AN OVERVIEW OF CENTRAL DIZIN PHONOLOGY AND MORPHOLOGY

by

MARVIN DEAN BEACHY

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ABSTRACT

AN OVERVIEW OF CENTRAL DIZIN PHONOLOGY AND MORPHOLOGY

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Dizin (Dizi) is an Omotic language spoken in Southwest Ethiopia with three main dialects. This thesis focuses on Central Dizin phonology and morphology, but includes some data from Eastern Dizin and Western Dizin.

Prolonged language contact with Amharic has affected the sound system of Dizin and numerous Amharic words have been borrowed.

Features of the Dizin sound system include glottalized consonants, syllabic nasals, lengthened vowels, three phonemic tone levels and contour tones. Western Dizin has phonemic retroflex consonants. The glottal stop is analyzed as phonemic word initially before nasals, but not phonemic elsewhere.

Dizin is polysynthetic and more agglutinative than fusional. Dizin has a stacked (compound) case system, a switch reference marker on medial verbs, a complex system of relativizing verbs, and interdependent verbs. Most of the words that modify nouns are understood to be relativized verbs.

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LIST OF ABBREVIATIONS

Ac1	Accusative 1
Ac2	Accusative 2
Ac3	Accusative 3
AcCon	Accusative Conjoined
Ad	Adessive
All	Allative
BE	Standard 'be' Verb; the Copula
C	Consonant
Cau	Causative
CD	Central Dizin
CQ	Content Question
D	Dual
Dat	Dative
Ds	Distal (also denotes Definiteness)
DP	Distant Past
DS	Different Subject (for the following verb)
ED	Eastern Dizin
ES	Extra Syllable
ExBE	Existential Copula ('there is, there are')
F	Feminine
Fem	Feminine

For	Formal
Fut	Future
FutQ	Future Question
Gl	Glottalized (also called "Ejective")
G	Glide
Ger	Gerund
Gn1	Genitive 1
Gn2	Genitive 2
Gn3	Genitive 3
Gn4	Genitive 4
H	High Tone
ID1	Interdependent 1
ID2	Interdependent 2
Ipf	Imperfective
IpfQ	Imperfective Question
In	Inessive
Inf	Infinitive
Inst	Instrumental
Intns	Intensifier
Imp	Imperative
Jus	Jussive
L	Low Tone
Loc	Locative
LocIr	Locative Irregular
M	Mid Tone

M	Masculine
Masc	Masculine
Neg	The Auxiliary Negative Verb
Ng	The Negative Verbal Suffix
NgImp	Negative Imperative
Nom	Nominative
Non-Lat	Non-Lateral
NP	Noun Phrase
P	Plural
Pass	Passive Voice
Perf	Perfect
PerfQ	Perfect Question
PImp	Plural Imperative
Pl	Plural
PNG	Person, Number, Gender
POF	Possessor Of (Feminine)
PolImp	Polite Imperative
POM	Possessor Of (Masculine)
PstPr	Past/Present (past on action verbs; present on copulas)
PstPrQ	Past/Present Question (past on action verbs; present on copulas)
Px	Proximal (also denotes Definiteness)
Rel	Relativizer
Rflex	Reflexive
S	Singular
Sg	Singular

SR	Surface Representation
SSO	Same Subject Overlap ("while")
SSS	Same Subject Succession ("then")
UR	Underlying Representation
v	Epenthetic Vowel
V	Vowel
Vd	Voiced
Vl	Voiceless
Voc	Vocative
WD	Western Dizin
1	First Person
2	Second Person
3	Third Person
&	And
&CL	And (Clause Level)
∅	Null Morpheme
??	Morpheme Not Yet Understood

CHAPTER 1
INTRODUCTION

1.1 Overview of Thesis

This thesis focuses on Central Dizin phonology and morphology, but includes some data from Eastern Dizin and Western Dizin. Although it is intended primarily as a descriptive work, rather than a theoretical one, Generative Phonology and Government and Binding Grammar have informed the analysis. This introductory chapter addresses a number of background issues, including a review of previous work on Dizin, and the socio-linguistic situation in the Dizi area. Chapter 2 is a phonology sketch. Chapter 3 presents the grammatical categories of Dizin and the morphology of each of those categories. The bulk in that chapter addresses noun and verb morphology. The final chapter summarizes conclusions derived from this study and lays out areas where more research is needed.

The appendices contain two sample texts from which some of the data in this study are taken, Bender's comparative word list, and a Dizin-English-Amharic word list of the nouns that have been analyzed for tone.

1.2 The Names of the Language

The Dizi people call the language they speak *Dizin* ([**di:zin**]) or *Dizinog* ([**di:zino:g**]). ([**no:g**] means 'word' or 'talk'). Those who speak Amharic (whether they are Dizi or not) usually use the name, *Dizinya* ([**dizɨɲɑ**]), but also, *Majinya* ([**mɑd͡ʒɨɲɑ**]). In the recent literature, the self-name for the people group, *Dizi*, has also been used as the name of the language. Since *Dizi* is not a self-name for the language, I have broken from that tradition and

use *Dizin*, the shortest and most commonly used of the self-names.[1] The Ethnologue also lists *Maji*, *Dizi-Maji*, *Sizi*, and *Twoyu* as names that have been used for the language (Gordon 2005a:114).

1.3 Number of Dizin Speakers

The report entitled, "*The 1994 Population and Housing Census of Ethiopia Results for Southern Nations, Nationalities and Peoples' Region*," published in 1996, gives the following figures for those who live in that region: 20,703 Dizin mother tongue speakers (1996:163); 1,933 second language speakers (1996:204); 21,894 in the Dizi ethnic group (1996:119).

1.4 Where the Dizi Live

The Dizi people live in southwestern Ethiopia, west of the Omo River. The town of Maji, which is near the center of the Dizi area, is about 100 kilometers (62 miles) directly south of the town of Mizan Teferi. Driving from Mizan Teferi to Maji on the road through Dima is about a 170 kilometer (106 mile) journey.[2] The Dizi's closest neighbors are the *Me'en* people to the north, and those who have often been called the *Surma*, to the south and west. Their languages are both part of the Surmic branch of Nilo-Saharan, unlike Dizin, which is Omotic.

Figure 1 shows the *Suri* and *Kapicho-Baliso* languages to the west and south of Dizin. Two closely related speech varieties are included in *Suri*: *Tirmaga* the west and north and *Chai* to the east and south. Those who speak *Tirmaga* and *Chai*, along with those who speak *Kapicho-Baliso* (known as the *Baale* people), have traditionally been called the *Surma* by

[1] The Dizin words for 'Amharic' and 'English' point to the productivity of the suffix **-in**: **golin** (from **golɑ-in** 'Amhara-language_of') and **iŋgɨliz-in** 'English-language_of'.

[2] Interestingly, though it is not shown on some maps of Ethiopia, Maji does appear on some globes.

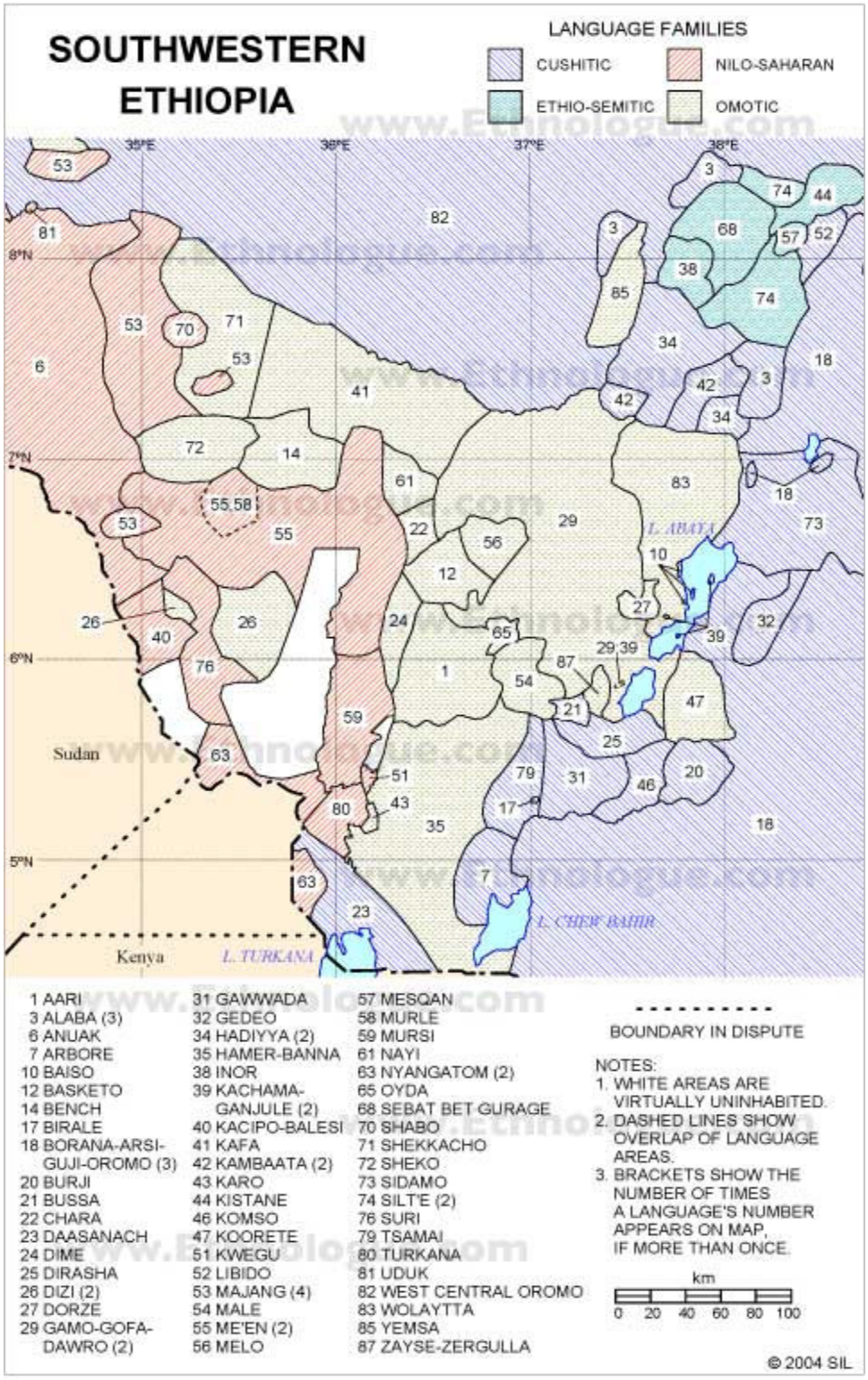

Figure 1. Where Dizin and Neighboring Languages are Spoken (Gordon 2005b)

outsiders. That name is probably related to the term, *Suri*, which all three of these groups use to refer to themselves.

Linguistically, though, it is not very precise to refer to "the *Surma* language" or "the *Suri* language." Though the *Tirmaga* and the *Chai* speak very similar varieties of speech, the *Baale*, while culturally very similar, speak a language which is not mutually intelligible with either *Tirmaga* or *Chai*. To complicate things further, the *Mursi*, who live just east of the Omo River, *do* speak a speech variety which is mutually intelligible with *Chai* and *Tirmaga*, but are not considered *Suri*, either by themselves or the *Suri*. So for the purposes of this thesis, the language of the *Tirmaga* and the *Chai* (and the people themselves) will be referred to as *Tirmaga-Chai* (Bryant 1999:1-4).

Maji is the largest town in the Dizi area. The three next most populous towns are Jeba, Tum, and Adikas, in that order.

1.5 Language Classification

Dizin is a member of the Omotic language family, which has generally been considered a member of the Afrasian (Afro-Asiatic) language family. Omotic was known as Western Cushitic until Fleming and Bender argued for a separate language family in the late 1960s and early 1970s (Hayward 1990:vii-viii). The internal classifications of the Omotic languages are still unsettled questions. Even the inclusion of Omotic in Afrasian is a matter of some debate. Bender has even speculated "about the possibility that part of Omotic is indeed Afrasian but that perhaps Aroid and Dizoid (AD) are not" (2003:xii). It will be interesting to see where the evidence leads in the coming years.

In his recent reanalysis of the Omotic data based on morphology, Bender calls "*Dizi*" a member of *Dizoid* which is a member of *Dizoid-Aroid* which is a member of *TNDA*. That

abbreviation stands for "**ta**/**ne**" (pronouns common to the *TN* group) and "*Dizoid-Aroid*" (2003:1-7, 299).

The *Dizoid* languages besides *Dizin* are *Sheko* and *Nayi*. Aklilu Yilma (2003:59) uses "*Maji*" instead of "*Dizoid*" because both *Sheko* and *Nayi* speakers say that their ancestors moved to their present locations from the *Maji* area. Others have also used the term "*Maji* languages" (Bender 1975:46, 48 and Hayward 1990:xi.), as will be done in this thesis.

Dizin's next closest linguistic relatives, according to Bender, are the *Aroid* languages: *Ari*, *Hamer*, and *Dimé*. Some of the languages from the *TN* side of the *TNDA* group are *Welaitta, Basketo, Malé, Kooreté, Benchnon (Gimira), Yem (Janjero), Kaficho,* and *Shekacho* (*Mocha*) (2003:1-7).

1.6 Dizin Dialects

Muldrow (1976:605) lists nine dialects of Dizin and twenty-two geographical areas where these are spoken. This is a claim which would still need to be confirmed with systematic fieldwork. A Dizi man tells me that those "dialects" were probably based on nine traditional Dizi chiefdoms, and the linguistic differences between some of those "dialects" are very slight. In his view, Dizin can be divided into three main dialects. The geographical areas where these are spoken appear in Table 1. Aklilu labels the three dialects he studied "Adikas, Maji and Jaba" (2003:65). As the table suggests, those correspond with what are here called Eastern Dizin[3], Central Dizin and Western Dizin.

Muldrow reported that different tone patterns distinguish the dialects (1976:605). The dialect which he said is probably the "most divergent" (1976:605) fits into what is now being called Western Dizin. Mother tongue speakers confirm that lexically Western Dizin is the

[3] To be more precise, "Eastern Dizin" could be called "Eastern and Southern Dizin," or "Southeastern Dizin," since Adikas is at the southern edge of Dizi territory.

most different. Aklilu (2003:66 ff.) notes a significant phonological difference: Western Dizin has four phonemic retroflex consonants that the other two dialects lack.

Table 1. The Three Main Dizin Dialects

DIALECTS:	WESTERN DIZIN	CENTRAL DIZIN	EASTERN DIZIN
GEOGRAPHICAL AREAS:	Jeba ([d͡ʒɛbɑ]) Haru Dami Kiafi etc.	Maji Meshi ([mɛʃi]) Tum Shotnt Gobi Sai etc.	Adikas Kolu Mui Siski etc.

This thesis focuses on Central Dizin, but also notes the divergence of Eastern Dizin, when it occurs. The source of most of the data for this thesis is a bi-dialectal Dizi man in his thirties. He spent his early childhood in the Adikas area (Eastern Dizin), but his mother was from near Maji (Central Dizin). His early schooling (first to third grade) was in Adikas, and then he attended school in Maji from grades 4 through 12. Some of his data has been checked by mother tongue speakers from the Central Dizin area, and they have suggested some changes so that it sounds more like Central Dizin. Central Dizin is the prestige dialect, and will likely be the first to have significant written materials produced for it.

1.7 A Few Pieces of Dizi History

The oral tradition of the Dizi people suggests a connection to the *Tigre* people of Northern Ethiopia. Harold Kurtz (2005, personal communication), who lived near Maji for many years, says that the oral tradition is that Orthodox Christian missionaries from Tigre came to the Dizi area several hundred years ago. They taught and preached for a few years, and when they left, they gave three things to the Maji Chief and the Adikas Chief that those

chiefs considered sacred: a blue cloth, a block of wood, and a fly switch. These artifacts are still being kept in those chiefs' compounds in small, carefully maintained buildings.

Kurtz (2005, personal communication) also says that "[the Dizi] were a very, very class structured society even to the point that you needed to know by relationship exactly how far up the hand—what knuckle—you took hold of when you shook hands with another man." The traditional leaders such as *burji, kiam,* and *kiaz,* maintained order before the current structures of the Ethiopian government came to the area. Subsistence farming was (and continues to be) the most common livelihood for the Dizi. Metal workers were likely invited from outside the area by the Dizi leaders to refine iron ore and make tools of high tensile steel (Kurtz 2005, personal communication).

Maji has been a southwestern outpost of every central government of Abyssinia or Ethiopia since the days of the Emperor Menelik in the 1890s (Deguchi 1996:122). Mule trains moved goods from Maji to Jimma to Addis Ababa, as well as the reverse direction.

When viewing the mountainous Dizi territory today, a striking feature is numerous terraces. These were built in the days when the Dizi population was great enough that the scarcity of farmland necessitated a creative solution. Because a decreased population over the past 100 years or so has no longer required increased farmland, the Dizi have lost the art of building these terraces. Disease is a possible reason for the currently reduced numbers, but another factor is the slave trade that took many Dizi people from this area to other places. This was still continuing on a large scale in the early Twentieth Century, as was reported by Major Henry Darley, a British explorer who traveled to Maji and wrote *Slaves and Ivory: A Record of Adventure and Exploration among the Abyssinian Slave-Raiders* (1926). Fernyhough reports, "Contemporary Ethiopian and European estimates suggest that for Kaffa, Gemira and Maji the demographic impact of slaving involved the deaths or deportation of at least 300,000 people between the early 1900s and the mid-1920s"

(1994:696). Fernyhough's data suggest that those estimates are probably high (1994:696), but he does agree that there is evidence for significant numbers of slaves being taken from the southwest of Ethiopia, including the Maji area, as late as the 1920s (1994:692-8).

A British consulate was established near Maji during the 1920s, after Ethiopia became a member of the League of Nations in 1923 (Strollo 2005:1). The purpose of the consulate included monitoring and discouraging the slave trade (Kurtz 2005, personal communication).

When the Italians occupied Ethiopia from 1935 to 1941, they built roads so that vehicles could be driven into the Dizi area. During those years a Catholic Mission became active there and began at least one school (Kurtz 2005, personal communication).

The American Mission was established in 1948 near Maji. This Mission also made education and medical care more available to the area. It left Maji in 1977 (James Keefer and Kurtz 2005, personal communication).

Relations between the Dizi people and the Tirmaga-Chai people have been complex. For example, a number of Tirmaga-Chai men have married Dizi wives, but I am not aware of any cases of Dizi men marrying Tirmaga-Chai wives. Market forces are certainly one factor, since the bride price for a Dizi bride (around five cows) is only one-fourth the price required for a Tirmaga-Chai wife.

Much has been written about the recurrent violence that has occurred between the Dizi and the Tirmaga-Chai (Beckwith and Fisher 1991, Abbink 1993a, 1993b, 1994, 1998a, 1998b, and Bryant 1999). The problem goes through cycles of lessening and increasing severity, but overall it has significantly worsened since I first visited Tum in 1997. This topic often dominates Dizi conversations. In February of 2004, representatives of the Regional State government made a visit to the area at the request of the Dizi leaders. I attended an open-air meeting at the Maji Woreda Compound near Tum where approximately 200 Dizi

men gathered. Many of them spoke passionately to the vice-president of the Regional State about the extent of the problem.

One reason for the increase in violence has been the extended civil war in southern Sudan that has displaced Sudanese people toward the east. This has led to the Tirmaga-Chai also moving east and north into territory that previously had been a buffer zone between them and the Dizi.

1.8 The Current Sociolinguistic Situation

The languages with which Dizin speakers currently have the most contact are Amharic, Tirmaga-Chai, Me'en, and English. Amharic has had a major influence on Dizin during the last century because it was the language of the soldiers, traders and government workers who came to Maji. Numerous loan words from that Semitic language are thoroughly integrated into Dizin. Dizin also shares a number of vocabulary items with Tirmaga-Chai, a Nilo-Saharan language. More research is needed to investigate the direction and details of borrowing. Since the Dizi are much more likely to speak Tirmaga-Chai than the Tirmaga-Chai are to speak Dizin, it is reasonable to assume that Dizin has borrowed more from Tirmaga-Chai than the other way around, but more data are needed to establish that as fact. Evidence of one case of Dizin borrowing from a Southeast Surmic language (likely Tirmaga-Chai, but possibly Me'en) is presented in 2.2.6.

A significant number of the Dizi also speak and read Amharic, because that is the primary language of education. Increasing numbers of Dizi children are attending schools. The Ethnologue says, "Literacy rate in second language: 16.8%” (Gordon 2005a:114). Some speak Tirmaga-Chai because of regular dealings with them. Some also speak English because it is also taught in the schools. A knowledge of English is useful to those who serve as guides for tourists who come to visit the nearby Mui National Park or to see the Tirmaga-Chai

people. I am not aware of any Dizin speakers who also speak the Me'en language well, but since there is considerable, usually friendly, interaction between the groups, this is quite likely along their common borders.

The social structure of the Dizi has been studied and reported by Haberland (1984 and 1993) and Deguchi (1996). Haberland repeatedly uses the term "caste," but Deguchi argues against that. They both note strong hierarchical relationships and dietary taboos among the traditional ruling classes. I can confirm that both of those phenomena still exist in the Dizi culture. Abeje Berhun has written about the economic and social relations between the Dizi and their neighbors (2000).

Muldrow stated that "the Mela clan of the Me'en [people] has sections in ... the Dizi ..." (1976:603). Unseth and Abbink (1998) report that that is not the case, but they do document extensive interaction between the Dizi and their Surmic neighbors. They also provide evidence from various sources that the Meelanir, a clan within the Majangir, may have descended from the Dizi.

