | ənmani | they |
| Tetrasyllable | CVVCCVCCVCV | $t^{\text {h }}$ iemmincupu | teacher |
|  | VCVCCVCV | әji:ynisuo | everyday |
|  | CVCVCVCVV | serinutui | milk |
|  | VCCVCVCVC | ənlenə?en | green vegetable |

Koren language is basically monosyllabic. The division of utterance into syllable is not always predictable in this language. In case of disyllabic and polysyllabic words seen, most of them appear to be compound words. For
example. [sabakkai] (sa-mimal. bah-hair, kai-long). These structures are the ones found in the collected basie words data. Even from these examples it is clearly visible that there are a great number of syllables.

Initial consonant cluster is absent in the Koren word system, but it occurs in borrowed words only or in onomatopoeic words, thus, [bras] from English 'brush' which is interpreted as toothbrush in Koren. Other examples are [klas] for 'class'; [bron] for 'brown' etc. but the typical Koren speaker who is above 55/60 years or illiterate will pronounced with the addition of the existing vowel in between the consonant cluster. Thus. [kalas] - 'class'; [boron] - 'brown'; [pelet] - 'plate' etc.

### 3.4 Geminate consonants:

Geminate is the combination of two identical consonants in a cluster form. In Koren, the geminate clusters are:-

| 1 | rr | arritui | eggs |
| :--- | :--- | :--- | :--- |
| 2 | nn | kinni | two |
| 3 | pp | apoppá | its wounded |
| 4 | mm | nemmák | expensive/costly |
| 5 | ll | kellet | turn |
| 6 | kk | sabəkkai | lion |
| 7 | tt | kuttin | nail |
| 8 | yy | capyok | stiff |

The generalization of the above examples is that geminate consonants occur only word medially between vowels.

### 3.5 Consonant Non-Geminate Clusters:

There is absence of consonant clusters in word initial and final position in the language. However, there is an exception in formation of onomatopoeic words, for example, 'krinkrin' for the sound of bell, 'kloikloi' for a rolling object, etc. (the cluster usually comprise of $/ \mathrm{k} /$ with $/ \mathrm{r} /$ or $/ \mathrm{l} /$. Consonant clusters occur only in word medial position.

### 3.6 Permissible Consonant Clusters (Word Medial):

| $\downarrow \rightarrow$ | p | b | t | d | c | $\ddagger$ | k | $k^{h}$ | s | h | S | 1 | r | w | $\square$ | $p^{\text {h }}$ | $t^{\text {h }}$ | 1 | m | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p | pp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pn |  |  |
| b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| t | tp |  | tt |  | tc |  | kk | $\mathrm{tk}^{\mathrm{h}}$ |  |  |  |  | tr |  |  |  |  |  |  |  |
| d |  |  |  |  |  |  |  | $\mathrm{dk}{ }^{\text {h }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| c |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| J |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| k |  | kb | kt |  |  |  |  |  | ks |  |  | kl |  |  |  |  |  |  |  |  |
| $k^{h}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| s |  |  |  |  |  | S3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ? |  |  |  |  |  |  |  |  |  | h? |  |  |  |  |  |  |  |  |  |  |
| h |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  | 11 |  |  |  |  |  |  |  |  |
| r |  | rb | ${ }_{\text {r }}$ | rd | rc |  | rk |  | rs | rh |  |  | rr | rw | T] |  |  |  | rm |  |
| w |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ๆ |  |  | nt |  |  |  | 7k | $\eta \mathrm{k}^{\text {h }}$ | ys | yh | g $\int$ | nl |  |  | ท1 |  |  | 1n | m |  |
| $\mathrm{p}^{\text {n }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{t}^{\text {n }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $m t^{h}$ |  |
| n |  | nb | nt | nd | nc |  |  |  | ns |  |  | nl |  |  |  |  | $\mathrm{nt}^{\text {h }}$ | nn | nm |  |
| m | mp |  | mt |  | mc |  |  |  |  |  |  |  |  |  |  | $m p^{h}$ | mn |  | mm |  |
| s |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\mathrm{n} \Omega$ |

Generalization of the above consonant clusters shows no clustering of [\%]. $[?] .[\mathrm{J}]$ and $[\mathrm{n}]$ with any other consonants. There is absence of threc consonant clusters.

### 3.7 Word stress:

In my utterance, some vowels are perceived as more prominent than others. Syllabic segments perceived as relatively more prominent are stressed. "Stress is a lower term for the combined effects of pitch, loudness, and length- the result of which perceived prominence." ${ }^{י 1}$ In general. Koren stressed vowels are higher in pitch, longer, and louder than unstressed ones. But exceptions are three as well. Koren being a tone language does not change the pitch level or contour of tones to mark stress. So relative prominence is marked by exaggerating the vowel length or pitch contour. The symbols $/ \times /$ for primary stress // for secondary stress or stresses. In Koren language, the placement of stress occurs word-filnally. For example, [waiwidk $\left.{ }^{h} \hat{u}\right]$ - 'dust', and [əruət $\left.t^{h} e^{x}\right]$ - 'husband'.

> /la:1sik/ - 'to make noise'.
> /tha:sik/ - the water to be filled'. /wa:nrồm/ - 'heaven'.

[^5]
## Chapter 4

### 4.0 TONE AND INTONATION

### 4.1 Tone in Language:

Speakers of any language have the ability to control the level of pitch of the utterance. They are able to do this by controlling the tension of the vocal folds and the amount of air that passes through the glottis. The combination of tense vocal folds and greater air pressure results in higher voice pitch on vowels and sonorant consonants, while less tense vocal folds and lower air pressure results in lower voice pitch. This controlled pitch movement found in human language can be of two kinds; tone and intonation.

This chapter will deal wit the formation of tone and its function in the Koren language. The chapter will show the importance of tone in the language and its significance in Koren word meaning. Being a tone language, this part of the study describes some, but by no means all, of the various aspects of Koren tone, along with difficulties involved in their analysis. The main object is to bring out the key features of the tone system in the language. The attempt to show a basic organizational difference and existence of the tone on the action of gliding - tone and level - tone of the Koren language is of the advances in the field proposed in this section.

### 4.2 Basic Characteristics of the Language:

* $\wedge$ language is said to have tone or be a tone language when differences in word meaning are signaled by differences in pitch."1 Or a tone language may be defined as a language having lexically significant. contrastive, but relative pitch on each syllable. Pitch on forms in tone languages functions very differently from the movement of pitch in a non-tone language. When a speaker of English says "a cat?" with a rising pitch, the word 'cat' does not mean anything different from the same form pronounced on a different pitch level or with a different pitch contour. In contrast, when a speaker of a tone language such as Koren pronounces the form [amal] with a falling pitch [amal], it means 'grain or pieces', but when the same form is pronounced with a rising pitch [amal], the meaning is 'to pick off corns from corncob, chilies from the plant or small fruits, etc.' There is no parallel to anything like this in non-tone languages such as English. In fact, Koren language show tones at certain pitch levels. It has tones head at high, mid, and low pitch levels. In the examples below the upper cases letters H, M, and L stand for high, kid, and low tones respectively. An auto-segmental notation is formed as an association line, is drawn from the letters to the vowel links the segments with their tones:-

| H | M | L |
| :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ |
| [athin] | [athin] | [athin] |
| swollen | hinder/block | wood |.

Tone languages can be divided broadly into two types:- "Level tones that signal meaning differences are called register tones: two or three register tones are the norm in most of the world's register- tone languages, though four have been

[^6]reported for Maratec. a language spoken in Mexico. ${ }^{-1}$ A single tone may be associated with more than one syllabic element; in Koren also there are eertain polysyllabic forms that show the sane tone on each syllable (here, the diacritic ['] indicates a high tone and the diacritic [ $\rceil$ indicates a low tone) --

High tone and low-tone words in Koren:

$$
\begin{aligned}
& \text { pépá:r - cheap and quality clothes shops } \\
& \text { zùk }^{\text {hà }} \text { - local brewed alcohol } \\
& \text { oleit }{ }^{\text {h }} \text { - farming/he did }
\end{aligned}
$$

Auto-segmental notation and association lines can be used to represent the tone or characteristic of an entire form. The single underlying tone unit is associated with all vowels.

