

**PHONOLOGICAL BASIS OF MISSPELLINGS IN THE WRITTEN ENGLISH
OF NANDI STUDENTS IN ELDORET WEST DISTRICT**

BY

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C50/72354/2014

A Project Submitted in Partial Fulfillment of the Requirements of the Award of Master
of Arts in Linguistics Degree of the University of Nairobi

2016

DECLARATION

Declaration by the Student:

This project is my original work and has not been presented for the award of a degree in this or any other university.

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Declaration by the Supervisors:

This project has been submitted for examination with our approval as university supervisors

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Signature.....

Date.....

MR MANYORA H. B

DEDICATION

I dedicate this project to my children; Darius, Emmanuel and Talia, my ever supportive friends; Kipchumba and Cheptoo.

ACKNOWLEDGEMENT

I acknowledge the Almighty God for giving me good health to pursue my studies. My special gratitude goes to the University of Nairobi for giving me a chance to pursue my scholarly dreams. Special regards goes to my supervisors, Mr. Manyora and Dr. Jerono for taking me through the work. My undying gratitude goes to all those who have given me chance to partner with them in these forums which have served as a real resource for me in the field of research.

ABSTRACT

The study focused on the common spelling errors that were made by learners who speak Nandi as a first language as they use English as a second language. The research sought to investigate whether phonology and orthography of Nandi as learners' first language affected the English orthography.

Learners of English have continued to lose marks and get poor results for they are penalized for all misspelt words and illegibility in their written work. In oral competitions, students have equally lost marks which results from mis-articulations. This study investigated the spelling errors in English words which can be accounted for in terms of first language influence and whether such influence may be attributed to the influence of the sound system of Nandi as their first language and the relationship between this sound system and the Nandi writing system. The present study intended to generate information on the nature of the phonological awareness deficits of learners in secondary schools with misspelling in the written and mis-articulations in their spoken English. Data was collected from dictations and written compositions which were given to the subjects as well as spoken words which were tape recorded. Natural Generative Phonology (NGP) and Interlanguage theories were adopted. In this study, all the words that were wrongly spelt were identified and categorized according to their nature. They were put in broad categories. The relationship between the first language phonology and the wrongly spelt forms was looked at and an attempt to explain the errors has been given. In addition, the possible causes of misspellings have been given after making an observation on the nature of errors. After identifying, categorizing, describing and explaining the errors, remedial measures were presented. These remedial measures are intended to correct and improve the deficient spellings as students attempt to learn and put into practical use a new language.

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CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

This study examined the influence of Nandi phonology on the written English, Nandi being a first language to the learners in this study. It majored on the spelling deficits in English seen in the written and spoken task by learners who speak Nandi as their indigenous language in their attempt to learn and acquire proficiency in English. In Kenya, English plays an important function in national affairs since it is the language in which most governmental businesses are conducted. It has been adopted as an official language and is therefore used by the government in parliament, administration and legal matters among others. In addition, it is used as a medium of instruction in learning institutions and serves as a service subject. For this reason, accuracy and fluency in all the aspects of the language will undoubtedly enable Kenyan secondary school students to perform better in all the other subjects in the school curriculum.

Competence in English is a goal every student should aspire for. By the end of the form four in Kenya, the assumption is that the learners having completed a minimum of twelve years of schooling in English are well versed in the mechanics of the language. However, most students leave school at form four with very little competence in English despite the high priority given to the learning of the language. Glaring spelling errors and tense errors are frequent in these students' written English and this greatly interferes with the overall comprehension of ideas being expressed. This affects their performance in English leading to overall decline of the quality of education among the students.

This study focused on the Nandi students who second language learners of English. The focus was on errors that are made by the Nandi learners in an attempt to learn English which is their second language. It looked at the areas where traces of influence on second language phonology which resulted from the learners' indigenous language intelligible arrangement of pronunciations and the English effect on pronunciation.

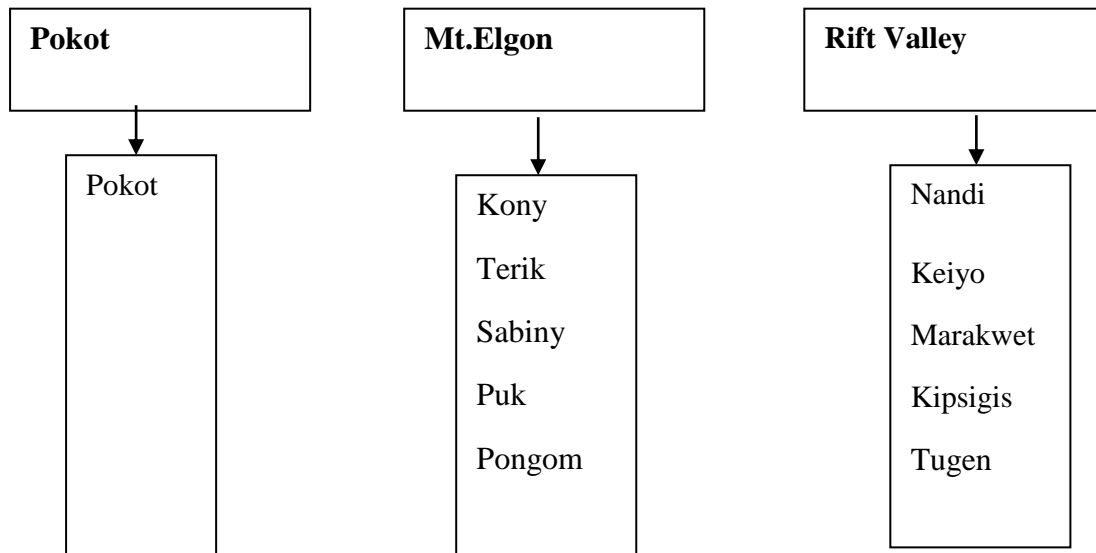
Nandi language belongs to the Nilo-Saharan language family, called Chari- Nile which is one of the six branches of Nilo- Saharan family. It belongs to the Eastern Sudanic

branch. The Nilotic group which is a branch of Eastern Sudanic family is again divided into three branches namely; Western, Eastern and Southern Nilotic groups. Kalenjin then belongs to the Southern Nilotic group.

The term 'Kalenjin' as stated by Kipkorir and Welbourn (1973), is a coinage which is artificial and political in its origin because the people of Kenya who are now known to us as Kalenjin did not have a common name. There is no language called Kalenjin. Before the term Kalenjin was coined, the scholars as well as the administration officials alluded them as Nandi-speaking tribes. The term gained prominence when several Nandi-speaking scholars united and coined the term 'Kalenjin', a Nandi expression which means 'I say to you'. It was the resistance of the Nandi people that drew the attention of the British rulers to them. The British discovered other Kalenjin tribes speaking a language similar to Nandi and they called them the Nandi-speaking tribes.

The choice of the word 'Kalenjin' was guided by need to find a term that was common to all dialects.

Many scholars have attempted to classify Kalenjin into various dialects. Some scholars argue that Kalenjin has nine dialects, while others argue it has thirteen. Towett (1975) classified Kalenjin languages into nine dialects namely; Nandi, Kipsigis, Keiyo, Tugen, Sabaot, Marakwet, Pokot, Ogiek and Sengwer while Creider (1982: 9), groups Kalenjin languages into eleven dialects and gives the genetic relationship of these dialects:



Adapted from Creider (1982:9)

Otterloo (1979) groups Kalenjin into thirteen dialects namely; Nandi (NA), Terik (TE), Kipsigis (KI), Keiyo (KE), South Tugen (ST), North Tugen (NT), Cheran'gany (CH), TalaiMarakwet (TM), Sambirir Marakwet (SM), Sabaot (SA), Endo Marakwet (EM), West Pokot (WP) and East Pokot (EP). For purposes of this study, we will adopt Towett's classification.

Nandi, a dialect of Kalenjin is spoken in Uasin Gishu, Nandi South, Nandi North, Trans-Nzoia districts and other parts of the country.

According to Chesaina, (1992:2) Nandi belongs to the highland Kalenjin together with Kipsigis, Tugen, Keiyo and Marakwet.

Of the Kalenjin dialects, Nandi was the first to be written down and much later Kipsigis and Pokot. The missionaries used Nandi for the rest of the Kalenjin and that is why it is considered as the standard dialect of Kalenjin. It is used in written literature especially

the bible, used as medium of instruction in lower primary and local vernacular stations such as Changei and Kass FM stations.

In their learning of a second language, the Nandi students' work portrays an influence by their L1 patterns. This influences both pronunciation and writing. Nandi language has unique features which are normally transferred by learners resulting in a shortfall as a result; some learners do not attain perfection in the second language as errors are created in this process.

Corder (1967) says like any other human learning, language learning is closely associated with the making of errors. These errors are a deviation from the rules of a language being learnt. When some L1 structures are passed over to the target language, deviant forms are created.

Every language has a distinct phonological system and the systems of the different languages cannot be generalised. Nandi and English therefore have different phonological systems. As a learner learns English, he/she should learn the spellings and sounds independently since there is inconsistency between the two, unlike Nandi where the sound and the spelling are in constant agreement. Due to this condition, as Nandi students learn English, traces of L1 influence are evident in their work.

This has been observed among the Nandi learners but those that do not speak Nandi do not exhibit the same problem. Attempts have been made to correct these errors but the objectives have not been realised. In the secondary school syllabus, the oral skills in form one and two have a lot of exercises to do with the differentiation of sounds and dictation. This has been planned with an aim of overcoming the problem of first language influence in both written and spoken English of learners who have English as their second language.

The researcher focused on the misspelt English words that could have been attributed to the influence of phonology of Nandi. This research sought to investigate whether the speech habits in the first language (Nandi) were transferred to the learning of the second language (English) thus creating errors.

In learning a language Phonological awareness is a very important skill. This is a situation where learners are able to differentiate speech sounds and put them in to correct use in different contexts (Whitehurst & Lonigan (1998). It is a skill that should be developed at the initial stages of language learning. As a learner continues using the language, it is expected that the language develops. This is crucial since it is necessary for a learner to master phonological awareness as it determines if the language has been learnt well or not.

1.1 Statement of the problem

Every language has unique phonology and orthography systems meaning that overgeneralizations cannot be made about languages. Each should be treated as a separate entity. Some sounds in English do not exist in Nandi and some graphemes in English can represent different sounds unlike Nandi where a grapheme represents a single sound. These differences in the two languages bring about the challenges in the learners' written work. The Nandi learners have continually performed unsatisfactorily in their work due to spelling deficits and illegibility of their handwriting leading to a shortfall in communication. In oral competitions, students have equally lost marks which results from mis-articulations.

Secondary school students in Nandi are second language learners of English and they are prone to making errors as they are trying to acquire communicative competence. A number of errors are seen in their written and spoken work. This study investigated the spelling errors in English words which can be explained satisfactorily in terms of effect caused by the patterns appropriate to their language one and whether the influence may have been as a result of the influence of Nandi phonology as their first language and the relationship between this sound system and the Nandi writing system (orthography). Although many scholars have done research on the influence of L1 on a second language acquisition, to the best knowledge of this researcher, no study had been done on the influence of Nandi phonology.

1.2 Research Questions

In this study, the following research questions were used as a guide:

(a) What are the commonly misspelt and mis-articulated words among the Nandi students?

(b) What spelling errors arise from the learners' first language phonology?

(c) What remedial measures can be instituted to address the errors?

1.3 Objectives

The objectives that guided the study were:

(a) To identify and classify misspelt words in the students written and spoken work.

(b) To investigate the spelling errors which arise from learners' first language phonology.

(c) To suggest remedial measures that can be instituted to address errors made.

1.4 Rationale/Justification of the Study

The present study intended to generate information on the nature of the phonological awareness deficits of learners in secondary schools with misspelling in the written and mis-articulations in their spoken English. The study will benefit primary and secondary school instructors for it will create awareness among them on the need of training learners on phonological awareness as it plays a vital role in speech. This is also useful to those giving instructions in the language and those that are being instructed since it shows the nature and types of errors made by learners as they try to gain written communicative competence.

The findings will also give a feedback to the teacher concerning effectiveness of his/her teaching materials and techniques and where much attention is required. This will indicate to the teacher and linguists in general that there are areas that may need more attention for instance phonology and morphology. This is relevant since this study is concerned about sound and word (phonology and morphology) of the Nandi which is a source language in this study.

In curriculum planning, this will be of importance since it highlights areas to be stressed at the initial stages of learning a language and even at an advanced level where learners with spelling deficits are assisted to correct the deficits. At the level where researchers

and language therapists would want to investigate challenges associated with writing and speaking, this study will provide important information to them.

1.5 Scope and Limitations of the Study

The study concentrated on the phonological basis of misspellings in the written English of Nandi speakers. It did not look at the position of errors in a word and the position of the misspelt word in a sentence in creative writing. The study was carried out in Eldoret West District, Uasin Gishu County targeting district mixed-day-boarding secondary schools.

The present study was limited to learners in form three from selected schools in Uasin Gishu County. The respondents were both boys and girls. This study looked at errors in the written English of Nandi learners which are believed to have resulted from phonological features of Nandi. In the learning of any language, it is possible that a shortfall is attributed to more than language one influence; this research only investigated the misspellings caused by the first language influence.

1.6 Literature Review

Literature reviewed in this section is on second language acquisition that helped contextualize the study in the current scholarship.

1.6.1 Review of Errors Caused by L1 phonology

Many studies in linguistics have been done by scholars concerning transfer of errors in the learning of a second language. Berkel and Smedt (1988:77) in their research investigated orthographic errors. They observed that, in the misspelt forms, learners tend to replace a form with one that he/she is familiar with. This happens when they have not mastered the target language. Their study was of help in this research as they point out categorically that homophones in English are taken to be deviant spelling when they are used in a wrong context. The researcher investigated instances where phonology of L1 influences orthography of L2. This was important to the researcher in categorising the errors that learners made and in explaining those errors, in this case, how a correctly spelt English word becomes wrong in a given context.

Faerch and Kasper (1983) in their study show that it is very possible to accurately learn a second language. Each language is unique; therefore, it should be treated separately. Since the two languages are distinct, it is suspected that it may not be possible to learn a new language successfully without leaving telltale traces of first language. The first language of learners plays a key role in shaping pronunciations and by extension their spellings. This was also important to the researcher because it gives a hint in suggesting the remedial measures.

Beards (1982) in his study views that the challenges that second language learners experience when learning a second language is attributed to their L1 phonology since speech habits that are appropriate to their language have already been formed. This poses a challenge because the habits cause an interruption when the second language is learned. What exists in the system of L1 is shifted to that of L2. In echoing what Beards suggests, the first language influence leads to misspelling and mis-articulations in the students' work. This helped the researcher in comparing the two languages, Nandi and English. This study borrowed from Beard on phonology and vocabulary but did not look at levels like syntax in grammar and morpho-syntax. From this observation, this study was conducted to analyze the distinction between L1 and L2 structures. This distinction will help the L2 instructors and learners to be sensitive of the phonological differences between L1 and L2 with an intention of helping them use appropriate L2 phonology for quality essay production.

Brown (1998:4) in his research examined the position of errors. In this research, the errors are categorised and explained according to the various categories. The position of errors is not looked at. Brown's study is different from the present one since it is so much concerned about the importance of the position of errors in the work.

Beebe (1998) gives a suggestion that second language learners do employ the strategy of language transfer. This is the occurrence of fossilized linguistic items and rules in the language of a second language learner as a result of first language. It plays a role in the acquisition of grammatical aspects. When the transfer is done, the gap is closed resulting in similar reaction. This brings about a shortfall in the target language since it will bear

the characteristics of the source language. L1 traces can be mistakes which are performance errors as the learner knows the system but fails to use it. The learner can self correct the errors. This assumption makes these learners end up with errors of direct translation, poor spellings, and misplaced vocabularies as well a host of semantic errors. This study was of much help in this research, the researcher notes that, some performance errors occur even if the learner knows the system but fails to use it. The traces in the learners' work helps in the identification and classification of errors for purposes of analysis. Due to the fact that learners can self correct the errors helps the researcher in suggesting the remedial measures to the errors. The relevant errors here are those of misspelling.