1.9 Previous Linguistic Research

While a number of researchers have made significant contributions to the present understanding of Dizin, the data available to the public remain somewhat sketchy.

Giovanni Toselli was the first to document anything extensive on the Dizin language. His book, "Elementi di Lingua Magi," was published in 1939. I had the first part of that Italian book translated into English, but did not find the information it gave helpful enough to warrant completing the translation.

James Keefer lived in the Dizi area for about three years in the 1960s. He wrote two papers in 1969 which are especially helpful. The first, "The Interrogative in the Maji (Dizi) Language of Kaffa Province," focused on the morphologically complex system of marking

questions. The second, "The Principal Characteristics of Maji," is a dense eleven-page overview of Dizin phonology and grammar.

Edward Allan called the eight-page paper he wrote in 1974 "The Phonology of Dizi (Maji): A Preliminary Report." His twelve-page chapter, "Dizi," (1976a) is another dense helpful pioneering introduction to Dizin phonology and grammar. His paper, "Inalienable Possession in Four Ethiopian Languages," includes one page of material on Dizin (1976b). In the 24-page paper, "Possession in Dizi: Inalienable or Not?" Claudi and Serzisko (1985) investigated Allan's claims for Dizin, and concluded, "Inalienability is not an overt category in Dizi" (1985:150). My analysis differs from both of theirs, as is explained in 3.5.8.4.

Habte-Mariam Markos wrote "Four Omotic languages: Benchnon, Dizi, Kefa, Yemsa" in 1982. I have not had access to it, but Tamirat (1988:3) states that it contains a brief sketch of Dizin, plus a proposal for a Dizin orthography using the Ethiopic script.

In 1984, Eike Haberland composed a mostly non-linguistic article on "Caste and Hierarchy among the Dizi." In it, he reports on a set of vocabulary (over a hundred words for common items) used only by the nobility. Deguchi attempted to confirm this, but was not able to do so (1996:128). I have not been able to gather any information on this phenomenon either; it is something the people I have asked seem to know nothing about.

Mary Breeze's paper "Phonological features of Gimira and Dizi" (1988) focuses on phonological similarities between Benchnon (then known as Gimira) and Dizin.

In the late 1980s, two Addis Ababa University students independently researched Dizin morphology. The first, Tamirat Jiffar, wrote his senior essay (1988) on "Verb morphology of Dizi (some inflections and derivations)." His treatise gave a helpful introduction to verb morphology and included descriptions of three morphophonemic processes. The next year, Teberih Anania wrote her B.A. thesis on "Noun Morphology of Dizi," but I have not yet been able to locate it at the University library.

More recently Aklilu Yilma has written a 102-page monograph, "A linguistic analysis of the Dizi language" (2000), which has not yet been made available to the public. Its publication will be a welcome addition to the literature. The paper, "Comparative phonology of the Maji languages" (Aklilu 2003), and various other of his works on the closely related languages, Sheko and Nayi (Aklilu 1988, 1994, 1997 and Aklilu, Siebert and Siebert 1993), represent a major step forward in our understanding of Dizin and those two other Maji languages.

1.10 Research Methodology

The data used for this thesis were collected from 1997 to 2004. I lived in the Dizi area near the town of Tum off and on during that time and processed data, as time allowed, during the times I was not able to be in the countryside. A Dizin speaker also came to Addis Ababa a few times, so that we could work together there.

Almost all the elicited material and most of the texts for this study came from one source, a Dizi man, in his twenties when my research began, and now in his thirties. A few of the texts came from others who lived nearby in the Tum (Central Dizin) area.

Thirty-two natural texts (about 13,000 words) were recorded onto cassette tape or onto the computer, then transcribed and given minimal edits by Dizin speakers. For almost half of these data (about 6,000 words) we were able to write good English free translations and English glosses for all but the morphemes which were not yet understood. I have consulted these data most heavily during the writing of this thesis. Most of the other natural material (about 7,000 words) has Amharic free translations. These data were most helpful in confirming the existence of various word forms.

Much of the elicited data used in this thesis were translated from Amharic sentences found in Leslau's "Amharic Textbook" (1967). I also made a number of variations of

sentences that appeared in natural texts. I had them checked by mother-tongue speakers and noted whether they were grammatical or not, or questionable. These are also considered elicited data. Drafts of scripture, all of James and parts of Acts, John and Mark, are considered elicited. All of the elicited data add up to over 19,000 words.

Since I want this description of Dizin to be as complete as possible, and I do not have any firsthand data from Western Dizin, I have reproduced some of Aklilu Yilma's data to show Dizin retroflex consonants. Credit is given to the source wherever the data are not my own.

1.11 Notation

The International Phonetic Alphabet (IPA) symbols, with varying degrees of detail, are used throughout this work. The Dizin data presented within the text will normally be in morphophonemic form, with morpheme breaks marked by a hyphen, and will be underlined. The epenthetic vowel, **-ɨ** 'v', is shown on occasion, even though it is not a morpheme. When phonetic form is given, it is indicated by the use of brackets: [ ]. When phonemic form is in focus, the data will be presented between forward slashes: / /.

Interlinear examples will normally consist of three lines. The first line will be the Dizin data in morphophonemic form, with morpheme breaks. The second line will give the morpheme-by-morpheme English gloss, and the third line will be a fairly direct free translation into English. Variations from this norm should be easily understood in their contexts. All abbreviations are listed in the front on pages xiv-xvii. A typical interlinear example will be as follows:

(1) nɑkin ɑ^{2}-wut-ɨ-ni?
how? 2S-fall-v-CQ
'How did you(S) fall?'

Marking Tone. Superscript numbers are used to mark tone in this thesis. Accent marks, which are most common for tonal African languages, are problematic because of the contour tones in the data. Another factor is that Benchnon, a related Omotic language, has six phonemic tones: five level and one contour (Wedekind 1981:129-149 and Breeze 1990:7-8). Those who have written on that language have used superscript numbers with "^{1}" being the lowest and "^{5}" the highest.[4] In her paper that compared the phonological features of Benchnon and Dizin, Breeze also used superscript numbers for Dizin, with "^{1}" being the lowest and "^{3}" the highest (1988:481).

I have chosen to use that notation, except that "^{4}" will be added for an extra high tone and "^{0}" will be added for an extra low tone. Note that Dizin is analyzed as having only three phonemic tone levels, instead of five, as is Benchnon. Dizin's extra high and extra low tones are seen as intonational in nature. Further details are given in section 2.7.1. The key in (2) shows how Dizin tone is marked in this thesis. Only a sampling is given for the contour tones:

(2)

Extra high tone	=	α^{4}
High tone	=	$\mathbf{\alpha^{3}}$
Mid tone	=	$\mathbf{\alpha^{2}}$
Low tone	=	$\mathbf{\alpha^{1}}$
Extra low tone	=	α^{0}
High to low contour tone	=	$\mathbf{\alpha^{31}}$
Mid to high contour tone	=	$\mathbf{\alpha^{23}}$

(etc.)

Most of the data which are the basis for this thesis has not been marked for tone. Tone is marked, though, to distinguish known minimal pairs. Research has not yet progressed to the point where a strong claim of being able to mark phonemic tones would be legitimate.

[4] This is more usual for marking tone on Asian tone languages. This can be seen in Yip 2002:xvii and 70. She normally uses numbers without superscripting them, but when quoting data with superscripts, she reproduces that notation.

Null Morphemes. Throughout this thesis, null morphemes are indicated by "∅." From the Government and Binding perspective, each clause has inflection with [±Tense] and [±Agreement] whether or not it is overt (Haegeman 1991:98-106). Dizin has a form of the verb that does not show any inflection on the root. Chapter 3 (3.8.8.1.3) argues that a null morpheme, -∅ 'SSO', attaches to this verb form. Null morphemes are also proposed for a tense/aspect morpheme (3.8.3.2.1) and for nominative and sometimes accusative case (3.5.8).

Mystery morphemes. In the texts in Appendix A, as well as in a few places in Chapter 3, '??' signifies that the morpheme is not yet understood. I would have liked to replace all of the pieces of data that contain these mystery morphemes, but was not always able to find completely understood examples that illustrated as well what was being explained.

Gender. Dizin does not have separate neuter gender morphemes, so, as is common in Ethiopian languages, the "masculine" morphemes are employed. This means that the "masculine" morphemes would more accurately be called "non-feminine." But with the readers' understanding, for ease of displaying the data, the term "masculine," and its abbreviations, "M" and "Masc," will be used.

Another reason not to use "non-feminine" is that the "feminine" morphemes are also sometimes used to denote 'diminutive'. So, animals that are small and cute (e.g. a pet rabbit) are grammatically "feminine," even if they are technically male. Additionally, the large inanimate objects, 'vehicle' and 'airplane', are given "feminine" grammatical status. This is likely an instance of borrowing from Italian or Amharic.

Adaptation. A variety of notational systems have been used by those who have written on Dizin and related languages. Therefore the data quoted in this thesis is usually adapted to IPA to match the notation used throughout the rest of this thesis.

CHAPTER 2
DIZIN PHONOLOGY

This chapter presents an overview of Dizin phonology. The consonant, vowel and tone phonemes and allophonic variations are given. Tone research is still in the preliminary stages, but it is clear that both lexical and grammatical tone operate in the language, as others have reported. The data also suggest that contour tones play an important role in the language. The significant effect that prolonged language contact with Amharic has had on Dizin phonology is discussed throughout this chapter.

2.1 Phonology, Orthography, and the Ethiopic Script

The Dizi Language Committee has, for good socio-linguistic reasons, chosen to write Dizin with the Ethiopic script used for Amharic, the most widely spoken language throughout Ethiopia. Since this script is a syllabary, we are left with fewer acceptable options for writing ambiguous segments and sequences. This means that the hypotheses offered in this chapter should not be seen as the suggested solutions to orthographic questions. Too many factors which are not addressed here need to be considered.[1]

2.2 Consonants

This section presents the consonantal phonemes and their allophones. The organization of this section progresses from less to more sonorant, and from front to back.

[1] Some of those factors are addressed in Beachy 2003a.

Table 2. Dizin Consonant Phonemes

The consonant phonemes of all three major dialects of Dizin are shown in this table. Asterisks mark the retroflex consonant phonemes, because they only occur in Western Dizin.

			Labial	Alveolar	Retroflex	Post-Alveolar/ Palatal	Velar	Glottal
Obstruents	Stops	Vl	p	t			k	
		Gl	p'	t'			k'	ʔ
		Vd	b	d			g	
	Affricates	Vl		t͡s	ʈ͡ʂ*	t͡ʃ		
		Gl		t͡s'	ʈ͡ʂ'*	t͡ʃ'		
		Vd				d͡ʒ		
	Fricatives	Vl	ɸ	s	ʂ*	ʃ		h
		Vd		z	ʐ*	ʒ		
Sonorants	Nasals		m	n			ŋ	
	Liquids	Non-Lat		ɾ				
		Lateral		l				
	Glides		w			j		

2.2.1 Voiceless Stops

The Dizin voiceless stops are: /p/, /t/, /k/, /p'/, /t'/, /k'/, and /ʔ/.

/p/. The phoneme /p/ is a recently added member of Dizin's phonemic inventory. The following pieces of evidence make it clear that [p] was not a separate Dizin phoneme in the past. First, Keefer reported that "the Amharic /f/ character [was] preferred for writing /p/" (1969b:1). Second, in non-borrowed words, the unreleased stop [pˀ] appears in complementary distribution with [ɸ] (and [f]). While [pˀ] only occurs word internally before /m/, [ɸ] (and [f]) occur in other word internal and word final environments. (Neither occur

word initially, but that is explained under /**ɸ**/ on page 26.) Third, [**p**] has not yet been attested in any non-borrowed words.

Given this history we might expect a /**p**/ in a borrowed word to weaken to a fricative, or be adjusted in some other way. Since that does not happen, it is best to call /**p**/ a recently added phoneme. These are examples of the borrowed, but regularly spoken, Dizin words:

(1) a. /**p**enu/ [**p**e.nu] 'pen' b. /**p**a**p**aj/ [**p**a.**p**aj] 'papaya'
c. /hos**p**ital/ [hos.**p**i.tal] 'hospital'

From a historical perspective it would be best to consider [**pˀ**] an allophone of /**ɸ**/. But, now that /**p**/ has become established in the language, it is phonologically intuitive to consider [**pˀ**] an allophone of /**p**/. This is analogous to the allophonic variation seen in /**t**/ and /**k**/. Another argument in favor of this view is that Dizin writers now prefer the Ethiopic script symbol for /**p**/ over the symbol for /**f**/ not only in the borrowed words shown in (1), but also in the non-borrowed words like those shown in (2).

(2) a. /i:**p**m/ [ʔi:**pˀ**.ʔm̩] 'house-LocIr' b. /a**p**m/ [ʔa**pˀ**.ʔm̩] 'look!'
c. /sa**p**m/ [sa**pˀ**.ʔm̩] 'above'

/t/. The phoneme /**t**/ has two allophones: [**t**], and [**tˀ**]. The released allophone occurs syllable initially, when /**t**/ is the last segment of a complex coda, and in emphatic speech when it is a simple coda. The unreleased allophone occurs obligatorily before nasals and optionally syllable finally in normal (unemphasized) speech when it is a simple coda.

(3) a. /**t**oku/ [**t**oku] 'mud' b. /**t**amu/ [**t**amu] 'ten'
c. /se**t**n/ [se**tˀ**.ʔn̩] 'flour' d. /an**t**a/ [ʔan.**t**a] 'perhaps'
e. /t͡san**t**/ [t͡san**t**/ 'before' f. /d͡ʒi**t**/ [d͡ʒi**t**] ~ [d͡ʒi**tˀ**] 'properly'

/k/. The phoneme /**k**/ also has two allophones: [**k**], and [**kˀ**]. The allophone [**k**] occurs syllable initially, when /**k**/ is the last C of a complex coda, and in emphatic speech when it is a simple coda. The allophone [**kˀ**] occurs obligatorily before nasals and optionally syllable finally in normal (unemphasized) speech when it is a simple coda.

(4) a. /**k**eti/ [**k**eti] 'wall' b. /**k**istu/ [**k**is.tu] 'curse'
c. /**k**ɑɾ**k**ɑmti/ [**k**ɑɾ**k**ɑmti] 'partridge' d. /oɸ**k**ŋ/ [ʔoɸ**k**˥.ʔŋ̩] 'to wear'
e. /iɑzk'ɑŋ**k**/ [ʔi.ɑz.k'ɑŋ**k**] 'lie-Inst' f. /**k**e**k**/ [**k**e**k**] ~ [**k**e̩**k**˥] 'right, proper'

/p'/. The phoneme /**p'**/ has one allophone: [**p'**]. In my word list it occurs in seven apparently indigenous words. Six of those times it is word initial, and the other time it is word final. It occurs word medially, but only in borrowed words.[2]

(5) a. /**p'**ɑso/ [**p'**ɑ.so] 'he was not afraid' b. /**p'**elel/ [**p'**e.lel] 'malaria'
c. /t'ɑɾɑ**p'**ez/ [t'ɑ.ɾɑ.**p'**ez] 'table' d. /to**p'**iɑ/ [to.**p'**i.ɑ] 'Ethiopia'
e. /nɑ**p'**/ [nɑ**p'**] 'quietly'

/t'/. The phoneme /**t'**/ also has one allophone: [**t'**]. It occurs in all positions.

(6) a. /**t'**ɑgŋ/ [**t'**ɑg˩.ʔŋ̩] 'two' b. /**t'**obo/ [**t'**o.bo] 'he cut a tree'
c. /t͡ʃ'ɑ**t'**u/ [tʃ'ɑ.**t'**u] 'tapeworm' d. /k'u**t'**ɨk˥.ʔŋ̩] 'to be healed'
e. /k'u**t'**/ [k'u**t'**] 'right (opposite of left)'

/k'/. The phoneme /**k'**/ has just one allophone: [**k'**]. In indigenous words it occurs syllable initially but not syllable finally. It occurs word initially and medially, but not finally. Borrowed words do have this segment in the syllable final and word final positions.[3]

(7) a. /**k'**ubɑ/ [**k'**ubɑ] 'small intestines' b. /**k'**emti/ [**k'**em.ti] 'co-wife'
c. /mɛɾɸi**k'**ɑŋk/ [mɛɾ.ɸi.**k'**ɑŋk] 'needle-Inst' d. /sɑ**k'**ɑl/ [sɑ.**k'**ɑl] 'little house'
e. /dɛ**k'**i**k'**/ [dɛ.**k'**i**k'**] 'minute' f. /t͡ʃ'ɑɾ**k'**/ [tʃ'ɑɾ**k'**] 'rag'

/ʔ/. Previous researchers have not been in agreement on the question of whether the glottal stop [ʔ] should be given phonemic status. Keefer (1969b:1) wrote, "There is also a significant but very light /ʔ/." Allen (1976:377) did not include it on his phoneme chart, nor did Tamirat (1988:4). Breeze wrote, "Gimira [Benchnon] has a glottal stop phoneme which does not seem to be present in Dizi" (1988:479). Aklilu writes, "The glottal stop /ʔ/ has been attested to in a few words in the dialects of Dizi that I have investigated" (2003:66).

The data suggest that in Central and Eastern Dizin the glottal stop /ʔ/ is sometimes underlying or phonemic and other times it is not. Word initially before vowels it should not

[2] (5c and d) are from Amharic /**t'ɛɾɛp':ɛzɑ**/ and /**it'ʲop':ʲɑ**/.
[3] (7e and f) are from Amharic /**dɛk'ik'ɑ**/ and /**t͡ʃ'ɛɾk'**/.

be considered phonemic, since it is predictable. An onset is obligatory word initially, and [ʔ] is the segment that is assumed to be inserted when a vowel begins a word underlyingly.[4] Also word internally following a stop and preceding a nasal, the glottal stop is predictable, so should not be considered phonemic in those cases. But word initially before nasals the glottal stop is not predictable, so in those environments it should be considered phonemic. A number of factors point to these conclusions.

First, the borrowed Dizin word /sɑːt/ 'hour' or 'watch', from Amharic /sɛʔɑt/, gives a piece of evidence against a word internal glottal stop between vowels being allowed, at least in the past. If the glottal stop had been completely phonemic at the time that Amharic speakers brought the word, presumably over a century ago, we would expect the /ʔ/ to be retained. Instead, /ɛʔɑ/ was adapted to become one lengthened segment: /ɑː/.

Another question is whether a rule that inserts the glottal stop before all nasals would be plausible. The data in (8) argue that it would not be. In (8a) we have a word that is realized phonetically as [mo], which is what we would expect if the underlying phonemes were /mo/. In both (8b) and (8c) the verb form that means 'he ate' is shown. The underlying representations, though, show two different analyses. In (8b) the assumption is that the glottal stop is underlying or phonemic and the rule which disallows complex onsets is satisfied by the /m/ becoming the nucleus of a syllable: [ʔm̩]. In (8c) the assumption is that the nasal /m/ is the entire underlying form of the morpheme, and a rule that requires the insertion of a glottal stop before the /m/ is needed. The problem is that it would be difficult to write such a rule so that it would not incorrectly affect the surface form of words like the one in (8a).[5]

[4] It could be argued that [ʔ] is always phonemic word initially, and some other consonant is the non-phonemic one which is inserted to take care of the constraint which requires a word initial consonant.

[5] Another factor is that (8a) contains just one morpheme, while (8b and c) contain two. The possibility that [ʔ] is sensitive to morphological structure should be researched further.

(8)	a. [mo]	b. [ʔm̩.o]	c. [ʔm̩.o]
	/mo/	/ʔm-o/	/m-o/
	earlier_today	eat-3SM	eat-3SM
	'earlier today'	'he ate'	'he ate'

Additional support for an underlying glottal stop is found in another word form inflected from the root for 'eat', shown in (9). In (9a), the analysis assumes the underlying root /**ʔm**/. A [**ʔm**] coda is not allowed because the sonority of the segments increases after the nucleus. So, the /**m**/ becomes syllabic. In (9b), the analysis tries to assume no underlying glottal stop, but the resulting surface form is not correct. A rule would be needed to insert the phonetic glottal stop before [**m**]. But as (9c) demonstrates, an unmarked syllabic segment (a vowel) does not need to have a glottal stop inserted in front of it unless it is word initial. It is possible to propose that all nasals need a glottal stop inserted before them in this environment, while vowels do not, but the phonetic plausibility of such rule would also be weak.

(9)	a. [ʔɑ^{3}.ʔm̩]	b. *[ʔɑm^{3}]	c. [ʔɑ^{3}.e]
	ɑ^{3}-ʔm-∅	ɑ^{3}-m-∅	ɑ^{3}e-∅
	3SM-eat-SSO	3SM-eat-SSO	3SM-do-SSO
	'he eating'	'he eating'	'he doing'

It is important to note that establishing that the glottal stop has phonemic status in the language does not mean that it is phonemic everywhere it appears. The data in (10a-d) help us see that [**ʔ**] is predictable whenever it occurs word initially before a vowel. But as shown in (8), it is not predictable word initially before a nasal, so will be considered phonemic in those cases.