"In some languages, tones change pitch on single syllabic elements. Moving pitches that signal-meaning differences are called contour tones. In Mandarin, both register and contour tones are heard. ${ }^{, 2}$ For examples:-


[^7]
$\overbrace{\text { [ma] }] \text { scold high fall }}^{H I}$

Although, tones may seem exotic to native speakers of Western Europe and other non-tonal languages, they are not uncommon but very widespread in world languages. According to Pike, "The languages of Southeastern Asia (China, Burma, Indo-China, Siam) are largely tenal, as ate the languages of Africa, west of Ethiopia and south of the Sahara (Sudanic, Bantu, Bushman, and the Hottentot groups). In North America, various tone languages are found in Southwestern Mexico (Mixteco, Mazateco, Amuzgo, Chatino, Chinanteco, Chocho, Cuicateco, Otomi, Ilapaneco, Irique, and Zapoteco) and the United States (Navho, Apache, and others)." Intone languages the pitch contrasts or significant pitch differences entail one pitch being kept different or separated from another in the immediate context. Two level pitches may contrast by one of them being relatively higher than the other. On the other hand, a rising pitch may contrast with a falling pitch or one rising pitch with a second pitch which, relatively, rises higher. Tone languages have a major characteristic in common: it is the relative height of their tonemes (the contrastive lexical units of sounds are phonemes, or, in tonal analysis, tonemes) or their actual pitch, which is pertinent to their linguistic analysis. A man and a woman may both use the same tonemes, even though they speak on different general levels of pitch. Either of them may retain the same tonemes while lowering or raising the voice in general, since it is the relative pitch of syllables within the immediate context that constitutes the essence of tonemic contrast.

Each syllable of a tone language carries at least one significant pitch unit. Most frequently, there is a one-to-one correlation between the number of syllables and the number of tonemes in any specific utterance. Korem tends to be of this

[^8]IPpe: in the word [athinן ". swollen'. instanced before there are wo syllables may have more than one toneme. Tone languages may have monosyllabic or dissyllabic (or (risyllabic). Tone languages are by no means all alike in the kinds of tonemes they utilize or in the function of these tonemes in their grammatical systems. One of the most striking differences exists between those systems which arte comprised largely of level tonemes and those whose tonemes are mostly of a gliding type. Koren falls under the level toneme or within the limits of perception. the pitch of a syllable does not rise or fall during its production. While in a gliding toneme, during the pronunciation of the syllable on which it occurs there is a perceptible rise or fall, or some combination of rise and fall, such as rising-falling or falling-rising. A language has restricted number of pitch contrasts or registers bctween level tonemes. The number of permitted registers in Koren is about three in numbers.

### 4.2.1 Lexically Significant Pitch:

Significant pitch distinguishes the meaning of utterances. Lexically, pitch distinguishes the meaning of words. Pitch is also significant in English, but in English. the semantic differential applies to the phrase as a whole constituting a shade of meaning rather than a dictionary or lexical meaning. For this reason, English is not a tone language even though it utilizes significant pitch, since a tone language must have pitch that is both significant and lexical. For example- in Koren, [mai] means 'pumpkin', but [mai] means 'face', and the only difference between them is that the first word ends in a high pitched vowel cluster and the second word ends in a low pitched one.

### 4.2.2 Contrastive Pitch:

By a contrast there is a difference from one thing to another within a functional system. As within the system of English [p] is different from or contrasts with $[\mathrm{b}]$ as seen in [pin] and [bin]; the contrastive lexical units of sounds are phonemes or can be known as "tonemes' in tonal analysis according to Pike. In tone languages, the pitch contrasts or significant pitch differences is being kept different or separated from another pitch in the immediate context. There is contrast in two level pitches with one of them being relatively higher than the other. Contrast between a rising pitch with a falling one, or a rising pitch with a second pitch which rise higher than the former.

### 4.2.3 Relative Pitch:

The languages have a major characteristic in common; it is the relative height of their tonemes, not their actual pitch, which is pertinent to their linguistic analysis. The important feature is the relative height of a syllable in relation to preceding ad following syllables. The relationship of one specific syllable to the other syllable in the specific syllable is important. A man and a woman may both use the same tonemes even though they speak on different general levels of pitch. Either of the may retain the same tonemes, wile lowering or rising the voice in general, since it is the relative pitch of syllables within the immediate context that constitute the essence of tonemic contrast.

### 4.2.4 Syllable Pitch:

As mentioned earlier, each syllable of a tone language carries at least one significant pitch unit. Most frequently, there is a one to one correlation between the number of syllable and the number of tonemes in any specific utterances.

Koren tends to be of this type: in the "ord [cacam] tea without sugar". are two syllables and two tonemes. "I lowever. a syllable may have more than one tonemes in some language. ${ }^{-1}$

### 4.2.5 Level Pitch Register System:

No tone languages are alike in the kinds of tonemes they utilize. or in the function of these tonemes in their grammatical systems. The striking differences that exist between those tonemes are comprised largely of level tonemes and those whose tonemes are mostly of gliding types.

A level toneme is one in which within the limits of limits of perception, the pitch of a syllable does not rise or fall during its production.

A gliding toneme is one in which during the pronunciation of the syllable on which it occurs there is a perceptible rise or fall or some combination of rise and fall, such as rising-falling or falling-rising. The manner of level-gliding distinction may affect a tonal system is indicated in the following:

### 4.2.5 Number of Register:

When a language has a small, restricted. number of pitch contrasts between level tonemes, these contrastive levels can be termed as registers. The number of permitted registers in various languages seems to be limited to two or three.

[^9]
### 4.3 Tones in Koren:

The most distinctive feature of the Koren tone is that it has a two-pattern tone system. And there are three main level tones namely mid-high 2 . mid 3 and low 4. Besides this. there is one more tone which is high 1 and does not occur in abundance. It also rarely occurs in monosyllabic words and it is usually preceded or followed by low 4 tone syllable.

For example;

$$
\begin{aligned}
& 1+4 \rightarrow[\text { ite }] \text { - 'nothing' } \\
& 1+4 \rightarrow[\text { sopa }] \text { - 'that male' } \\
& 1+4 \rightarrow[\text { pinti }] \text { - 'very angry' } \\
& 4+1 \rightarrow[\text { วŋŋje'? }] \text { ' what' } \\
& 4+1 \rightarrow[\text { nəy nu? }] \text { - 'you?' }
\end{aligned}
$$

### 4.3.1 Pitch pattern:

### 4.3.1.1 Noun:

## Monosyllable Disyllable Polysyllable

| a:r (chicken) | Jalmun (bed) | copibut (boiled cabbage) |
| :--- | :--- | :--- |
| 2 | 42 | 234 |
| u:m (gourd) | a:rsi (stare) | campərəkuy (lime tree) |
| 3 | 24 | 3324 |


| an (vegctable) | incor (backyard) lamkeipu (leader) |  |
| :--- | :--- | :--- |
| 4 | 43 | 442 |
| mit (eye) | motkor (banana peel) ocekp ${ }^{\mathrm{h}}$ it sparkling |  |
| 3 | 42 | 322 |

### 4.3.1.2 Verbs:

| Disyllable | Polysyllable |
| :--- | :--- |
| aca:k (eat) | ənuifa (amuse) |
| 34 | 342 |
| ala:m (dance) | risut $^{\text {h ier (clean) }}$ |
| 32 | 333 |
| 2mu (see) | cokjelduk (mix) |
| 33 | 424 |
| 3in (sleep) | $\mathrm{k}^{\text {h }}$ omrepsik (gather) |
| 43 | 243 |

Monosyllable verbs do not exist on their own but takes a suffix when written as a word.