Mwaniki (2001) observes that in the process of learning a new language, learners come up with temporary rules that will play a key role in their learning of a language. As they do so, the knowledge they possess in the L1 help them in the formation of the interim rules. These rules that learners construct fall in between the L1 and L2 rules. His study is relevant to this study. This is because interlanguage theory is adopted, where the learner comes up with interim rules. What is learned by the student in this case falls between the first and the second language. What is taken from the source language (first language) is blended with what is taken from the target language (second language) coming up with an interlanguage.

Kensworthy (1992:94) acknowledges the fact that the English orthography can be a source of errors in the learners' work. Inadequate mastery of the English orthography can lead to the production of deviant forms. This happens when learners having learned a few rules of the language do inappropriate application of the rules. His study helps in explaining the errors that occur due to generalizations by non-native speakers of English.

Mwangi (2006), in discussing the phonological basis of misspelling in the written English of Kikuyu speakers, looks at the possible causes of misspelling in the written English words. His study however does not offer any remedial measures that can be instituted to eradicate these errors. His study nevertheless was of much help to the current one, as an eye opener on the likely causes of this problem in learners' and this

guided the researcher in investigating the basis of misspelling among the Nandi students. In this study, the researcher suggests remedial measures that could be instituted to eradicate the errors established.

1.6.2 Review of Literature on Nandi

This section reviews the works that are relevant to this study. The discussion of these works will be based on their contribution to the study of Nandi.

In the first section we deal with the early grammars of Kalenjin which were the simple works that were mainly intended for the non-native speakers of Nandi who wanted to acquire a working knowledge of the language. The non-native speakers include the settlers and the missionaries. The simple grammars include primers, books of traditional Kalenjin fables and church devotional books.

Such grammars include Hollis (1909) who deals with orthography, pronunciation, parts of speech and tense. Though his work provides insights to our study, he does not mention any phonological processes. In this study, Nandi orthography and pronunciation is very important. In the speaking exercise, this guided the researcher to know whether the mis-articulations are due to the errors caused by the Nandi pronunciations. The Nandi orthography plays an important role in analysis of the misspellings in the dictation exercise and in the compositions. This helped the researcher know if the errors resulted from the passing over of the elements in their first language to the target language. This is one of Selinker's cognitive processes.

Mumford (1959) gives the pronunciation and orthography of the language. This is important to this study since a reading exercise was done so as to tell the words that the learners mis-articulate from the list they were given. In orthography that he looked at, this research borrowed from his work since the interest is in the misspellings that occur due to the first language influence which was investigated to ascertain if this assumption was true. Just like Hollis' contribution, this helped the researcher in the analysis of errors which may be due to errors which result from language transfer.

These grammars are pioneer works on Nandi that gave a foundation for both speaking and reading. They did not apply any linguistic theory as much as they contained lists of vocabulary from the language. All these are important sources of data for the study.

In the next section we explore studies on different aspects of Kalenjin-Nandi linguistics. So much has been done on Kalenjin especially the Nandi language. Tucker (1964) presents the consonant and vowel systems of Nandi. He describes how tone occurs in the language.

The Nandi vowel and consonant systems are important to this study in that, the two systems are looked at and therefore this gives an idea to the researcher on how these systems look like. The knowledge of these systems helped in relating the first language and the target language and know if the learner has acquired proficiency in the second language or has come up with an interlanguage that is neither the first nor the target language.

Heine (1977) discusses the glottochronology of Kalenjin. He studies Kalenjin dialects with the aim of establishing the relationship between them. He determines the age of separation of these dialects in order to come up with Proto-Kalenjin and in doing so he gives insights into the language.

Toweett (1975) and (1979) attempts to classify Kipsigis nouns basing on the plural formative suffixes. He groups the nouns into eleven plural classes according to the suffixes they take. He also gives the phonetic inventory of Kipsigis and shows the positions in which vowels and consonants occur. Though he gives the phonetic inventory, the discussion is not done within any theoretical framework and the phonological processes are not dealt with in detail. A few alterations when sounds change positions in which they occur are mentioned. However, they introduce phonological issues that are relevant to this study. The changes that take place when sounds change positions is of help to the researcher since this helps in trying to identifying some errors and explaining the origin of those errors.

Otterloo (1979) does a comparative study of Kalenjin dialects. The goal of this comparison was to determine the dialects that are closely related that can effectively use

the same set of literature. Nandi is a Kalenjin dialect. In the introduction to the study, the relationship between the Kalenjin dialects is mentioned.

Creider (1982) attempts the analysis of tone in Nandi in detail. The work presents the tonal phonetics of Nandi and the processes involved with the aim of reconstructing the tonal system of Proto-Kalenjin. He outlines the Nandi-Kipsigis segmental phonology in a generative phonology perspective. He attempts to highlight the phonological process in the derivation of nouns. Segmental phonology is important to this study as it also looks at the Nandi phonology.

Creider and Creider (1989) give the phonetic inventory of Nandi. They give changes that may occur when sounds appear in certain environments. Their discussion is not based on any theoretical framework and as such, there are no rules formulated to account for the alterations. This phonetic inventory is relevant to this study.

Zwarts (2004) investigates the phonology of Endo- a dialect of Marakwet. He mentions the various phonological processes but he does not use any theoretical framework and no rules are formulated for the alterations. However, his work is relevant to our study. This is because; this study has looked at phonological processes in Nandi.

Koske (2006) gives the phonetic inventory of Kipsigis and deals with vowel harmony a phonological process within autosegmental phonology framework. Her study is also important to this study due to the fact that the aspect of phonetic inventory and vowel harmony is dealt with in this study. The phonetic inventory and vowel harmony is helpful to this study because this study looked at the same.

Boen (2014) investigates the phonological and morphological adaptations of loan words in Nandi from English and Kiswahili using Natural Generative Phonology and Generative CV-Phonology theoretical framework. She discusses segmental phonology in Nandi where the various vowel and consonant processes as well as syllable structure adaptation processes. In addition to the Nandi phonology, vowel and consonant processes were looked at. These studies gave insights to this study in form of data and the shape it should take.

1.6.3 Literature Review on Language Errors

Obinju (2007) in her study investigated the possible causes of errors made in the formation of English tag questions among learners. She explored Selinker's (1972) theory of interlanguage. In the study, she points that the system of rules changes with time and attributes this to Selinker's cognitive processes..

Mwaniki (2001) looked at a syntactic study of the interlanguage of Kikuyu learners of English as a second language. He identified, analysed and described both qualitatively and quantitatively the emerging interlanguage syntax of a sample of Kikuyus learning English which to them is a second language. He based his study on interlanguage theory which postulates the structural autonomy of the developmental stages of learner-language and its inherent characteristics as systematicity, variability and rule-governed. The underlying processes in this theory enabled the inference of psycholinguistic explanations of the processes and strategies in the formation of learner-language.

Moseti (2013) in his study examined the syntax of the written English of Kenyan deaf learners and adapted the interlanguage theory as its theoretical framework. He examined the extent to which Kenyan sign language among other factors contributes to the formation of interlanguage syntactic strings.

Chomba (2013) in her study on the morphosyntactic errors in the written Kiswahili that result from the influence of sheng and non-target structures attempted a morphosyntactic analysis of sheng and non-target structures to determine their influence on standard Kiswahili proficiency of learners. The study was guided by interlanguage theory as proposed by Selinker (1972). Manifestation of Selinker's psycholinguistic processes was assessed in terms of their distribution and frequency. A comparative assessment of sheng and pidgin was done to determine whether sheng can be classified in the same category with pidgin.

Ouma (2014) in studying on code-switching and learning of English as a second language attempted to bring out the patterns of language behaviour. The goal of the study was to establish how code-mixing of Dholuo and English relates to interlanguage theory as pupils learn English which is to them is a second language. In the study, it was

discovered that the English language has adapted to Dholuo contexts especially when the pupils engage in formal conversations in informal situations. English language remained the matrix language in formal situations where the learners were alert in their language of choice.

Ouma (2015) investigated the extent of mother-tongue interference related to phonological processes among the Lumarachi native speakers who are learners of English. Grammatical bits of English that are affected by the grammatical bits of Lumarachi learners of English by examining the instances of interference due to morphological errors are also highlighted.

1.7 Theoretical Framework

The study adopted Interlanguage Theory and Natural Generative Phonology. The Natural Generative Phonology (NGP) is applied in chapter two where the Nandi phonology is dealt with in detail. It gives the explanations on the phonology, its processes and helps in the derivation of rules. In chapter three and four, interlanguage theory is used. There is a comparison between the target language, the source language and the interlanguage. Interlanguage theory is applied when the learned form is analysed, which lies between the source and the target language. This language is erroneous and the errors are identified and the source explained. The source and the target languages help in tracing the source of errors.

1.7.1 Natural Generative Phonology

Natural Generative Phonology whose proponent is Vennemann. He proposed the theory in the early 1970s but Hooper expounded it later in the year 1976 with the intention of constraining abstractness in phonology, Clark & Yallop (1995:402). In phonology, abstractness can be said to be the extent to which an underlying representation of a morpheme may stray from its associated phonetic representation. Abstractness results from the reality that in phonology, two levels of representations are put forward which are the surface representation and the underlying representation.

NGP introduced generalizations across concrete phonetic representation forms to replace rules with an aim of restricting abstractness. As a result, within NGP, there is a direct

relationship between rules and NGP is representations and surface forms. To some degree, NGP is founded on Transformational Generative phonology (TGP). The TGP theory was developed by Chomsky in early 1950s. It is highly abstract and as a result, it fails to capture that which is thought to be achievable in the phonology of natural languages. NGP is considered to be a more constrained theory as compared to TGP since it does not permit the underlying representations that are not related to their surface representations.

1.7.1.1 Principles of Natural Generative Phonology

Hooper (1976) outlines the principles of NGP. In her study, she did an examination of the consequences of NGP for the analyses of a range of data from a number of human languages like French, Spanish, to mention just a few. Her claim is that, if abstractness can be restricted, then also the same case will apply on the possible underlying forms and the result would be that the rules of grammar will be constrained. This is illustrated in the example below in (2a) and (2b) from Clark and Yallop (1995:403).

(2a) Demon [di:mən] (2b) Demonic [dɪ'mɒnɪk]

In this example, if abstractness is constrained, then it will be proposed that of the two words above, one is the underlying form while the other is a surface form. If this is the so, why does [ə] occur in one form and not the other after the initial consonant? Challenges are likely to arise if a rule is stated to explain this because in the words used for illustration, one of the given elements does not exist in one of them.

Hooper (1976: 13) 'part of its structural description (SD) does not exist on the surface in English'. As a result, Natural Generative Phonology has to place constraints to such rules. Seen in this manner, the abstract rule of the kind illustrated in (2a) and (2b) would not be allowed. Hooper (1976) 'A very strong constraint on rules would be the one that does not allow abstract rules at all, it would require that all rules express transparent surface generalizations that are true for all surface forms and should also express the relation between surface forms in the most direct manner'. This state of being is known as the true generalization condition.

1.7.1.2 The True Generalization Condition

True generalization condition is a constraint on phonological rules which demands that a form proposed as underlying to be accepted as the right underlying form, it should have a surface manifestation. The condition here declares that, some changes do not have a conditioning that is phonetic in nature.

‘The condition requires that all the rules express transparent surface realizations. Natural Generative Phonology posits that native speakers formulate rules about their languages that relate surface forms to other surface forms to eliminate abstractness’ Clark & Yallop (1995:403).

The relationship between surface forms should be shown by the rules in a very clear way possible. Having grammar rules that make generalizations that are true and testable is allowed by this principle. In addition, it requires that phonological rules and representations bear a direct relation to the surface linguistic forms, the resulting concrete analyses are subject to empirical disconfirmation than abstract analyses.

1.7.1.3 The No- Ordering Constraint

This is a constraint on the application of rules. Rules should only be applied at such time the structural description of a rule is met but not forced on to a human language. In addition, these rules should apply in a serially on the products of other rules so that they have their own inbuilt ordering. It limits external rule ordering so that rules only apply after their structural descriptions have been created by the output of other rules. This condition states that special rules always apply before the general ones. Another implication here is that, the use of rule order by a language’s speakers as a result of their choice of the sound use analysis that relates morphological and phonological phenomena.

1.7.1.4 A Strong Naturalness Condition

This is a constraint on the abstractness of the underlying representations which restricts abstractness of the underlying forms. The prerequisite here is that the forms should be

the same if not bearing full likeness to the surface forms and has to be expressed in inherent phonetic content.

There needs to be clarity between underlying and surface forms. This will indicate changes that are occurring thereby avoiding abstractness in grammar.

1.7.1.5 Rules in Natural Generative phonology

Natural Generative Phonology, rules which possess some characteristics. The rules include:

1.7.1.6 Phonetically Conditioned Rules (p- rules)

The rules describe the changes that occur in environments that are thoroughly explained in Phonetic terms. In addition, these rules are conditioned by the physical articulatory processes and they are not modified in any way.

The changes are described as universal since they commonly occur in given environments regardless of the language. They are instinctive and do not have exclusions.

Mberia (1993) 'phonological rules are more universal and are found in all languages as long as the rule contains only phonetic information'.

The laws of pronunciation in a language are also formed by the phonological rules. These rules express allophonic variations that are purely phonetically motivated. NGP model declares that environments in which the changes for these rules occur are entirely phonetic.

1.7.1.7 Morphophonemic Rules (MP Rules)

Hooper (1976)'s argument is that these rules are involved in sound-meaning correspondence of a language and are language specific.

Distinction between MP-rules and P-rules is an important feature of Natural Generative Phonology theory. Transformational Generative Phonology true rules does not have the

generalization conditions which do specify the manner in which a rule should be formed in phonetic terms even if it does not correspond directly to the surface phonetic facts.

NGP theory hypothesizes that a learner of any language who only has the surface data to work with, constructs only hypotheses that are consistent with surface data and cannot construct abstract underlying forms and opaque rules. A learner comes up with rules that express clear surface generalizations that are true for all surface forms.

1.7.1.8 Sandhi Rules

Hooper (1976) 'Sandhi rules are a class of rules that are intermediate between phonological rules and morphophonemic rules. On one hand, the word boundary that functions in Sandhi rules must be considered a syntactic boundary since it is determined arbitrarily by the syntax and semantics but not phonology'. In the same way, a word boundary is similar to a phonological boundary because it has the ability to coincide with a syllable boundary. Ideally, what can start and end a word can also start and end a syllable. Additionally, where a word can start and end can also be where an utterance starts and ends. The close association between word boundary and phonological boundary make Sandhi rules behave like phonological rules which cannot be suppressed since they are productive.

1.7.1.9 Word Formation Rules

They are rules which points out clearly diverse morphological elements that can be joined together, and the order in which this joining can be done to create a word in a given language. The rules here are morphologically related.

1.7.1.10 Spell- Out Rules

These rules orders that an initial vowel and the final vowel must be put in between for it to meet the morphological dictates of the recipient language.

1.7.1.11 Via Rules

They are rules which show the relationships between surface forms directly create the surface structure from an ordinary underlying form. This brings about the difference

between MP-rules and Via-rules. For instance, in changes like *divine* versus *divinity* and *derive* versus *derivative* in English, Hooper in her argument says ‘the speaker stores both alternates that is, /divain /and /diviniti/ but knows that there is a relationship between the two forms, expressible in the following via rules stored alongside each pair to which it applies that is, /ai/ and /i/’.