(10)	a. /etu/ [ʔe.tu] 'youS'	b. /ɑt͡sm/ [ʔɑ.tsɨm] 'moon/month'
	c. /iɑt͡s'ɨz/ [ʔi.ɑ.ts'ɨz] 'big'	d. /okŋ/ [ʔokˀ.ʔŋ] 'far'
	e. /kubm/ [kubˀ.ʔm̩] 'four'	f. /ʃɑdnɨz/ [ʃɑdˀ.ʔn̩.ɨz] 'that which is long (Masc)'
	g. /ʔmm/ [ʔm̩ː] 'eat!'	h. /ʔŋ^{2}ɑl/ [ʔŋ̩^{2}.ɑl] '1S-stay-Ipf'

The epenthesis rule that formalizes the insertion of the word initial glottal stops in (10a-d) is shown in (11).

(11) **GLOTTAL STOP PROTHESIS**

∅ → ʔ / # __ V

This rule states that a prothetic glottal stop is inserted before a word initial vowel. We could broaden the rule to include syllabic nasals, but that would require positing phonemic syllabic nasals, something we prefer to avoid.

It is possible to write another rule that states that when a stop is followed by a nasal, an epenthetic glottal stop is inserted between them. Example (10f) is especially helpful, since it illustrates that the nasal does not have to be word final. Even though [**ɨz**] follows, making it possible for the nasal to be the onset of the final syllable, the epenthesis of the glottal stop still occurs.[6] (The possibly expected, but incorrect, surface form would be *[**ʃɑdˀ.nɨz**].) The process is formalized in (12).

(12) **GLOTTAL STOP EPENTHESIS**

$$\varnothing \rightarrow \text{ʔ} \;/\; \underset{[\text{-continuant}]}{\text{C}} \;\_\_\; \underset{[\text{+nasal}]}{\text{C}}$$

Another factor is the historical question which should still be researched more thoroughly. The origins of the phonetically syllabic nasals in the Maji languages may give us a clue regarding the origins of the phonemic glottal stop word initially, as seen in (8). Aklilu writes, "Non-initial PM [Proto-Maji] *un and *um have become syllabic nasals in the daughter languages" (2003:77-78). He then presents cognate sets to support the claim. I have reproduced two of his ten here, retaining his notation (upper case means syllabic):

(13)	Sheko	Nayi	Dizin	Proto-Maji
'grandfather'	**ákN**	**áku**	**ákN**	***ákun**
'tomorrow'	**berN**	**bearN**	**bʸaru**	***bearun**

[6] This is complicated by the fact that [ʃɑdˀ.**ʔ**n̩.ɨz] is made up of more than one morpheme: **ʃɑdn-Ø-z** 'be_long-CR-M. As before, the possibility that [**ʔ**] is sensitive to morphological structures should be researched.

Perhaps these ancestors (/*un/ and /*um/) were separate words, in which case they would have likely been preceded by a phonetic glottal stop. So, the glottal stop that our second epenthesis rule inserts may be a remnant of a time before some morphemes evolved from being separate words to being suffixes. Assuming that this change would have occurred word initially also, the changes would have gone from [ʔuN] (/uN/) to [ʔN̩] (/ʔN/). Though this scenario is plausible, it is still somewhat speculative, given the limited amount of data available. As stated earlier, this should be investigated further.

2.2.2 Voiced Stops

The voiced stops are /b/, /d/, and /g/. Syllable final voiced stops are normally unreleased. When /d/ and /g/ end a word, they are optionally devoiced to [t] and [k], respectively. When /b/ and /g/ end a word, they are optionally weakened to the fricatives [β] and [ɣ]. This is illustrated in examples (14g), (14h), (15g) and (16e).

/b/. The phoneme /b/ has three allophones [b], [bˀ], and [β]. The allophone [b] always occurs syllable initially. It also occurs word finally in free variation with [β]. The allophone [bˀ] always occurs if /b/ is both syllable final and word medial, as in (14e) and (14f). The allophone [β] only occurs word finally, in free variation.

(14) a. /bɑmbu/ [bɑm.bu] 'hole'
b. /biːz/ [biːz] 'Venus'
c. /k'ubɑ/ [k'u.bɑ] 'small intestines'
d. /niɑlbɑb/ [ni.ɑl.bɑbˀ] 'stony'
e. /debm/ [debˀ.ʔm̩] 'game'
f. /ɑbʃi/ [ɑbˀ.ʃi] 'tree species'
g. /gob/ [goβ] ~ [gob] 'area'
h. /dɑmb/ [dɑmβ] ~ [dɑmb] 'tobacco'

/d/. The phoneme /d/ has four allophones, [d], [dˀ], [t], and [tˀ]. The allophone [d] always occurs syllable initially. It also occurs word finally in free variation with [t]. The allophone [dˀ] occurs if /d/ is both syllable final and word medial, as in (15c) and (15f). The allophone [t] only occurs word finally, in free variation. The allophone [tˀ] is attested following voiceless fricatives as (15d) and (15e) illustrate. The underlying form of the passive morpheme is /dn/ 'Pass', as shown in (15c).

(15) a. /**d**ɑʒ/ [**d**ɑʒ] 'worm'
b. /**d**um/ [**d**um] 'metal'
c. /gɛ**d**n**d**ɛgo/ [gɛ**dˀ**.ʔn̩.**d**ɛ.go] 'it is said'
d. /ɛʃ**d**nigɛj/ [ɛʃ**tˀ**.ʔn̩.i.gɛj] 'she will be buried'
e. /kɑɸ**d**ndɛgo/ [kɑɸ**tˀ**.ʔn̩.dɛ.go] 'it is built'
f. /u**d**gu/ [ʔu**dˀ**.gu] 'moonless time'
g. /sukunu**d**/ [su.ku.nu**d**] ~ [sukunu**t**] 'snake'

/g/. The phoneme /**g**/ has four allophones: [**g**], [**gˀ**], [**ɣ**], and [**k**]. The allophone [**g**] occurs syllable initially. The allophone [**gˀ**] occurs syllable finally within a word. The allophones [**g**], [**ɣ**] and [**k**] occur in free variation word finally.

(16) a. /**g**ot/ [**g**ot] 'night'
b. /**g**ɑnt/ [**g**ɑnt] 'like, as'
c. /bo**g**ɨlu/ [bo.**g**ɨ.lu] 'manure'
d. /bɑ**g**o/ [bɑ.**g**o] 'he waited for prey'
e. /**g**olmuː**g**/ [**g**ol.muː**g**] ~ [**g**ol.muː**ɣ**] ~ [**g**ol.muː**k**] 'beer'

2.2.3 Affricates

The affricates are: /**t͡s**/, /**t͡ʃ**/, /**t͡sʼ**/, /**t͡ʃʼ**/, /**ʈ͡ʂ**/, /**ʈ͡ʂʼ**/, and /**d͡ʒ**/.

/t͡s/, /t͡ʃ/, /t͡sʼ/, and /t͡ʃʼ/. All four of the Dizin voiceless non-retroflex affricates ([**ts**], [**tʃ**], [**tsʼ**], and [**tʃʼ**]) can occur word initially, medially, and finally. They have no allophonic variation in my data.

(17) a. /**t͡s**ɑn/ [**ts**ɑn] 'face'
b. /**t͡s**uku/ [**ts**uku] 'bark rope'
c. /**t͡s**ɑ**t͡s**u/[**ts**ɑ**ts**u] 'worm'
d. /bin**t͡s**u/ [bin.**ts**u] 'sprouting sorghum'
e. /kɑ**t͡s**/[kɑ**ts**] 'to cook'
f. /wuɾgi**t͡s**/ [wuɾ.gi**ts**] 'fish'

(18) a. /**t͡ʃ**ont/ [**tʃ**ont] 'middle'
b. /**t͡ʃ**ɑ**t͡ʃ**ibɑb/ [**tʃ**ɑ.**tʃ**i.bɑb] 'shepherd'
c. /ɑ**t͡ʃ**ku/ [ɑ**tʃ**.ku] 'meat'
d. /dɑl**t͡ʃ**i/ [dɑl.**tʃ**i] 'foolish'
e. /**t͡ʃ**iɑ**t͡ʃ**/ [**tʃ**i.ɑ**tʃ**] 'malaria'
f. /in**t͡ʃ**/ [ʔin**tʃ**] 'tree'

(19) a. /**t͡sʼ**o/ [**tsʼ**o] 'full'
b. /**t͡sʼ**ɑbt/ [**tsʼ**ɑbt] 'disease'
c. /gi**t͡sʼ**u/[gi.**tsʼ**u] 'fiber, sisal plant'
d. /kʼe**t͡sʼ**ɨm/ [kʼe.**tsʼ**ɨm] 'fever'
e. /ku**t͡sʼ**/[ku**tsʼ**] 'to save'
f. /niɑm**t͡sʼ**/ [ni.ɑm**tsʼ**] 'spleen'

(20) a. /**t͡ʃʼ**ojdn/ [**tʃʼ**ojdˀ.ʔn] 'crazy'
b. /**t͡ʃʼ**u**t͡ʃʼ**u/ [**tʃʼ**u.**tʃʼ**u] 'louse'
c. /to**t͡ʃʼ**u/ [to.**tʃʼ**u] 'manure'
d. /kʼɑ**t͡ʃʼ**uŋ/ [kʼɑ.**tʃʼ**uŋ] 'knock!
e. /tu**t͡ʃʼ**/ [tu**tʃʼ**] 'hump (of a cow)'
f. /mɨlɨ**t͡ʃʼ**/ [mɨ.lɨ**tʃʼ**] 'all'

Aklilu does report allophonic variation for /t͡ʃ/ and /t͡ʃ'/. He writes that in Eastern Dizin and Central Dizin, "the retroflex consonants [… **ʈ͡ʂ, ʈ͡ʂ'**] seem to be in free variation with their corresponding alveo-palatal … affricates [**… t͡ʃ, t͡ʃ'**]" (2003:66).

/ʈ͡ʂ/ and /ʈ͡ʂ'/. Aklilu goes on to say that he has found /ʈ͡ʂ/ and /ʈ͡ʂ'/ to be phonemic in Western Dizin (2003:66), so the data for these retroflex affricates is reproduced here.

(21) a. /ʈ͡ʂon^{3}/ 'heart' (2003:75) b. /ʈ͡ʂow/ 'cold water' (2003:75)
c. /ku^{l}ʈ͡ʂu^{1}/ 'hɑnd' (2003:76) d. /ke^{3}ʈ͡ʂun/ 'spin!' (2003:76)
e. /u^{3}ʈ͡ʂu^{3}/ 'five' (2003:76) f. /boʈ͡ʂkn̩/ 'take out soil from a hole by hand' (2003:76)

(22) a. /ʈ͡ʂ'uʈ͡ʂ'u/ 'louse' (2003:77) b. /ʈ͡ʂ'ubu/ 'smoke' (2003:77)
c. /ɑʈ͡ʂ'u/ 'tooth' (2003:77)

/d͡ʒ/. The phoneme /d͡ʒ/ has one allophone, [**dʒ**]. It occurs word initially, medially, and finally. The only example of [dʒ] as a simple coda is in a word borrowed from Amharic, (22g).

(23) a. /d͡ʒob/ [**dʒ**ob] 'zigzag' b. /d͡ʒibˀd͡ʒɑb/ [**dʒ**ibˀ.**dʒ**ɑbˀ] 'around 4 a.m.'
c. /noːd͡ʒi/ [noː.**dʒ**i] 'leech' d. /ɛnd͡ʒiʃm/ [/ʔɛn.**dʒ**i.ʃɨm] 'to be happy'
e. /gemd͡ʒ/ [gem**dʒ**] 'jaw' f. /burd͡ʒ/ [bur**dʒ**] 'lord, king'
g. /t'ɛd͡ʒ/ [t'ɛ**dʒ**] 'mead'

A Dizin phonotactic constraint is that if two affricates are in a root, they will be identical. This is seen in examples (17c), (18b), (18e), (20b), (22a), and (23b).

While the examples of the retroflex phonemes in Western Dizin are not numerous, in (22a) two retroflex affricates occur in the same root. This corresponds with a constraint observed in Benchnon. Breeze writes that "no two palato-alveolar fricatives or affricates within a root morpheme can differ in the feature of retroflexion" (1990:10). Additionally, the examples in (31a) and (32c) correspond with this constraint.

2.2.4 Fricatives

The fricatives are: /ɸ/, /s/, /ʃ/, /h/, /z/, /ʒ/, /ʂ/ and /ʐ/.

/ɸ/. The phoneme /ɸ/ has two allophones: [ɸ] and [f]. They occur in free variation wherever /ɸ/ occurs. They are not attested immediately before /m/, as discussed in 2.2.1. They only occur word initially in a few borrowed words[7]. They occur on many non-borrowed words, both word medially, and word finally.

Aklilu's reconstruction of Proto-Maji is helpful in explaining the absence of any word initial /ɸ/ in non-borrowed words. He shows word initial /*f/ going to Dizin /h/, but non-word initial /*f/ did not make that change. Further details are given by Aklilu (2003:71-72).

(24) a. /ɸɑɾind͡ʒ/ [ɸɑ.ɾindʒ] ~ [fɑ.ɾindʒ] 'foreigner' (from Amharic)
b. /boɸi/ [bo.ɸi] ~ [bo.fi] 'venomous snake'
c. /jɑɸkŋ/ [jɑɸkˀ.ʔŋ] ~ [jɑfkˀ.ʔŋ] 'to find'
d. /ts'iɸ/ [ts'iɸ] ~ [ts'if] 'back of neck'
e. /kutʃkuɸ/ [kutʃ.kuɸ] ~ [kutʃ.kuf] 'tarantula'

/s/. The phoneme /s/ has three allophones, [s], [ʃ], and [z]. It is usually realized as [s], and occurs word initially, medially, and finally, as most of the examples in (25) show.

Place assimilation causes /s/ to become [ʃ] following /ʃ/. This is illustrated by examples (25e) and (25f). The causative suffix is **-s** 'Cau'.

Voicing assimilation causes /s/ to be neutralized and realized as [z] when it occurs before [d]. This is illustrated by examples (25g) and (25h). The verb root is **bɑ:s** 'want'.

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[7] Interestingly, the only occurrences of this phoneme word initially in my data are in three borrowed words, each perhaps from a different phonemic source: /f/, /p/, and /h/. It is safe to assume that Amharic /fɛɾɛnd͡ʒ/ became Dizin /ɸɑɾind͡ʒ/ 'foreigner'.

The Amharic word /polis/ probably became /ɸolis/ 'police'. This would have been an earlier borrowing because the /p/ became /ɸ/ instead staying /p/ as other more recent borrowings have done. (Examples are in 2.2.1, under /p/.) Since some Amharic speakers say [folis], another possibility is that Dizin borrowed the word from those who spoke that variety of the word.

The Amharic name /johɑn:is/ may have been the source of /ɸɑnis/ 'John'. It is also possible that the missionaries from Tigre gave the Dizi their pronunciation for 'John' from Tigrinya or Ge'ez, which may differ from Amharic. This should be investigated further.

(25) a. /**s**ɑrmi/ [**s**ɑr.mi] 'oldest daughter'
b. /**s**ukunud/ [**s**u.ku.nud] 'snake'
c. /e**s**ku/ [ʔe**s**.ku] 'goat'
d. /tu**s**u/ [tu.**s**u] 'seven'
e. /wu**s**igo/ [wu.**s**i.go] 'it will cause to enter'
f. /wɛʃ**s**dɛniʃo/ [wɛ.ʃ**ɨ**ʃ.dɛ.ni.ʃo] 'they shake (cause to be shaken)'
g. /bɑː**s**o/ [bɑː.**s**o] 'he wanted'
h. /bɑː**s**dɛgo/ [bɑː**z**dɛgo] 'he regularly wants'
i. /uː**s**/ [ʔuː**s**] 'bone'
j. /je**s**i**s**/ [je**s**i**s**] 'therefore'

Certain data involving /**s**/ and /**d**/ require correct rule ordering. That is, when /**s**/ and /**d**/ come together at morpheme boundaries, voicing usually spreads back to /**s**/ and it becomes [**z**], as (25h) and the first example in Table 3 both illustrate. An exception is that when the syllable structure requires the insertion of an epenthetic vowel between the /**s**/ and the /**d**/, voicing does not spread. The final two examples in Table 3 illustrate this.

These data suggest that syllabification and epenthesis occurs before voicing assimilation. If it were the other way around, the surface form of the second example should be *[**ʔin.zɨ.dɛ.ki**] and the surface form of the third example in Table 3 should be *[**ʔm̩.zɨ.dɛ.ni.ʃo**].

Table 3. Voicing Assimilation and Epenthesis

Underlying Form	Surface Form	Gloss	Translation
bɑːs-s-dɛ-go	[bɑ.sɨz.dɛ.go]	want-v-Cau-Ipf-3SM	'it is necessary'
in-s-dɛ-ki	[ʔin.sɨ.dɛ.ki]	go-v-Cau-Ipf-Perf-CR	'those who lead'
ʔm-s-dɛ-niʃo	[ʔm̩.sɨ.dɛ.ni.ʃo]	eat-Cau-Ipf-3P	'they feed'

/ʃ/. The phoneme /ʃ/ is consistently realized as [ʃ]. It occurs word initially, medially, and finally.

(26) ɑ. /ʃinu/ [ʃi.nu] 'younger sibling'
b. /ʃɑr/ [ʃɑr] 'up'
c. /ɑbʃi/ [ɑbʃi] 'tree species'
d. /ʃɑʃi/ [ʃɑ.ʃi] 'squirrel'
e. /t͡ʃoʃt/ [t͡ʃoʃt] 'after'
f. /t͡ʃenʃ/ [t͡ʃenʃ] 'mistake'
g. /wuʃ/ [wuʃ] 'kill-SSO'
h. /herɛʃ/ [he.ɾɛʃ] 'flower'

/h/. The phoneme /**h**/ has just one allophone, [**h**]. This occurs word-initially, medially, and finally.

(27) a. /**h**ɑskŋ/ [**h**ɑskˀ.ʔŋ] 'insult (noun)'
b. /**h**intu/ [**h**in.tu] 'kind of vine'
c. /t͡sɛ**h**i/ [tsɛ.**h**i] 'flea'
d. /nu**h**ɨŋ/ [nu.**h**ɨŋ] 'hyena'
e. /t'u**h**/ [t'u**h**] 'burst-SSO'
f. /biɑ**h**/ [bi.ɑ**h**] 'open-SSO'
g. /wuː**h**/ [wuː**h**[3]] 'ya! (reply to a call)'
h. /woː**h**/ [woː**h**[12]] 'ya! (reply to a call)'

Two borrowed words suggest that at some point in time, or in some dialect of Dizin, word initial /**h**/ was not accepted.

(28) ɑ. /ospitɑl/ [ʔospitɑl][8] 'hospital'
b. /isɑb/ [ʔisɑb] 'bill' (from Amharic /**h**isɑb/)

/z/. The phoneme /**z**/ has two allophones: [**z**], which occurs word initially, medially, and finally, and [**s**] which occurs before /**t**/.

(29) ɑ. /**z**oku/ [**z**oku] 'bull'
b. /**z**uru/ [**z**uru] 'relative'
c. /t'u**z**i/ [t'u**z**i] 'ball'
d. /bo**z**kŋ/ [bo**z**kˀ.ʔŋ] 'to go for a walk'
e. /i**z**u/ [ʔi**z**u] 'he / it'
f. /i**z**t/ [ʔi**s**t] 'it-Loc / in it'
g. /bo**z**/ [bo**z**] 'guest'
h. /bɑ**z**/ [bɑ**z**] 'beehive'

/ʒ/. The phoneme /**ʒ**/ has one allophone, [**ʒ**]. It occurs word medially, and finally, and syllable initially and finally.

(30) a. /ɑ**ʒ**u/ [ɑ**ʒ**u] 'tooth'
b. /wo**ʒ**i/ [wo.**ʒ**i] 'bamboo'
c. /ge**ʒ**kŋ [ge**ʒ**kˀ.ʔŋ] 'to laugh'
d. /dul**ʒ**/ [dul**ʒ**] 'wildcat'
e. /bɑ**ʒ**/ [bɑ**ʒ**] 'war, conflict'
f. /t͡ʃo**ʒ**/ [tʃo**ʒ**] 'behind'

/ʂ/ and /ʐ/. Aklilu reports allophonic variation in Central and Eastern Dizin between "[**z**, **ʂ** …]" and "[**ʒ**, **ʃ** …]" (2003:66). In addition, he has found /**ʂ**/ and /**ʐ**/ to be phonemic in Western Dizin (2003:66), so the data for these retroflex fricatives are reproduced in (31) and (32).

(31) a. /**ʂ**o**ʂ**ɨn/ 'roast!' (2003:75)
b. /u**ʂ**um/ 'horn' (2003:75)
c. /ɑː**ʂ**un/ 'stand up!' (2003:75)

(32) a. /mu**ʐ**tn/ 'cut! (vegetables)' (2003:74)
b. /k'o**ʐ**,-n/ 'scratch' (2003:71)
c. /t͡**ʂ**uɑ**ʐ**u/ 'snake' (2003:80)

[8] This word is now also pronounced [hos.pi.tɑl].

2.2.5 Nasals

The data indicate that Dizin has three nasal phonemes: /**m**/, /**n**/ and /**ŋ**/. Allan (1976:377-8) and Breeze (1988:477) concluded that the velar nasal [**ŋ**] was an allophone of /**n**/. Aklilu (2003:66) does not list /**ŋ**/ in his phonemic inventory either. The conclusion these researchers came to is understandable, since [**ŋ**] never occurs word or syllable initially, so contrast cannot be found in that location. Word internally (even across syllable boundaries) and word finally, nasals usually assimilate to the place of articulation of the consonant phonemes they precede or follow.[9] So it is difficult to establish contrast in those positions. However, contrast can be found when nasals occur after vowels, word finally, as the examples in (33) illustrate.