### 4.3.1.3 Adjectives:

| Disyllable | polysyllable |
| :--- | :--- |
| asa (good) | əwa:rpen (bright) |
| 34 | 324 |
| melsət (good looking/beautiful) | ədairel (cool) |
| 24 | 324 |
| 2bən (white) | ajinmhul (dark) |
| 32 | 324 |
| cenlul (round) | aseijon (tall) |
| 24 | 334 |

### 4.3.2 Tone in syllable:

Monosyllable ..... 23

$$
4
$$

Disyllable2432333442

Polysyllable 234
$2+3$

322

324

342

333

3324

442

424

### 4.3.3 For tones concerning syllables with diphthongs:

| Monosyllable | disyllable | polysyllable |
| :--- | :--- | :--- |
| ui (dog) | maibuo (pumpkin leaf) tuolp ${ }^{\mathrm{h}}$ ietna |  |
| 4 | 3434 | 32342 |
| lei (tongue) | neinuoi (earth) | moiruoibuca:k (wedding feast) |
| 34 | 3434 | 343233 |
| suon (cook) | Ja:mp ${ }^{\mathrm{h}}$ uon (jackfruit) pat $^{\mathrm{h}}$ ienoi (believer) |  |

In the examples above, may of the diphthongs usually have mid to high rise or mid to low fall. In case of three vowel clusters, instead of three distinct tone only two toes are realized as the middle vowel closely follows the first.

### 4.3.4 Tones and their changes:

When a Koren word or syllable is uttered aloud, the sound produced consists of not only the consonants and the vowels but also a tone. But for a syllable ort tone word occurring in a phrase or a sentence, the tone is often replaced by another tone. The original tone and those which takes its place ate allotones of one toneme.

Each tone has its shape ort feature. This consists of two elements, pitch and glide. 'Pitch' indicates whether the tone is high or low or mid. And 'glide' means the rises or falls. The pitch here is relative in the sense that every individual has his/her range of voice.

### 4.3.4.1 Monosyllable:

The pitch of an individual's voice range ca be divided into:
a) high
b) mid high
c) mid
d) low

The four naming tones in the Koren language may be described as follows:
a) tone 1. high it starts from mid high and rises to high. c.g. [pin] -height of anger
b) tone 2 mid high - it starts from mid and rises to mid-high. e.g [wa:] - • bird ${ }^{-}$
c) tone 3. mid -- it starts somewhere a bit lower than mid and from mid it ends between and mid and low, e.g [som] -- 'ten'
d) tone 4. low - it starts about mid-low and falls to low. [bel] - 'stung'

### 4.3.4.2 Disyllables:

a) Toneme 1 becomes 2 when followed by 2 . remains high when preceded or followed by toneme 4 . and it changes to toneme 2 when preceded or followed by toneme 3 or 1 .

For example;

$$
\begin{aligned}
& 1+1 \rightarrow 12 \text { [pin pin] - 'very angry' } \\
& 1+2 \rightarrow 22\left[\mathrm{k}^{\mathrm{h}}\left[\mathrm{k}^{\mathrm{h}} \mathrm{i}\right]-{ }^{-t h a t}(\mathrm{up})^{-}\right. \\
& 1+3 \rightarrow 23\left[\text { So } \int 0\right]-\text { "that (across) }{ }^{\text {. }} \\
& 1+4 \rightarrow 14\left[\mathrm{k}^{\mathrm{h}} \mathrm{k}^{\mathrm{h}} \mathrm{in}\right] \text { - 'there' } \\
& 2+2 \rightarrow 22\left[\text { cek p }^{\mathrm{h}} \mathrm{it}\right]-\text { [sparkle] } \\
& 3+1 \rightarrow 32 \text { [com sik] - 'to be washed' } \\
& 4+1 \rightarrow 41\left[b a: 1 k^{\mathrm{h}} \mathrm{I}\right]-\text { - that aurum' }
\end{aligned}
$$

b) Toneme 2 remains high if preceded by tonemes 3 and 4, it changes to 4 if preceded by 2 and it remain as it is even if preceded or followed by 1. For example;

$$
2+2 \rightarrow 24[\text { a:r cak ] - 'chicken' }
$$

$$
\begin{aligned}
& 3 \cdot 2 \rightarrow 32\left\lfloor 1^{6} \text { incon } \mid\right. \text { - branch } \\
& +2 \rightarrow+2 \text { 【danka: }\rfloor \text { 'money } \\
& 2+3 \rightarrow 23 \text { [arsi] star' } \\
& 2+4 \rightarrow 24 \text { [wa:l lul] -. }{ }^{-1} \text { shinc } \\
& 2+2^{\prime} \rightarrow 22 \text { [a:rar] - chicken to chicken' }
\end{aligned}
$$

c) Toneme 3 remains the same when preceded by $2,43,1,3$, it changes to toneme 2 when followed by the tone 4 when it is reduplicated.

For example;

$$
\begin{aligned}
& 1+3 \rightarrow 23\left[\int \text { a:n } \mathrm{k}^{\mathrm{h}} \mathrm{on}\right] \text { - 'tall' } \\
& 2+3 \rightarrow 23 \text { [wai po:l] - 'rice cake' } \\
& 3+3 \rightarrow 33 \text { [sam hoi] - 'sporting long air' } \\
& 4+3 \rightarrow 43 \text { [hu:m pi] - 'tiger' } \\
& 3+2 \rightarrow 32[\mathrm{ram} \text { a:r] - 'wild fowl' } \\
& 3+4 \rightarrow 24 \text { [rom ui] - 'wolf/fox' } \\
& 3+3^{2} \rightarrow 34[\text { ja:m ]a:m] - 'slowly' }
\end{aligned}
$$

d) The toneme 4 remains unchanged except when the same syllable is reduplicated, the second syllable becomes slightly lower than the first one.

For example;

$$
\begin{gathered}
4+4^{3} \rightarrow 44^{4}[\text { วn } \partial n] \text { - 'curry to curry' } \\
{[\text { ui ui }] \text { - 'dog to dog' }}
\end{gathered}
$$

[^10]
### 4.3.4.3 Polysyllable:

In polysyllabic words tone variation is not clearly predictable.
For example;

$$
\begin{aligned}
& 3+3+2 \rightarrow 422 \text { [samk }{ }^{\text {h }} \text { itna] - 'hairband' } \\
& 2+3+2 \rightarrow 422 \text { [a:mitui] - 'egg' } \\
& 3+3+2+2 \rightarrow 4322 \text { mei al cep na] - 'tong' } \\
& 3+4+2 \rightarrow 244 \text { [nai pay doy] - 'child' } \\
& \left.4+2+4 \rightarrow 324 \text { [wai wid } \mathrm{k}^{\mathrm{h}} \mathrm{u}\right] \text { - 'dust' } \\
& 3+2+2 \rightarrow 422 \text { [kut ca:m bel] - 'pot for washing hand' } \\
& 3+4+4 \rightarrow 342 \text { [thei can kup] - 'wild fig tree' } \\
& 4+2+3 \rightarrow 432 \text { [sum phai ji:n] -- 'cloudy' }
\end{aligned}
$$

### 4.3.5 Phonological Status:

Tone functions on three main levels besides the one level which occurs rarely. For the case of reference, tones are numbered from 1 to 4 (high to low) but for the pitch pattern only three are being used and here kid-high is replaced by high to avoid complications as is easier to read. Every syllable bears at least one or two of the four level tones and glides, which can readily be analyzed as combination of the level tones, are not uncommon. It is not probiematic to find minimal pairs of three words but minimal quadruplets do not exist.

Examples of lexical tonal contrasts level tones:

Word
tone
gloss

| akal | 2 | climb |
| :---: | :---: | :---: |
|  | 3 | strain |
|  | 4 | latch |
| $\mathrm{t}^{\mathrm{h}}$ in | 2 | shake off |
|  | 3 | hinder /stop |
|  | 4 | wood |
| Bel | 2 | pot |
|  | 3 | smear |
|  | 4 | string |
| วncəm | 2 | they are simple |
|  | 3 | their opinion |
|  | 4 | mustard |
| ว ${ }^{\text {cum }}$ | 2 | correct |
|  | 3 | slow |
|  | 4 | distant |
| anir | 2 | he/she/it stands |
|  | 3 | to stand |
|  | 4 | his/her/its way of standing |
| toy | 2 | a smaller variety |
|  | 4 | to receive |
| abok | 2 | messy/tangled |


|  | + | hair |
| :--- | :--- | :--- |
| Budu | 2 | fond of rice |
|  | 4 | foolish |

### 4.3.6 Reduplication:

Reduplication of a word is abundant in Koren. When a word is reduplicated the tones on the syllables do not change, in general.