The rules are used to illustrate the association between the two forms at the lexical level. This is done without displaying any derivational relation. In most cases, via rules are not productive. NGP also makes strong claims have been made by NGP about natural language processes and changes.

1.7.2 Interlanguage Theory

Interlanguage theory is credited to Selinker (1972) who proposes that second language learners produce their own self-contained system that falls somewhere between the first and the second language systems. The role of the first language in the acquisition of second language has witnessed an intense debate during the past 50 years, resulting in the prevalence of Error Analysis over Contrastive Analysis. Contrastive Analysis started in the 1970s and it sought to predict the errors that learners make by identifying the linguistic differences between their first language (L1) and second language (L2), Ellis (1994: 47). Error Analysis provides a methodology for investigating a learner’s language. For this reason, Error Analysis constitutes an appropriate starting point for the study of learner language and L2 acquisition. A great number of empirical studies indicated that neither L1 nor L2 were always responsible for learners' errors (Bailey et al. 1974; Krashen et al. 1978; Larsen-Freeman, 1991, 2002). Thus, Contrastive Analysis and Error Analysis paved the way for Interlanguage Theory to take place in describing L2 learners' errors from its own perspective.

Interlanguage theory developed out of Contrastive Analysis Hypothesis and Error Analysis, developed by Lado and Corder, respectively. Selinker, the proponent of this theory was motivated by Corder’s error analysis which attempted to examine and classify the errors of language learners. The term ‘interlanguage’ was coined by Selinker, (1972), though the idea that L2 learner language was different from both L1 and the target language had gained traction at the time. He proposes that, L2 learners produce

their own system of rules that lies between the source language and the target language systems. L1 is the source language while L2 is the target language. What is taken from L1 is blended with what is taken from L2, resulting in new forms that are neither in the L1 or L2. A new system of language is formed. Only that it has features and rules from both L1 and L2. Interlanguage rules are flexible and changes with time, that is, they can either be added, altered or deleted depending with the situation.

Selinker noted that in a given situation, the utterances produced by the learner are different from those that native speakers would produce had they attempted to convey the same meaning. This comparison reveals a separate linguistic system. This system can be observed when studying the utterances of the learners who attempt to produce a target language norm. The interlanguage is the learned form which is erroneous. The learners fail to learn the rules of a target language successfully and put into correct use. In interlanguage, fossilization is an important characteristic of L2 learning. Selinker (1972) later on broadly referred to it as “incompleteness.”

This research study will be based on the Inter-language Theory as explained and elaborated by Selinker (1972). This theory postulates the structural autonomy of the developmental stages of learner-language and its inherent characteristics. The characteristics are:

Dynamic: the learners of a second language keep the rules in their minds. These rules keep altering from time to time. This is a state of progression along a continuum but as a continuous progression resulting in a succession of interim grammars.

Systematic: At any particular point or stage of development, the interlanguage is governed by rules which constitute the learner’s internal grammar. These rules are discoverable by analyzing the language that is used by the learner at the time. What he/she can produce and interpret correctly as well as errors that are made. Rules do not exist in a vacuum, for them to be derived; the language is looked at as it is used at that particular time.

Variable: The interlanguage varies with context. Different forms are produced depending with the use at a given time.

Reduced system: This is the reduced system in both form and function. It refers to the less complex grammatical structures that typically occur in an interlanguage compared to the target language (e.g. omission of inflections such as the past tense suffix and plural markers in English). This characteristic of reduced form refers to the smaller range of communicative needs typically served by an interlanguage (especially if the learner is still in contact with members of the LI speech community).

According to Ellis (1985:47), the Inter-language Theory is based on the hypothesis that there is “psychological structure hidden in the brain” which is activated when one attempts to learn a certain language. Selinker, (1972) noted that in a given situation the utterances produced by the learner are different from those “native speakers” would produce had they attempted to convey the same meaning. This comparison reveals a separate linguistic system. It implies that the learners in this case produce systems different from those of the target language which is spoken by the native speakers. This system can be observed when studying the utterances of the learner who attempts to produce meaning in using the target language. Inter-language can be observed to be variable across different contexts. For example, it may be more accurate, complex and fluent in one discourse domain than in another, Selinker and Douglas (1985).

The inter-language theory is important in linguistics and can be used to test what learners know about a target language in all aspects. By looking at this, and making a comparison between an interlanguage and universal language rules has given input in the understanding of linguistic universals in Second Language Acquisition (SLA).

White (1992) points out on the need to consider inter-language grammars in their own right with respect to principles and parameters of Universal Grammars (UG) arguing that one should not compare L2 learners to native speakers on the L2 but instead consider whether inter-language grammars are natural language systems. When a learner learns a second language, the resultant language is not the target language but an interlanguage which is erroneous in nature. Comparing the native and non-native speakers in this case may not be necessary because the rules used by the non-native speaker are not the same rules used by the native speaker. This means that the two will be using distinct language

forms. Interlanguage therefore is appropriate in the discussion of the phonological basis of misspelling in learners' written work.

The point of contention here is whether the interlanguage stands out independently with its rules and principles.

In the process of second language acquisition, Interlanguage is in constant movement from the source language to the target language with an aim of closing the gap between the interlanguage and the target language. Unfortunately, before that achieved, a state is reached where the movement is stopped completely. This is referred to as fossilization.

1.7.2.1 Fossilization

It is a permanent retention of second language learners' habits. This is a stage during second language learning that occurs when movement towards the target language is stopped, Bussmann (1996). Some errors seem uncorrectable in spite of the effort put with the aim of eliminating them. Fossilization brings about second language acquisition, Han and Selinker (2005); Long (2003). Selinker (1972:215) says they are linguistic rules, items, systems and subsystems of the native language which L2 learners keep in their interlanguage irrespective of age or L2 input. It can occur at any stage of the learning process. These include all the aspects of intrlanguage that become permanent and that the majority of second language learners can only rectify with considerable effort. This process is common adults who are learning a second language, Selinker and Lamendella (1980).

The notion of Interlanguage being developmental suggests that it is possible to the stage at which a learner is along a developmental continuum, Selinker (1972). It is for this reason that he identifies cognitive psychological processes which play a key role in the learning of second language. According to him, these processes exist in latent psychological structure and that Interlanguage utterances are associated with one or more of these processes. The processes include:

Overgeneralization: Richard (1971) points out that some elements in the learners' interlanguage appear when a learner of a second language uses the L2 rules inappropriately in the target language context. Learners make their own rules of

language. Some of the rules of the interlanguage system may result from overgeneralization of specific rules and features of the target language. This process entails the extending the application of a rule. Learners apply rules from L2. These rules are applied inappropriately.

Transfer of Training: In her article, Stenson (1974:55) describes transfer of training deviations as those deviations which come about as a result of cause design and/or teaching techniques which lead to teacher induced deviations. They come as a result of faulty explanations leading to misunderstanding or misrepresentation of usages. The lack of formal instruction in English fossilization of incorrect language forms result in initial learning process on the performance of the later activities. This is normally due to training deviations for example, wrong explanations, and misinterpretations by the trainer.

Language Transfer: This is the occurrence of fossilized linguistic items and rules in the target language as a result of first language (Selinker (1972). It plays a role in the acquisition of grammatical aspects. Studies by Richard (1971) and Krashen (1974) have shown that deviations made by second language learners are developmental and transfer plays a minimal part. Some of the rules in interlanguage system may be the result of transfer from the learner's first language. Learners use their L1 to create their own language system. The errors in the use of L2 result mainly from L1, and the difference between L1 and L2 is the reason for the occurrence of errors.

Strategies of Second Language Learning: Some of the rules in the learners' interlanguage may be as a result of transfer from the application of language learning. Strategies have a tendency on the part of the learners to reduce the TL to a simpler system in order to perform a wide range of communicative and expressive functions. According to Wardlaugh (1986), simplification is the reduction and modification of morphology and syntax. It also involves omission of functional words and plural markers in order to make the target language easier to use. Language learning strategies appear to be central to this theory according to which interlanguage evolves over time as a result of various strategies that learners use. It involves incorrect learning strategies fossilization of some features. Some elements of the interlanguage may be the result of learners'

specific approach to the language material to be learnt, i.e., their selection of learning strategies. It involves incorrect learning strategies fossilization of some features.

Strategies of Second Language Communication: Faerch and Kasper (1983) defines communication strategies as ‘ potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal’. According to Tarone (1983), second language learners employ distinct communication strategies in order to make up for their limited knowledge of the target language. This strategy involves topic avoidance and/or message abandonment as a result of inadequate mastery of the target language. It pays attention to the fluency rather than accuracy in the communication. Learner tries to simplify target language rules.

Learners of a second language use a variety of strategies to aim at their goal. In one way or another, second language learners employ at least one of these strategies resulting in a shortfall. The language that is learned bears traces of both source and target language. This theory is of relevance in this study in that, it helps the researcher in tracing the origin of errors. For instance, it can be due to the overgeneralization of rules where the learnt rules are applied anyhow. Some errors may be due to the errors made by the instructor during his/her explanations leading to misunderstanding. This study using the interlanguage theory traces such errors and remedial measures are suggested. For errors to occur, the characteristic of reduced system in form and function is seen. Less complex structures are commonly used and some which are complex are likely to be omitted. Some errors are as a result of omissions of complex structures or substituting them with simple structures.

In summary, interlanguage is a single system composed of hypothetical rules that have been developed through different cognitive strategies and are tested and modified by the learner during the process of comprehension and production.

There are a number of assumptions or principles underlying the interlanguage theory. The principles are given below:

1.7.2.2 Principles of Interlanguage

The following are the principles of interlanguage:

(a) When learning an interlanguage, the students come up with temporary rules. This form has the properties and rules of both the first and the second language. It can also have a totally new system that does possess features of neither.

(b) The learner grammar is permeable. It allows the entrance of any rule. Other externalities cause an impact in the interlanguage. A language can be influenced leading to incorrect forms.

(c) The interlanguage grammar is traditional. Their grammar is not stable. It is flexible and therefore changes with time. At any point in time, the users of the language can increase or reduce the vocabulary of the interlanguage giving it a new face.

(d) The interlanguage grammar can come to a phase when the movement towards the target language is stopped. Effort may be put by learners and instructors without success. The deviant forms will continually be seen in the work of learners.

From the discussion above, we conclude that interlanguage theory is best suited to enable us achieve the objectives in this study. The forms that came out are compared with the correct forms and this theory provides an explanation of the interlanguage, which is neither the source nor the target forms.

1.8 Methodology

The researcher collected 60 written compositions and dictations (60 words) from high school learners whose first language is Nandi. A speaking exercise was also done where the learners were given words to read aloud. The five selected schools were from Eldoret West District in Uasin Gishu County.

The data for the study is in linguistic forms, that is, words. These data is written compositions and dictated words as well as words to be read from a given list. This study focused on misspellings which are caused by first language phonology; that is the reason as to why both words written and read were tested. The speaking exercise as well as writing is important because they bring out a true picture of the influence that leads to misspelling. The words are both vowels and consonants.

To get the respondents suitable for the study, five schools in Eldoret West District, Uasin Gishu County were visited. This is a reasonable scope considering the size of the district. The target population is 60 students, 12 per school. This gives a relatively fairly spread results per school. The selected schools are: Atlas, Murgusi, Soy, St. Mary's Osorongai and Christ the King Sambut secondary schools. The schools are Day-Boarding Mixed District schools. What informed the selection of this category of schools is the fact that, for learners to be day scholars, they must be from the local community around the school. This is because, the presence of day scholars who interact with non-English speakers after school may be influenced positively or negatively and may in-turn influence their colleagues in school. Most of the people in this district speak Nandi; in addition, district schools admit most of their students from within the district. The researcher also considered the location of these schools such that they are spread within the district.

The research investigated whether the language that the learners use at home is imported to school and because this is so, it poses a problem in English for the learners whose first language is Nandi. This is partly contributed by the time or period of exposure to English since it is very minimal and not used regularly as compared to their first language. This is because the learners are influenced by the sound system of Nandi.

The respondents are learners from form three. This helped the researcher get a true picture of the influence since form threes have been exposed to the English language for a fairly reasonable length of time in secondary school. The subject teachers in the selected schools did not help the researcher with the identification of learners who were the subjects. This is because; the subject teachers may be subjective in their choice of respondents. The researcher picked the learners at random so as to avoid bias. The researcher went ahead to administer the test. This test was administered to satisfy the respondents' inclusion criteria.

The respondents who had been identified were given a task in imaginative writing. The researcher also administered a dictation test to the learners. The dictation comprised of specific words and as the researcher dictated, the students wrote the words. In addition, a speaking exercise was given where the learners were given words to read aloud. As the

learners were reading the words, the researcher was marking the words on the scripts as either correctly or incorrectly read. In addition, tape recording was done to enable the researcher to play it back and get a clear picture of the read words as either correctly or incorrectly read. The researcher then marked the tests on the scripts, that is, the compositions and the dictated words.

In the learners' work, all the misspelt and mis-articulated words were identified. The misspelt forms were put into various categories depending on the anomaly and the likelihood of it resulting from the effect of the first language sound system. The present study employed a descriptive design. The nature of errors made was put into the following categories: errors due to homophones, consonant substitution, silent graphemes, discrepancy between English spellings and sounds, absence of the sound in Nandi, vowel length, and retention of 'e' before a suffix.

The data for the study is in linguistic forms, that is, words. Data collected was summarized and analyzed. These errors were presented and discussed under the above stated categories. In this study, Natural Generative Phonology (NGP) and Interlanguage theory were used. NGP is applicable in the Nandi phonology where the sound systems, phonological processes as well as the syllable structure with rule derivation is presents. In the findings and remedial measures, Interlanguage theory is used where a comparison between the source form, target form and the new form are compared. The interlanguage is the erroneous form which falls short of the target form. For instance, some may be due influence by first language patterns. It gives possible causes of misspellings.

CHAPTER TWO

NANDI PHONOLOGY

2.0 Introduction

Segmental phonology forms the basis of this study. Phonetic inventory of Nandi consonants and vowels together with the words that they occur in is discussed in this chapter. According to Odlin (1989:115) ‘segmental errors are errors involving vowels and consonants’. A shortfall arises due to the disparity between the source and the target language phonemic inventories. He states that “the most salient consequences of linguistic differences are production errors which result in pronunciation patterns that diverge from those found in the target language”. The vowel and consonant sounds as well as their phonological processes will be looked at in this chapter. A brief overview of consonantal and vowel processes act as a basis for the interpretation of the misspelt words in English.

2.1 Nandi consonants

Nandi, just like any other language has both true consonants and glides. It has two glides and 11 true consonants. This language allows consonants to occur in incipient position as well as final positions; it is CVC (Consonant-Vowel-Consonant) kind of a language. It should be noted that /p/ and /k/ have allophones which are in the free variation. The allophones of p are [p], [b] and [β] while the allophones of k are [g], [k] and [ŋ]. The table below shows orthographic as well as IPA representations of Nandi consonants together with the words that they occur in.