(33) a. /kusɨ**m**/ b. /insɨ**n**/ c. /kusɨ**ŋ**/
[ku.sɨ**m**] [ʔin.sɨ**n**] [ku.sɨ**ŋ**]
'flower' 'honey' 'leather sack'

Two others who have also concluded that Dizin has three nasal phonemes are Keefer (1969b:1) and Tamirat (1988:4).

/m/, /n/ and /ŋ/. The phonemes /**m**/, /**n**/ and /**ŋ**/ do not have any allophonic variation,[10] but the place constraint mentioned previously results in neutralization and a lot of allomorphy. The phonemes /**m**/ and /**n**/ occur syllable initially, medially and finally and word initially, medially and finally. The phoneme /**ŋ**/ never occurs syllable or word initially, but it does occur syllable and word medially and finally.

(34) a. /**m**o/ [**m**o] 'earlier today' b. /**m**ɛʃ/ [**m**ɛʃ] 'patience'
c. /dɛ**m**bi/ [dɛ**m**.bi] 'tradition' d. /ko**m**bi/ [ko**m**.bi] 'tin cup'
e. /dɑ**m**b/ [dɑ**m**b] 'tobacco' f. /ʔ**m**o/ [ʔm̩.o] 'he ate'
g. /ku**m**/ [ku**m**] 'placenta' h. /deb**m**/ [deb̚.ʔm̩] 'to rain'

[9] A description of what happens when conflicts occur appears in Table 22. An example is when these three morphemes coming together in a word: **ɑk-ŋ-ti** 'gather-Imp-PImp'. In this case, the nasal takes the place of the stop which precedes it, instead of the one that follows it. So, [**ʔɑk̚.ʔŋ.ti**].

[10] While these nasals are marked as syllabic in the phonetic data, it is the syllable structure which determines this. So, an [**n̩**], for example, is not considered a phone separate from [**n**].

(35) a. /**n**oj/ [**n**oj[1]] 'ostrich'
b. /ʔ**n**[3]tɑɾb/ [ʔn̩[3].tɑɾβ] 'our drum'
c. /ɑ**n**d͡ʒi/ [ʔɑ**n**.dʒi] 'kind of palm tree'
d. /ʃɑd**n**ɨz/ [ʃɑdˀ.ʔn̩.ɨz] 'long'
e. /ɑ**n**t/ [ʔɑ**n**t] 'later today'
f. /uy**n**d/ [ʔuj**n**d] 'in the past'
g. /ki:**n**[12]/ [ki:**n**[12]] 'coals'
h. /ut**n**/ [ʔutˀ.ʔn̩] 'rat'

(36) a. /ʔ**ŋ**[3]ɑku/ [ʔ**ŋ̩**[3].ɑ.ku] 'our grandfather'
b. /t͡ʃɑg**ŋ**ɨz/ [tʃɑgˀ.ʔ**ŋ̩**.ɨz] 'plain'
c. /bɑ**ŋ**gɨɾo/ [bɑ**ŋ**.gɨ.ɾo] 'return (trans)'
d. /dɑʃu**ŋ**k/ [dɑ.ʃu**ŋ̩**k] 'late afternoon'
e. /mule**ŋ**/ [mule**ŋ**] 'rhinoceros'
f. /k'og**ŋ**/ [k'ogˀ.ʔ**ŋ̩**] 'sprouts'

2.2.6 Liquids

The liquids consist of the lateral liquid, /**l**/, and the non-lateral liquid, /**ɾ**/.

/ɾ/. The phoneme /**ɾ**/ is most often realized as a flap [**ɾ**]. It is sometimes realized as a trill [**r**] in slow or emphatic speech. It occurs word medially and finally, but never word initially. As (37a and b) illustrate, it can occur syllable initially, word medially. It is not common in that position, though, and (37b) is borrowed from Amharic.

(37) a. /ɑ[3]**ɾ**ɛj[32]/ [ʔɑ[3].**ɾ**ɛj[32]] 'you (MVoc)'
b. /dɨ**ɾ**ɛs/ [dɨ.**ɾ**ɛs] 'next to'
c. /bɑ**ŋ**gɨ**ɾ**s/ [bɑ**ŋ**.gɨ**ɾ**s] 'returning'
d. /ɑ**ɾ**bm/ [ʔɑ**ɾ**bˀ.ʔm] 'rib'
e. /ɑkɨ**ɾ**/ [ɑ.kɨ**ɾ**] ~ [ɑ.kɨ**r**] 'kind, type'
f. /bɑʃu**ɾ**/ [bɑ.ʃu**ɾ**] 'cooking plate'

/l/. The phoneme /**l**/ has no clear allophonic variation. Regarding its distribution, Aklilu (2003:68) found no word initial, non-palatalized /**l**/ in any dialects of Dizin, but he did find a palatalized version ([**lʲ**]) word initially. My data do contain six words from Eastern Dizin which begin with /**l**/ and five of them have counterparts in Central Dizin which begin with /**n**/ instead. For example, 'leech' is /**lo:t͡ʃ'**/ in Eastern Dizin, but /**no:d͡ʒi**/ or /**no:ʒ**/ in Central Dizin.

Aklilu (2003:80) says, "The presence of palatalized *lʲ* is surprising. Neither Proto-Maji nor any of the present-day Maji languages have plain *l* word-initially. The palatalized *lʲ* could be Dizi's innovation, or it may be a loan from neighboring languages. This has to be investigated in the future." Evidence to support the loan hypothesis is that the root for the Tirmaga-Chai word for 'matter' or 'word' is /**lɔg**/ (Bryant 1999:139). Eastern Dizin has this lexical item as /**log**/, while Central Dizin has the form, /**no:g**/. The assumption is that

Dizin may have borrowed a number of vocabulary items from Tirmaga-Chai and word initial /**l**/ changed to /**n**/ in Central Dizin, but not in Eastern Dizin.

Additional support for the loan hypothesis comes from the Dizin word /**wurgit͡s**/ 'fish'. Unseth's reconstruction of Proto-Surmic includes "***kol+t**" (1988:158-9) for 'fish'. An ***l** to **r** rule which applied to Southeast Surmic led to the present Tirmaga-Chai word for 'fish': "**urgus**" (1988:158). This establishes that Dizin has borrowed from a Surmic language. The /**r**/ suggests the source was a Southeast Surmic language, of which Tirmaga-Chai and the Me'en are two.

Examples of other Eastern Dizin /**l**/ initial words (probably borrowed from Tirmaga-Chai) are given in (38a) and (38b). Non-initial cases of /**l**/ are numerous and occur in all dialects. Examples are seen in (38c) to (38f).

(38) a. /**l**e**l**ɑt/ [**l**e.**l**ɑt] 'tree species' b. /**l**iɑmts'ɑ/ [**l**i.ɑm.ts'ɑ] 'spleen'
c. /ɑ**l**o/ [ʔɑ.**l**o] 'he stayed' d. /bo**l**ku/ [bo**l**.ku] 'aardvark'
e. /mi**l**mi**l**/ [mi**l**.mi**l**] 'kidney' f. /tu**l**/ [tu**l**] 'marrow'

2.2.7 Glides

The glides are /**j**/ and /**w**/.

/j/. The glide phoneme /**j**/ is always realized as [**j**]. It occurs in all positions that consonants occur, except that if it is part of a complex coda, it must be the first C. The ambiguous cases of this phoneme are discussed in 2.5.3 and 2.5.4.

(39) a. /**j**ɛ/ [**j**ɛ] 'that' b. /**j**izu/ [**j**i.zu] 'sea'
c. /ɑ**j**o/ [ɑ.**j**o] 'he spent the night' d. /bo**j**du/ [bo**j**.du] 'poor'
e. /kɑ**j**t/ [kɑ**j**t] 'without' f. /t͡ʃo**j**ʃt/ [tʃo**j**ʃt] 'after'
g. /gɑ**j**/ [gɑ**j**] 'hut' h. /ʃo**j**/ [ʃo**j**] 'tick'

/w/. The glide phoneme /**w**/ is always realized as [**w**]. It occurs in all positions that consonants occur, except that if it is part of a complex coda, it must be the first C. The ambiguous cases of this phoneme are discussed later in 2.5.3 and 2.5.4.

(40) a. /**w**ɛt͡ʃi/ [**w**ɛ.tʃi] 'second harvest' b. /**w**uɾgit͡s/ [**w**uɾ.gits] 'fish'
c. /t͡ʃo**w**do/ [tʃo**w**.do] 'it was cold' d. /kɑ**w**ɑ/ [kɑ.**w**ɑ] 'this animal fat'
e. /tɛ**w**ŋ/ [tɛ**w**ŋ] 'go!' f. /t͡ʃo**w**d/ [tʃo**w**d] 'being cold'
g. /t͡ʃɑ**w**/ [tʃɑ**w**] 'kind of greens' h. /gɛ**w**/ [gɛ**w**] 'bracelet'

2.2.8 Lengthened Consonants

Consonant length is a feature that must be considered for Dizin since it is such a common feature of the language area. In fact, Charles Ferguson listed eight phonological features that he found to be characteristic of "The Ethiopian Language Area" (1976:65-9), one of which was consonant length. He wrote of that feature: "Length is lexically distinctive in consonants …" (1976:67). His table shows this feature to be *very* common in Ethiopian languages, including Omotic languages (1976:69).

However, after listening for this feature in the Dizin data, no evidence is found for their existence. Neither have any other researchers suggested that phonemically lengthened consonants exist in Dizin. The context in which *phonetically* lengthened consonants occur is when two identical nasal stops come together at a morpheme boundary, as shown in (41a).[11] Phonetically lengthened obstruents have not been attested. Instead, when two identical obstruents come together, an epenthetic vowel is inserted between them. Examples (41b) and (41c) illustrate this.

(41)	a. [jinː]	b. [ʔɛjkɨkɑ]	c. [bɑːsɨsigo]
	jin-n	ɛjk-kɑ	bɑːs-s-i-go
	I-Ac2	lion-&	want-Cau-Fut-3SM
	'me'	'and a lion'	'it is necessary'

2.3 Vowels

Dizin vowels have almost certainly been influenced by Amharic. Beginning more than a century ago, a constant, sizable population of Amharic-speaking people has lived

[11] In a song this word is pronounced [**jinɨn**]. More research should be done to determine whether it is ever spoken as [**jinɨn**], and whether it is ever sung as [**jinː**], if that would better fit the syllables needed for the song.

among the Dizin speaking population. Amharic has six phonemic vowels and no contrastive vowel length. These six phonemes are displayed in (42). Also displayed is the commonly spoken phonetic high central vowel [ɨ]. The conclusion that [ɨ] is not phonemic in Amharic is taken from Hetzron, who stated that "all occurrences of the sixth order vowel [ɨ] in Amharic are predictable and that it is therefore not a phoneme" (Bender 1969:34). This does not distract from the point that [ɨ] have been heard by Dizin speakers for decades now and interpreted as a phoneme.

(42) **Amharic Vowels**

i	[ɨ]	u
e		o
ɛ		
	ɑ	

The hypothesis to consider is that 150 or more years ago, before the Amharic speakers arrived, Dizin had the vowel system that Aklilu proposes for "Proto-Maji" (2003:80):

(43) **Proto-Maji Vowels**

*i *iː		*u *uː
*e *eː	*ə[12]	*o *oː
	*ɑ *ɑː	

With the arrival of the Amharic speakers and their constant contact with Dizin speakers over a number of decades, the Dizin vowel system began to change. This happened more rapidly where there was the most language contact, in Central Dizin.

[12] Aklilu's symbol here is "ä" which has traditionally been used for transliterating the Amharic first form vowel. This is most often [ɛ], but sometimes [ə]. I am confident in using /ə/ because of the position in the chart and because it is called "the mid-central vowel" (2003:80).

With that proposal in mind, let us consider the present data. They suggest that Dizin has seven short vowels and five long vowel phonemes, as laid out in Table 4. (An alternate view would be to consider vowel length as one separate phoneme, instead of having five long vowel phonemes.) My first suggestion is that Proto-Maji *ə has become /ɛ/, while still being realized as [ə] on occasion. My second suggestion is that the epenthetic [ɨ] of Proto-Maji became centralized to [ɨ] in Central Dizin. The phone, [ɨ] also occurs presently in non-epenthetic environments in Central and Eastern Dizin, so is seen as a phoneme: /ɨ/.

Table 4. Dizin Vowel Phonemes

	Front Unrounded	Central Unrounded	Back Unrounded	Back Rounded
Close	i iː	ɨ		u uː
Close-Mid	e eː			o oː
Open-Mid	ɛ			
Open			ɑ ɑː	

Regarding the distribution of these vowels, all the vowels are attested word initially and word medially. All of the vowels except /uː/ are attested word finally. The vowel /ɨ/ is never a phonemic ending of a word. However, it can be the epenthetic vowel between two words when the first one ends with a stop and the second begins with a stop.

(44) ... sɑːg-ɨ-[3] k'ɑl ...
God-v-Gn4 word
'... God's word ...'

In my Dizin data, no long vowels appear word finally on polysyllabic single morpheme words. This corresponds with Aklilu's observation regarding Proto-Maji (from which Dizin, Sheko and Nayi have descended): "All the non-monosyllabic words always have final short vowels" (2003:80). However, this restriction does not apply to polymorphemic words, as the first word in (45) illustrates. (A *burji* is a traditional leader.)

(45) [kɛj^{2}.s**ɑː**^{31} jɛ^{2}.ko^{1}]
kɛj^{2}s**ɑ**-^{3}**ɑ**^{1} jɛ^{2}-k-o^{1}.
burji's_son-Px come-Pres-3SM
'This son of a *burji* is coming.'

/i/. The phoneme /**i**/ is almost always realized as [**i**], but word finally it is occasionally realized as an unvoiced vowel: [**i̥**]. Eastern Dizin uses [**i**] as its epenthetic vowel, instead of [**ɨ**], the epenthetic vowel of both Central Dizin and Amharic.

(46) a. /**i**nt͡ʃɛj/ [ʔ**i**ntʃɛj] 'she collected firewood' b. /b**i**t͡ʃ**i**/ [b**i**tʃ**i**] 'sore (noun)'
c. /n**i**n**i**/ [n**i**n**i**] 'older sister' d. /gult**i**/ [gult**i**] ~ [gult**i̥**] 'ankle'

/iː/. The phoneme /**iː**/ is always realized as [**iː**].

(47) a. /**iː**^{23}/ [ʔ**iː**^{23}] 'house' b. /b**iː**z/ [b**iː**z] 'Venus' c. /t**iː**^{1}/ [t**iː**^{1}] 'tree species'

/ɨ/. This Dizin phone will require more explanation. Others have described a central unrounded epenthetic vowel.

(48) a. **ɨ**z-**ɨ**-g b. bɑːs-**ɨ**-s-i-go c. iz-**ɨ**-n
it-v-In want-v-Cau-Fut-3SM he-v-Ac2
'in it 'it will be necessary' 'him'

Most of the appearances of [**ɨ**] can be understood as non-phonemic epenthesis. It is likely a recent addition to the phonemic inventory of Central Dizin and may not yet deserve phonemic status in Eastern Dizin. Some borrowed words from Amharic suggest that [**ɨ**] was not phonemic when they were originally borrowed, perhaps around a hundred years ago. To give two examples, Amharic [**dɨnːɨt͡ʃː**] 'potato' is the source of Dizin /**dɨnɨt͡ʃɨ**/ and Amharic [**ɨrsɑs**] 'pencil' is the source of /**ɨrsɑs**/.

Some compelling evidence for [**ɨ**] being phonemic now is found in the Dizin word [ˈ**mɨ**^{3}.l**ɨ**t**ʃ**ˈ^{3}] 'all'. One line of thinking would be to propose that [**ɨ**] is an allomorph of /**i**/ (or another vowel) which occurs in unstressed syllables. But in this word, [**ɨ**] occurs in the stressed first syllable. If stress were the factor, [**i**], or some vowel besides [**ɨ**], would appear.

As mentioned before, no examples of /**ɨ**/ have been found word finally.

A representative set of examples of /**ɨ**/ are shown in (49).

(49) a. /**ɨ**zt/[13] [ʔ**ɨ**st] 'at it'
b. /**ɨ**ʃkŋ/ [ʔ**ɨ**ʃkˀ.ʔŋ] 'their'
c. /m**ɨ**^{3}l**ɨ**t͡ʃ'^{3}/ [m**ɨ**^{3}l**ɨ**t͡ʃ'^{3}] 'all'
d. /k'ɑlg**ɨ**mo/ [k'ɑlg**ɨ**mo] 'lightning struck'
e. /e^{3}k**ɨ**ɾ^{3}/ [ʔe^{3}.k**ɨ**ɾ^{3}] 'bedbug'
f. /d͡ʒɛn.d͡ʒ**ɨ**.mɨ.ni.ʃo/ [dʒɛn.dʒ**ɨ**.mɨ.ni.ʃo] 'they were worried'

/u/. The phoneme /**u**/ is most times realized as /**u**/, but sometimes word finally it is realized as a voiceless vowel: [**u̥**].

(50) a. /**u**ɾs**u**/ [ʔ**u**ɾs**u**] 'palm tree' b. /uːs**u**/ [ʔuːs**u**] 'bone'
c. /b**u**do/ [b**u**do] 'he pulled out' d. /noʃ**u**/ [noʃ**u**] ~ [noʃ**u̥**] 'slingshot'

/uː/. The phoneme /**uː**/ is always realized as [**uː**]. As mentioned previously, the long form does not appear word finally.

(51) a. /**uː**su/ [ʔ**uː**su] 'bone'
b. /m**uː**g/ [m**uː**ɣ] 'local fermented drink'

/e/. Since a number of words show an alteration between [**e**] and [**ɛ**], one possibility is to say that /**e**/ is realized as [**e**] and [**ɛ**]. The data in (52) and (57), and other examples like them, suggest that no environmental constraint can explain the presence of [**ɛ**]. Since contrast occurs in analogous environments, the variations in (52d) to (52f) are seen as free variation between two phonemes, not free variation between two allophones of the same phoneme.

(52) a. /**e**m/ [ʔ**e**m] '(an interjection)'
b. /k**e**k/ [k**e**k] 'right, correct'
c /gun**e**/ [gu.n**e**] 'castrated goat'
d. /**e**^{3}k**ɨ**ɾ^{3}/ [ʔ**e**^{3}.k**ɨ**ɾ^{3}] ~ /**ɛ**^{3}k**ɨ**ɾ^{3}/ [ʔ**ɛ**^{3}.k**ɨ**ɾ^{3}] 'bedbug'
e. /k**e**m^{1}ti^{2}/ [k**e**m^{1}.ti^{2}] ~ /k**ɛ**m^{1}ti^{2}/ [k**ɛ**m^{1}.ti^{2}] 'red-necked spur fowl'
f. /j**e**tu/ [j**e**.tu] ~ /j**ɛ**tu/ [j**ɛ**.tu] 'you (S)'

/eː/. The phoneme /**eː**/ is consistently realized as [**eː**].

(53) a. /**eː**/ [ʔ**eː**] 'yes' b. /z**eː**d/ [z**eː**d] 'eight' c. /w**eː**/ [w**eː**] 'reply to a call'

/o/. The phoneme /**o**/ is always realized as [**o**].

(54) a. /**o**t^{2}n^{1}/ [ʔ**o**t̚^{2}ʔn̩^{1}] 'horn' b. /t͡ʃ**o**^{3}ɾɑ^{3}/ [tʃ**o**^{3}ɾɑ^{3}] 'bird species' e. /sɑɾ**o**/ [sɑɾ**o**] 'hello'

[13] The words in (49a) and (49b) are also pronounced as [ʔ**ɨ**st] and [ʔ**ɨ**ʃkˀ.ʔŋ̩]. Other words show this alternation between [**ɨ**] and [**i**] as well. This is assumed here to be a shift from one phoneme to another, rather than free variation within the phoneme /**i**/.

The data in (55) suggest that [**o**] can be subject to the forces of vowel harmony in borrowed words, a phenomenon which is a possibility for non-borrowed words with [**ɑ**] as well (cf. 3.8.10.1.3). The first example, (55a), shows how the unsanctioned word initial /**ɾ**/ is normally corrected by the insertion of the epenthetic [**i**] before it. In (55b) [**o**] is inserted instead, apparently because of the word internal [**o**]. The borrowed word in (55c) shows another case of [**o**] apparently spreading because of vowel harmony, but not to a place where an epenthetic vowel is needed. Instead, the responsible factor may be that /**ɛ**/ was not a Dizin phoneme at the time the word was borrowed.

(55) a. /iɾɑd**o**n/ [ʔiɾɑd**o**n] 'radio' (from Amharic /ɾadio/ or /ɾadion/)
b. /**o**ɾ**o**b/ [ʔ**o**ɾ**o**b] 'Wednesday' (from Amharic /ɾ**o**b/ or [iɾ**o**b])
c. /m**o**sk**o**t/ [m**o**sk**o**t] 'window' (from Amharic /mɛsk**o**t/)

/oː/. The phoneme /**oː**/ is consistently realized as [**oː**].

(56) a. /**oː**l^{31}/ [ʔ**oː**l^{31}] 'bird species'
b. /k**oː**ɸ/ [k**oː**ɸ] 'gourd cup (Eastern Dizin)'
c. /h**oː**^{3}/ [h**oː**^{3}] 'lung'

/ɛ/. The phoneme /**ɛ**/ is most often realized as [**ɛ**] but as (57d) and (57g) illustrate, it is optionally realized as [**ə**].