For examples:
inkil inkak - 'nook and corner of the house'
3333
bubel ənbel - 'pots and all'

$$
3232
$$

$\mathrm{t}^{\mathrm{h}}$ inkup luykup - 'trees and plants
4444
However, in the examples below, the tone changes but for all these forms the tone level is the same.

For examples;

| Parent form | duplicated form |
| :--- | :--- |
| ənei (rich) | əninei (richer) |
| 34 | 343 |
| əhoi (nice) | əhihoi (nicer) |
| 34 | 323 |
| əva:r (bright) | əviva:r (brighter) |
| 32 | 323 |

The tone change results from the insertion of a syllable in between the cxisting two syllables. And the reduplicated syllable always consists of the first consonant of the second existing syllable, followed by the vowel [i]. .

### 4.4 Intonation:

As humans' most sophisticated means of communication, the mode of language exploits numerous formal devices in order to get the meaning of the message across. When words are strung together, the resulting meaning of the whole structure is a function of the romantic properties of the individual lexical items and of the syntactic relations that hold among them. It is also a function of the linguistic and situational context in which the utterance is produced. When speech is uttered, the vocal organs are set into motion in order to generate the sound pattern that corresponds to the underlying linguistic elements. In this generation process the speaker does not merely articulate the successive speech sound that makes up an utterance, but simultaneously controls other vocal features such as loudness, tempo, rhythm, pitch, voice quality etc. The later variations do not shape the phonetic identity of the segmental speech-sounds., but construct a truly 'supra-segmental' or 'prosodic' layer in the sound pattern. The prosody of an utterance adds an expressive dimension to the communication process: by modifying the prosodic features the speaker can supplement his utterance with element of meaning that is not explicitly contained in its lexical and syntactic make-up. The added meaning must be taken in a brood sense as communicative information which can be widely interpreted as: I want this to be done; this is a polite request; I don't believe that; I don't mean what I say; I mean the opposite of what I say; I emphasize this world; etc.

Intonation is one prosodic feature. which can be delined as the ensemble of pitch variations in speech caused by the varying periodicity in the vibration of the rocal cords. The most fascinating and intriguing thing about language is that it functions so eminently well in human communication. Therefore the evident goal of linguistic analysis is to lay bare the properties of language that supports its communicative role in the speech community. Undoubtedly intonation is one of the vocal means that can be put to use in conveving a message from speaker to listener. One of the main concerns is to come to grip with the communicative value of intonation.

In some ways it resembles music not only in its physical basis but in other ways as well-both have ties with emotion. The chief difference is that music is an art form and it is highly elaborated; we insist on exact intervals an exact combination, and we play allsorts of imitative and imaginative tricks which melodies \& rhythms .Language cannot afford that degree of originality, for it has to be conventional; it has more important business than transmitting feelings and this forces it to harness emotion in the service of meaning. It may be that the rising pitch on a question really reflects the speaker's inner uncertainty or his excitement or interest in getting an answer; but questions are a grammatical category \& high or rising pitch is one way of telling them from statements.

The typical use of intonation in a language usually means one of two things: the total quality of the sound by which he can distinguish one dialect from another whether he understands what is being said or not, and the tone of voice to which he reacts more or less emotionally.

In the example below one can feel the different sensations one feels on hearing the same sentence spoken in three different ways:
(a) Don't be angry
(b) Don the angry
(c) Don't be angry

The first is soothing or pleading; the second is assertive-it imposes the speakers will and is the way commands are usually made; the third most likely to be explanatory-it could be in answer to "How can I react to this?"

Yet language is a multi-façade subject and even here things are not as simple as they seem. The soothing intonation maybe overruled by a warning look-the speaker may be expressing something else or trying to subdue an impatience urge etc.

Intonation, as whole compromises of factors like rhythm, pause, length. and stress as well as pitch- that combine to make the prosody of the language.

### 4.4.1.1 General Characteristics of Intonation:

1. Constituted by sequences of pitches-intonation contours:

Every sentence, every word, every syllable is given some pitch when it is spoken. Even a sound in isolation is produced by vibrations whose frequencies constitute its pitch .In a way-there are no pitch less sentences. Fluctuations in pitch occur in the sentences of all languages. The intricacy of pitch change \& pattern of variation, rules of change can be blocked even though one speaks his language with little effort, their analysis is extremely difficult \& may induce one to conclude that no actual organization or rules are present, but that people use pitches by whim and fancy.
2. Intonation Contours:

In each language. however the use of pitch fluctuations tends to become semi-standardized. or formalized so that all speakers of the language use basic pitch sequences in similar ways under similar circumstances. These somewhat abstracted characteristics sentence melodics may be called intonation contours. The characteristics of intonation can be rough divided into several types. Some contours may be completely colorless in meaning: they give to the listeners no implication to the speaker's attitude or feeling. The mechanical contours are important for learning a language since failure to use them distinguishes one with a bad accent.

Other intonation characteristics maybe affected or caused by the individual's psychological state-anger, happiness, excitement. age, sex, and so on. Change of pitch contour will change the meaning of the sentence: thus "what?" "what?!" are different.
3. Accompanied by shades of meaning:

One characteristic of intonation contours is the tremendous contour native power of their somewhat elusive meanings. Reaction is often seen in the intonation meanings than to the lexical ones. Meanings of intonation contours are largely of this type- the attitudes of the speaker. Most sentences or parts of sentences can be pronounced with several different intonation contours, according to the speaker's momentary feeling about the subject matter.
4. Compared to the tone of tone languages:

Two most important characteristics of intonation are (a) the distribution of its contours over phrases and (b) the addition of shades of meaning to phrases rather than the giving of lexical meaning to words. Both of these characteristics can be seen in contrast with a different type of pitch system in tone languages.

In tone languages the pitch of each syllable is basic to the word. Pitch contours are located on single syllables, not on groups of syllabus. Every syllable has a pitch which is determined by the nature of the word itself. The tones of tone languages with the consonants and vowels form the actual words themselves so that no word exists unless its phonemic tone exists along with its sounds. The tone contributes its share towards carrying the basic lexical meanings of words. Just as the substitution of [1] for [ $\int$ ] in Koren [lam] to [ $\int \mathrm{am}$ ] and change the lexical meaning from "way" to "hair".

In addition to this lexical pitch, however tone language may have various types of pitches superimposed upon them. Thus, the general pitch of the voice may carry implications of anger, disgust, joy and so on.

### 4.4.1.2 Intonation in Koren:

Like other languages variation in pitch \& contour define the meaning of the utterance as well as the subtle embedded, underlying meaning intended by the speaker is there. Following are some of the intonation examples in Koren.

1. Did you go for the wedding?
(a) moiruoi mao nice?
[question】
(b) moiruoi mo nice?
[used to express rebuke]
(c) $\overline{\text { moiruoi... mo nice? }}$
[used to express hesitation]
(d) moiruoi mo nice...?
[used to express doubt]
2. Cook the pumpkin
(a) Mai suoyro [statement]
(b) $\widehat{\text { mai suoyro }}$
[emphasis on pumpkin]
(c) mai suoyro
[emphasis on cook]
(d) mai suoyro?
[question]
(e) mai suoyro.
[rebuke/authoritative]
(f) mai...suoyro.
[hesitant]
(g) maisuoyro . 【unpleasant」

## 3. They went to catch crabs.

(a) ai cur ənce
[simple statement]
(b) $\overparen{\text { ai cur ənce }}$
[emphasis on crab]
(c) ai cur ənce
[emphasis on want]
(d) ai cur ənce?
[question]
(e) $\widehat{\text { ai cur ənce }}$
[authoritative]
(f) $\widehat{\text { ai....cur...once }}$
[hesitant]
(g) aicuronce
[unpleasant/dismissive]

### 4.4.2 Generalization:

Generalization over the samples above, the dimension of meaning postulated are associated with the elements in contour variation.
(a) Simple statement linal fall
(b) Emphasis on noun - rising noun stlables (front), final fall
(c) 'emphasis on verb’ - high rising verb syllable (and)
(d) 'Qucstion' rising- falling- rising final
(c) Authoritative/rebuke - falling mid sentence. rising and falling final.
(f) Hesitant - breaks in between words, falling final
(g) Unpleasant/dismissive - pronounce together all the words in quick succession, falling final.