Table 1: Nandi Consonants

Consonant (IPA)	Orthography	Phonetic Transcription	Gloss
/p/ → [β, b, p]	Tup	[tup]	Burry
	Batet	[βatet]	Back
	bobat	[bobat]	Mushroom
/t/	Ter	[tɛr]	It is different
	Til	[til]	cut
/tʃ/	Chas	[tʃas]	Slide
	saach	[sa:tʃ]	seduce
/k/ → [k, g, ʏ]	Kas	[kas]	hear
	Tuga	[Tuga]	cattle
	Pugat	[puʏat]	foam
/m/	Moosit	[mo:sit]	Do not scrab
	Kimiet	[kimiet]	Ugali
/n/	Niin	[ni:n]	That one
	Kiinet	[ki:net]	Breast
/ɲ/	Nyit	[ɲit]	Annoy
	Nyiir	[ɲi:r]	Sneer
/ŋ /	Ng'om	[ŋom]	He/she is wise
	Cheeng'	[tʃe: ŋ]	Look for
/s/	Kas	[kas]	Hear
	Somis	[sɔmis]	They are awful
/r/	Koorir	[ko:rir]	He/she cried
	Cheer	[tʃe:r]	Cheer
/l/	Leel	[le:l]	White
	luk	[luk]	war
/j/	Yat	[jat]	Open
	Siyet	[sijet]	Finger nail
/w/	Wech	[wetʃ]	hate
	Chorwech	[tʃorwetʃ]	Steal for us

Nandi consonant phonemes occur in all word positions with an exception of two glides which occupy the word incipient and medial positions as shown in the following words (1a) and (1b) below:

Word initial	Gloss	Word Medial	Gloss	Word Final	Gloss
1a.) [ni:n]	that one	[pit&t]	custom	[il]	break
1b.) [sal]	colour	[punik]	enemies	[pand&k]	maize

2.1.1 Prenasalized consonants

A prenasalized consonant is a type of a consonant cluster which consists of a sequence that begins with a nasal articulation and ends with an oral articulation. A prenasalized consonant behave in many aspects like single segments in a word. Nandi language has four types of prenasalized consonants which are /mb/, /nd/, /ŋg/ and /ɲʃ/ as shown in the table below:

Table 2: Prenasalised consonants

Consonant (IPA)	Orthography	Phonetic Transcription	Gloss
/mb/	Mbareet Kemboi	[mbare:t] [kemboi]	Farm Night
/nd/	Kiinde ndaret	[ki:nde] [ndaret]	You(sg)put snake
/ŋg/	Ongen Senge	[oŋgen] [senge]	You(pl) know Aunt
/ɲʃ/	Menjo Injoor	[meɲʃo:] [ɲʃo:r]	An initiate's hut Backyard

The four types of prenasalized consonants shown above are the voiceless plosives which through the process of progressive voice assimilation become voiced because of the nasals that precede them. There is no regressive assimilation that causes prenasalisation.

2.2 Nandi Vowel Phonemes

The phonetic inventory of Nandi contains ten vowels that are divided into two on the basis of the process vowel harmony though there is controversy about the number of vowels. Scholars like Toweett (1975), Creider (1982), and Tucker (1964) state there are ten vowels in Nandi though the distinction between [ɔ] and [a] are not clear. We will not attempt to resolve the controversy but we will use the ten vowel system.

2.2.1 Vowel Harmony

Vowel harmony of any sort is an assimilatory process that involves a restriction such that all the vowels within some domain (e.g word morpheme) must have the same value for some phonological feature, Casali (2002:2). Vowel harmony is thought of a particularly strong co-occurrence restriction among vowels.

Vowels of Nandi fall into two matching categories of five pairs on the basis of advanced tongue root [ATR] harmony. According to Local and Lodge (1994), [+ATR] vowels are articulated with the tongue advanced forward while [-ATR] vowels are articulated with the tongue retracted. [ATR] harmony feature serves to divide the vowels of Nandi into two sets [+ATR] /i e u o a/ and [-ATR] /I ʊ ɛ ɔ ɑ/ vowels. All the vowels have their harmonic counterparts.

The examples below show how vowel harmony occurs in Nandi.

a.) Par {par} [a] is [+ATR]	Gloss
Kiabarin {kiabarin}	kill (root)
{ki} {a-} {par} {-in}	
Distant past I kill (you)	

All the vowels in the word are +ATR.

b.) Keer {ke:r} [e] is [+ATR]	see
Kiagerin {kiagerin}	
{ki-} {a-} {ke:r} {-in}	
Distant past I see you (sg)	

In the above examples of words in (a) and (b), if there is a [+ATR] vowel in a word, whether it is in the root or in the affix, then the following vowels become [+ATR]. For

example in the root /ke:r/ (see), the [+ATR] vowel /e/, triggers vowel harmony in the word /kiakerin/ (I saw you).

In the following section, Nandi vowels are captured on a vowel distribution table together with the words that they occur in.

Table 3: Nandi Vowel distribution

Vowel	Underlying representation	Phonological transcription	Gloss
/i/	Sich	[sic]	‘get’
	rip	[rip]	‘Guard’
/ɪ/	Mit	[mɪt]	‘chew’
	Nyit	[ɲɪt]	‘annoy’
/e/	Eun	[eun]	‘hands’
	Let	[let]	‘behind’
/ɛ/	Ker	[kɛr]	‘Shut’
	kwesit	[kwɛsit]	‘smoking pipe’
/a/	Ano	[ano]	‘Where’
	Anyone	[aɲone]	‘I am coming’
/ɑ/	Al	[ɑ]	‘buy’
	Laal	[la:l]	‘cough’
	Kaat	[ka:t]	‘Neck’
/ɔ/	Ot	[ɔt]	‘Serve’
	Moy	[mɔɪ]	‘Calf’
	Yom	[jɔm]	‘To tempt’
/u/	Sus	[sus]	‘bite’
	Kur	[kur]	‘call’
ʊ	Nuch	[nʊʃ]	‘To stamp’
	Put	[pʊt]	‘destroy’

From the above distribution of vowels, it is evident that vowels occur in all word positions. This means that Nandi vowels can occur in word initial position, for instance,

al [al] (buy), orek [orek] (ash). Nandi vowel phonemes also occur in medial positions as shown in the following words: mil [mɪl] (amuse), til [til] (cut). Nandi vowel phonemes can also occur in word final positions as shown in the following words: ano [ano] (where), lu [lu] (drink).

Nandi language is classified as a CVC (Consonant-Vowel-Consonant) structure language due to the fact that most words in the language start with a consonant followed by a vowel then again followed by a consonant. This is illustrated by the following verbs: tor [tɔr] (stab), rut [rut] (pierce), nyit [nit] (annoy).

2.2.2 Nandi Vowel Sequence

Nandi language permits two vowel sequences that is, (v_1, v_1) where two vowels of the same quality occur together and (v_1v_2) , V_1V_2 sequence refers to the various combinations of two different vowels in a word.

The table below gives examples of words with v_1v_1 sequence.

Table 4: V₁V₁ sequence table

Vowel	Orthography	Transcription	Gloss
/ii/	Piich	[pi:ʃ]	People
	Riip	[ri:p]	To guard
/ii/	Piit	[pɪ:t]	To grow
	Niin	[ni:n]	Distal that
/uu/	Kuur	[ku:r]	To call
	Luul	[lu:l]	To take someone hostage
/oo/	Muut	[mɔt]	Hit
	Tuun	[tɔn]	Someday in future
/ee/	Cheet	[ʃe:t]	Loud noise
	beleek	[Bele:k]	Elephants
/ɛɛ/	Eeny	[ɛ:n]	Slaughter
	Beel	[bɛ:l]	Burn
/oo/	Soon	[sɔ:n]	Someone barren
	Ng'ook	[ŋɔ:k]	He/she is mean
/aa/	Saanik	[sa:nɪk]	Brother-in-laws
	Maas	[ma:s]	To hit with a stick

V₁V₂ sequence in words

V₁V₂ sequence refers to the various combinations of two different vowels in a word. They can therefore be said to be various combinations of two different vowels. There are several words in Nandi that have this sequence of V₁V₂ as shown in the following table.

Table 7 V₁V₂ Sequence table

V₁V₂ Sequence	Word	Phonetic transcription	Gloss
/ɪo/	Riot	[rɪot]	In-calf
	Sion	[sɪon]	They are co-wives
/oi/	Moita	[moita]	Calf
	oinet	[oinet]	River
/ui/	Suik	[suik]	Jackals
	Ui	[ui]	Go
/ei/	mieindo	[mieindo]	Goodness
/ɛi/	Eik	[ɛik]	Oxen
	nyeisiet	[ɲɛisiet]	Chewing
/ɔi/	Tuiyot	[tɔijɔt]	Meeting
	Tui	[tɔi]	To break(e.g a bottle or a pot)
/aɛ/	Saet	[saet]	Buffalo
	Naet	[Naet]	Knowledge
/ɔɛ/	Soet	[sɔɛt]	Sky
	moet	[mɔɛt]	Wound
/ai/	Taita	[taita]	First born
	mwaitanyu	[Mwaitaɲu]	My oil
/ɛu/	Keu	[kɛu]	To move away from somewhere
	Keum	[kɛum]	To take shelter when it is raining
/aɛt/	Maet	[maɛt]	Drying
	Kaet	[kaɛt]	I have denied somebody something
/iɛ/	Tiech	[tiɛʃ]	Step on
	siep	[siɛβ]	Lie on something

2.3 Nandi Syllable Structure

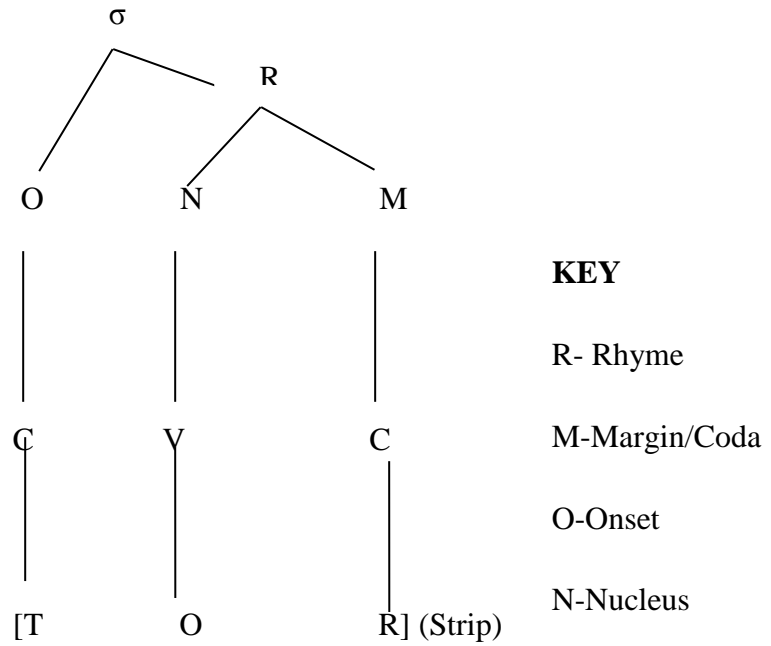
Katamba (1989:153) defines the syllable as the unit in terms of which phonological systems are organized. A syllable is therefore a purely phonological entity. In dealing with the syllable, one looks at the level of organization of the consonant and vowels in a word in a given language since each language has a specific syllable structure. A syllable structure consists of two segments, that is, a consonant and a vowel. There are two types of syllable systems, the open and the closed syllable system. In the open syllable system words end in a vowel while in a closed system words end in a consonant sound. Nandi language permits both the open and closed syllable systems as shown by the following words: moita [moita] (calf), ui [ui] (go), teta [teta] (cow) which consist of open syllables and mit [mIt] (chew), tor [tor](strip), ker[kɛr] (shut), which consist of closed syllables.

Akmajian et al (2001:126) defined a syllable as representing a level of organization of the speech sounds of a particular language. This means that various languages have distinct syllable structures.

Kenstowicz (1994:44) defines a syllable as a minimal pronounceable phonological unit. This means that a syllable can be utilized as a linguistic unit for studying distributional restrictions in a language.

Wardhaugh (1997:225) says that the syllable has the optional syllable onset which consists of one or more consonants and the obligatory rhyme which must have a vowel peak followed by an optional coda which like the onset will consist of one or more consonants. The rhyme is always the head constituent, that is, it is the only compulsory constituent.

The following illustrations show the Nandi syllable structure:



Most nandi words have a CVC structures as seen in the following words:

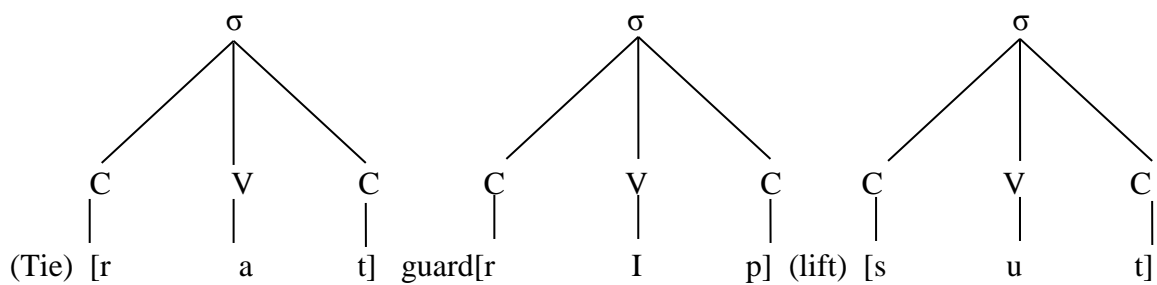
Wir [wɪr] (hit), laal[laal](cough).

Words in Nandi can also be mono syllabic, bisyllabic, trisyllabic or polysyllabic as seen in the following examples:

2.4.1 Monosyllabic words

Monosyllabic words consist of one syllable as seen in the words below:

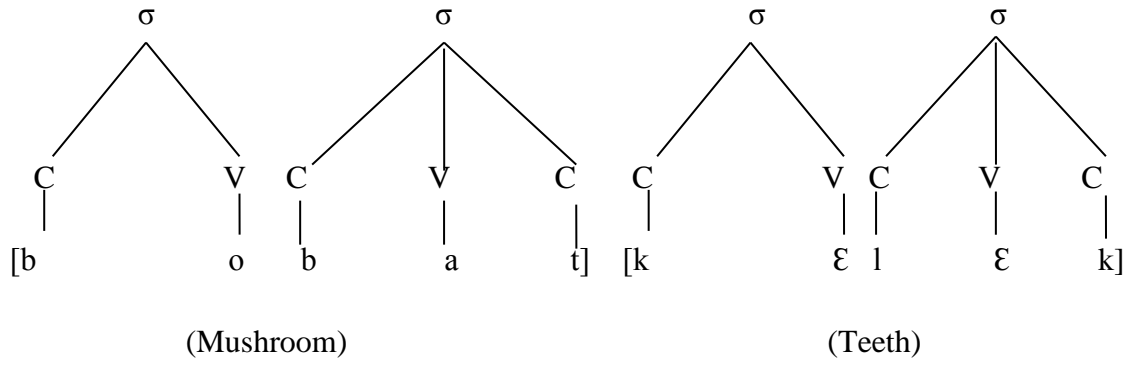
Rat [rat] (tie), rip [rip] (guard), sut [sut] (lift).