(57) a. /**ɛ**t͡ʃo/ [ʔ**ɛ**.tʃo] 'he sneaked'
b. /**ɛ**jk/ [ʔ**ɛ**jk] 'lion'
c. /b**ɛ**ɾgi/ [b**ɛ**ɾ.gi] 'hoof'
d. /g**ɛ**d**ɛ**go/ [g**ɛ**.d**ɛ**.go] ~ [g**ɛ**.d**ə**.go] 'he says'
e. /j**ɛ**/ [j**ɛ**] 'coming'
f. /k**ɛ**/ [k**ɛ**] 'furthermore'
g. /k**ɛ**bi/ [k**ɛ**.bi] ~ [k**ə**.bi] 'bird'

/ɑ/. The phoneme /**ɑ**/ is consistently realized as [**ɑ**]. Examples (58b) and (59b) provide a minimal pair for length.

(58) a. /**ɑ**ɾg^{13}ŋ^{3}/ [ʔ**ɑ**ɾg^{13}.ʔŋ^{3}] 'kind of palm tree'
b. /h**ɑ**^{2}lu^{3}/ [h**ɑ**^{2}.lu^{3}] 'tapeworm'
c. /k**ɑ**ɾ^{3}m**ɑ**^{3}/ [k**ɑ**ɾ^{3}.m**ɑ**^{3}] 'tree species'

/ɑː/. The phoneme /**ɑː**/ is always realized as [**ɑː**].

(59) a. /**ɑː**t/ [ʔ**ɑː**t] 'now'
b. /h**ɑː**^{2}lu^{3}/ [h**ɑː**^{2}.lu^{3}] 'hollow space inside trees'
c. /**ɑː**/ [ʔ**ɑː**] 'this'

2.3.1 Vowel Variations

A few cases of vowel alternation have been described in the previous section. One, /**e**/ versus /**ɛ**/ shown in (52d) to (52f) is assumed to be phonemic. The others, [**i**] versus [**i̱**] in (46d), [**u**] versus [**u̱**] in (50d), and [**ɛ**] versus [**ə**] in (57d) and (57g), are assumed to be phonetic. An additional phonetic variation is that all of the vowels can be lightly nasalized when they occur next to nasal consonants.

Besides all of those cases, other common alternations are:

(60) a. /**e**/ ~ /**iɛ**/
b. /**e**/ ~ /**ie**/
c. /**ɛ**/ ~ /**iɛ**/ [**iɛ**]
d. /**ɛ**/ ~ /**iɛ**/ [**iə**]

These are assumed to be phonemic variations which occur in a number of morphemes.

(61) a. /jɑːb**e**k**e**/ [jɑːb**e**k**e**] ~ /jɑːb**iɛ**k**iɛ**/ [jɑːb**iɛ**k**iɛ**] 'those people'
b. /k**e**l/ [k**e**l] ~ /k**ie**l/ [k**ie**l] 'day/time'
c. /g**ɛ**n/ [g**ɛ**n] ~ /g**iɛ**n/ [g**iɛ**n] 'say-DS'
d. /ʔŋ^{2}t**ɛ**/ [ʔŋ^{2}t**ɛ**] ~ /ʔŋ^{2}t**iɛ**/ [ʔŋ^{2}t**iə**] '1S-go-SSO'

Both options are spoken by the same speakers. In rapid speech the single V option is more common. Central Dizin has more cases of these VV sequences, but Eastern Dizin is also affected. It seems as though a vowel shift of some kind is taking place, and this needs to be investigated further.

2.4 Syllable Structure

Examples of unambiguous syllable structures are shown in Table 5, while examples of ambiguous syllable structures are shown after that in Table 6. The two bottom examples in Table 5 are ambiguous with regard to the onset, but the codas are the focus, and they are not ambiguous.

For the example words with more than one syllable, the syllable in focus is underlined. Almost all the syllable examples in both Tables 5 and 6 adhere to the "Sonority

Sequencing Generalization [14] " (Selkirk 1984:116). The exception is [**k'ɑbs**] /**k'ɑbs**/ 'gathering'.[15] This means that the universal tendency for all segments to rise in sonority before the nucleus and fall after it is also a strong tendency in Dizin.

Table 6 presents examples of syllables that could be analyzed in more than one way. The possible analyses that are rejected are discussed in 2.5.

For the unambiguous syllables, the template is: C V (C) (C). When all the syllable types from both tables are distilled, two general templates emerge: (C)V(G)(C)(C) and CN̩(C). The more specific word initial templates are: CV(G)(C)(C) and CN̩. For these templates "V" stands for a normal or a long vowel and "N̩" stands for a normal or a phonetically lengthened syllabic nasal. These lengthened nasals are assumed to be cases of two adjacent nasal phonemes, at the phonemic level.

Table 5. Unambiguous Dizin Syllables

Syllable Pattern	Phonetic	Phonemic	Gloss
CV	[mo]	/mo/	'earlier today'
	[so]	/so/	'above'
	[jɛ]	/jɛ/	'that'
CVC	[ʔɑl]	/ɑl/	'fire'
	[boz]	/boz/	'guest'
	[kɑl]	/kɑl/	'sky'
CVCC	[ʔɛnt]	/ɛnt/	'later'
	[ʔoms]	/oms/	'bow (noun)'
	[k'ɑbs]	/k'ɑbs/	'gathering'
	[nɑst]	/nɑst/	'where?'
	[ʃɛʃk]	/ʃɛʃk/	'song'
	[ʃorʃ]	/ʃorʃ/	'to defeat'
	[ts'ɑbt]	/t͡s'ɑbt/	'disease'
	[tʃɪrb]	/t͡ʃɪrb/	'to be selfish'

[14] This is also called the "Sonority Sequencing Principle" (Kenstowicz 1994:254).

[15] Two other exceptions to the Sonority Sequencing Generalization come from loan words, so are not listed in the tables. But they are significant, in that the codas [**ks**] and [**ds**] are not disallowed. They are [**ʔor.to.doks**] 'orthodox' and [**eds**] 'AIDS'.

Table 6. Ambiguous Dizin Syllables

Syllable Pattern	Phonetic	Phonemic	Gloss
V	[ʔɑ^{3}.e^{1}]	/ɑ^{3}e^{1}/	'3SM-do-SSO'
VC	[ʔɑ^{3}.ez^{1}] [ʔɑ^{3}.oɸ^{1}]	/ɑ^{3}ez^{1}/ /ɑ^{3}oɸ^{1}/	'3SM-do-Inf' '3SM-wear-SSO'
VCC	[ʔɑ^{3}.ust^{1}] [ʔɑ^{3}.oʃk^{1}]	/ɑ^{3}ust^{1}/ /ɑ^{3}oʃk^{1}/	'3SM-be strong-SSO' '3SM-call-SSO'
CN̩	[ʔŋ̩^{2}.o^{3}.tʃi^{3}] [ʃɑdˀ.ʔn̩.ɨz]	/ʔŋ̩^{2}o^{3}t͡ʃi^{3}/ /ʃɑdnz/	'my-mushroom' 'long'
CN̩ː	[ʔm̩ː]	/ʔmm/	'eat-Imp'
CVː	[hoː] [ʔiː] [ʔeː]	/hoː/ /iː/ /eː/	'lung' 'house' 'yes'
VG	[dʒu.ɑj]	/d͡ʒuɑj/	'tear open-SSO'
VC	[ʔi.el] [ʔi.ɑz]	/iel/ /iɑz/	'rabbit' 'lie-SSO'
CVːC	[dɑːʒ^{12}] [muːd^{12}] [ʔoːɾ]	/dɑːʒ^{12}/ /muːd^{12}/ /oːɾ/	'worm' 'awl' 'river'
CVG	[k'oj] [gɑj] [gɑw]	/k'oj/ /gɑj/ /gɑw/	'one' 'hut' 'metal bracelet (ED)'
CVGC	[tɛwŋ] [ʃojt]	/tɛwŋ/ /ʃojt/	'go-Imp' 'all'
CVGCC	[ʔujnd]	/ujnd/	'in the past'
CV	[t͡s'o] [d͡ʒɑ.lu]	/t͡s'o/ /d͡ʒɑlu/	'full' 'lizard'
CVCC	[gemd͡ʒ] [boɾt͡ʃ]	/gemd͡ʒ/ /boɾt͡ʃ/	'jaw' 'rough'
CN̩	[ʔŋ̩^{2}.kɑɾ^{3}] [sɑpˀ.ʔm̩]	/ʔŋ̩^{2}kɑɾ^{3}/ /sɑpm/	'my molar' 'flower'
CN̩C	[ʃotˀ.ʔn̩t] [d͡ʒu.ɑkˀ.ʔŋ̩t]	/ʃotnt/ /d͡ʒuɑkŋ̩t/	'Shotnt (name of area)' 'in the afternoon'

For the purpose of clarifying the distribution of segments, more detail can be added. The major division that has been mentioned before is between Vowel Nucleus Syllables and Syllabic Nasal Nucleus Syllables. Tables 7 and 8 list the attested onsets, nuclei, and codas in these two types of Dizin syllables. The labels for the optional parts of the syllables are in parentheses.

Table 7. Attested Segments in Vowel Nucleus Syllables

Items that appear only in borrowed forms are marked with an asterisk.

(Onsets)	Vowel Nuclei	(C Codas)	(CC Codas)	(GCC Codas)
p*, t, k, ʔ, p', t', k', b, d, g, t͡s, t͡ʃ, t͡s', t͡ʃ', t͡ʂ, t͡ʂ', d͡ʒ, ɸ, s, ʃ, h, z, ʒ, ʂ, z̩, m, n, ŋ, ɾ, l, j, w	i, ɨ, u, e, o, ɛ, ɑ, iː, uː, eː, oː, ɑː	p, t, k, p', t', k'*, b, d, g, t͡s, t͡ʃ, t͡s', t͡ʃ', ɸ, s, ʃ, h, z, ʒ, z̩, m, n, ŋ, ɾ, l, j, w	kt, ks*, bt, bs, ds*, ɸt, ɸk', st, sk, ʃt, ʃk, mt, mb, md͡ʒ, ms, mʃ, nt, nd, nt͡ʃ, nt͡ʃ'*, nd͡ʒ*, ns, nʃ, nz, nn, ŋk, ŋg, ɾt, ɾk, ɾk', ɾb, ɾd, ɾg, ɾt͡ʃ, ɾd͡ʒ, ɾɸ, ɾs, ɾʃ, ɾn, lt, lb, lɸ, ls, lʃ, lʒ, jt, jk, js, jʃ, jm, jn, wd, ws, wŋ, wl	jnt, jnd, jns, jnʃ

Table 8. Attested Segments in Syllabic Nasal Nucleus Syllables

Onset	Syllabic Nasal Nuclei	(Coda)
ʔ	m̩, n̩, ŋ̩, m̩ː	t

2.5 Interpretation of Ambiguous Items

This section presents the ambiguous items in the language. It further presents the decisions regarding their treatment as consonants or vowels, a unit or a sequence, and the reasons for arriving at those decisions.

2.5.1 Affricates or CC Sequences?

The items [ts], [ts'], [tʃ], [tʃ'], [t͡ʂ], [t͡ʂ'] and [dʒ] are ambiguous because they could be either units (the affricates (/t͡s/, /t͡s'/, /t͡ʃ/, /t͡ʃ'/, /t͡ʂ/, /t͡ʂ'/, /d͡ʒ/), or CC sequences (/ts/, /ts'/, /tʃ/,

/tʃ'/, /t͡s/, /t͡s'/, /dʒ/). The main reason to treat them as units or affricates is that considering them to be sequences would require at least four new syllable types: CCV /**tʃi**/ 'human feces', CCVC /**tsɑk**/ 'cross (verb)', CCVCC /**tsɑnt**/ 'before', and CVCCC /**burdʒ**/ 'ruler'. This is because no other unambiguous cases of CC onsets occur and no other cases of unambiguous CCC codas occur.

2.5.2 Prenasalized Units or Sequences?

The items [**mb**], [**nt**], [**nd**], [**ntʃ**], [**ndʒ**], [**ŋk**], and [**ŋg**] are ambiguous because they could be analyzed as either prenasalized units (/ᵐ**b**/, /ⁿ**t**/, /ⁿ**d**/, /ⁿ**t͡ʃ**/, /ⁿ**d͡ʒ**/, /ᵑ**k**/, /ᵑ**k**/) or as /CC/ sequences (/**mb**/, /**nt**/, /**nd**/, /**nt͡ʃ**/, /**nd͡ʒ**/, /**ŋk**/, /**ŋg**/).

If these phones are regarded as units, they would be considered prenasalized stops and affricates. But treating them as sequences, is the preferred choice for four different reasons. First, no new syllable structures are required when these are considered sequences. Other CC codas are attested. Second, these ambiguous items only occur word medially and finally. If they were units as the affricates seem to be, they would likely also occur word initially. Third, each of the segments that make them up occur by themselves in many positions within words. Fourth, morpheme boundaries between the nasals and the stops suggest that regarding them as distinct segments is preferable, e.g. /**tɛmbɑb**/ 'rich man', from /**tɛm-bɑb**/ 'wealth-POM'.

2.5.3 Palatalized and Labialized Consonants or /CG/ Sequences or /CV/ Sequences?

The first two segments of the items [**biV**], [**kiV**], [**tʃuV**], etc.,[16] are ambiguous because they could be analyzed in one of three different ways:

[16] All these ambiguous sequences found in the data (without the Vs that follow) are: **p'i, bi, ti, t'i, t͡s'i, t͡ʃi, t͡ʃ'i, ki, k'i, gi, ʔi, si, hi, mi, ni, li, ku** (only in a borrowed word) , **t͡ʃu, t͡ʃ'u, ʃu**.

(62) a. palatalized and labialized consonants (/b͡ʲV/, /k͡ʲʷV/, /t͡ʃ͡ʷV/, etc.)

b. consonant glide /CG/ sequences (/b͡jV/, /k͡'jV/, /t͡ʃ͡wV/, etc.)

c. consonant vowel /CV/ sequences (/b͡i.V/, /k͡'i.V/, /t͡ʃ͡u.V/, etc.)

If (c) is chosen, the vowels can be taken to be the normal syllabic variety, and a syllable break would immediately follow it. With this analysis the syllable structure remains simpler. The vowels can also be taken as non-syllabic vowels phonetically, such as [bi̯V], [ki̯V], and [tʃu̯V], but in the interests of a simpler syllable structure, this is not preferred. Dizin also has other V.V sequences, such as /ɑo/, discussed in 2.5.5, to lend credibility to this analyses.

Others who have researched this question have not arrived at the same conclusion.[17] Keefer mentioned labialization on "alveo-palatal fricatives and affricates" (1969b:1) and seemed to suggest that he considered ʃʷ, d͡ʒʷ, t͡ʃʷ, and t͡ʃ'ʷ to be single phonemes. He did not address palatalization, but one piece of his data suggests that he assumed my option (b), /CG/ sequences: "/...ʔjɑkiz .../ - ... very much ..." (Keefer 1969b:8).

Allen (1976b) did not address this question directly either. However, his data suggest that (a) was not assumed and that both (b) and (c) were. Note "kiɑnu" and "zjɛd" (1976b:381) and "ku¹ot͡ʃin" and "t͡ʃwɑʒu" (1976b:380).

Breeze assumed (a), independent phonemes, for Dizin in her paper on the phonological features of Dizin and Benchnon (1988:478-9).

Aklilu Yilma (2003:61-62, 64-65, 66-67) presents comparative data from Dizin and the two other Maji Languages (Sheko and Nayi) that must be given extra consideration. For Sheko and Nayi he finds morphophonemic and dialectal evidence to support underlying /e/ and /o/, so does not posit phonemic palatalized and labialized consonants in those languages.

[17] A reminder: the data quoted in this section has been adapted to match the notation used throughout this thesis.

This evidence was not found in the Dizin data, so he treated the palatalized and labialized consonants as independent phonemes. Note that in the data from Aklilu for Sheko and Nayi in (63), the /**e**/ and /**o**/ are phonemic, while phonetically they are [**i**] and [**u**] (2003:72 and 74).

(63)		Sheko	Nayi	Dizi	Proto-Maji
	'chief'	**keɑz**	**keɑs**	**kʲɑz**	***keɑz**
	'noon'	**ʐoɑk^{3}n̩**	**ʐoɑk^{3}n̩**	**d͡ʒʷɑkt^{3}**	***ʐoɑ^{3}kun**

It seems preferable to assume that the historical /**e**/ and /**o**/ were raised in Dizin to become phonemes that were already in the language, /**i**/ and /**u**/, rather than that /**ke**/ and /**ʐo**/ became new Dizin phonemes: /**kʲ**/ and /**d͡ʒʷ**/. This line of reasoning applies to all the similar cases.

A brief review of the analysis of Benchnon palatalization and labialization shows that different analyses are also possible within that language. Breeze (1988:478) chose option (a) for both of these phenomena. Christian Rapold's recent analysis of Benchnon prefers (b) /**Cj(ɑ)**/ for the palatalization question. For the labialization question, an option not mentioned as a possibility for Dizin, a /**Cu(j)**/ sequence, was chosen, mainly because phonetic labialization only occurs before the ambiguous [**j**] or [**i**] (2005, personal communication).

However, other language internal factors need to be considered. First, the principle of economy of phonemes argues against (a) because such an analysis creates at least twenty four new Dizin phonemes.

Second, the goal of keeping the syllable structure as simple as possible argues against (b), because that analysis creates /CG/ onsets. However, this factor should not be weighted too heavily, because the sonority sequencings of the syllables in question fit universal language tendencies and languages that allow /CG/ onsets but not other /CC/ onsets are common.

But further support for choosing (c) can be found in words that begin with the phonetic palatalized glottal stop [**ʔʲ**], such as [**ʔʲelu**] 'rabbit'. As described more fully in 2.2.1,

the glottal stop [ʔ] is predictable in Dizin before word initial vowels. Choosing /ʔʲelu/ 'rabbit' as the analysis would leave us in the position of having a palatalized variant of a consonant as a phoneme, while the plain form of that consonant is not phonemic in that position of the word. But choosing /ielu/ as the analysis allows us to keep the rule that makes [ʔ] predictable in that position of the word, so it does not need to be written phonemically there (e.g. /ielu/).

Additional support for /ielu/ is that other /VV/ sequences are allowed in the language (e.g. /guneɑ/ 'this castrated goat').

Taking all these factors into consideration, but weighting the evidence from Sheko and Nayi fairly heavily, I am assuming (c), /CV/ sequences.

2.5.4 Diphthongs, VG Sequences, or VV Sequences?

The items [ɑj], [ɛj], [ej], [oj], [ow], and [ɑw] are ambiguous because they could be analyzed in one of three different ways, shown in (64).

(64) a. diphthongs (single units): /ɑ͡i/, /ɛ͡i/, /e͡i/, /o͡i/, /o͡u/, /ɑ͡u/

b. VG sequences: /ɑj/, /ɛj/, /ej/, /oj/, /ow/, /ɑw/

c. VV sequences: /ɑi/, /ɛi/, /ei/, /oi/, /ou/, /ɑu/

Disadvantages of (a) are that six new phonemes would be added, and diphthongs are rare, if they exist at all, in Ethiopian languages (Rapold 2005, personal communication). An advantage would be that the syllable structure could be simpler. No three consonant codas would be attested if the (G) part of our syllable template could be left out.

It might seem preferable to keep this decision analogous with the previous one and call the final segment a syllabic vowel, as in (c), but that is only one factor.

Support for the VG analysis (b) is found in the way that third person singular suffixes pattern after verb roots. In all unambiguous cases when the root ends in a consonant, the third person singular suffix begins with a vowel. (E.g. /wut-o/ 'fall-3SM', /wut-ɛj/ 'fall-3SF',

/**t'us-o**/ 'know-3SM'.) In most unambiguous cases when the root ends in a vowel, the third person singular suffix begins with a consonant. Examples are /**ho-go**/ 'be finished-3SM', /**kiɑ-go**/ 'leave-3SM' and /**tɛ-gɛj**/ 'go-3SF'. Some of the cases of roots ending in /**ɑ**/, and all the cases of roots ending in /**u**/, go against this trend. Examples are /**giɑ-o**/ 'chew-3SM' and /**wu-o**/ 'enter-3SM'. An alternate explanation exists for those cases based on historical changes or dialectal differences. An underlying root-final /**h**/, similar to the overt /**h**/ in /**biɑh-o**/ 'open-3SM', is probably responsible.[18] The point, though, is that when verb roots end with the ambiguous sequence in question, it always takes the suffixes that normally go with consonants, not normally with vowels. Examples are /**ɑj-o**/ 'spend the night-3SM/he spent the night' and /**how-o**/ 'rest-3SM/he rested'. Never */**ɑi-go**/ 'spend the night-3SM/he spent the night' or */**hou-go**/ 'rest-3SM/he rested'.)

To summarize, the diphthong analysis (a) would have the advantage of allowing for a simpler syllable structure. The /VV/ analysis (c) would have the advantage of being analogous to the /VV/ part of the analysis settled on in 2.5.3. But the way that the third person singular PNG morphemes are realized after these ambiguous sequences is the most compelling evidence, and it is in favor of the /VG/ analysis. So (b), the /VG/ sequence option, is chosen.