Most of the Koren speakers employ this method of expression in the intonation front. But it is not so rigid as un-liable to change as sometime a speaker can always adapt a style that deviates a bit from the norm to suit his own intention.

## Chapter 5

### 5.0 CONCLUSION

Although the present dissertation has been written of Koren as spoken today, the language described in it is nor without the traits of speech of earlier generation. Even if Koren today has a small number of speakers or is undergoing a slow transformation, the indigenous language is still being routinely acquired by children as their first tongue. The language is the identity of the close knitted community, although open to change as in the case of a living language.

So this dissertation is an attempt to create some basic knowledge of an endangered language belonging to an indigenous community. Thus the importance of research from any front is the need of the hour as very little has been explored of the Koren community. The main aim and objective of this dissertation is to bring out the basic sound system of the language in terms of its phonemes, allophones their distribution, the syllable structure, word-stress. tone and intonation. Phonemes are the first step to study the linguistic features of the language. Only after such a study, will it be possible to study the language on other levels such as morphology, syntax and semantics.

As the language has not been investigated, it was found necessary to establish the basic sound system first, i. e. the consonants and vowels. For this work, the data collected during the fieldwork come in handy. The consonants and vowels were obtained from the basic words lists which were about three hundred (300).

There were lots of difliculties in uriting abou the language as a whole. The process was somewhat cqual to writing a mini grammar of the language. It consumes a lot of time to analye and took days to examine and come up with the correct forms. In the course of analyzing the sounds. many facts came up for discussion. Not all of them could be treated here. One striking feature of the language is the existence of describing the stages and properties of things by changing the vowels. In Koren language, a set of vowel is used to describe almost each and every state, may be the colour, thickness. way of an action etc. etc. there are also many other features of consonants and vowels that behaves differently from the rest of the examples. But it is not easy to pinpoint those features as the whole dissertation is a first of its kind for the language concerned, so it can be said that almost all the point as mentioncd in the chapters before are important finds.

The chief purpose of this dissertation is not a critical analysis of the subject, but:

1) A simple approach to establish the existing sound system and tonal system of the language. A methodology based on available linguistic advance. and
2) The presentation of firsthand data on Koren language which represent a sound system of its own with its structural arrangements of linguistic tone. Specifically, the dissertation does not pretend to be a complete report on all the information of Koren tone that may exist- though it gives hints and is open ended for the future analysis. But the generalizations on Koren tones and sounds systems represented in this dissertation is culturally important as well.

Voice, purely as voice pays many parts in communication. It provides the overtones that are the raw material f vowels; determines the differences between certain consonants and certain others, it is what gives speech its power to ride over noise and carry long distances. Besides these roles- which, though they evolve
voice and hence tone. could almost as well be monotone - the fundamental pitch of the voice plays others that overlap in their physical manifestations like the motion of the sea, the ups and downs surface, identifying where one stops and another begins: to identify other phonctic events such as duration and loudness, that are associated with them. and relate each to some separate function in communication. The work is far from finished, but enough is known so that broad generalization is done.

Yet intonation is not as 'central' to communication as some of the other traits of language. If it were, we neither could understand someone who speak in monotone; and on so far as or comprehension of written language is due to its being a faithful reproduction of speech, we could not read. We therefore must be wary of giving it undue attention first because it is something new.

1. Tones pronounced in isolation behave differently fro those pronounced in connected speech. In connected speech they go through perturbation. This is usually governed by the position they occupy in the phrase or by the tonal environment. It may also be governed by grammatical structure, though this does not form part if the present inquiry.
2. Besides the four main tones in the Koren language, there are two glides, i. e. falling-rising and rising-falling.
3. Intonation in Koren language is superimposed in the sentence as a whole and it is this superimposed intonation that modifies that individual tones and not the tones themselves that decide the intonation of the sentences.

The research brought about many firsthand information regarding phonemes, tones, intonation and their conditions in Koren language. Following are some of the important findings:-

1. There are 25 (twent! line) consonants and eleven cowels. as well as 12 (twelve) diphthongs. The language is such that many sounds ca replace each other that sometime it's difficult to term the exact allophones of certain phonemes.
2. Phonemes like $\mathrm{m}^{\prime}$, if and $g$ occurs very rarely, this is. limited to onomatopoeic or borrowed words.
3. In the formation of tone also. the main tones numbered four but the high tone occurs very rarely.

This dissertation was meant to highlight the linguistic features of an endangered tribe but also has left many thing unanswered when it comes to the finality of the finds as it is done for the first time and within a short and limited period. This still leaves the Koren language in a front where further research is necded very much.

Little is settled but much is illuminated. The main hope is that the reader will leave this writing with a deepened curiously about what goes on when he hears or produces a stream of fundamental pitch.

## Appendixes

### 1.0 Picture Diagrams:

1.0.1 on


Time s F0 Hz
0.553889 -undefined-
$0.563889 \quad 219.836752$
$0.573889 \quad 215.676280$
$0.583889 \quad 205.019851$
0.593889201 .503989
0.603889198 .767515

Minimum pitch - 191
Maximum pitch - 219
Difference -28
1.0 .4 ku.r

$\begin{array}{ll}\text { Time s } & \text { FO } \mathrm{Hz} \\ 0.491474 & 237.251867 \\ 0.501474 & 235.013100 \\ 0.511474 & 232.986226 \\ 0.521474 & 232.568941 \\ 0.531474 & 231.961416 \\ 0.541474 & 231.278260 \\ 0.551474 & 231.191546 \\ 0.561474 & 232.132526 \\ 0.571474 & 234.449306 \\ 0.581474 & 235.673913 \\ 0.591474 & 235.865718 \\ 0.601474 & 234.330894 \\ 0.611474 & 232.270875 \\ 0.621474 & 230.248528 \\ 0.631474 & 228.357439 \\ 0.641474 & 230.678815 \\ 0.651474 & 233.653766 \\ 0.661474 & 233.932988 \\ 0.671474 & 233.580034 \\ 0.681474 & 234.101379 \\ 0.691474 & 233.720647 \\ 0.701474 & 232.705769 \\ 0.711474 & 231.562350 \\ 0.721474 & 229.291845 \\ 0.731474 & 230.628509 \\ 0.741474 & 233.147913 \\ 0.751474 & 234.923210 \\ 0.761474 & 235.418232\end{array}$
Minimum pitch - 228
Maximum - 258
Difference -9

## 1.0 .5 ner



```
Time_s FO_Hz
1.032336 216.776720
1.042336 220.052268
1.052336 220.531573
1.062336 222.790041
1.072336 222.591036
1.082336 221.778833
1.092336 222.934954
1.102336 224.355280
1.112336 224.780708
1.122336 224.222789
1.132336 224.064798
1.142336 224.997048
1.152336 227.069217
1.162336 229.137495
1.172336}2230.31887
1.182336 232.059449
1.192336 233.692327
1.202336 233.759061
1.212336 232.242412
1.222336 231.534645
```

Minimum pitch - 216
Maximum pitch - 233
Difference -17


Time_s FO _Hz 0.19079 .1201 .028107
0.500794204 .304731
0.510791207 .678396
0.520791210 .121238
$0.53079+212.029925$
0.540794213 .269871
$0.550794 \quad 216.192806$
$0.560794 \quad 219.418048$
$0.570794 \quad 220.351551$
$0.580794 \quad 222.245791$
0.590794225 .838213
0.600794226 .030314
$0.610791 \quad 225.776951$
0.620794223 .619443
0.630794222 .626561
$0.640794 \quad 222.859752$
$0.650794 \quad 223.394759$
$0.660794 \quad 225.451221$
$0.670794 \quad 226.159033$
$0.680794 \quad 224.366467$
$0.690794 \quad 223.056249$
$0.700794 \quad 221.984853$
$0.710791 \quad 221.898541$
$0.720794 \quad 221.908728$
$0.730791 \quad 222.537663$
$0.710794 \quad 222.901393$
0.750794220 .308853