2.4.2 Bisyllabic words

Consists of two syllables as shown in the following examples:

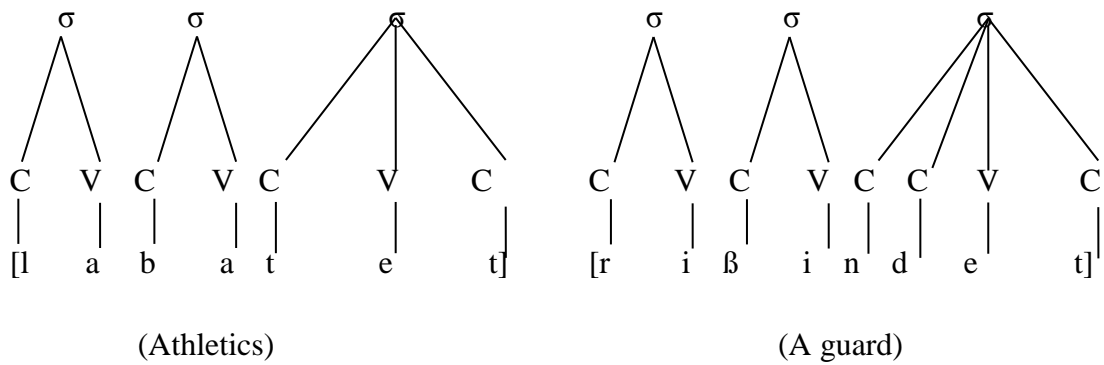
Metit[metit] (head), kelek[kɛlɛk](teeth), bobat[bobat](mushroom)



2.4.3 Trisyllabic words

Trisyllabic words consist of three syllables as shown below:

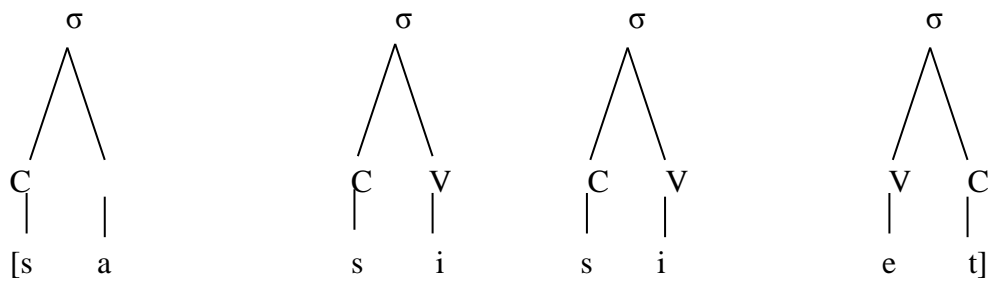
Ribindet [riβindet] (a guard), chitugul [tʃituɣul] (everybody), labatet [labatet] (athletics)



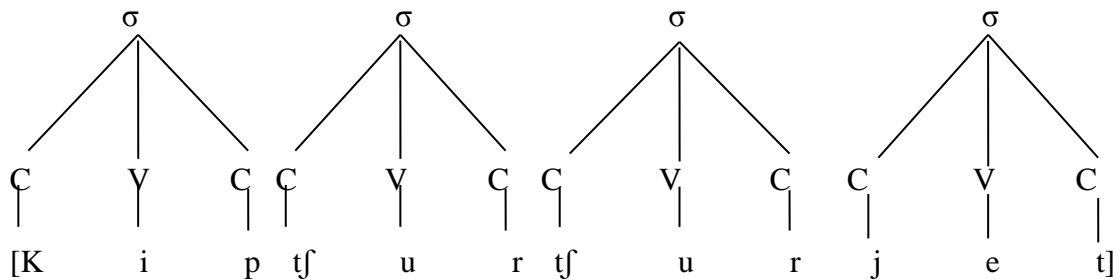
2.4.4 Polysyllabic words

Polysyllabic words consist of more than three syllables as shown in the following examples:

Semberisiet [seɱberisiet] (weeding), sasisiet [sasiet] (contempt), kipchurchuryet [kɪptʃurtʃurjet] (whirl wind), chebololet [tʃebolɔlɛt] (pumpkin)



(Contempt)



(Whirlwind)

2.5 Nandi phonological processes

‘A phonological process is a mental operation that applies in speech to substitute for a class of sounds or sound sequences presenting a common difficulty to the capacity of the individual’ (Stampe (1979:43). The phonological variations of Nandi may depend on speech difficulties of the speakers which are motivated by the nature of speech production perception.

For example in Nandi speech difficulty is shown:

Examples:

/ker/	[ker]	‘see’
/ke-/	[kɛ-]	‘to’
/ke-ker/	[keʏer]	‘to see’
/sich/	[sic]	‘get’
/ke-sich/	[kesic]	‘to get’

It would be easier to articulate [ke ʏer] than [ke-ker] because the rule of the language is that, a velar plosive that appears in between vowels becomes a fricative.

Stampe (1979: 43) observes that when morphemes of a language are combined to form words, the segment of neighboring morphemes become juxtaposed and sometimes undergo change.

There are various phonological processes in Nandi which can be grouped into two broad groups namely: vowel processes and consonant processes. Vowel processes include: palatal glide formation, labial glides formation, vowel lengthening and coalescence while consonantal processes are: spirantisation, voicing, palatalization, labialization and deletion.

The following are the process found in Nandi.

2.5.1 Consonantal processes

2.5.1.1 Spirantisation

This is the process of turning non-fricatives, for instance, stops into fricatives (Campbell, 1998:42). It is a common change involving stops when they occur between vowels. This process is also known as fricativization. Spirantization is a case of consonant weakening. Consonants tend to weaken from voiceless stops to voiced fricatives.

In Nandi, the roots of verbs are basically CVC as in example (i) and (ii).

1.) Underlying representation	Gloss
i.) /ker/	‘see’
/ker lakwet/	‘see the child’
ii.) /pan/	‘bewitch’
iii.) /sir/	‘write’
iv.) /chil/	‘press’

2.) Underlying Representation	Transcription	Gloss
i.) /ke+pan/ →	[keβan]	‘to bewitch’
ii.) /ke+sir/ →	[kesir]	‘to write’
iii.) /ke+ker/ →	[keŋer]	‘to shut’
iv.) /ke+chil/ →	[kɛci:l]	‘to press’

In example 2, we note that the underlying voiceless bilabial and velar plosives in Nandi become fricatives when they occur in between vowels. The voiceless bilabial plosive is realized as a voiced fricative /β/ → ke+pan/ → [keβan]

The infinitive marker /ke-/ is used with the root verb and the result is change of voiceless bilabial plosive to fricative. Examples (ii) and (iv) do not change because the root verb of (ii) begins with a fricative so no change is seen. In (iv), /s/ and /c/ do not change in between vowels.

Nouns with voiceless plosive also undergo this change. Nouns in every language can either be definite or indefinite, alternatively referred to as primary and secondary.

The primary form is best described as ‘indefinite’. It is always used in constructions with ‘any’ e.g. *chii ake tugul* ‘any person’ but *chiita* ‘a/the person’. However, the meaning

difference between the two forms is not great, and in texts the forms may alternate for stylistic reasons only.

Example 3 **Indefinite form**

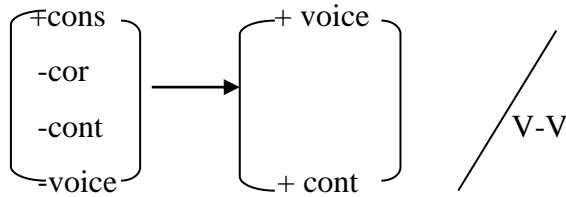
Underlying Rep.	Transcription	Gloss
i.) /rup + et/	→ [rɒp]	‘hunger’
ii) /atep+et/	→ [atɛp]	‘custom’
iii.) /luk+et/	→ [lɔk]	‘war’
iv.) /sak+ek/	→ [sak]	‘leaves’
v.) /sot+et/	→ [sɔt]	‘calabash’

Example 4 **Definite forms**

Underlying Rep	Transcription	Gloss
i)/rup + et/	→[rɒβɛt]	‘hunger’
ii) /atep+et/	[atɛβɛt]	‘custom’
iii)/luk+et/	→ [lɔvɛt]	‘war’
iv/sak+ek/	→ [sɔvɛk]	‘leaves’
v)/sot+et/	→ [sɔtɛt]	‘calabash’

In example 4 above, the voiceless bilabial and velar plosives also become fricatives. This change is true in all situations when these plosives appear in between vowels. /t/ does not undergo any change. The conditioning environment for spirantization is that of vowels. The voiceless, plosives /p/ and /k/ share the feature [-coronal] while /t/ is [+coronal]/ it is only the plosives with [-coronal] feature in Nandi that become fricatives intervocalically.

The rule for spirantization is formalized in distinctive features as:



2.5.1.2. Palatalization

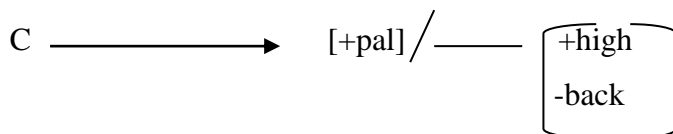
This is a secondary consonant modification where in addition to primary constriction, the tip of the tongue moves towards the hard palate region and the consonants acquire the [i] coloring, Clark and Yallop (1995: 65).

Examples:

Underlying Representation	→	Transcription	Gloss
i.) /Kim/	→	[k ^y Im]	‘strong’
ii.) /Tiendo/	→	[t ^y iɛndo]	‘song’
iii.) /lalet/	→	[lalet]	‘a burning’

In Nandi, palatalization occurs when a consonant precedes a high vowel [i] as exemplified in (i) and (ii) above but the consonant in (iii) is not fronted because for fronting of a consonant to take place, there must be a high vowel [i].

From the above data, we can formulate the following rule:



2.5.1.3 Labialization

‘This is an assimilatory process that involves addition of lip rounding or lip protrusion to any sound which is normally articulated with the lips in a neutral or spread position’, Clark and Yallop (1995: 64). This results in modification and extension of the vocaltract. According to Hyman (1988) labialization is a secondary consonant modification in that,

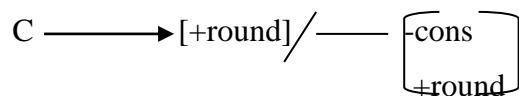
in addition to the primary constriction, the lips are rounded and the consonants acquire u, w coloring. It is indicated by using the raised ^w after the consonant [c^w]

Example

Underlying representation	Transcription	Gloss
i.) /tup/	[t ^w up]	‘bury’
ii.) /tui/	[t ^w ui]	‘break e.g a bottle’
iii.) /lany/	[lan]	‘climb’
iv.) /mal/	[mal]	‘smear’

From the data above, consonants in Nandi are labialized when they precede a round vowel but not when they precede non-round vowels as in (iii) and (iv) above. The process of labialization requires that a consonant precede a round vowel for it to acquire [+round] features as in examples (i) and (ii) above. Where a consonant follows a non-round vowel like /e, ɛ/ and /a/ there is no change.

The rule that is stipulated to the phonological process is:



2.5.1.4 Deletion

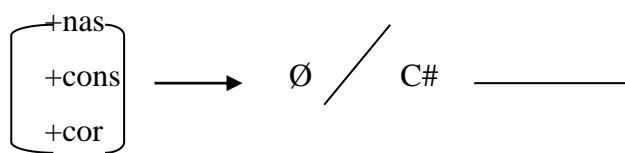
Deletion is a process that involves loss of some segments. It is the elision of sounds in a certain environment especially in connected speech.

The morphemes for ‘this, that’ and ‘distal that’ are [ni] [nɔ] and [nin] in Nandi.

Consider the data below:

Underlying Representation	Transcription	Gloss
/ni/	[nɪ]	‘this’
/met +ni/	[mɛtɪ]	‘this head’
/asis +ni/	[asisi]	‘this sun’
/no/	[nɔ]	‘that’
/ket +no/	[kɛtɔ]	‘that tree’
/eey + no/	[ɛɛjɔ]	‘that oxen’
/nin/	[nɪn]	‘distal that’
/ket+nin/	[kɛtɪn]	‘that tree’
/kel + nin/	[kɛɪɪn]	‘that leg’

The data above illustrates that deletion of the alveolar nasal in the singular demonstrative adjective when it is affixed to the noun. The demonstrative loses its initial sound when it occurs after a noun. The rule shows this deletion is formulated as:



This deletion of [n] takes place to avoid unwanted clusters in the language which would be otherwise difficult to articulate.

2.5.1.5 Voicing

Assimilation is the process by which phonemes close to each other become more similar in terms of the state of the glottis. Katamba (1989:80) defined assimilation as the modification of a sound in order to make it more similar to some other sound in its neighborhood.

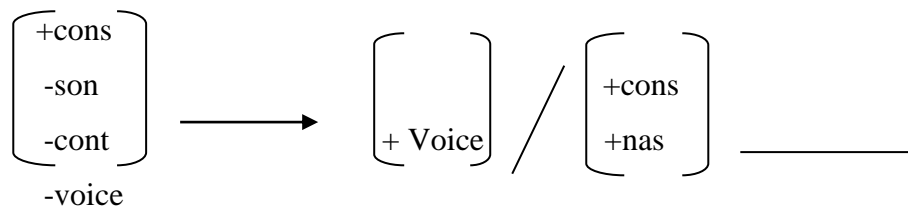
2.5.1.5.1 Voicing after nasals

Example

Underlying representation	Transcription	Gloss
i.) /paan-ta/	[paanda]	‘journey’
ii.) /em-pa/	[emba]	‘land of’
iii.) /Potan-chi/	[potanji]	‘tremble for’
iv.) /teep-chi/	[teepci]	‘ask for’
v.) /saap-ta/	[saapta]	‘approach stealthily’

Examples (i-iii) give the change of voiceless plosives to voiced when they are preceded by nasals. There is no change in (iv) and (v) above as the consonants that precede the plosives are non-nasals and voiceless at the same time. The nasal influences the voiceless plosives to become more like it in terms of the feature [+voice]. There is progressive voice assimilation in that the feature [+voice] of the preceding nasal is carried over to the subsequent voiceless consonant.

The rule that is formalized in distinctive feature to capture the above is:



2.5.1.5.2 Voicing after liquids

The voiceless plosives in Nandi become voiced after the liquids. The plosives acquire the feature [+voice] from the liquids. This shown in the data below:

Examples in (1) above shows the indefinite nouns (any leg, tooth, bark, reward) while those in (2) shows the definite nouns since it is showing the specific nouns.

Examples

1. Underlying Representation	Gloss
i.) /kel/	‘leg’
ii)/kel/	‘tooth’
iii)/sep/	‘bark’
iv)/melek/	‘reward’

Examples in (1) above shows the indefinite nouns, refers to any leg, tooth, bark, reward.

2. Underlying Representation	→	Transcription	Gloss
i) /kel +ta/	→	[kelda]	‘leg’
ii) /kel+tet/	→	[kɛldɛt]	‘tooth’
iii) /melek +ta/	→	[melekta]	‘reward’
iv) /sep+tet/	→	[septet]	‘bark’

Examples in (1) give the underlying forms and (2) gives the surface realization after the affixation has been introduced. The examples in (1) show that there is no change and in (2) the change is realized after the addition of the affixes.

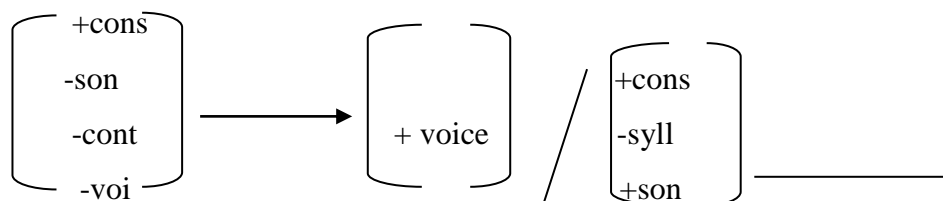
Examples 2(i) and (ii) illustrates that voicing of the voiceless plosives occur when the liquid /l/ precedes these plosives. In 2(iii) and (iv) above, there is no change because the voiceless plosives are preceded by other voiceless plosives. There is no voicing taking place.

Example 3

i.)	/por por/	→	[pɔrbɔr]	‘brittle’
ii.)	/purkey/	→	[purgej]	‘warm’
iii.)	/lapkey/	→	[lapkej]	‘bright’

In (i) and (ii) above, the voiceless plosives are voiced when they are preceded by the liquid /r/ example (iii) does not undergo any change because the consonant that precedes the voiceless plosive is not a liquid and it is voiceless.

We can therefore state that the voiceless plosives in Nandi become voiced after liquids. From the data presented above, it can be observed that Nandi does not have underlying voiced plosive but are attained through the process of voice assimilation. The following rule shows voicing after liquids.