2.5.5 Adjacent Non-High Vowels or Diphthongs?

The Dizin non-high vowel sounds which occur next to each other, [**ɑe**], [**ɑɛ**], [**ɑo**], [**ɛo**], and [**eo**], are ambiguous because they can be seen as two separate segments or as single unit diphthongs. Since these occur only where morphemes come together, never within a single morpheme, they will be assumed to be adjacent vowels in separate syllables.

[18] An underlying /**w**/ is also a possibility on the /**u**/ final roots. This is discussed in 3.8.3.1.

(65) a. [ʔɑ.eb.dɑ]
ɑ-eb-dɑ
3SM-think-IpfQ
'Does he think?'

b. [gi.ɑ.o]
giɑ-o
chew-3SM
'He chewed.'

2.5.6 Lengthened Vowels or Identical VV Sequences?

The Dizin lengthened vowels [**ɑː**], [**oː**], [**eː**], [**uː**], and [**iː**] are ambiguous because they could be seen as separate vowel phonemes /**ɑː** /, etc. or as sequences /**ɑɑ**/, etc. Clear cases of lengthened vowels within a morpheme occur, not just where morphemes come together. An example of contrast is [**dɑdu**] 'child' and [**dɑːdu**] 'thunder'. Phonemic lengthened vowels are usually assumed. The exception is that when identical vowels come together at morpheme boundaries, they are phonetically realized as lengthened vowels, but should be seen as VV segments underlyingly.

(66) a. [ʔɑːmɨni]
ɑ^{3}-ɑm-ni
3SM-be(come)-CQ
'[how many years] will it be?'

b. [ʔiːɾɑdon]
i-iɾɑdon
her-radio
'her radio'

2.6 Stress

Breeze found that stress was not contrastive in Dizin or Benchnon "but generally falls on the first syllable of a word" (1988:482). This needs to be researched further.

2.7 Tone

Keefer (1969b:2), Allen (1978:379), Breeze (1988:481), and Aklilu (2003:67) all analyzed Dizin as having three phonemic tone levels: low, mid, and high. My understanding of the tone system is still far from complete, but I have become more confident in agreeing with their analysis of the number of tone levels. What helped me arrive at that conclusion was the recording of 141 nouns in the following frame:

(67) gi[1]ɑm[1](u[2]) _____ ɑŋ[2]g-ɑ-t[2] ki[1]-go[1]
yesterday _____ here-Px-Loc ExBE-3SM
'Yesterday _____ was here.'

We also recorded those nouns in isolation. After working through the data a few times, I arrived at the results shown in Table 9 for surface tone on those nouns. All these nouns appear in Appendix B.

None of the researchers just mentioned refer to contour tones in their papers.[19] These new data show that contour tone is a significant factor in the language phonetically, and suggest that it is also significant phonemically. These 141 nouns have 256 syllables. Of those syllables 30 (11.7%) have contour tones.[20] Most of those contours occur on syllables with long vowels or ambiguous sequences like [ɑw/ɑu] or [oj/oi]. But a few cases of contours on short vowels also exist: /ʊrs[31]/ 'plum tree species', /bo[12]lu[1]/ 'castor oil', /kɑ[12]lu[1]/ 'enset trunk', and /bɑr[13]bɑr[1]/ 'red hot pepper' (from Amharic /bɛrbɛːɛ/).

I had initially assumed that /gi[1]ɑm[1]/ was a mid tone word because of the amount of lowering that occurred throughout the utterances. But when it became clear that no syllables immediately after /gi[1]ɑm[1]/ dropped significantly in tone, I considered /gi[1]ɑm[1]/ a low tone word. The second syllable of some words that followed /gi[1]ɑm[1]/ did drop more noticeably, as did following syllables, but those drops can be attributed to the normal lowering of pitch (downdrift) which occurs throughout the utterances.

[19] Keefer did present this tone minimal pair: "/dóù/- large snake, /dōú/- small antelope" (1969b:2). This implies a two syllable analysis of what is here considered a one syllable words.

[20] There are 22 syllables (8.6%) with rising tones and 8 (3.1%) with falling tones.

Table 9. Surface Tones on 141 Dizin Nouns

Tones		Number, Out of 141
monosyllabic level:	L	3
	M	1
	H	6
monosyllabic rising:	LM	12
	MH	2
	LH	0
monosyllabic falling:	ML	1
	HM	4
	HL	3
bisyllabic - level on all syllables:		
level:	L.L	5
	M.M	6
	H.H	28
rising:	L.M	26
	L.H	3
	M.H	10
falling:	M.L	7
	H.M	1
	H.L	11
bi-syllabic - contour on first syllable:		
rising:	LM.L	3
	LH.L	1
	LH.M	1
	LH.H	2
	MH.H	1
3 & 4 syllable - level on all syllables:		
rising:	L.M.M	1
	M.M.H	1
	L.H.H.H	1
falling:	H.H.L.L	1

2.7.1 Extra-High and Extra-Low Tones: Intonational Phenomena

An extra-high tone is used as an intensifier. An example question and two possible answers are shown in (68). The raised tone on the last of these possible answers to the question communicates intensification.

(68) a. ɑ^{2}-iː-ɑ nɑŋg ɑ^{3}-ki^{1}-ni^{1}? b. ʃɑr$^{\mathbf{3}}$. c. ʃɑr-$^{\mathbf{4}}$.
2S-house-Px where? 3SM-ExBE-CQ toward_uphill toward_uphill-**Intns**
Where is your(S) house? Up there. **Way** up there!

This only appears in cases such as this, where a statement needs to be intensified, so positing an extra-high toneme is not needed. Instead, this can be understood as an intonational phenomenon.

An extra-low tone appears at the end of some content questions.

(69) a. ɑjs^{3} it^{3}-ɑːj$^{\mathbf{0}}$-ni$^{\mathbf{0}}$? b. ɑjs^{3} ɑ$^{\mathbf{0}}$-ɑːj$^{\mathbf{0}}$-ni$^{\mathbf{0}}$?
how? 2P-spent_night-CQ how? 2S-spent_night-CQ
How did you(P) spend the night? How did you(S) spend the night?

Since its appearance is so limited and is related to a clause level phenomenon, it will also be considered a feature of Dizin intonation rather than a part of the tone system.

2.7.2 Tone Minimal Pairs

Though Dizin has lexical tone, as seen in (70) and (71), it does not carry a heavy functional load. A few examples of contrastive tone which occur in monosyllabic nouns are shown in (70).

(70) koj^{32} 'bridge' kum^{1} 'neck' ɑːj^{12} 'ear' dow^{12} 'duiker'[21]
koj^{12} 'guinea fowl' kum^{3} 'placenta' ɑːj^{3} 'water' dow^{32} 'python'
koj^{3} 'mother'

Examples of contrastive tone found in two syllable words are as follows:

(71) bo^{2}tu^{2} 'pumpkin' gɛ^{1}li^{2} 'stick' hɑː^{1}du^{1} 'hunger' boŋ^{1}gu^{2} 'barley'
bo^{1}tu^{2} 'soil' gɛ^{3}li^{2} 'head' hɑː^{1}du^{2} 'fig tree' boŋ^{2}gu^{1} 'burnt'

[21] A wild animal, similar to a small deer.

Grammatical tone also exists in the language. For example, only tone distinguishes the person and number of the subjects shown in the questions in (72).

(72) a. mɛt͡s'ɑɸ-ɑke-s-n jiɾ kel-t **ɑ²**-bɑŋgɨɾ-s-i-ni?
book-Pl-Ac1-Ac2 what? time-Dat **2S**-return-Cau-Fut-CQ
'When will **you(S)** return the book?'

b. mɛt͡s'ɑɸ-ɑke-s-n jiɾ kel-t **ɑ³**-bɑŋgɨɾ-s-i-ni?
book-Pl-Ac1-Ac2 what? time-Dat **3SM**-return-Cau-Fut-CQ
'When will **he** return the book?'

To summarize, the discovery of these phonetic contour tones suggests that any future in-depth account of Dizin tone must take them into account and propose which, if any of them, are phonemic.

CHAPTER 3
DIZIN GRAMMATICAL CATEGORIES AND MORPHOLOGY

Now that we have examined the consonants, vowels and tones of Dizin, we turn our attention to how they fit together to form Dizin words. This chapter presents the prototypical shapes of Dizin words, what the roots look like and how affixes attach to them. The grammatical categories are addressed separatedly, according to the affixes that attach to them.

3.1 Morphological Typology

Dizin is a polysynthetic language. Assuming a continuum of polysynthetic languages with agglutinating ones at one end and fusional at the other, Dizin is closer to the agglutinating end. A completely agglutinative language would have separate morphemes to convey each separate concept, such as tense, aspect, person, number, etc. Note this Dizin example of fusion, where person, number, and gender are conveyed by a single morpheme, the final one, **-go**.

(1) t͡ʃ'ɛj-dɛ-**go**
consult-Ipf-**3SM**
'he consults'

3.2 Prototypical Shapes of Dizin Words

Dizin roots of all grammatical classes are usually disyllabic or monosyllabic. In a count of a sample of 405 roots of various grammatical classes, 54% were disyllabic, 39% were monosyllabic, 7% had three syllables, and 1% had four syllables.

Up to two prefixes can occur on verbs and nouns at the same time. To this point, the largest number of suffixes attested on any word is six.

3.3 A Comparison of Pronouns, Possessive Prefixes, and PNG Affixes

Before moving into the morphology of each separate grammatical category it will be helpful to note the similarities between independent pronouns, the pronominal possession prefixes that attach to nouns, the verbal person, number, gender (PNG) proclitics, the PNG suffixes that attach to the auxiliary negative verb: **nɑn** 'Neg', and the PNG verbal suffixes. The numerous similarities suggest grammaticalization of pronouns into four types of affixes.[1]

Table 10. Dizin Pronouns, Possessive Prefixes, and PNG Affixes

PNG	PRONOUNS	POSSESSIVE PREFIXES	VERBAL PNG PROCLITICS	AUX NEG SUFFIXES	PNG VERBAL SUFFIXES
3SM	i^2zu^2 / $i^2zɑ^2$	$ɑ^3$-	$ɑ^3$-	-$ɑ^3$	-go^1/-zo^1/-o
3SF	$iʒ^2$ / $i^2ʒi^2$	i^3-	i^3-	-i	-ge^1/-$gɛj^1$/-ze^1/-$zɛj^1$/-e^1/-$ɛj^1$
2S	e^1tu^2 / $jɛ^1tu^2$	$ɑ^2$-	$ɑ^2$-	-$ɑ^2$	-to^1
1S	yi^1nu^2	$ʔŋ̩^2$-	$ʔŋ̩^2$-	-n^2	-no^1
3D	$i^3ʃɑ^2$	$i^3ʃ$-$ɑ^2$-	$i^3ʃ$-$ɑ^2$-	-$i^3ʃ$-$ɑ^2$	-$nɑj^2ʃi^1$
2D	$i^3tɑ^2$	i^3t-$ɑ^2$-	i^3t-$ɑ^2$-	-i^3t-$ɑ^2$	-$nɑj^2ti^1$
1D	$i^3nɑ^2$/i^3nu^2	$ʔŋ̩^3$-$ɑ^2$-	$ʔŋ̩^3$-$ɑ^2$-	-^3n-$ɑ^2$	-$nɑj^2ni^1$
3P	$i^3ʃi^2$	$iʃ^3$-	$iʃ^3$-	-$iʃ^3$(i)	-$ni^2ʃo^1$ -$ni^2ʃɑ^1$ -$ni^2ʃi^1$ -$ʃo^1$
2P	i^3ti^2	$i^3t(i^2)$-	it^3-	-it^3	-ni^2to^1
1P	i^3nu^3	$ʔŋ̩^3$-	$ʔŋ̩^3$-	-n^3	-$n^{13}no^2$

Especially note in Table 10 that the possessive prefixes that always attach to nouns and the verbal PNG proclitics that can move to attach to nouns are identical, so context is needed to know which morpheme is present.

[1] For more detailed tables see Table 16 (3.6) for Personal Pronouns; Table 12 (3.5.2) for the Possessive Prefixes; and Table 17 (3.8.3.1) for the Person, Number, Gender Verbal Suffixes.

3.4 The Grammatical Categories of Dizin Words

Dizin has a number of different grammatical categories that affect the syntax of the language. But more importantly for this chapter, different grammatical categories usually take different sets of affixes. The categories posited are: noun, pronoun, demonstrative, verb, adjective, auxiliary negative verb, adverb, postposition, preposition, and interjection. Each will be addressed separately, except that postpositions and the only preposition are addressed in the same adposition section.

3.5 Nouns

First we will consider the shape of noun roots and their affixes. One and two syllable roots are common. Three and four syllable noun roots also occur, but those tend to be compounds or borrowed words. The affixes that attach to nouns are generally presented in order from front to back.

3.5.1 What Belongs in the Noun Root?

In this section we will consider whether the vowels that end many nouns in their citation form should be analyzed as a part of the noun root, or as an extra segment that is added to the root to form the stem.[2] First, let us note the possible endings of the citation forms of 948 nouns, and their frequency in Table 11.

[2] In her analysis of a Hamar, a related language, Lydall wrote of nouns as having a "stem form consisting of the root with or without a vowel ending" (1976:406). Other Omotic researchers, including Hayward, have used the label "terminal vowels" (1987:215) for similar phenomena.

Table 11. Endings of Dizin Citation Forms of Nouns

ENDING	NUMBER	PERCENTAGE	V DELETES WHEN V-INITIAL SUFFIX FOLLOWS	EXAMPLES
C	514	52%	---	**boz** 'guest'
V	470	48%	almost always	**ɑ:ʃu** 'leg/foot'
u	270	27%	yes	**nibu** 'sorghum'
i	164	17%	yes	**kɑsi** 'game'
ɑ	33	3%	yes	**kɑsɑ** 'sand'
e	2	0.2%	no	**gune** 'castrated goat'
o	1	0.1%	no	**kilo** 'kilogram'

Examples in (2) illustrate of the absence of that final V when a suffix that begins with a vowel is attached to the noun.

(2) a. **ugu**
milk
'milk'

b. ... jɑtn **ug-ɑ-s** ɑ[3]-tɑ-n ...
fox **milk-Px-Ac1** 3SM-give-DS
'... the fox giving **the milk** ...'

c. **ugi**
termite_mound
'termite mound'

d. **ug-ɑ-s** sɛ-∅-go.
termite_mound-Px-Ac1 see-PstPr-3SM
'He saw **the termite mound**.'

For a few nouns, the vowels that end the root remain present after a V-initial suffix is attached.

(3) a. bɑl**e**
tassel
'tassel'

b. bɑl**e**-**ɑ**
tassel-**Px**
'this tassel'

c. kil**o**
kilogram
'kilogram'

d. kil**o**-**e**
kilogram-**Ds**
'kilogram-Ds'

Given these data, what should be considered the root? My original analysis of nouns set up noun classes which were established on the basis of which "vowel ending" was added to the root to complete the stem (i.e.: the U-Class, the I-Class, etc.). But now, to consider those vowels that end many nouns to be a part of the root seems preferable. Since no conclusive evidence suggests that a Dizin noun class system exists, we can instead think of these noun final vowels as part of the root. Then a final vowel deletion rule applies to the root

when a vowel initial suffix is attached. However, it does not apply to the roots that end with mid-high vowels (/e/ or /o/).

Mother tongue speakers often have a difficult time deciding whether those final vowels should be pronounced when a noun is said in isolation. Other times they are confident in pronouncing the final vowels when saying a word in isolation. But then those same words are regularly pronounced without the final vowel or any other suffix in normal speech. Two examples of this are **sɑ:gu** 'God' and **dɑdu** 'child'. In normal speech [**sɑ:g**] and [**dɑd**] are frequently said.

In one case, the word **gi^{1}ɑm^{1}** 'yesterday' was confidently given as a consonant final citation form. But when it was used in a frame with many different nouns following it, it was occasionally said with an ending vowel: [**gi^{1}ɑ^{1}mu^{2}**]. These may be instances of unconditioned variation, but it is more likely that a tone bearing unit is needed in some contexts and not in others. The cause of these variations could also be a prosodic phenomenon like stress. The question deserves much more investigation than can be done in the present study.

3.5.2 Possessive Pronominal Prefixes

Dizin has separate possessive pronouns. But it can also mark possession with one of a set of prefixes that attach directly to the noun being possessed.

Each of these possessive prefixes shown in Table 12 has been attested in natural texts, except the third person dual form, **iʃ-ɑ-**.

Table 12. Possessive Prefixes

PERSON	SINGULAR	DUAL	PLURAL
1	ʔŋ^{2}- 'my'	ʔŋ^{3}-ɑ^{2}- 'our-D'	ʔŋ^{3}- 'our'
2	ɑ^{2}- 'yourS'	it^{3}-ɑ-^{2} 'your-D'	i^{3}t(i^{2})- 'yourP'
3	ɑ^{3}- 'his' i^{3}- 'her'	iʃ^{3}-ɑ^{2}- 'their-D'	iʃ^{3}- 'their'

Example (4) is an elicitation of an Amharic question and answer which includes plurals for 'your' and 'our' (Amharic has no dual forms). This appears to be a mixed set, (dual, **it-ɑ-,** in the question, then plural, ʔŋ^{3}-, in the answer). This could be a production error, but, if it is not, this is evidence that the chart should also include ʔŋ^{3}- (without the ɑ^{2}-) as an acceptable form of the dual prefix.

(4) ɑkt **it-ɑ**-guj-ɑ nɑkin tɛ-niʔ ɑkt **ʔŋ^{3}**-guj-ɑ
this_year **your-D**-field-Px how? BE-CQ this_year **our(P)**-field-Px

t͡ʃ'ojm-s-ki-∅-z ti-go; mɑt koʃ-ki-nno.
be_amazed-Cau-Perf-CR-M BE-3SM much farm-Perf-1P

'This year how are your(D) fields? This year our(P) fields were amazing; we have grown much [food].'

This needs to be checked further, but the use of the dual forms may be on the decline, and the plural forms used instead. The basis for this statement is that I was able to elicit (with some difficulty) dual forms for verbs, but those forms are not yet attested in natural texts. Since dual forms do not occur in any of the four main contact languages, Tirmaga-Chai (Mike Bryant 2005, personal communication), Me'en (Achim Diehl 2005, personal communication), Amharic, or English, its decline in Dizin would not be surprising.

Prefix Nasal Assimilation. As described in 2.2.5, nasals normally assimilate to the place of the consonant phonemes that precede or follow them. In the case of these first person possessive prefixes (ʔŋ^{2}- 'my' and ʔŋ^{3}- 'our'), they assimilate to the place of the consonants that follow. The same process also occurs for two person and number prefixes on verbs

(**ʔŋ²-** '1S' and **ʔŋ³-** '1P'). To keep the data in Table 13 simple, only one of those four morphemes is shown.[3]

The lower row shows that the velar nasal is employed when a vowel follows it, which is the reason /ʔŋ/ is seen as the underlying form of the nasal in this and the three similar morphemes. The other rows show the nasal assimilating to the place of articulation of the consonant which follows it.

Table 13. Prefix Nasal Assimilation

Underlying Form	Surface Form	Gloss
ʔŋ³-muleŋ	[ʔm̩³.mu.leŋ]	'our-rhinoceros'
ʔŋ³-buɾd͡ʒ	[ʔm̩³.buɾdʒ]	'our-lord'
ʔŋ³-tɑɾb	[ʔn̩³.tɑɾβ]	'our-drum'
ʔŋ³-sibsu	[ʔn̩³.sib.su]	'our-*teff*[4]'
ʔŋ³-gɑɾɨz	[ʔŋ̩³.gɑ.ɾɨz]	'our-spear'
ʔŋ³-ot͡ʃu	[ʔŋ̩³.o.t͡ʃu]	'our-younger_sibling'

3.5.3 Definiteness Prefixes

The definiteness of a noun can be marked with the prefixes **ɑ-** 'theM' and **i-** 'theF'. These appear as though they could be the possessive morphemes, but the glosses 'his' and 'her' are rejected by mother tongue speakers. Example (5) was taken from a text.

(5) jɛ kiɛl-t in kɛ wɛk **ɑ**-gob-t-e-t tiɛ-ki-nno.
that time-Loc we also down **theM**-area-Loc-Ds-Loc go-Perf-1P
'At that time we also had gone down to that area.'

I elicited (6) and was told that it is grammatical, but it would not be common, since it denotes a small area. (The feminine gender is also used for marking 'diminutive'.)

[3] More details can be found in Beachy 2003b.
[4] A common small grain grown almost exclusively in Ethiopia and Eritrea.

(6) jɛ kiɛl-t in kɛ wɛk **i-**gob-t-e-t tiɛ-ki-nno.
that time-Loc we also down **theF**-area-Loc-Ds-Loc go-Perf-1P
'At that time we also had gone down to that little area.'

Example (7), from a text, shows how this feminine definiteness prefix is used. The feminine suffix on that noun and the feminine verb suffix both support the gloss chosen for **i-**.

(7) ... **i-**bɛj-**ɛni** iʃi-n kujs-kɑ botku-kɑ un͡tsŋ-kɑ hel
theF-monkey-**Fem** they-Ac2 squirrel-& baboon-& wolf-& all

deb-dn-∅ ʃub-n ɛjk-dɑkŋ kiɑms-**ɛj**.
beat-Pass-SSO die-DS lion-Ad accuse-**3SF**

'... the monkey accused the squirrel, the baboon, the wolf, all of them, before the lion, in order that they be beaten to death.'