Minimum pitch - 186
Maximum pitch - 226
Difference - 40

## 1.0 .7 ram



Time s F0 Hz
$0.542574 \quad 205.253318$
$0.552574 \quad 207.693654$
0.562574208 .852288
$0.572574 \quad 209.396019$
0.582574210 .005295
0.592574210 .791771
$0.602574 \quad 211.397367$
0.612574211 .891033
$0.622574 \quad 211.888185$
$0.632574 \quad 211.811681$
0.642574212 .556653
0.652574212 .996458
$0.662574 \quad 213.092999$
0.672574212 .965601
0.682574211 .353959
$0.692574 \quad 210.215428$
$0.702574 \quad 210.689973$
$0.712574 \quad 210.493627$
$0.722574 \quad 209.612061$
$0.732574 \quad 208.384817$
$0.742574 \quad 206.940495$

Minimum pitch - 201
Maximum pitch - 213
Difference - 12
1.0 .8 ui


```
Time s FO Hz \(0.454444 \quad 272.858004\) \(0.464444 \quad 266.664554\) \(0.474444 \quad 260.906574\) \(0.484444 \quad 252.054348\) \(0.494444 \quad 236.048177\) \(0.504444 \quad 231.407829\) 0.514444 --undefined-0.524444 --undefined-0.534444 --undefined-0.544444218 .930495 \(0.554444 \quad 215.625592\)
0.564444213 .459972
\(0.574444 \quad 211.203433\)
\(0.584444 \quad 208.821822\)
0.594444205 .713106
\(0.604444 \quad 202.352705\)
0.614444199 .911783
0.624444195 .363089
```

Minimum pitch - 195
Maximum pitch - 275
Difference -77
1.0.9 mai 2

$\begin{array}{ll}\text { Time_s } & \mathrm{FO} \mathrm{Hz} \\ 0.532766 & 217.923114 \\ 0.542766 & 219.171294 \\ 0.552766 & 220.729447 \\ 0.562766 & 222.537914 \\ 0.572766 & 222.595358 \\ 0.582766 & 223.288273 \\ 0.592766 & 224.362926 \\ 0.602766 & 225.000164 \\ 0.612766 & 227.712887 \\ 0.622766 & 231.601324 \\ 0.632766 & 234.015901 \\ 0.642766 & 235.123986 \\ 0.652766 & 235.142515 \\ 0.662766 & 235.197571 \\ 0.672766 & 235.122608 \\ 0.682766 & 235.135247 \\ 0.692766 & 234.979983 \\ 0.702766 & 234.935212 \\ 0.712766 & 235.281704 \\ 0.722766 & 235.725080 \\ 0.732766 & 235.410607 \\ 0.742766 & 235.965168 \\ 0.752766 & 238.021728 \\ 0.762766 & 238.398955 \\ 0.772766 & 238.794112 \\ 0.782766 & 239.170877 \\ 0.792766 & 238.662319 \\ 0.802766 & 241.260568 \\ 0.812766 & 242.344645\end{array}$
Minimum pitch - 225
Maximum pitch - 245
Difference - 20
1.0 .10 mai 4


Time_s FO Hz
$0.452143 \quad 190.613948$
$0.462143 \quad 189.883609$
0.472143190 .220425
0.482143190 .033738
0.492143188 .797086
0.502143188 .235355
0.512143186 .603489
0.522143185 .141995
0.532143183 .798419
0.542143183 .370660
0.552143182 .017460
0.562143179 .682867
0.572143177 .964489
0.582143176 .056244
0.592143173 .062095
0.602143170 .238276
0.612143167 .514724
0.622143164 .387286
0.632143162 .103581
0.642143159 .748917
0.652143157 .253218
0.662143154 .739655
0.672143153 .392099
0.682143151 .928888
0.692143150 .763546
0.702143149 .714320
0.712143149 .013103
0.722143147 .686602
0.732143146 .106193
0.742143144 .823884

Minimum pitch - 143
Maximum pitch - 190

### 1.1 Tone Analysis through PR IMT (Monosyllable):

a) If [n] is preceded by a woul the syllable take low tone
b) If the syllable has a diphthong in between two consonants. the tome is usually mid
c) If sylable ends in |r| preceded by a shon vowel. it usually takes mid-high tone.
d) If a consonant is followicd by a diphthong with fi]. it takes mid-high tone
e) If a short vowel is between two consonants, it usually takes mid-tone
f) If both the vowels in the diphthong are short vowels it usually takes low tone
$g) \& h$ ) in case of a syllable containing a diphthong with one long vowel followed a short one, it usually takes more than one tone which carrics different meanings. For example, when/mai/ is mid tone it means "pumplin' and when it takes low tone it means 'face".

This generalization is based on the data collected and that other possible conditions might be there.
i.i.l II(ORI) INSI, I!


| 20 | Burn | aka: |
| :---: | :---: | :---: |
| 21 | Child | na:i |
| 22 | Claw | ahuol |
| 23 | Cloud | $\int u^{\text {a }}$ mpai |
| 24 | Come | wa: |
| 25 | Count | etcl |
| 26 | Cut | PəRa:t (cut in to \& fro motion), <br> ətan (cut by striking), <br> tuktən (cut by blows), <br> renten (cut with one go) |
| 27 | Day | $k^{\text {h owa }}$ |
| 28 | Die | $\partial t^{n} \mathrm{i}$ : |
| 29 | Dig | ək ${ }^{\text {huor, }}$, cei $^{\text {a akel }}$ |
| 30 | Dirty |  |
| 31 | Dog | ui |
| 32 | Drink | Piń(v), insik(n) |
| 33 | Dry | ərei, əca:r, əhu:1 |
| 34 | Dull | $\mathrm{t}^{\text {haseit }}$ |
| 35 | Dust | wutk ${ }^{\text {h }}$ u, wəiwidk ${ }^{\text {h }}$ u |
| 36 | Cold | ədai, əhip, $\mathrm{k}^{\text {hobur }}$ |
| 37 | Ear | kuər |
| 38 | Earth | neinuei |
| 39 | Eat | əca:k |
| 40 | Egg | a:rritui |


| 41 | Eye | mit |
| :---: | :---: | :---: |
| 42 | Fall ${ }^{-}$ | ata: |
| 43 | Far | əla:k |
| 44 | Fat/grease | 2thai. arick |
| 45 | Father | pa |
| 46 | Fear | əci |
| 47 | Feather | a:rmul. wəmul |
| 48 | Few | əlek |
| 49 | Fight | kerwok, kersual, keryo, kerbuan |
| 50 | Fire | mei |
| 51 | Fish | yá |
| 52 | Five | riya: |
| 53 | Float | tonla:n |
| 54 | Flow | əta:, əta:n |
| 55 | Flower | reipa:r |
| 56 | Fly | mit ${ }^{\text {hei }}$ i(n), azuán(v) |
| 57 | Fog | sump $^{\text {haiji }}$ a ${ }^{\text {a }}$ |
| 58 | foot | ké |
| 59 | Four | $\operatorname{minli}$ |
| 60 | Freeze | $\partial p^{\text {ham }}$ |
| 61 | Fruit | $\mathrm{t}^{\text {h }} \mathrm{i}$ |
| 62 | Full | əsip |
| 63 | Give | əpek |
| 64 | Good | əsa: |


| 65 | Grass | 1ay |
| :---: | :---: | :---: |
| 66 | Gireen | 队om |
| 67 | Giuts | aril |
| 68 | Hair | bàk. sàm |
| 69 | Hand | kuit |
| 70 | He | əmapa |
| 71 | Head | Lú: |
| 72 | Hear | ənai |
| 73 | Heart | lún |
| 74 | Heavy | Orik |
| 75 | Here | wahin |
| 76 | Hit | əwuak |
| 77 | Hold/take | ?o:. əlei |
| 78 | Horn | rikí |
| 79 | How | əŋəŋа |
| 80 | Hunt | əthat |
| 81 | Husband | arvat ${ }^{\text {h }}$ er |
| 82 | I | kei |
| 83 | Ice | vur |
| 84 | If | ijkò |
| 85 | In | əsu:n, ( .ai suffise with places $\}$ |
| 86 | Kill | $\partial t^{\text {hat }}$ |
| 87 | Knee | $k^{\text {h }} \mathrm{u}$ : $k$ |