2.6 Nandi Vowel processes

Vowel processes are systematic sound changes that affect vowels. The processes are glide formation, vowel length, vowel coalescence and vowel harmony. They are discussed below:

2.6.1 Glide Formation

Glides are consonants which have vowel-like articulatory features and the two glides, that is, the labio-velar glide /w/ and the palatal glide /j/ are part of Nandi consonant inventory. Glide formation is a phonological process that derives the surface glides, /j/ and /w/ when high vowels are immediately followed by non-high vowels. The following section examines how these glides are formed.

2.6.1.1 Palatal-glide formation

Formation of a palatal glide /j/, in Nandi occurs in certain environments and not in other environments. When a high vowel precedes a non-high vowel, it motivates the formation of a palatal glide and if a high vowel is followed by another high vowel, the palatal glide is not formed when a high vowel precedes another high vowel. This is illustrated below:

Underlying representation	Surface realization	Gloss
a.) /Ki +a+tep/	→ [k ^j ate:p]	I asked
b.) /Ki+a+keer/	→ [k ^j aʏe:r]	I saw
c.) /ka+i+net/	→ [kainet]	You have taught

In the above examples, (a) and (b) show the formation of a palatal glide as the high vowels are followed by non-high vowels while in (c), there is no formation of a palatal glide because vowel /a/ is a non-high vowel.

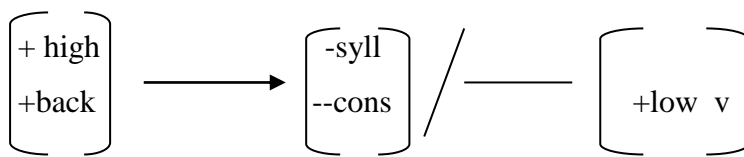
2.6.1.2 Labio-velar glide Formation

A labio-velar glide is formed when high-back vowels are followed by non-high vowels. This is illustrated below:

Underlying representation	→	Surface realization	Gloss
a.) /ko+a+neet/	→	[kwaanet]	I had taught her
b.) /ko+a+til/	→	[kwaatil]	I had cut

In the above examples of labio-velar glide formation, the velar glide is formed in example (a) and (b) as the high-back vowels /u/ and /o/ are followed by words beginning with non-high vowels. Vowels /u/ and /o/ change into a labio-velar glide when they are followed by /a/.

The rule for labio-velar glide can be formalized as follows:



The notion of naturalness in ease of articulation explains the formation of the glides phonetically; it is easier to articulate a glide than two vowels of different qualities in succession. The formation of a glide minimizes the effort of articulation.

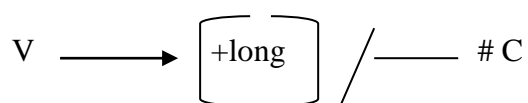
2.6.2 Vowel lengthening

This refers to the change in which a vowel sound is made to be longer in some contexts. The Nandi language exhibits this process and the illustrations are given in the examples below.

Underlying representation	→	Surface realization	vowel lengthened	Gloss
a.) /kesa+tʃi/	→	[kesa:tʃi]	/a/	to pray for
b.) /kesom+tʃi/	→	[keso:mʃi]	/o/	to be asked for

In examples (a) and (b) above on vowel lengthening in Nandi, it is observed that this vowel lengthening occurs before the suffix {chi} in words, that is, the final vowel in the word is lengthened when it is suffixed to {chi}. This means that in Nandi, the suffix {chi} to a word triggers lengthening of the preceding vowel.

The rule to account for vowel lengthening can be formalized as shown below:



2.6.3 Vowel coalescence

Coalescence refers to the coming together of linguistic units which were originally distinguishable, Crystal (1997: 65). In this process, these two adjacent segments influence one another and may be replaced by a new segment. In Nandi for instance, the vowel /a/ in the negative prefix {ma}, combines with {i} (second person singular pronoun) to form the new segment, /ɛ/ in words as shown below.

Underlying representation	Surface realization	Gloss
a.) /ma+i+tep/	[mɛtep]	You did not ask
b.) /ma+i+kono/	[mɛkono]	You did not give me

In the above data in (a) and (b), the segments /a/ and /i/ are replaced by one segment, which is /ɛ/.

2.6.4 Vowel Harmony

This is a situation where vowels in a given language are divided into two categories and in a word, all the vowels must come from the same category, Goldsmith (1990:304). The vowels of successive syllables become similar.

The vowels of a given language harmonize in terms of features for instance, backness, roundness, frontness and [ATR] (Advanced Tongue Root), as vowels that exhibit opposite values will not co-occur within the same domain. A language which has a rounding harmony for example rounded vowels such as /o/ or /u/ cannot co-occur in the same word with unrounded vowel like /e/, Casali (2003: 2). In a given word, all vowels must ordinarily be drawn from the same set.

The [ATR] feature is a phenomenon of vowel harmony and Nandi has its harmony based on it. Casali (2003:2-3) defines vowel harmony as a phenomenon in which all the vowels in a word must agree or harmonize for their value of [ATR]. This feature divides the vowels of a language into 2 sets, the [+ATR] and the [-ATR] as shown below:

[+ ATR] vowels	[-ATR] vowels
/i u o e a/	/ɪ ʊ ɛ ɔ ɑ/

Examples of words with [+ATR] vowels

Word	Transcription	[+ATR] Vowel	Gloss
a.) {ki-} + {-a-} + {rir} →	/kiarir/	/i/	I cried
b.) {meel} + {ei} →	/me:lei/	/e/	he/she is licking
c.) {ma-} + {i} + {mach} →	/maimaɸ/	/a/	You did not want

Examples of words with [-ATR] vowels

Word	Transcription	[-ATR] Vowel	Gloss
a.) {ma-} + {a-} + {lapat} →	/ma:lapat/	/a/	I did not run
b.) {kɔ-} + {i-} + {sɔr} →	/kɔisɔ:r/	/ɔ/	You went after Him/her

This agreement of vowels within a word shows that Nandi has intrinsic harmony since the harmony is found within vowels in a word or a morpheme. Vowel harmony in Nandi ensures that affixes share the same feature with the root as shown in the examples above [+ATR] and [-ATR].

Conclusion

The chapter has presented the sound system of Nandi in terms of consonants and vowels. There are thirteen consonants in Nandi including two semi vowels. The voiced plosives /b, g, d/ occur in consonant clusters when they are preceded by nasals.

There are five pairs of vowels in Nandi. There are five [+ATR] and [-ATR] vowels. Nandi permits V_1V_1 and V_1V_2 sequences. The V_1V_2 sequence has two vowels of the same quality occurring together while V_1V_2 has two vowels with different qualities occurring together.

Phonological processes in Nandi are also presented in this chapter. The processes have been discussed and examples are given to illustrate the same. Glide formation has been discussed which is a change that has been motivated by high vowels being followed by non-high vowels.

Vowel harmony has been discussed. The vowels in Nandi undergo harmony and a demonstration of how advanced tongue root (ATR) plays a major role in vowel harmony has been done.

The vowel coalescences and lengthening have been discussed. The vowels are lengthened before the suffix [-chi] is suffixed to the root while coalescence is the fusion of vowels.

Spirantisation (fricativization) has been highlighted and it has been demonstrated that only the voiceless bilabial and velar plosives are turned into fricatives when they occur between vowels. This is a form of intervocalic assimilation. The /t/ and /c/ are preserved between vowels because Nandi does not have the closest fricative counterparts for these sounds.

Voicing in Nandi occurs after nasals and liquids which have the feature [+voice] and is repetitive. The voiceless plosives acquire the feature [+voice] from the nasals and liquids. Voicing after the nasals gives us the nasal compounds that are found in the language. This is for ease of articulation.

Palatalisation and labialization are assimilatory processes whereby consonants acquire the features [+pal] and [+round] from the vowels respectively.

Finally, we have also looked at deletion of consonants. This elision takes place before the affixation of the demonstrative to the noun. All these phonological alterations take place to ease articulation and to avoid the occurrence of undesired clusters in the language.

CHAPTER THREE

IDENTIFICATION AND CLASSIFICATION OF ERRORS

3.0 Introduction

This chapter presents the findings of the study. All the misspelt forms from the learners' creative writing, dictations and spoken exercise were identified and categorized in accordance with the nature of errors. The categorized errors were then described in terms of association between the deviant form and the Nandi phonology. As Corder (1973) puts it, some word forms which in English are correctly spelt are treated as misspellings if used in the wrong context. This means that, the intended meaning was not communicated. Corder further states that errors can be overt or covert. Overt errors present a form that does not exist in the language. For instance *knifes instead of 'knives'.

On the other hand, an error is treated as covert if the form presented is correct because it exists in the language in question but it is wrong in terms of context since intended meaning is not communicated. For example the 'come' below:

'I *come home yesterday' instead of
'I came home yesterday'.

In the description of errors, correctness of a word form is considered in terms of form in English and its suitability in use. The misspellings seen in the work of learners resulted from their L1 phonology influence and the sound system of the target language.

The scripts were analyzed and categorized according to the type of the error as shown in the following examples and explanations.

3.1 Errors due to silent graphemes

In this category, errors were seen where learners failed to provide the correct spellings for words with silent letters. Learners did not give the letters in the writing for those sounds that are not pronounced. They wrote what is produced during pronunciation leading to the deviant forms.

Frequency of Errors due to silent Graphemes

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a) * ofen	Often	5	8.3
c.) *nee	Knee	6	10.0
d.) *Goverment	Government	5	8.3
e.) *Rappor	Rapport	4	6.7
f.) *ile	Isle	4	6.7
g.) *suprise	Surprise	1	1.7
h.) *hankerchief	Handkerchief	3	5.0
i.) *onest	Honest	2	3.3
Total		26	50.0%

In example (a) the letter ‘t’ is omitted. In the pronunciation of the word often /ɔfn/ the sound /t/ is silent. Therefore, the learner whose mother tongue is Nandi transferred to orthography what they hear in the pronunciation of the word. Nandi phonology has no silent sounds; as a result, Nandi students tend to omit the sounds that are not articulated in the TL. This spelling error is caused by the spelling system of English. communication strategies as potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal. Tarone (1983) ‘second language learners employ distinct communication strategies in order to compensate for their limited knowledge of the target language’. This strategy involves topic avoidance and/or message abandonment as a result of inadequate mastery of the target language. The learners have not mastered the target language otherwise they would have known that, some English words have silent graphemes unlike their language which does not.

3.2 Errors due to consonant substitution

The consonants that are not found in Nandi are substituted with those sounds found in the language. Most consonants in English are not found in Nandi; therefore, sounds are substituted with those found in the language. This is illustrated in the examples given below:

Frequency of Errors due to consonant substitution

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
*piteo	Video	3	5
*pile	File	4	6.7
*tisel	Diesel	5	8.3
*Plouse	Blouse	2	3.3
*tietre	Theatre	3	5
*termos	Thermos	1	1.7
*chak	Jug	2	3.3
Total		16	33.3

Video /vidəʊ/ → [βitəʊ]

File /faɪl/ → [βail]

Labio-dental fricatives, /f/ and /v/ are substituted with the voiced bilabial fricative /β/ as shown above.

Diesel /dizl/ → [tisl]

Blouse /blaʊz/ → [βlaus]

The voiced alveolar fricative /z/ is also substituted by its voiceless counterpart /s/, as seen in the example above.

The voiced alveolar plosive /d/ as well as the voiceless dental fricative /θ/ are substituted by the voiceless alveolar plosives /t/ as seen in the examples below:

Theatre /θiətə/ → [tiətə]

Thermos /θɜ:məs/ → [tɜ:məs]

The voiced palato-alveolar affricate /dʒ/ and the voiced palato-alveolar fricative /ʒ/ are also substituted by the voiceless palato-alveolar affricate /tʃ/ as shown in the examples below:

Jug /dʒʌg/ → [ʃak]
 Garage /gæraʒ/ → [ʒæraʃ]

From the examples above, it is clear that Nandi like any other natural language uses substitution as a strategy for adopting non-native sounds in the language by utilizing those sounds found in the language.

These errors are occurred due to the language transfer which is the occurrence of fossilized linguistic items and rules in the language of a second language learner as a result of first language (Selinker (1972)). It plays a role in the acquisition of grammatical aspects. Some of the rules in interlanguage system may be the result of transfer from the learner's first language. Learners use their L1 to create their own language system. The errors in the use of L2 result mainly from L1, and the difference between L1 and L2 is the reason for the occurrence of errors. The learned version is the erroneous version. Some elements of L1 are transferred to L2. Some sounds of L1 are transferred to L2 since the sounds do not exist in their language.

3.3 Errors due to double consonant graphemes

In this category, some students gave wrong forms because they failed to double consonants in some words as expected in the English writing convention. Examples of words that were misspelt are tabulated below:

Frequency of errors due to double consonant graphemes

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) * corect	Correct	10	16.7
b.) * misspel	misspell	8	13.3
c.) * begining	Beginning	5	8.3
d.) * arive	Arrive	6	10.0
e.) *comitee	Committee	5	8.3
Total		34	46.7%

In examples (a-e) above, the learners misspelt words due to their failure to double the consonant to conform to the writing conventions of English. There is no doubling of consonants in Nandi orthography while in English consonants are doubled. For example, the English word ‘committee’ which is pronounced as /kɒmiti: /. Therefore, some learners of English whose mother tongue is Nandi spelt it with single ‘m’ and ‘t’ since Nandi orthography does not double consonants hence misspelling the word.

The errors in this category occurred as a result of language transfer. This is the occurrence of fossilized linguistic items and rules in the language of a second language learner as a result of first language (Selinker (1972). Some of the rules in interlanguage system may be the result of transfer from the learner’s first language. Learners use their L1 to create their own language system. The errors in the use of L2 result mainly from L1, and the difference between L1 and L2 is the reason for the occurrence of errors.

3.4 Errors due to discrepancy between the English sound system and the spelling system.

Errors in spelling were detected where learners misspelt words due to the discrepancy between the English phonology and the orthography. Examples of misspelt words due to this nature are shown in the table below:

Frequency of errors due to discrepancy between the English sound system and the spelling system

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) *couf	Cough	6	10.0
b.) *sanday	Sunday	10	16.7
c.) *ricive	Receive	5	8.3
d.) *coll	Call	4	6.7
e.) *weil	Wail	5	8.3
Total		30	50.0 %

In example (a) 6 learners misspelt the word ‘cough’ and spelt it as ‘couf’. In the above misspelt word, the letter ‘f’ takes the place of letters ‘gh’ in English. The learners relied on their first language knowledge where they used sound /f/ to match the pronunciation they hear from English word /kɒf/ since the word in target language is pronounced as /kɒf/.

The discrepancy between the English phonology and of the orthography is therefore the cause of misspelling in the above word.

In example (b) 10 learners misspelt the word ‘Sunday’ which is equivalent to 16.7% of the total learners who were tested i. e 60 learners. The word Sunday is pronounced as /sʌndeɪ/ in English. The equivalent of sound /ʌ/ in Nandi is sound /a/ which is represented by letter ‘a’. Therefore in writing, the learner applied the phonology of Nandi and its orthography leading to the deviant form above.

In example (c), the word ‘receive’ was misspelt by 5 learners. The word is pronounced as /ri:si:v/ in English. In this case, the sound /i/ takes care of the letters ‘i e’ in English pronunciation. In Nandi, sound /i/ is equivalent to letter ‘i’, so there is /I/ in English pronunciation.

In example (d), 4 learners misspelt the word ‘call’ and instead spelt it as ‘*coll’. In English, the word is pronounced as /kɔ:l/. In the misspelt word, letter ‘o’ replaces letter ‘a’ of the English word. The sound /ɔ/ is represented by letter ‘o’ in Nandi phonology. Therefore, the learners use ‘o’ in orthography to match with what they hear in the pronunciation of English words. Learners’ over reliance on Nandi phonology which is transferred to the words in the target language led to the spelling error. The same case applies to the rest of the examples.