3.5.4 Derivational 'possessor_of' Suffixes

A pair of derivational suffixes, **-bɑːb** 'possessor of masculine (POM)' and **-bɑjn** 'possessor of feminine (POF)', are quite common. (Variants that occur for the feminine are **-bɑːni** and **-bɑjni**.) In (8a) **-bɑb** 'POM' is attached to the noun root **ʃiʃk** 'health' to denote a healthy man. In (8b) **-bɑjn** 'POF' is attached to the same root to denote a healthy woman. Inflectional affixes attach to the new noun stem, just as they would to a simple noun root, as shown in (8d).

(8) a. ʃiʃk-ɨ-**bɑb**
health-v-**POM**
'healthy man'

b. ʃiʃk-ɨ-**bɑjn**
health-v-**POF**
'healthy woman'

c. bɑʒu-**bɑb**
war-**POM**
'warrior'

d. k'ɛjdn-**bɑb**-ɑ-ke-s-is
work-**POM**-Px-Pl-Ac1-Dat
'to the (Masc) workers'

3.5.5 Demonstrative Suffixes

Dizin has two very common demonstrative suffixes. They attach to nouns to convey the proximity of the noun to the speaker, and the noun's definiteness. Both convey the idea of

definiteness or reference to a particular known person, place or thing, but the denotation is not as definite as the prefix definiteness prefixes described previously in 3.5.3.

One of the suffixes **-ɑ** also denotes that the object is relatively close to the speaker while the other **-e** denotes that the object is relatively far away. I have chosen to gloss **-ɑ** as 'Px' for 'Proximal' and **-e** 'Ds' for 'Distal'. Using the glosses 'this' and 'that' would be a possibility, but since separate demonstrative words also exist (cf. 3.7), they could not be used. In free translations it often seems most natural to use 'the'. When these co-occur with other determiners, like possessives, 'near' or 'far' ared sometimes appropriate. The examples in (9) were elicited for clarifying these morphemes. (A *burji* is a traditional leader.)

(9) a. kɛj^{2}sɑ^{1} jɛ^{2}-k-o^{1}.
burji's_son come-Pres-3SM
'**A** son of a *burji* is coming.'

b. kɛj^{2}sɑ-^{3}**ɑ**^{1} jɛ^{2}-k-o^{1}.
burji's_son-**Px** come-Pres-3SM
'**This** son of a *burji* is coming.'

c. kɛj^{2}s-**e**^{31} jɛ^{2}-k-o^{1}.
burji's_son-**Ds** come-Pres-3SM
'**That** son of a *burji* is coming.'

3.5.6 Plurals

The Dizin suffix **-ɑkɛ** is the most common plural marker for nouns.

(10) jɑːb-**ɑkɛ**
person-**Pl**
'people'

It is not obligatory, in that nouns which could be marked with this suffix are sometimes left unmarked so that the context alone communicates the plurality of the noun. Examples (11) and (12) illustrate the phenomenon:

(11) in-kŋ iː-pm **jɑːb** iɑkɨz d͡ʒɛnd͡ʒɨm-ɨ-**niʃo**.
we-Gn1 house-LocIr **person** very be_worried-v-**3P**
'In our house people were very worried.'

(12) … **wuŋgu-bɑb** ɑm-i-**niʃo**.
thievery-POM become-Fut-**3P**
'… they will become (Masc) thieves.'

The [**ɑ**] in **-ɑke** is deleted whenever it is preceded by a vowel. This results in the very common phonologically conditioned allomorph: **-ke**. For examples, this is the case when 'Pl' follows **-e** 'Ds' or **-ɑ** 'Px':

(13) jɑːb-**e-ke** hel bɑŋgɨɾ-∅ ...
person-**Ds-Pl** all change-SSO
'All **those people** changing, ...'

(14) kob-**ɑ-ke**-s-n bɑːs-k-ɨ-no.
chicken-**Px-Pl**-Ac1-Ac2 want-Pres-v-1S
'I want **these** chickens.

Another plural marker for nouns is **-k'ɑŋkɑz**. Allen (1976:377 and 390) listed this as a separate word and the intuitions of Dizin mother tongue speakers who are literate in Amharic suggest it may be. But the generally shorter length of Amharic words could be interfering with normal intuitions. Since it can fit in the same slot as **-ɑke**, the more common plural marker, and other nominal suffixes can attach to it, it may be best to treat this morpheme as a suffix on the noun.

(15) ɑ-biɑɾ-ɑ-t t͡ʃɑk johɑnɨs-kɑ ɑ[3]-tɑmɑɾ-e-**k'ɑŋkɑz**-kŋ t͡ʃon-g
theM-tomorrow-Px-Loc again John-& his-student-Ds-**Plur**-Gen middle-In

t'ɑgŋ-e-**ke**-k ɨʃ-gɑb ɑːʃu-k-ɨ-tɛj.
two-Ds-**Pl**-InstIr 3P-together stand-Pres-v-DP

'On the next day again John and two of his disciples stood together.'

Example (16) also shows that **-k'ɑŋkɑz** can be analyzed as a suffix.

(16) … t'ɑgŋ-e-**k'ɑŋkɑz** jɑɸ bɑːni-kɑ bɑːbɨz-kɑ gɛ-dn-∅ sum-s-n-tɛj …
two-Ds-**Plur** both wife-& husband-& say-Pass-SSO call-Cau-Pass-SSS …
'… those two are called wife and husband respectively …' (said of two parts of a beehive)

Example (17) shows **-k'ɑŋkɑz** appearing in the context of three items, so that excludes the possibility of it being a dual marker.

(17) kɑlk bɑz-kɑ gunu bɑz-kɑ gor bɑz-kɑ jɛ-**k'ɑŋkɑz** hel t͡ʃuɑʒu-k'ɑŋk
kalk hive-& *gun* hive-& *gor* hive-& that-**Plur** all grass-Inst

t͡sɑn-sn-∅ kɑɸ-tn-dɑ-z ti-niʃo.
cover-Pass-SSO hang-Pass-Rel-M BE-3P

'The *kalk* hive, the *gun* hive, and the *gor* hive, **those** are all covered with grass and hung [on a tree].'

The examples in (18) illustrate that both plural markers can co-occur with the same nouns, so noun classes are not involved.

(18) a. jɑːb-ɑ-**ke**
person-Px-**Pl**
'these people'

b. jɑːb-ɑ-**k'ɑŋkɑz**
person-Px-**Pl**
'these people'

3.5.7 Gender Markers

Masculine (technically "non-feminine") is the default, or unmarked gender of Dizin nouns. An explicit feminine marker appears on a few nouns. Three variants of the 'feminine' suffix have been observed: **-n**, **-ni**, and **-ɛni**. It is assumed that these variations are due to lexical rather than phonological reasons.

Example (19) shows **-n** being used on the root for 'child' to denote 'Feminine' while its absence on the same root denotes 'Masculine.'

(19) ... sɑːg-ɨ-[3] k'ɑl kokŋ dɑd-e-**n**-kɑ dɑd-e-∅-kɑ t͡ʃ'ɛj-dn-tɛj ...
God-v-Gn4 word way child-Ds-**Fem**-& child-Ds-**Masc**-& advise-Pass-SSS
'... the bride and the groom being advised concerning God's word ...'

Just as **dɑd** 'child' can become derivationally feminine, the root **oti** 'bovine' becomes feminine and means 'cow', after the feminine suffix is attached. This is seen at the beginning of the third line in (20).

In the first line of (20) the feminine marker is suffixed to the root **kɛj** 'sun'. The citation form had been given to me as **kɛj**, and it does appear in the data in that form. But it also appears in a text in this form. Note the agreement with the gender marker on the verb by which it is governed (**i**-jɛ-n '**3SF**-come-DS').

(20) kɑːdu god-ɨ-kŋ t͡ʃoʃt ɑ^{3}-wɛs-tɑ-n ɑ^{3}-tɛ-n esi **kɛj-ɛni**
three evening/day-v-Gn1 after 3SM-send-??-DS 3SM-go-DS and **sun-Fem**

so t͡ʃon-t **i**-jɛ-n ɑ^{3}-tɛ-∅ bɑŋgɨr-∅ ge-kɨdɑt ɑŋg
up middle-Loc **3SF**-come-DS 3SM-go-SSO return-SSO tell-when here

jɑtn-^{3} **ot-e-ni** siɑg-n; ɛjk "ʔŋ^{2}-zokɑ mo otu
fox-Gn4 **bovine-Ds-Fem** give_birth-DS lion my-bull earlier_today calf

dɑd siɑg-o" jɛ gɛ-go.
child give_birth-3SM that say-3SM

'After three days he [lion] sent him [fox], and he [fox] went, and the **sun** came up to [the] middle [of the sky]; he [fox] going, returns and tells [lion]; and fox's cow gave birth here; and lion [said], "Earlier today my bull gave birth to a calf," he said that.'

The following examples are similar, in that **jɑrm** was given as the lexical form, and it can appear without the feminine suffix, as seen in (21).

(21) … ɑ^{3}-**jɑrm**-ɑ-s kɛ-t͡ʃojʃ-ɨ-tɛj …
his-**blood**-Px-Ac1 also-spill-v-SSS
'… also spilling his **blood** …'

But it also appears with the suffix **-ɛni**:

(22) ɑ^{3}-**jɑrm-ɛni**-k'ɑŋk jɛt-n t͡ʃuɾ-i-go.
his-**blood-Fem**-Inst youS-Ac2 wash-Fut-3SM
'He will wash you with his **blood**.'

A more thorough understanding of the semantics of the feminine suffix should be sought. All the nouns that can occur with and without the feminine suffix should be listed together to see if they contain semantic commonalities. A tentative proposal is that both the 'sun' and 'blood' are seen as life-giving to Dizin speakers. Adding a feminine suffix emphasizes this, since females give birth to offspring.

3.5.8 The Case System

The Dizin case system is complex. The case morphemes are summarized in Table 14. Some of the forms are single morpheme case markers and a number of forms are analyzed as stacked cases. It is important to note that different phenomenon have been called "stacked

case" or "case stacking." The case stacking found in the Dizin data is not the type that Sadler and Nordlinger describe as "the phenomenon whereby a single word may bear multiple cases reflecting its relation to a number of different syntactic elements …" (forthcoming:1).[5] Marlin Leaders describes a type of case stacking characterized by "more than 1 case marker on [a noun phrase,] with extra ones adding extra meaning" (2005:9).[6] Some of the Dizin data fit this latter description of case stacking. The clearest case of extra meaning being added is discussed in 3.5.8.3, where the inessive case marker *and* the dative case marker stack, to give the sense of a location to which the subject goes *and* enters. However, the Dizin examples in this section do not usually reveal great changes of meaning when cases are stacked. But since they are more overtly marked, it seems reasonable to assume a more determined purpose on the part of the communicator to present his or her message unambiguously.

At times the question arises as to whether a construction is a stack of two case morphemes or a separate morpheme. The criterion chosen to determine this, is that if the parts are all attested as morphemes on their own, together they will be considered stacked. If the separate parts are not attested as morphemes on their own, the complete construction will be considered a morpheme in its own right.

Many of these case markers are used for different denotations in different contexts, so finding labels that cover the semantic ranges well, can be difficult.

Case will be discussed in seven sections: nominative case, accusative case markers, dative case markers, genitive case markers, cases of location, instrumental case markers, and vocative case markers.

[5] This phenomenon has also been called "double case marking" (Blake 1994:103). "Multiple case" is another term used, since it "involves two or more cases with different scope …" (Blake 1994:108).

[6] These constructions have also been called "compound cases" (Blake 1994:43).

Table 14. Dizin Case

CASE MARKER(S)	GLOSS(ES)	WHAT IS MARKED	POSSIBLE TRANSLATION(S)
-∅	'Nom' (Nominative)	Subject	---
-s	'Ac1' (Accusative 1)	Direct object	---
-n	'Ac2' (Accusative 2)	Direct object	---
-s-n	'Ac1-Ac2'	More marked direct object	---
-∅	'Ac3' (Accusative 3)	Indefinite direct object	---
-nɑn	'AcCon' (Accusative for conjoined constructions)	Direct object	---
-is	'Dat' (Dative)	Indirect object	to, toward, for, concerning
-s-is	'Ac1-Dat' (Dative)	More marked indirect object	to, toward, for, concerning
-g-is	'In-Dat' (Inessive-Dative)	Movement to and inside of	through, to
-kŋ	'Gn1' (Genitive 1)	1. Possession 2. location, time (with postpositions)	'of' '-s'
-kŋɑ	'Gn2' (Genitive 2)	Possession	'of' '-s'
-kŋki	'Gn3' (Genitive 3)	Possession	'of' '-s'
-^{3}	'Gn4' (Genitive 4)	Possession	'of' '-s'
-t	'Loc' (Locative)	Location, instrumental	at, in, on, by, with, by means of, from
-pm	'LocIr' (Locative Irregular)	Location	at, in, etc.
-t-ɑ-t	'Loc-Px-Loc'	Proximal Location	at this, etc.
-t-e-t	'Loc-Ds-Loc'	Distal Location	at that, etc.
-g	'In' (Inessive)	Being/going inside	in, into, inside, through
-g-ɑ-t	'In-Px-Loc' (Inessive-Proximal-Locative)	Being/going inside this	in, into, inside, through
-g-e-t	'In-Ds-Loc' (Inessive-Distal-Locative)	Being/going inside that	in, into, inside, through
-kojs(ɑ)	'All' (Allative)	Direction toward	to, toward
-dɑkŋ	'Ad' (Adessive)	Proximity	at, near, beside
-k'ɑŋk	'Inst' (Instrumental)	Instrumental, Accompaniment	with, by
-k	'InstIr' (Inst Irregular)	Instrumental, Accompaniment	with, by
ɑ-	'VocM' (Vocative Masc)	Informal address (M)	'O'
i-	'VocF' (Vocative Fem)	Informal address (F)	'O'
ɑ- -ɛj	'VocM- -Voc'	Semi formal address (M)	'O'
i- -ɛj	'VocM- -Voc'	Semi formal address (F)	'O'
ɑ- -ɑ-s-ɛj	'VocM- -Px-Ac1-Voc'	Very formal address (M)	'O'
ʔm^{2}- -ɑ-s-ɛj	'1S- -Px-Ac1-Voc'	Very formal address	'O'

3.5.8.1 Nominative Case

The case that is always unmarked in Dizin is the nominative case. Null case markers could be marked at the appropriate locations on nominative nouns throughout this thesis. But, for a more convenient presentation of the data, null case markers will not normally be shown. Nevertheless, nominative case is assumed to be on the subject (agent or experiencer) and predicate noun, assigned by "Infl" (Culicover 1997:27), which is an abbreviation of "inflection." Examples (23) through (26) show the null nominative case markers:

(23) eː, ɑlmɑz-∅ et-n kot-ɛj.
yes Almaz-**Nom** youS-Ac2 await-3SF
'Yes, Almaz awaited (waited for) you.'

(24) k'eɾ-ɑ-s-n dɑd-ɑ-∅ biɑh-o.
door-Px-Ac1-Ac2 child-Px-**Nom** open-3SM
'The child opened the door.'

(25) ɑk-∅ oɾob-∅ ti-go.
today-**Nom** Wednesday-**Nom** BE-3SM
'Today is Wednesday'

(26) … jɛ-∅ gɛ-dn-dɛ-go.
that-**Nom** say-Pass-Ipf-3SM
'… that is said regularly.'

3.5.8.2 Accusative Case

Verbs are assumed to assign accusative case to "the direct object" (Culicover 1997:23) whether it is marked overtly or not. The accusative case is overtly marked four different ways in Dizin. First, it is marked by the suffix **-s**, which will be glossed **'Ac1'** for 'Accusative 1'. Second, accusative case is marked by **-n**, which will be glossed **'Ac2'** for 'Accusative 2'. A third common way to mark this case is to stack these two suffixes together, with 'Ac1' always occurring first: **-s-n 'Ac1-Ac2'**. A fourth accusative case marker is **-nɑn**. It is glossed '**AcCon**' because it only occurs on conjoined constructions. When accusative case is not marked by means of an overt affix, it will sometimes be shown as a null morpheme **-∅** and given the gloss '**Ac3**' for 'Accusative 3'.

Several generalizations can be made about the distribution of these morphemes. First, Allen suggested that "if the noun is indefinite or lacks modifiers, apparently there is no object marker" (1976:390). My data usually agree, as shown in (27) and (28).

(27) a. kobu-**∅** bɑːs-k-ɨ-no.
chicken-**Ac3** want-Pres-v-1S
'I want a chicken.'

b. kob-**e-s-ɨ-n** bɑːs-k-ɨ-no.
chicken-**Ds-Ac1-v-Ac2** want-Pres-v-1S
'I want that chicken.'

(28) boz-ɑ kiɛl-t ʔŋ[3]-tiɛ-kɨst **mugu-∅** bɛj-∅ ɑɸt-∅
wedding-Px day-on 1P-go-when **beer-Ac3** drink-SSO be_intoxicated-SSO

ɛj ɛj-∅ te-gɑ.
dance dance-SSO go-Jus

'When we go on the wedding day, let us go drinking beer, being intoxicated, and dancing a dance.'

However, in one instance, an accusative case marker appears without any separate morpheme to mark definiteness.

(29) ... **ket-ɨ-s** kɑɸ-tɛj iʃi **i͡ts-e-s** ʃojt ɨz-ɨ-g ɑn-∅; ...
uprights-v-Ac1 build-SSS they.D **grain-Ds-Ac1** all it-v-In put-SSO
'... building uprights [for the attic] and putting all their grain in it, ...'

The data do suggest, though, that whenever definiteness is marked on a direct object noun phrase, the accusative case is also marked.

Another generalization is that only **-n** 'Ac2' occurs on pronouns and proper nouns (male and female).

(30) izu jɑːb d͡ʒɛj-∅-z tɛ-j? kɑːj, **iz-ɨ-n** ɑ[2]-jɑb-is.
he person be_good-CR-M BE-FutQ no **he-v-Ac2** 2S-believe-NgIJ
'Is he a person who is good? No, do not believe **him**.'

(31) birɑnu **lɑk'ɛt͡ʃ-ɨ-n** boj-o.
Birhanu **Laqech-v-Ac2** marry-3SM
'Birhanu married **Laqech** (a feminine name).'

(32) **jɛsus-ɨ-n** kɛjs-i-no wuʃ-i-no gɛ-∅ jɛ-go.
Jesus-v-Ac2 destroy-Fut-1S kill-Fut-1S say-SSO come-3SM
'He came, saying, "I will kill, I will destroy **Jesus**." '

The tendency is for the other nouns to always be marked by either **-s** or **-n**. So it could be useful to set up noun classes, which could be labeled "S-Class" and "N-Class." Of course, provision would need to be made for the nouns which can take either accusative marker. Charting that out will be left for a time when it will be possible to elicit data specifically for that purpose.

It seems, though, that all the S-Class verbs can take either **-s** or **-s-n**. But **-s-n** never occurs on N-Class nouns. An example can be seen in the **ít͡ses** ~ **ít͡sesn** variation in (33) and (34).

(33) ... **ket-ɨ-s** kɑɸ-tɛj iʃi **ít͡s-e-s** ʃojt ɨz-ɨ-g ɑn-∅; ...
uprights-v-Ac1 build-SSS they.D **grain-Ds-Ac1** all it-v-In put-SSO
'... building uprights [for the attic] and putting all their grain in it, ...'

(34) iʃ-kot-ɨ-dɛ-ki-∅ ít͡s-e-∅ hel ɑ[3]-besk-ŋ-∅
3P-guard-v-Ipf-Perf-CR grain-Ds-Nom all 3SM-divide-Pass-SSO

ɑn-dn-ki-n iʃ-t-ɨ-t iʃ-kot-ɨ-dɛ-ki-∅ **ít͡s-e-s-n**
put-Pass-Perf-DS them-Loc-v-Loc 3P-guard-v-Ipf-Perf-CR **grain-Ds-Ac1-Ac2**

bɑ́t͡s-de-∅ ko-dn-de-∅ deb-dn-tɛj ujtkŋ-tɛj e-gɑ.
eat-coming-SSO bring-Pass-come-SSO beat-Pass-SSS reprimand-SSS happen-Jus

'May it happen that all the grain that they have been guarding be divided, and be put with them, [and if something else] comes and eats the grain they are guarding, may they be brought, and beaten, and reprimanded.'[7]

After verb roots are relativized by **-dɑ** 'Rel' they act like S-Class nouns. That is, they take **-s** or **-s-n**, but never **-n**.

(35) kɑ:j, ʔŋ[2]-wuŋg-ɨ-**d-ɑ-s** nɑ-n[2] e: koj-ki-ti.
no my-steal-v-**Rel-Px-Ac1** Neg-1S yes say-Perf-Ng
'No, I have not said yes to (believed) the one who stole (from) me.'

More elicitation must be done to determine whether a semantic or phonological basis underlies these proposed classes.

[7] This suggests that even if they are not to blame for eating the grain, it will be good for them to be reprimanded so that they will guard more carefully.

The only occurrence of **-nɑn** 'AcCon' is when a construction of two conjoined noun phrases is the object of an action. It attaches to the final **-kɑ** '&'.

(36) birɑnu-**kɑ** ɑ^{3}-bɑjn-ɛni-**kɑ-nɑn** k'ɛjdn-bɑn-ɛ-ni kɑɸ-s-ɛj.
Birhanu-**&** his-wife-Fem-**&-AcCon** work-POF-Ds-Fem dislike-Cau-3SF
'The (Fem) worker caused Birhanu **and** his wife to quarrel.'