| 88 | know | $\mathrm{t}^{\mathrm{h}}$ ciday |
| :---: | :---: | :---: |
| 89 | Lake | pa:t |
| 90 | Laugh | ənui |
| 91 | Leaf | əbuo. nabuo |
| 92 | Left sidc | veitien |
| 93 | Leg | ke |
| 94 | Lie(be in lying position) | əja:l, ətal |
| 95 | Live | ?om |
| 96 | Liver | ət ${ }^{\text {h }}$ in |
| 97 | Long | əsei |
| 98 | Louse | rik |
| 99 | Man/made | pasal |
| 100 | Many | ətam |
| 101 | Meat | mé, ətak, əvoi |
| 102 | Moon | $\mathrm{t}^{\mathrm{H}} \mathrm{a}$ |
| 103 | Mother | nu: |
| 104 | mountain | cij |
| 105 | mouth | baì |
| 106 | Name | mig |
| 107 | Narrow | əbik, əsi:n |
| 108 | Near | ənai |
| 109 | Neck | ri:g |
| 110 | Now | ət ${ }^{\text {har }}$ |
| 111 | Night | 于a:n |


| 112 | Nose | na: |
| :---: | :---: | :---: |
| 113 | Not | nimak |
| 114 | Old | əlúí. ətár |
| 11.5 | One | $k^{\text {hat }}$ |
| 116 | Other | lamlak |
| 117 | Person | mi. mirin |
| 118 | Play | kerdai |
| 119 | Pull | əkei |
| 120 | Push | ənam |
| 121 | Rare |  |
| 122 | Red | əsem |
| 123 | Right/correct | ədik |
| 124 | Right side | caplien |
| 125 | River | tuiduy |
| 126 | Road | lampi |
| 127 | Root | rid3un, rijuy |
| 128 | Rope | rui |
| 129 | Rotten | əthú |
| 130 | Round | əcen |
| 131 | Rub | ətak, ənul |
| 132 | Salt | mici: |
| 133 | Sand | leinói |
| 134 | Say | əti, əril |
| 135 | Scratch | əhuat, əthai, əJiet |
| 136 | Sea | tuit ${ }^{\text {h ampi }}$ |


| 137 | See | әmúu |
| :---: | :---: | :---: |
| 138 | Sced | əmù |
| 139 | Scw | əsúi |
| 140 | Sharp | әуеi |
| 141 | Short | 2boly |
| 142 | Sing | $l \mathrm{la}^{\mathrm{h}^{\prime}}$ |
| 143 | Sit | ?on |
| 144 | Skin | wùn |
| 145 | Sky | wa:ncuy |
| 146 | Sleep | ? in |
| 147 | Smell | əsi:n |
| 148 | Smell | ərim |
| 149 | Smoke | meik $^{\text {h }} \mathrm{u}, ~ ə \mathrm{k}^{\text {h }} \mathrm{u}(\mathrm{n})$, ajo.p(v) |
| 150 | Smooth | əni: |
| 151 | Snake | nu:1 |
| 152 | Snow | vur |
| 153 | Some | alék |
| 154 | Spit | əcil (v), cil (n) |
| 155 | Split | akhoi |
| 156 | Squeeze | әmet |
| 157 | Stab/pierce | əsun, t $^{\text {hil }}$ l, ${ }^{\text {ewit }}$ |
| 158 | Stand | əทir |
| 159 | Star | ə.rsi |


| 160 | Stick | mol |
| :---: | :---: | :---: |
| 161 | Stonc | (ui) |
| 162 | Straight | kerdiy. $\mathrm{ccu}^{\text {m }}$ |
| 163 | Suck | әjop |
| 164 | Sun | ní: |
| 165 | Swell | әpuor, əthiy |
| 166 | Swim | tuibuol |
| 167 | Tail | rumei |
| 168 | That | hawaha |
| 169 | There | wahan |
| 170 | They | anmani |
| 171 | Thick | əsà:, əthà: |
| 172 | Thin | əko:y, areiy |
| 173 | Think | kernai |
| 174 | This | hiwahi |
| 175 | Thou | nəๆ |
| 176 | Three | kint ${ }^{\text {h }}$ um |
| 177 | Throw | əden, əhé, əvó: |
| 178 | Tie | əkhit |
| 179 | Tongue | léi |
| 180 | Tooth | ha:, ha:? |
| 181 | Tree | $\mathrm{t}^{\text {hinkuug }}$ |
| 182 | Turn | kellet, kihe |
| 183 | Two | kinni |
| 184 | Vomit | əluó |


| 185 | Walk | ə心 |
| :---: | :---: | :---: |
| 186 | Warm | วlum |
| 187 | Wash | a So:m. risu:k |
| 188 | Water | tui |
| 189 | Wc | cini |
| 190 | Wet | әco:p |
| 191 | What | ənmo. àje |
| 192 | When | əıtik |
| 193 | Where | honmò honajc. honć |
| 194 | White | əbay |
| 195 | Who | tu:mo, $\mathrm{k}^{\text {hoyée }}$ k $\mathrm{k}^{\text {hoimò }}$ |
| 196 | Wide | əpak. əpek |
| 197 | Wife | ənumei |
| 198 | Wind | $p^{\text {háiwuò }}$ |
| 199 | Wing | mert ${ }^{\text {ha }}$ |
| 200 | Wipe | ənu:I, ətuai |
| 201 | With | le? |
| 202 | Woman | numei |
| 203 | Woods | $\mathrm{t}^{\mathrm{h}}$ ighai, ramcà ${ }^{\text {a }}$ |
| 204 | Worm | rumphùr |
| 205 | Ye | nay |
| 206 | Year | kúm |

1.1.2 WORD LIST (B):

| 1 | Brother | náipà (vounger). ú:pà (clder) |
| :---: | :---: | :---: |
| 2 | Clothing | puondier |
| 3 | Cook | əsuat |
| 4 | Dance | əlam |
| 5 | Fight | kiniet |
| 6 | Hundred | ruiakhat. ruŏik ${ }^{\text {hat }}$ |
| 7 | Seven | saŕi |
| 8 | Shoot | əka:p |
| 9 | Sister | náinú (younger), ú:nù (elder) |
| 10 | Spear | $\mathrm{t}^{\text {hal }}$ |
| 11 | Tiventy | somní |
| 12 | Work | cuan |
| 13 | Bindi | bindi |
| 14 | Flour | muoidá |
| 15 | Dough | muoidəpolsa |
| 16 | Bun (hair) | samtúm |
| 17 | Banana | mo:t |
| 18 | Blouse | sónkòl |
| 19 | Book | larik |
| 20 | Brother's wife | ú:nù |
| 21 | Cat | yaitoy |
| 22 | Chili | mercá |
| 23 | Cold (ailment) | dainimet |


| 24 | Comb | samı ${ }^{\mathrm{n}_{\mathrm{i}}}$ |
| :---: | :---: | :---: |
| 25 | Copper | kuori |
| 26 | Cough | kik ${ }^{\text {h }}$ : ${ }^{\text {k }}$ |
| 27 | Crow | we?ek |
| 28 | Cry | әcap |
| 29 | Dog | ui |
| 30 | Door/entrance | ink ${ }^{\text {ha:r/ }}$ əlutná |
| 31 | Down | ənuoi |
| 32 | Drizzle | ruo Sirti |
| 33 | Earring | kuarkà:i, kuarbèt |
| 34 | Elephant | salyi |
| 35 | Eye-brow | mitmùl |
| 36 | Fever | $k^{\text {habua }}$ |
| 37 | Finger | kutmal |
| 38 | Fish | ya |
| 39 | Flour (dry) | moida |
| 40 | Food | cá:k |
| 41 | Forest | ramcan |
| 42 | Garlic | khaisó:n, kha:só:n |
| 43 | God | pat ${ }^{\text {h }}$ ien, pumà |
| 44 | Goodness | pat ${ }^{\text {h }}$ iennu |
| 45 | Gold | soná: |
| 46 | Grand father | pu |
| 47 | Grand mother | pi |