These errors occurred due to strategies of second language learning communication. Interlanguage system rules may also be the result of strategies employed by the learners in their attempt to communicate with native speakers of the target language. It pays attention to the fluency rather than accuracy in the communication. Learner tries to simplify target language rules. They are not concerned about the accuracy in their written work so long as they are able to speak the language fluently.

3.5 Errors due to retention of letter ‘e’ before a suffix

When a suffix is added to some of the English words that end with the vowel ‘e’, the vowel ‘e’ is omitted. The ‘e’ is silent in speech and when it fails to be dropped in writing, a misspelling occurs. Spelling errors were seen where learners failed to delete letter ‘e’ before adding a suffix as shown in the table below:

Frequency of errors due to retention of letter ‘e’ before a suffix

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) * receiveing	Receiving	2	3.3
b.) *observeable	Observable	3	5.0
c.) * deleteing	Deleting	2	3.3
d.) *argueing	Arguing	4	6.7
e.) *categorizeing	Categorizing	1	1.7
Total		12	20%

In the above examples, spelling errors can be said to be caused by the influence of the first language phonology since some Nandi vowel sounds are not deleted and there are no silent sounds.

This resulted from language transfer where some of the rules in interlanguage system may be the result of transfer from the learner’s first language. Learners use their L1 to create their own language system. The errors in the use of L2 result mainly from L1, and the difference between L1 and L2 is the reason for the occurrence of errors.

3.6 Errors due to Homophones

This was another source of errors in the learners’ work. Learners failed to provide the correct spellings for the homophones due to their reliance on what they heard. They gave alternative words which are pronounced like the intended forms.

Frequency of errors due to homophones

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) * Flour	Flower	3	5.0
b.) *Mail	Male	4	6.7
c.) *Our	Hour	5	8.3
d.) * See	Sea	2	3.3
Total		14	23.3

In example (a) in the table above, ‘flour’ and ‘flower’ are pronounced the same way /fləʊə/hence they are homonyms. This means that they are spelt the same way but their meaning differ. The learners use them interchangeably regardless of their meaning since they are homonyms. It may mean that they do not know the difference in meaning hence use them interchangeably. The errors here can be said to have resulted due to the sound system of English.

In example (b), the words ‘mail’ and ‘male’ are pronounced the same way. In English pronunciation, the two words are pronounced as /meil/. They are also spelt the same way but they have different meanings. Since they are homonyms, learners use them interchangeably just as in example (a) above.

In example (c), the words ‘our’ and ‘hour’ are pronounced the same way /aʊə/. Since they are homonyms, the learners used them interchangeably regardless of the difference in meaning. The same case applies to (d) where learners interchanged them. They are pronounced as /si: / in English and this made the learners to interchange them hence misspelling the word ‘sea’.

This category of errors is attributed to the learners’ failure to differentiate the homonyms and therefore use them interchangeably.

Some elements in the learners’ interlanguage appear as a result of the application of a rule of the target language to an inappropriate target language context. Learners make

their own rules of language. Some rules of the interlanguage system may be the result of overgeneralization of specific rules and features of the target language. This process entails the extending the application of a rule. Learners apply rules from L2. These rules are applied inappropriately. The overgeneralization is on the sound and the learners are not concerned about the context.

3.7 Errors Due to vowel length

Errors may arise if Nandi learner is unable to distinguish between short and long vowels. Some learners' were unable to distinguish the vowels. Their failure to distinguish these vowels led to the errors as shown below:

Frequency of Errors Due to Vowel Length

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) * To	Too	5	8.3
b.) *Sit	Seat	3	5.0
c.) *sin	Seen	3	5.0
d.) * Slip	Sleep	2	3.3
Total		12	21.6

In example (a) above, 5 learners misspelt the word 'too' and spelt it as 'to'. In English, the word 'too' is pronounced as /tu: / and it is a long vowel while the misspelt one, *'to' is pronounced as /tu/ which is a short vowel.

In example (b), three learners misspelt the word 'seat'. They spelt it as *'sit'. The correct pronunciation for the word 'seat' is /si:t/ while the misspelt word *'sit' is pronounced as /sit/. The learners pronounce the two words as /sit/ and use the same trends in writing.

In example (c), three learners misspelt the word 'seen' and spelt it as *'sin'. In English pronunciation, the word 'seen' is pronounced as /si:n/ while the mispronounced one *'sin' is pronounced as /sin/. In this case, the learners failed to distinguish between long

and short vowels. The misspelling is attributed to the Nandi phonology which affects the learners' pronunciation in English and is translated into the written English.

Language transfer led to such errors since some of the rules in the interlanguage system resulted from the transfer from the learners' first language. They relied on their L1 where short vowels are used in most cases. This is a negative transfer.

3.8 Errors Due to Absence of the Sound in Nandi

The English sound system and that of Nandi differ. Some sounds that are in English do not exist in Nandi. For example sounds like /v, g, z, d/. As a result of this, in the tests given, spelling errors were exhibited by the Nandi learners whose first language is Nandi.

Frequency of Errors Due to Absence of the sounds in Nandi

Misspelt word	Correct spelling	No. of learners who misspelt	Percentage of learners who misspelt
a.) *as	Has	3	5.0
b.) *Soo	Zoo	6	10.0
c.) *tey	They	4	6.7
d.) *lepy	Levy	2	3.3
e.) *traw	Draw	3	5.0
Total		20	30.0

From the table above, example (a) the word 'has' was misspelt by three learners. They spelt it as '*as'. The correct pronunciation in English is /hæz/. The learners omit the consonant sound /h/. This error can be attributed to the influence of Nandi phonology as the glottal sound /h/ is not available in the phonemic inventory of the Nandi language.

In example (b), six learners misspelt the word 'zoo'. In English pronunciation, the word 'zoo' is pronounced as /zu:/. The voiced alveolar fricative sound /z/ is not present in Nandi sound system. The learners therefore, replace it with its voiceless counterpart

sound /s/. The Nandi phonology therefore can be said to be responsible for the misspelling of this word.

In example (c), four learners misspelt the word 'they' and instead spelt it as *'tey'. Dental fricatives do not exist in Nandi. The voiceless dental fricative /θ/ therefore does not exist. The closest sound to the voiceless dental fricative /θ/ in Nandi is the voiceless alveolar fricative /t/. The learners used the alveolar fricative /t/ in place of the dental fricative/θ/ in English. What gives rise to this is the phonology of Nandi which is the learner's first language.

In example (d), two learners misspelt the word 'levy'. They spelt it as *'lepy'. In English pronunciation, the word 'levy' is pronounced as /lɛvi/. The misspelt word *'lepy' is pronounced as /lɛβi/.

The learners replaced the sound /v/ with sound /β/. The phonology of Nandi as the learners' first language is a motivating factor here. Language transfer also led to this category of errors. L1 is used where the sounds that don't exist in Nandi and are in English are replaced with those found in the language leading to the incorrect forms.

3.9 Conclusion

Generally, this chapter contains findings of the study. Using inter-language theoretical framework, various categories of errors emerged.

Errors due to retention of letter 'e' before a suffix where the learners failed to drop the 'e' before a suffix in order to conform to the English writing convention.

Errors due to double consonant graphemes where learners failed to double consonants in some words in English leading to the wrong forms.

Errors due to silent graphemes were seen as learners failed to supply the correct spellings in some words where those letters are silent in pronunciation.

Errors due to homophones occurred as the learners relied on pronunciation for spelling without considering the context.

Errors due to discrepancy between the English phonology and orthography were seen as a result of lack of consistence between spelling and sound system in English.

Errors due to consonant substitution, some consonants present in English but lacking in Nandi were substituted with the sounds found in the language.

Errors due to vowel length are a category of errors where learners failed to differentiate between long and short vowels. They gave short in place of long vowels.

Errors due to the absence of the sound in Nandi was seen where learners failed to supply the right spelling for the words with sounds that do not exist in their language. They deleted some and substituted some.

Among these categories, on one hand, the errors occurring due to the discrepancy between English sound systems and the spelling system, errors due to double consonant graphemes, errors due to silent graphemes happened to be the major causes of spelling errors among the Nandi learners. The errors due to the discrepancy between the English phonology and orthography were made by 50% of the students tested. Errors due to double consonant graphemes were made by 46.7% of the students tested. Errors due to silent graphemes were made by 50% of the learners who were tested. On the other hand, errors occurring due to retention of 'e' before a suffix had the least number of learners. This category of errors had only 12 students which is equivalent to 20%. Errors due to absence of the sound in Nandi were made by 20 learners which is equivalent to 30%. Errors due to vowel length were made by 12 students which is equivalent to 21.6%. It is therefore concluded that misspellings of English words arise from the influence of L1 phonology and the Nandi writing system.

CHAPTER FOUR

REMEDIAL MEASURES

4.0 Introduction

This chapter identifies remedial measures that can be taken to address the spelling errors of written English by students who use Nandi as a first language.

4.1 Remedial measures

Errors should first be identified and the frequency of occurrence. A teacher should begin with the errors with the highest frequency in that that is where the major problem is. The remedial materials should be organized in such a way that it will address the specific errors. For example, errors due to silent graphemes (e.g.*'ofen' instead of 'often') or those that arose due to the absence of some sounds in Nandi (e.g.*'as' instead of 'has'). The learners should be taken through English sound system thoroughly until they master it since the English and the Nandi sound systems are distinct.

Pattern drills can be used by the teacher to address the spelling errors made by learners, Krashen (1982). Pattern drills can be defined as the practicing a linguistic structure in which a learner repeats a word frequently after the teacher. The learner keeps repeating after the teacher keeping his/her pronunciation as closely as possible to the teacher's. The intention here is to achieve a mechanical drill where the learners' response and that of the teacher are similar. This is achieved through control of responses. This can be done as illustrated in the examples below:

Teacher	: Seat	/si:t/	stimulus
Learner	:*sit	/sIt/	response
Teacher	: seat	/si:t/	reinforcement
Learner	: seat	/si:t/	response

It is also important for the learner to master all the four language skills. The skills can be classified into two broad categories;

-Receptive (Listening and reading)

- Productive (speaking and writing).

Receptive skills can be controlled by a learner through the mechanical drills i.e he/she would be in a position to understand and read with comprehension the structures and vocabulary presented, Krashen (1982).

Learners should be encouraged to write words with problematic sounds and commonly misspelt words as well as words with longer structures. This practice will help the learners to master the different strings of letters that are often found together. In addition, they will be able to identify sounds in isolation and when they occur in different words. The teachers can reinforce this by giving oral lessons, dictation exercises and oral quizzes or tests regularly.

Teachers should go through the work with the learners. He/she should stress on the identification of the errors. Learners should be encouraged to identify the errors with the guidance of the teacher. The teacher should focus on helping learners become more independent. During this exercise, an explanation should be given as to why a word is wrong. This helps the learners to understand the errors so that they will not repeat them in future. As the words are corrected, the correct forms should be written.

The teachers at times may lack the skill of teaching remedial spelling. This has made most of them to neglect the teaching of spellings and sounds as they see it as a boring or a difficult exercise. Therefore, there is need for teacher to be further trained in this area. This will benefit the learners since their knowhow will enable them give a systematic help to the learners. They can make a follow up to see the progress of the learners and plan for further remedial depending on the need of the learners.

Research suggests that there are certain guidelines that will help us make use of word lists for spelling instruction more productive, Greene (1995). For example individualized word lists and test-study-test. Individualized word lists are done using pretests so as to eliminate words that they can spell correctly. The misspelt words are studied further to

correct the misspellings. Test-study-test is where a pretest is given with a view of identifying words that require further study. The words that are still problematic are studied then tested again to see if the learners will have mastered the spellings or not. Individualization as well as emphasis on word study and repetitive practice is crucial as emphasized by Wallace, Cohen, and Polloway (1987). The two are crucial in the learners' mastery of spellings and the sounds in language.

Learners whose first language is Nandi and have chronic misspellings should be identified and a special program organized for them. For instance, they can be taken through a spelling course and given more work on spellings. This course should be integrated into the four language skills and should give learners clear guidance on articulations and spellings. This course will help the learner master the English spellings and relate them to the English sound system. This will solve the problem of errors like those that occur due to silent graphemes, double consonants and discrepancy between the English sound system and that of spellings.

Kenya National Examination Council (KNEC) should give an oral examination for students in primary and secondary schools in their Kenya Certificate of Primary Education (KCPE) and Kenya Certificate of Secondary Education (KCSE) respectively. This need will make teachers put more stress on clear articulations and correct spellings and they will dedicate more time to this. The learners will also put in more effort knowing that they must be fluent and must master the pronunciations and spellings of words.

4.2 Conclusion

This chapter has presented remedial measures that can be undertaken to eradicate misspellings in the written English of Nandi speaking learners in Eldoret West District. It is therefore shown that there are possible remedies to the errors arising from L1 phonology. The remedies found include giving oral examinations, use of pattern drills, identifying those with chronic misspellings and organizing a spelling course for them,

word analysis, training teachers on how to teach spellings and sounds, giving individualized word lists and test-study-test, identification of errors according to frequency of occurrence, mastery of all the four language skills, taking learners through the spelling exercise while identifying errors and encouraging learners to write words with problematic sounds and the commonly misspelt words.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter focuses on the summary, conclusions and recommendations that arise from the study.

5.1 Summary

This study's main focus was on the misspellings in the work of learners whose first language is Nandi. The study sought to examine whether the Nandi sound and written systems, Nandi being a first language to the learners in this study, influenced these learners' spellings in English.

Interlanguage theory was adopted as the theoretical framework. This study's data was collected from the learners written compositions, dictations and spoken exercise. Chapter one gave an introduction of the study. In the introduction, the study introduced us to the focus of the study. The study introduced Nandi as belonging to Nilotic-Kalenjin group. The aim of the study was to investigate the deviant spellings that arise from learners' first language phonology.

This was due to misspellings and mis-articulations that could be explained in relation to first language phonology and orthographical influence. Objectives of the study were to identify and classify the misspelt words in the students written and spoken work, investigate the spelling errors which arise from learners' first language phonology and suggest remedial measures that can be instituted to address errors made. This gave the aim of the study. Together with the research questions, objectives gave a direction to the study.

The study covered the Nandi learners in Eldoret West District, Uasin Gishu County in five day-boarding mixed district schools. In the theoretical framework, Interlanguage theory was used. This theory was put forward by Selinker (1972). The theory gave the learned version which is neither the source nor the target language. Methodology gave explanations on where and how the data was collected, the techniques used and the

analysis. The data was collected from Nandi learners in Eldoret West District in Uasin Gishu County. Form three students from the five selected day-boarding mixed district secondary schools were used as the subjects. They were given creative compositions to write as well as a dictation exercise. In addition, a speaking exercise was given where they were required to read them aloud. As the learners were reading, the researcher marked the words as either correctly or incorrectly articulated. Tape recording was also done which was later on played back for the researcher to ascertain if they are correctly articulated or not. The dictated words and creative compositions were later on marked and errors identified and classified according to the spelling anomaly. An explanation was given on the possible causes of misspellings or mis-articulations in relation to the first language influence.

Chapter two gave the Nandi phonology which formed the basis of this study. This section dealt with the Nandi consonants and vowels as well as the words in which they occur in. In addition, this section dealt with the Nandi consonantal and vowel processes. The consonant processes include: spirantisation, palatalisation, labialization, deletion and voicing. On the other hand, vowel processes include: vowel coalescence, vowel harmony, and vowel lengthening as well as glide formation. The Nandi syllable structure is also presented here which showed that the language has monosyllabic, disyllabic, trisyllabics and polysyllabic words.

In chapter three all the misspelt forms from the learners' creative writing, dictations and spoken exercise were identified and categorized in accordance with the nature of errors. The categorized errors were then described in terms of association between the deviant form and the Nandi phonology. The errors were classified under the categories such as: errors that occurred due to double consonant graphemes, silent graphemes, homophones, consonant substitution and vowel length other categories are those that occur due to discrepancy between the phonology and orthography, errors due to the absence of the sound in Nandi and errors due to the retention of letter 'e' before a suffix.

Chapter four presented the remedial measures that could be instituted to solve the problem of misspelling in the written work of Nandi students. Chapter five gave a summary, conclusions and recommendations of the study.

5.2 Conclusions

Conclusions of this study are founded on the evidence in earlier discussions. It is concluded that first language phonology and orthography influence orthography in English. Referring to the categories of misspellings, the errors with the highest frequency shows arise from learners' first language phonology and orthography. For example, errors that occurred due to the discrepancy between English sound system and spelling system and those that are due to silent graphemes were made by 50% of the total learners tested and the errors which occurred due to the double consonant graphemes were made by 46.7% of the total learners tested. Errors due to silent graphemes were made by 50% of the learners who were tested.

Most learners relied on the first language phonology and orthography which led to the errors like those which occur due to consonant substitution, double consonant graphemes, absence of a sound in Nandi, homophones and silent letters.

Wilson (2001) in his observation notes that, overgeneralizations of spelling rules in a target language can lead to misspellings in the work of learners. During their articulations and writing, they applied the rules of their first language to English. This led to the errors because in Nandi, there is consistency between phonology and orthography which lacks in English.

5.3 Recommendations

During this study, important areas that call for the attention of linguists came out clearly and there is need for further research to be done in those areas. This study established that the phonology of Nandi as a first language to learners under the study influences orthography in English, there is need for a research to be conducted to inquire whether phonology and orthography of English influences orthography in Nandi.

This study focused on the phonological basis of misspellings in the written English of Nandi speakers. A research should be done on phonological awareness tasks such as rhyme awareness. In this study, came out clearly that some errors occurred due to the absence of some sounds in Nandi. Further research should be done to establish situations where the Nandi students in their English written and spoken English replace the

voiceless alveolar plosive /t/ with its voiced counterpart yet in their sound system, the sound does not exist. For example a word like 'to'/tu/ is presented as 'do'/du: / in their work.

Finally, further research should be done on the contributions that direct interviews make in the identification of misspellings and mis-articulations. This can be done with the view of analyzing both the strengths and weaknesses that were not detected during the tests that were given.

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APPENDICES

NO PAIN NO GAIN

It was on the early morning when that my grandmother wake me up from the deep slip, I was on my way to USA (United state of America) in the city of Mexico, when my grandmother wake me up I was on the Atlantic Ocean in the middle beding to the city that I was going to meet the leader of my life.

Then my grandmother took over my blanket and I continue step because I did want to wake up before to my mission acomplished. Then I continue step but I was in the hurry to the city of the white people.

On the way I was going by the motor boat then abruptly I get starg in the ocean the boat was no fuel, the other day come am just on a step so that I need to see the girl whom I was going to meet her, the two men's come heading were I was they asked me what is the matter and it was on the midnight. I shout to them that I was heading to Mexico city and I had know many to be fuel. The men's told me no come on the other boat then I was assisted by those two men, when the men see me on the boat they start questioning me? who are you and where do you come from? I told them that I am a Kenya and my name's are Wafula Koimet, and where are you going? to Mexico city. do you have any related person whom as col ed you yes she is my girl friends, Then they started laughing at me.

When we reca the men told me do you NO
whom you are going to meet? The I said 'yes.'
Who he she or him I told the she. The men to
me that we were the one whom you was chatting
in WhatsApp and Facebook. I was shocked and
finally weak from the deep sleep.

It was on the midday when I work up and
my grand mother was gone to look after the Cattles.

I rushed to the bedroom and wash my
face and take the cup of tea the go to look
for my grand mother. I found her on the way to
pasture the Cattles. Then my gran mother asked
me I was thinking that you are sick,
I told him that it was not sick I was on
the journey to Mexico city my grandmother was
shock what? Yes but I was get stuck in the
road then my grand mother told me no pain no gain,

NO PAIN NO GAIN

27/9/2016

As a student you need to know how to manage yourself, you should be very discipline in order to achieve goals.

Every time there is temptation or rudness, impatience and disobedient. This one cannot assist anyone to achieve. You must be very intelligent straight person, whom you will not be supervise in each and every activity you done.

A good learner must no why he/she were in school, he/she need to understand more about the rest of life. Some knows the reason but most do not even understand.

On the other hand student care in school because they saw others coming to school. To avoid this, you must have appetite of learning and know more in your early time. It is the time of someone know to plant. When it comes to time of harvesting, everyone would harvest what he plant, and if you do not plant, you plant to fail. Most of us at that time, they would say, if I know I did what the teacher says.

A place where no pain no gain because if you know manage yourself well and follow simple instruction as instructed might be no pain and there is choice.

Most of some people who follow simple instruction their life was easy but those who play with theirs, they wish and says if I were you know in school, I do better in my studies, because they agreed that "NO GAIN NO PAIN."

No PAIN No GAIN

Long time ago there was a boy whose name was macho, that boy was very lazy, he did not want to do what his parents tell him, even in school he did not want to do the ~~teacher~~ ^{teacher} work and even to read. The ~~class~~ ^{teacher} tell him every day to pull up his shoes socks but ~~but~~ he did not want to hear what he has been told.

One day as he was working along the road he find a man on the road and that man tell him that "why are you not been in a school", that boy said "It is not your problem" and that man tell him that "If you want to be a good boy you must respect what others tell you because if you will not you will be the last in the class."

The boy went to his house and he recall what he was told by that man, and he see the man was telling him the truth. From that day he start to change his way and he always work up at the crack of down to sturdy and he also respect his teachers even other student in the class.

When they did the first cat have come the second position every one was wondering who he did come among the top ten student in the school. After four weeks they did the second cat and he become the first ~~of~~ position, even the teacher tell him to give out how he had done very well.

The boy tell the student "If you want to done a good work in the school you must work hard and even to respect teachers and other studen. and you must make sure that your book is you reads friend every day. If you do so you will be come a good student. Truly a stick in time save nine."

From that day every student in the school did not mark any noise in the school every body where doing his work at the end of the year when they did the end exams they

NO GAIN ON GAIN

When oil passes the etams and the knew that no pain
no gain.

[The following text is mirrored bleed-through from the reverse side of the page and is largely illegible due to being upside down and faint.]

No pain no Gain

Long Time ago there was a man living in a corner area called mbale he had four children all of them were in school. The first born of his children was in form one so this man was a jobless he has no job to feed his family but use to do a very thing he can do that his family can afford daily.

He use to wake up every early in the morning going to look for job all over the town he will do any job which was available at that time because his children has to go to school like others and get ~~with~~ what to eat.

This person had a small piece of land which use to utilize very well he use to plant vegetable which he can also get money from that small piece of land even his family was not left behind they were unit together so that they can drive poverty away, his children worked very hard so that they can be possible to help his parents.

As time pass by the younger brother finish form four and he get a good result her father was proud of his son and another problem arise again he was wondering were to get money so that can put him into next level of education so that he can continue to his study but he use to get loan from his friends his friend was believing on him because when he asked for a loan he never fail to return back in time.

hungry son proceeded to his study until the time came to finish when he finish his study he was able to get a good job which he used to earn alot of money he stated changing his home and put his brothers to school and pay for them the school fees he build to his father a very big house with her father could never believe in his eyes

he drive big car which he could never ^{believe} that one day he would be like other rich people in this ~~world~~ world & he would never forget about the past the all the challenges that he has go through when he was in school until ~~now~~ now his owning big cars and companies and living a good life

from that day alown that in life there is no ~~gain~~ gain without pain for have to struggle in life so that you can gain everything in ~~it~~ even we shall no give up we keep on working hard because one day we can make it,

NO PAIN NO GAIN

This proverb means that one must work seriously hard to achieve what he/she wants to be future. The following story can illustrate much better about the meaning of this proverb.

During my younger age we used to live on a small ^{hut} ~~hate~~ in Baringo north Chamalingot division my parents were poor they could not even afford to buy clothes we used work bare footed each and every day. we wear some clothes which were made from the skin of cows and goats. It was actually a tough life we experience alot we went through alot of point, indeed it was a life that nobody in this world cannot desire even in a dream.

However the school ~~was~~ was far from where we were living but I bare with the situation I work for about ~~20~~ twenty kilometer each and every day. Although it ~~was~~ was tiresome I never lose hope because I new that one day I will become a successful person in life. When I finished my primary level I managed to score 366 marks and I was ponsored by a congregation of Camel missionaries of eastern Africa to go pursue my secondary level studies at Kabarak high school.

At high school I work seriously harder because I was remembering where I came from my family and other people at home I don't follow the bad behaviour of some students but in state I focus with my studies so that to achieve my visions. I never let the obstacles and ^{other problems} ~~problems~~ to discourage me. At school also I made alot of friends of all kinds, sum of them encourage while some reject me and see me as a poor person most of see me always call me the person from the back of the earth. I neglected their views I went on with my studies.

When I finished my secondary level I managed to score a grade of "A" most of my colleagues were amazed with my ~~person~~ performance. I got a Sponsorship to study at Michigan University in ~~an~~ America. ~~Actu~~ Actually ~~No~~ No Pain No Gain-

1	Open ✓	* (b) Two X
2	Judge ✓	* (b) Mail X
*3	Correct X	(b) Seed X
4	Caught ✓	* (b) Discipline X
*5	Nice X	(b) Zoo X
*6	Tomas X	* (b) Outward X
*7	Mispend X	(b) Painful X
8	Sunday ✓	(b) Levy X
*9	Government X	(b) Sin X
*10	Tester X	(b) Sid X
*11	Begging X	(b) has ✓
12	Receipt ✓	(b) dialogue ✓
13	Rape X	us They
14	Below X	* (b) Accomodate X
15	Arrive ✓	43 Ambitious X
16	Cold X	(b) Knowledge X
17	Allied X	(b) Forty ✓
18	Failed X	(b) Quaraling X
*19	Comitee X	(b) Maintance X
20	Walle X	(b) Continuuwing X
*21	Video ✓	(b) Paomet X
*22	Suprise X	(b) Starbuner X
23	Receiving ✓	(b) Reffered X
*24	Unbearable X	(b) Jealousy X
25	Honest ✓	(b) Pursue ✓
*26	Arguing X	(b) Beautiful ✓
*27	Hangacher X	(b) Shopkeeper ✓
28	Dealing X	
*29	Flour X	
30	Categorising	
31	Hour ✓	
32	Draw ✓	

1. often ✓	33	two X
2. Jag ✓	364	sloop ✓
3. correct ✓	345	* Nail X
4. caught ✓	356	soa X
5. knee ✓	367	Discipline ✓
6. thomas X	378	zoo ✓
7. Mispel X	389	backward X
8. Sunday ✓	3940	Yonchfull X
9. government ✓	3041	lori X
10. theatres X	42	* sin X
11. *begining X	43	seat X
12. receive ✓	442	has ✓
13. *rappo X	45	Dialogue ✓
14. Blawo ✓	46	they ✓
15. Arrire ✓	47	accomodate X
16. Cold X	48	ambushes X
17. higo X	5049	knowledge ✓
18. file ✓	50	Festy ✓
19. *Committee X	501	allrolling X
20. *wail X	502	Maintance X
21. video ✓	543	continently X
22. *cupke X	554	room met X
23. recoring ✓	565	starbon nars X
24. obsayable X	576	reford X
25. honest X	587	Jealously ✓
266 Arguing ✓	598	pasruil X
267 handke X	609	beautifull ✓
27 deleting ✓	60	shop keepers ✓
28. *flows X		
30. categorizing ✓		
301 hour ✓		
312 draw ✓		

1. Often ✓	33	too too ✓
2. Judge X	34	sleep ✓
3. Correl ✓	35	island X
4. Cough ✓	36	seat see X
5. Kneel ✓	37	discipline X
6. Tamias X	38	zoe X
7. Mispel X	39	equo ockward X
8. Sunday ✓	40	tenchful X
9. Government ✓	41	leri X
10. Tietore X	42	seal X
11. biggining X	43	seat ✓
12. receire ✓	44	quake X
13. vapour X	45	dialogue ✓
14. plawp X	46	They ✓
15. arrive ✓	47	quomodate X
16. Call ✓	48	ambitious X
17. thitt hael X	49	knowledge ✓
18. find X	50	fourty X
19. Committe X	51	quater X
20. weill X	52	maintainance X
21. video ✓	53	Continuing X
22. Suprice X	54	roommate ✓
23. receiving X	55	Herbornness X
24. Oberrade X	56	referd referd X
25. honest ✓	57	gelowly X
26. lyt hige hugue X	58	passue X
27. handcachife X	59	beautiful ✓
28. deleting ✓	60	Shop-keeper X
29. flour X		
30. Categorising X		
31. hour ✓		
32. draw ✓		

DICTATION

- | | |
|------------------------------|------------------------------|
| 1. O fen X | 33. too ✓ |
| 2. Jug ✓ | 34. sleep ✓ |
| 3. co rect X | 35. mail X |
| 4. Cough ✓ | 36. See ✓ |
| 5. nee X | 37. discipline ✓ |
| 6. Thermos ✓ | 38. Zoe X |
| 7. Mispel X | 39. awkward ✓ |
| 8. Sanday X | 40. Vengeful ✓ |
| 9. government ✓ | 41. Levy ✓ |
| 10. Tietre X | 42. sin X |
| 11. Beginning ✓ | 43. sit X |
| 12. Recieve X | 44. as X |
| 13. Rappo X | 45. dialogue ✓ |
| 14. plouse X | 46. they ✓ |
| 15. arrive ✓ | 47. acomodate |
| 16. Call ✓ | 48. accomodait X |
| 17. lle X | 49. ambitious X |
| 18. file ✓ | 50. knowlege X |
| 19. Committee X | 51. fourty X |
| 20. Wail X | 52. quarelling ✓ |
| 21. video ✓ | 53. maintanance ✓ |
| 22. Suprise X | 54. Continueing X |
| 23. receiving ✓ | 55. room&it X |
| 24. Observeable X | 56. Stuborness X |
| 25. honest ✓ | 57. referred X |
| 26. argue ✓ | 58. passue X |
| 27. handkerchief ✓ | 59. beautiful ✓ |
| 28. Deleting ✓ | 60. shop-keeper ✓ |
| 29. flour X | |
| 30. categorising ✓ | |
| 31. Dur X | |
| 32. draw ✓ | |

1. Open ✓	33. too ✓
2. Jug ✓	34. sleep ✓
3. Correct ✓	35. mail ✗
4. Cough ✓	36. see ✗
5. knee ✓	37. discipline ✗
6. Thomas ✓	38. zoe ✗
7. misspell ✓	39. backward ✗
8. Sunday ✓	40. vein ✗
9. Government ✓	41. Levy ✓
10. teator ✗	42. seen ✓
11. beginning ✓	43. sit ✗
12. receive ✓	44. ask ✗
13. paper ✗	45. dialogue ✓
14. blouse ✓	46. day They ✓
15. drive ✓	47. accomodate ✗
16. called ✗	48. ambitious ✗
17. Hall ✗	49. knowledge ✓
18. fine ✗	50. fourty ✗
19. Committee ✗	51. quepeling ✗
20. whaite ✗	52. maintainance ✗
21. vedro ✗	53. continouing ✗
22. suppise ✗	54. poamait ✗
23. reclering ✗	55. starboness ✗
24. observable ✗	56. referd ✗
25. Honest ✓	57. Jalousy ✗
26. arguing ✓	58. persuade ✓
27. Handkerchief ✓	59. Beautiful ✓
28. delecting ✗	60. Shopkeeper ✓
29. flood ✗	
30. Categorising ✓	
31. Hour ✓	
32. draw ✓	