| 48 | Green vegetable | ənlena?ey |
| :---: | :---: | :---: |
| 49 | Hot | əlum |
| 50 | House | inn |
| 51 | Itch | $\partial t^{\text {h }}$, $k$ |
| 52 | Language | cón |
| 53 | Lion | sabakkai |
| 54 | Lips | ner |
| 55 | Liquor | d3ú |
| 56 | Mango | $t^{\text {heihai }}$ |
| 57 | Medicine | léila?ai |
| 58 | Milk | serinútùi |
| 59 | Mirror | men $\int$ iel |
| 60 | Money | dankà |
| 61 | Mosquito | Sa:nSa:n |
| 62 | Mouse | Mizu |
| 63 | Nails | kuttin |
| 64 | Necklace | rika: |
| 65 | Oil | sariek |
| 66 | Onion | tillò |
| 67 | Pain | əna |
| 68 | Peacock | vahuay |
| 69 | Plait | әp ${ }^{\text {hier }}$ |
| 70 | Pond | puk ${ }^{\text {hari }}$ |
| 71 | Potato | a:lu |


| 72 | Rice (cooked) | bu: |
| :---: | :---: | :---: |
| 73 | Rice (raw) | cacai |
| 74 | Round | acey |
| 75 | Run | əta:п |
| 76 | Shawl | puănba:y |
| 77 | Shirt | sónkò |
| 78 | Sister's husband | ú:pà |
| 79 | Spectacles | a:no:t |
| 80 | Spices | maru mara:y |
| 81 | Spoon/ladle | mik ${ }^{\text {h }} / \mathrm{k}^{\mathrm{h}} \mathrm{etei}$ |
| 82 | Sugar | samja:kbay |
| 83 | Tasty | ənik, ətúi |
| 84 | Tea | cá: |
| 85 | Teeth | ha?hai |
| 86 | Thumb | kútpi |
| 87 | Turmeric | áièn |
| 88 | Ginger | ait ${ }^{\text {hi:g }}$ |
| 89 | Up | acuy |
| 90 | Village | $\mathrm{k}^{\text {hua }}$ |

1.1.3 WORD LIST (C):

| 1 | Abuse | raysán |
| :---: | :---: | :---: |
| 2 | Air | $p^{\text {haiwuo }}$ |
| 3 | Ant | sikni:r |
| 4 | Aroma | rimhoi |
| 5 | Bald | luté |
| 6 | Bathe [v. cause] | minbual |
| 7 | Bathing | əbual |
| 8 | Bathe | tuibual |
| 9 | Bazaar | $\mathrm{p}^{\mathrm{h}} \mathrm{ai}$ |
| 10 | Begin | $\partial p^{\text {h }} u t$ |
| 11 | Behind | ənupthiey |
| 12 | Blind | mitcó |
| 13 | Brass | kuəri |
| 14 | Brave | əra:t |
| 15 | Bull | sara:tcəl |
| 16 | Butterfly | belep |
| 17 | Buy | ricok |
| 18 | Cheap | ətem |
| 19 | Coconut | zúpi |
| 20 | Corpse | mit ${ }^{\text {h }}$ iruak |
| 21 | Costly | əlú |
| 22 | Cry of ' x ' | әсар |
| 23 | Curse | $\mathrm{k}^{\mathrm{h}}$ oma:ksa:m |


| 24 | Daily | əji:ŋnisuo |
| :---: | :---: | :---: |
| 25 | Danger | citruoi |
| 26 | Deaf | kuarset |
| 27 | Donkey | gada: |
| 28 | Double | kinnisun |
| 29 | Draught | ikay |
| 30 | Earn | ata:1 |
| 31 | End | ətorna |
| 32 | Enemy | Pensietpu |
| 33 | Farmer | leit ${ }^{\text {h }}$ omi |
| 34 | Feed | amincak |
| 35 | Flood | tuilien |
| 36 | Front of | əmaikun |
| 37 | Goat | kel |
| 38 | Goldsmith | sonasut |
| 39 | Halves | əher |
| 40 | Hard | atat |
| 41 | Heels | kedil |
| 42 | Her | wanuta |
| 43 | High | asa:y |
| 44 | His | wapata |
| 45 | Honey | $\mathrm{k}^{\text {h uoinin }}$ |
| 46 | Horn | ariki |
| 47 | Hunger | wonca:m |
| 48 | Ill | ana/yamlei |
| 49 | Ironsmith | $\mathrm{t}^{\text {hirsut }}$ |


| 50 | King/chief | ren/kulak |
| :---: | :---: | :---: |
| 51 | Landlord | leipuma |
| 52 | Lazy | $\mathrm{t}^{\text {hasiet }}$ |
| 53 | Letter | $\mathrm{cit}^{\text {h }} \mathrm{i}$ |
| 54 | Lonely | kerhoroy |
| 55 | Love | ninsiet |
| 56 | Mad | əkiwe:t |
| 57 | Maize | meiteini:m |
| 58 | Memory |  |
| 59 | Mine | kita/keita |
| 60 | Monkey | Э0: 7 |
| 61 | Paint | ray |
| 62 | Pig | wók |
| 63 | Price | əmən |
| 64 | Priest | $\mathrm{t}^{\mathrm{h}} \mathrm{iempu}$ |
| 65 | Read | apá |
| 66 | Remember | at ${ }^{\text {heiday/ajiet }}$ |
| 67 | Rice (crushed) | cakersuk |
| 68 | Rice (husk) | cəhum |
| 69 | Rice (paddy) | ca:y |
| 70 | Rice (puffed) | bupok |
| 71 | Sell | ə uór $^{\text {r }}$ |
| 72 | Sheep | fò |
| 73 | Shop | tuka:l |
| 74 | Silver | dəŋka |


| 75 | Sometimes | aka:rra? |
| :---: | :---: | :---: |
| 76 | Sparrow | wacek |
| 77 | Sugar-cane | micú |
| 78 | Sweet potato | kolkái |
| 79 | Tailor | puonsúi |
| 80 | Teach | $\mathrm{t}^{\text {hiemmincu }}$ |
| 81 | Teacher | $\mathrm{t}^{\text {hiemmincupù }}$ |
| 82 | Thirst | әra:1 |
| 83 | Tongs | ceicé/mei alcepna |
| 84 | Train | tre:n |
| 85 | Upside down | əlep ${ }^{\text {haləm/ale }}$ ekhup |
| 86 | War | ra: 1 |
| 87 | Weave | әp ${ }^{\dagger} \mathrm{iezr}$ |
| 88 | Well | ədam |
| 89 | Wheat | gehu: |
| 90 | Worship | əmò:k |
| 91 | Write | 2i: |
| 92 | Yours | nita: |

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[^1]:    ${ }^{1}$ ibid. p. 3.

[^2]:    ${ }^{1}$ Kabui, Gangmumei: The Koirengs of Manipur, Published by the Koren Historical Research Committee, Imphal, Manipur, 1987, p. 13.

[^3]:    ${ }^{1}$ Census of India 2001, Series 14, Manipur Provisional Population totals, Paper 1 of 2001, Directorate of Census Operation, Manipur.
    ${ }^{2}$ During the fieldwork carried out, the elders of the community estimated speakers to be more or less the same with the 2001 population census.

[^4]:    ${ }^{1}$ Grierson, G.A: Linguistic Survey of India, Vol. III, Part II, pp. 234-239, Delhi: Low Price Publications, 1994.

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    ${ }^{2}$ Ibid, p. 2

[^8]:    ${ }^{1}$ Keneth L. Pike - Tone Languages. The University of Michigan, Michigan:1948.p 2

[^9]:    ${ }^{1}$ Keneth L. Pike - Tone Languages. The University of Michigan, Michigan:1948.

[^10]:    ' In the case of reduplication, the tones remain same.
    ${ }^{2}$ Ibid..
    ${ }^{3}$ Ibid.
    ${ }^{4}$ Slightly lower than the low tone 4