(37) … kujs-kŋ k'ogŋ-**kɑ** bik'il-**kɑ-nɑn** kot-s-ɨ-tɛj …
squirrel-&CL sprouts-**&** sprouts-**&-AcCon** guard-Cau-v-SSS
… '[the] squirrel guarded [the] k'ogŋ sprouts **and** [the] bik'il sprouts …'

3.5.8.3 Dative Case

The dative case marking suffix is **-is** 'Dat'. It commonly appears in combination with **-s**, which is analyzed as 'Accusative 1', and **-g**, the inessive case marker.

The default use of the dative case marker is to mark the indirect object. But other meanings are apparent in some other contexts. The noun phrase in the dative case either (a) is the recipient of a thing which is given, or (b) is the recipient of verbal communication, or (c) has something done for its benefit, or (d) explains what the subject of the clause is about, or (e) is the goal toward which the subject of the clause is moving. Examples (38a) through (39e) illustrate each of these meanings.

(38) a. tɛmɑɾi-ɑ ɑstɛmɑɾi-ɑ-**s-is** t'ɑgŋ wɛɾk'ɑt wɛs-o.
student-Px teacher-Px-**Ac1-Dat** two paper send-3SM
'The student sent two papers **to** the teacher.'

b. ɑ^{3}-sɑɾ-ɑ-s nɑn-ɑ^{3} jin-**is** gɛ-ki-ti.
his-name-Px-Ac1 Neg-3SM I-**Dat** say-Perf-Ng
'He has not said his name **to** me. (He has not told me his name.)'

c. sɑːgu-^{3} dɑd jɛsus jɛt-**is** ʃub-ki-go.
God-Gn4 child Jesus youS-**Dat** die-Perf-3SM
'God's child, Jesus, has died **for (in behalf of)** you(S).'

d. tiɑtiɾ-ɑ kot͡ʃin k'oj-**s-is** ti-go.
drama-Px woman one-**Ac1-Dat** BE-3SM
'The drama is **about** a woman.'

e. t͡ʃoʃt bɑt͡ʃi d͡ʒɛj-∅-z oɸ-∅ kɑr gɑb-**is** tɛ-gɛj.
after clothes be_fine-CR-M put_on-SSO to market-**Dat** go-3SF
'After putting on clothes which are fine, she went **to** the market.'

Some phonological basis for the variation between the forms /**is**/ and /**sis**/ exists, in that only /**sis**/ follows a vowel. However, following a consonant, either form occurs. The two sets of examples in (39) and (40) illustrate this.

(39) a. … edʂ-k'ɑŋk mɛt͡ʃ-ɨ-n-ki-∅ jɑːb-**s-is** ɑ^{2}-tɑsɸɑ-s-ɨ-n
AIDS-Inst grab-v-Pass-Perf-CR person-**Ac1-Dat** 2S-hope-Ac1-v-Ac2

ɑ^{2}-tɑs-ɨ-z ust-i-to.
2S-give-v-Inf be_able-Fut-2S

'… you will be able to give hope **to** a person who has been infected with AIDS.'

b. … jɑːb-**is** ʃojt utn-k'ɑŋk tɑ-dɛ-ki-∅ …
person-**Dat** all love-Inst give-Ipf-Perf-CR
'… the one who has been giving to all people with love …'

(40) a. … in-**s-is** tɑ-dn-ki-∅ …
we-**Ac1-Dat** give-Pass-Perf-CR
'… what has been given to us …'

b. … wotwot ki-∅ ʃun-e-n in-**is** tɑ-tɛj …
eternal ExBE-SSO life-Ds-Ac2 we-**Dat** give-SSS
'… giving eternal life to us …'

Since the same roots can take either form while conveying a very similar sense, it is difficult to provide a firm analysis. The hypothesis chosen at this point is that the dative morpheme is **-is**, and when /**sis**/ occurs, it is a matter of stacking **-s** 'Ac1' and **-is** 'Dat', for a reason which is not yet understood. This should be investigated further.

The Inessive-Dative Stack. A clearer example of stacked case is the Inessive-Dative stack which has a shape **-g-is** 'In-Dat'. (Inessive case is described on p. 77.) This stack is narrower semantically than dative is alone, since it always has the sense of being a location which the subject goes to and enters.

(41) a. gɑb-**g-is** giɑm tiɛ-nno.
market-**In-Dat** yesterday go-1P
'We went **to** market yesterday.'

b. hɑkim-ɑke hospitɑl-**g-is** tiɛ-niʃo.
doctor-Pl hospital-**In-Dat** go-3P
'The doctors went **inside** the hospital.'

c. wuŋg-ɨ[3] k'ɛjdn kotɛ-∅ et-n t͡s'ɑt͡s' iː-**g-is**
thievery-Gn4 work take-SSO youS-Ac2 tie house-**In-Dat**

wu-s-i-go.
enter-Cau-Fut-3SM

'Thievery will take (you) and will cause you to enter the tie house (prison).'

3.5.8.4 Genitive Case

Dizin employs four genitival case markers: **-kŋ** 'Gn1', **-kŋɑ** 'Gn2', **-kŋki** 'Gn3', and tonal **-[3]** 'Gn4'.

'Gn1' -kŋ. The suffix **-kŋ** has been the subject of some debate. According to Claudi and Serzisko (1985:150), Toselli (1939:134) called "*kn* a suffisso possessivo." Keefer (1969b:4) called it a "genitival suffix." Allan (1976a:381-2; 1976b:304-5) understood this morpheme to mark inalienable possession, as opposed to alienable possession, which was marked by tone changes instead. In their investigation of Allan's claims, Claudi and Serzisko concluded, "The element *-kn* is hereby identified as a locative case marker" (1985:150). While a detailed analysis of these articles is beyond the scope of this thesis, my data suggest that Claudi and Serzisko were correct to conclude the following: "Inalienability is not an overt category in Dizi" (1985:150). However, their apparent conclusion that "*-kn*" is not a possession marker needs to be questioned.

From the data now available, it seems clear that **-kŋ** normally marks possession, and other times, in combination with postpositions, it marks location and time. So **-kŋ** will be glossed as 'Gn1', for 'Genitive 1', for the reasons that follow.

First, evidence points toward "possession" being at the semantic core of the morpheme. When bilingual Dizi people are asked to translate an Amharic possession construction into Dizin, they normally choose this construction: POSSESSER-**kŋ**

POSSESSED. Examples of this are in (42) and (43). In (42) the **-kŋ** construction was chosen, though another option is to use a Dizin possessive prefix: **iti-**, (i.e.: **iti-gɛli-g** 'yourP-head-In').

(42) tɨmɨɾt-ɑ iti-**kŋ** gɛli-g ɑ^{3}-wu-ŋ?
lesson-Px youP-**Gn1** head-In 3SM-enter-PstPrQ
'Did the lesson enter you(P) head? (Do you understand the lesson?)'

Example (43) is similar, though **-kŋ** attaches to a noun, instead of a pronoun:

(43) dɑd-ɑ-**kŋ** ɑː^{12}j-ɑ ɑ^{3}-sis-dɑ?
child-Px-**Gn1** ear-Px 3SM-hear-IpfQ
'Does the child's ear hear? (Can the child hear?)'

Besides the evidence of elicited data, natural texts point toward a possessive and genitival understanding of **-kŋ**. Consider the examples in (44) of the lion's bull and the fox's cow. As the complete text in Appendix A shows, possession and ownership is central to the understanding of this fable, so calling these "locative case markers" is not plausible.

(44) ... ɛjk-**kŋ** zoku niɑk-ɨz-ɨ-nɑ jɑtn-**kŋ** oti kot͡ʃin i-ki-n; …
lion-**Gn1** bull male-Masc-v-and fox-**Gn1** bovine female 3SF-ExBE-DS
'... the lion's bull and the fox's cow were there; ...'

A good reason to use the label "genitive" is that it is a broad enough term to include more than just possession.[8] We can think in terms of a "genitive of possession," a "genitive of location," and a "genitive of time." The construction (NOUN PHRASE-kŋ POSTPOSITION) is very common. An example of the genitive of location is given in (45), as is an example of the genitive of time in (46). As (45) illustrates, **-kŋ** is an enclitic and attaches to the right edge of the noun phrase.

(45) kɑmil-eni i-boɾku-kŋɑt **dɑdu** **k'oj-kŋ** **hɑt** wut-∅ ɨz-n
vehicle-Fem 3SF-roll-when child one-**Gn1** on fall-SSO he-Ac2

d͡ʒɨt mɛt͡ʃ-ki-gɛj.
pressing_down hold-Perf-3SF

'When the vehicle rolled it fell **on** a teenager and it held him, pressing down.'

[8] "Associative" is also commonly used for what is here labeled "genitive."

(46) **jɛ-kŋ** **t͡ʃoʃt** ɛjk hiɑlm-∅ iʒ-n gib-o.
that-Gn1 **after** lion be_angry-SSO she-Acc chase-3SM
'**After that**, [the] lion, being angry, chased her.'

Derivational evidence. The derivations of some postpositions give an understanding of how this "genitive" came to be used in location and time constructions. As is explained more fully in 3.12, some postpositions show evidence of being derived from nouns. So a construction like **sɑ:g-ɨ-kŋ** **t͡sɑnt** is best translated as 'before God', but can be glossed as 'God-Gn1 face-Loc' and translated as 'at God's face'. This is illustrated in (47a). A similar situation with a genitive of time is seen in (47b).

(47) **a. sɑ:g-ɨ-kŋ** **t͡sɑn-t**
God-v-Gn1 face-Loc
'at God's face (before God)'

b. jɛ-kŋ **t͡ʃoʃ-t**
that-Gn1 back-Loc
'at the back of that (after that)'

So, a plausible explanation is found for **-kŋ** 'Gn1' being used in extended constructions denoting location and time.

Variant genitive forms: -kŋɑ and -kŋki. The variant forms of the genitive, **-kŋɑ** and **-kŋki**, are also considered here. The sentence shown in (48a) was in a natural behavioral text. When the affixation on **sɑ:g** 'God' was changed to **-kŋɑ** and **-kŋ**, as shown in (49b) and (49c), the clauses were still considered grammatical and any difference in meaning could not be explained. This suggests free variation.

(48) a. sɑ:g-ɨ-**kŋki** ʃorkŋ in-kŋ t͡ʃoŋg wu-kɑj ɑ^{3}-k'iɑ-nt ɑ:-s-n
God-v-**Gn3** fear we-Gn1 heart-In enter-Neg 3SM-leave-if this-Ac1-Ac2

ʔŋ^{3}-e-z nɑ-n^{3} t͡ʃɑl-i-ti.
1P-do-Inf Neg-1P be_able-Fut-Ng

'If God's fear (the fear of God) does not enter into our hearts, we will not be able to do this.'

b. sɑ:g-ɨ-**kŋɑ** ʃorkŋ …
God-v-**Gn2** fear
'… the fear of God …'

c. sɑ:g-ɨ-**kŋ** ʃorkŋ
God-v-**Gn1** fear
'… the fear of God …'

It is also possible that /**ɑ**/ and /**ki**/ are suffixes that are not yet understood. Perhaps they convey some discourse meanings, but the examples in (49) and (50) argue against that, since they were elicited from isolated sentences.

(49) iz-**kŋɑ** koj-dɑd-eni ɑstɛmɑɾi ɑm-ɛj.
he-**Gn2** mother-child-F teacher become-3SF
'His sister became a teacher.'

(50) a. gob-ɑ-**kŋki** nog mɑt iti-t'us-kŋ?
earth-Px-**Gn3** thing many 2P-know-PerfQ
'Have you(P) known many things about the earth?'

b. kɑːj, gob-ɑ-**kŋki** nog mɑt nɑ-n[3] t'us-ki-ti.
no earth-Px-**Gn3** thing many Neg-12 know-Perf-Ng
'No, we have not known many things about the earth.'

Conclusions. Two conclusions can be made regarding the alternation between /**kŋ**/, /**kŋɑ**/ and /**kŋki**/. First, only /**kŋ**/ occurs in conjunction with the postpositions. Second, in the possessive constructions, any of the three options are accepted as grammatical, without any easily understood differences in meaning between them.

Assigning genitive case. Concerning the assignment of the Dizin genitive case, in the possessive examples we assume with Culicover that "genitive Case assignment [is] the realization of the thematically marked 'subject' of the NP" (1997:46). In the "location" and "time" examples, we assume that genitive case is assigned by the postpositions.

A tonal genitive marker. The genitive of possession that is marked by tone, which Allan referred to, does exist, but is not as common as **-kŋ**. In examples (51) through (53) the last vowel on the possessor (/**u**/ or /**ɨ**/, the epenthetic vowel) carries a high tone. However, **-[3]** 'Gn4' is a tentative analysis, since it has not been checked on nouns with a variety of tone patterns.

(51) i-bɑːb-kɑ, i-koj-kɑ, iːbjɑːb-e nɑn-iʃ sɑːg-ɨ-**[3]** dɑd jɛsus
her-father-& her-mother-& family-Ds Neg-3P God-v-**Gn4** child Jesus

kɾɨstos-n kob-ki-∅ jɑːb ti-ti.
Christ-Ac2 receive-Perf-CR person BE-Ng

'Her father and mother, those in that family, are not people who have received God**'s** child Jesus Christ.'

(52) sɑːg-ɨ-**[3]** kud-ɑ-s it-mɛt͡ʃ-ɨ-z bɑːs-ɨ-s-i-go.
God-v-**Gn4** road-Px-Ac1 yourP-grab-v-Ger want-v-Cau-Fut-3SM
'Your(P) grabbing God**'s** path is necessary. (You need to take hold of God**'s** way.)'

(53) sɑːg-ɨ-**[3]** k'ɑl
God-v-**Gn4** word
'God**'s** word'

Example (54) is of special interest because it shows this tone genitive marker attaching to a word borrowed from a non-tonal language. (tɨmɨɾt-[3] iː is from Amharic [**tɨmhɨɾtɛ bet**] 'lesson house'.)

(54) giɑm tɨmɨɾt-**[3]** iː-pm heʃ-ɨ-nno.
yesterday lesson-**Gn4** house-LocIr spend_day-v-1P
'Yesterday we spent the day at/in school.'

Example (44) included the phrase, **jɑtn-kŋ oti** 'fox-Gn1 bovine'. Now in (55) tone is used to mark the case on **jɑtn**, rather than **-kŋ**.

(55) … ɑŋg jɑtn-**[3]** ot-e-ni siɑg-n; ɛjk "ʔŋ[2]-zokɑ mo
here fox-**Gn4** bovine-Ds-Fem give_birth-DS lion my-bull earlier_today

otu dɑd siɑg-o" jɛ gɛ-go.
calf child give_birth-3SM that say-3SM

'… and fox's cow gave birth here; and lion [said], "Earlier today my bull gave birth to a calf," he said that.'

3.5.8.5 Cases of Location

Four Dizin cases will be called cases of location: locative case, inessive case, allative case and adessive case.

3.5.8.5.1 Locative Case

The gloss 'Loc' is chosen for **-t** because it conveys a wide range of locative meanings. These can be translated with the English, "at, on, beside, in, onto, etc." Examples (56) through (58) show part of that range:

(56) … iz-kŋ ɑb-**t** …
he-Gn1 eye-**Loc** …
'… **beside** his eye …'

(57) wɛk iʒ-kŋ hel-**t** ɑ^{3}-tiɑɸ-n …
down she-Gn1 chest-**Loc** 3SM-drip-DS
'[the milk] dripping down **onto** her chest …

(58) … k'oj bɑl-**t** …
one place-**Loc**
'… **at** one place …'

An irregular locative case marker, **-ɨpm** 'LocIr', has only been attested on one word: **iː** 'house'. The expected form ***iː-t** 'house-Loc' does not occur, but **iː-ɨpm** 'house-LocIr' occurs frequently.

(59) ʔn^{2}-dɑd-ɑ iː-**ɨpm** ki-go.
my-child-Px house-**LocIr** ExBE-3SM
'My boy is at the house.'

(60) giɑm tɨmɨɾt-^{3} iː-**ɨpm** heʃ-ɨ-nno.
yesterday lesson-Gn4 house-**LocIr** spend_day-v-1P
'Yesterday we spent the day at/in school.'

(61) in-kŋ iː-**ɨpm** jɑːb iɑkɨz d͡ʒɛnd͡ʒɨm-ɨ-niʃo.
we-Gn1 house-**LocIr** person very be_worried-v-3P
'**In/At** our house people were very worried.'

Stacked locative case. We now consider a couple of possible instances of stacked case: **-t-ɑ-t** '**Loc-Px-Loc**' and **-t-e-t** '**Loc-Ds-Loc**'. The first /**t**/ remains a mystery. The syllable structure does not suggest that an epenthetic consonant is needed when a demonstrative suffix and the locative suffix attach to a root. For example, all the syllables in both [*ɑ^{3}.go.b**et**] and [*ɑ^{3}.gob.**te**] would be well formed. Perhaps two different case morphemes had the same

shape: **-t**. Perhaps the same morpheme 'Loc' is stacked on the same root at the same time, then metathesis reverses a vowel and the first /**t**/. This is the current analysis, but a tentative one, chosen because it is analogous with **-g-ɑ-t** 'In-Px-Loc' and **-g-e-t** 'In-Ds-Loc' (shown on p. 78), and because we lack a more convincing option.

(62) jɛ kiɛl-t in kɛ wɛk ɑ-gob-**t-e-t** tiɛ-ki-nno.
that time-Loc we also down theM-area-**Loc-Ds-Loc** go-Perf-1P
'At that time we also had gone down **to that** area.'

(63) t͡sɑnt ʃub-kɑj ɑ^{3}-ki-∅ kel-**t-ɑ-t** benti
before die-Neg 3SM-ExBE-SSO day-**Loc-Px-Loc** shaman

ɑt͡s-tɛj ɑ^{3}-sɑːg-ɨ-^{3} iː-ɑ-s tiɾ-ki-niʃo.
get_fortune_told-SSS Det-God-v-Gn4 house-Px-Ac1 quit_going_to-Perf-3P

'Before **the** day/time that he died, they had had his fortune told (by) a shaman and they had quit going to God's house.'

3.5.8.5.2 Inessive Case

The case marker **-g** is often semantically similar to the locative but its range of meaning is narrower. It normally gives the idea of being inside or passing through something, so it is labeled 'In' for "Inessive." Usually "inside," "in," or "through" are accurate glosses. The examples in (64) and (65) show these common denotations.

(64) tokŋ-e-**g**
hole-Ds-**In**
'**through** that hole'

(65) tiɑtrɑ-kŋ t͡ʃoʃt kɑr iː-**g** wu-e.
drama-Gn1 after to house-**In** enter-3SF
'After the drama she went **in/inside** a house.'

Given the semantic similarities it is worth considering evidence of 'In' and 'Loc' being two separate cases, and not two noun classes with different suffixes for the same case. The examples in (66) provide supporting evidence.

(66) a. t͡ʃon-**t** b. t͡ʃon-**g** c. jiɾ-**t** d. jiɾ-**g**
heart/middle-**Loc** heart/middle-**In** what?-**Loc** what?-**In**
'**in** the middle of' '**in** the middle of' '**in** what?' '**in** what?'

Stacked inessive-locative case. Two other common forms, /**gɑt**/ and /**get**/, are analyzed as stacked cases made up of smaller pieces and glossed: -**g-ɑ-t** 'In-Px-Loc' and -**g-e-t** 'In-Ds-Loc'. They seem to convey the meanings of -**ɑ** 'Px' and -**g** 'In', and -**e** 'Ds' and -**g** 'In', but -**t** is perhaps added to denote more clearly the notion of location. The sequence [**gt**] never occurs as a coda. This provides a clue as to why those first two morphemes (-**ɑ** 'Px' and -**g** 'In' or -**e** 'Ds' and -**g** 'In') are in the reverse of the expected order. The demonstrative suffixes normally occur before any case suffixes. Epenthesis could produce a form like /*iːɑgɨt/. But this insertion of a new segment can be avoided by metathesis, which apparently violates a weaker constraint than epenthesis does.

(67) … bol tokŋ-**g-e-t** k'iɑ-∅
tree_species hole-**In-Ds-Loc** leave-SSO
'… leaving **through that** hole in the bol tree …'

(68) iː-**g-ɑ-t** ʔŋ^{3}-ɑl-gɑ …
house-**In-Px-Loc** 1P-stay-Jus
'Let us stay **inside this** house …'

The coda [**tg**] never occurs either, so the metathesis of those segments would not result in an allowable syllable structure.

3.5.8.5.3 Allative Case

While the Dizin dative case can sometimes give the sense of direction toward, the allative case always gives that sense. The suffix -**kojs** 'All' is shown in context in (69). Dividing it into -**k-ojs** or -**koj-s** has been considered, but since neither -**ojs** nor -**koj** appear as suffixes on their own, those analyses have not been chosen.

(69) jin-ɨ-**kojs** jɛ-n-ti.
I-v-**All** come-Imp-PImp
'Come **to** me!'

This suffix attaches to pronominal forms which do not currently occur independent of -**kojs** or -**dɑkŋ**. These can be called reduced root pronouns. Table 10, helps us see that these

reduced root pronouns correspond with possessive prefixes and PNG proclitics. Note that in (71), **kaɾ** 'to', which is analyzed as a preposition, co-occurs with **-kojs**.

(70) **a^2-kojs** jɛ-ki-no.
youS-All come-Perf-1S
'I have come **to you(S)**.'

(71) **kaɾ ʔŋ^2-kojs** jo-ŋ.
to me-All come-Imp
'Come **to me**.'

3.5.8.5.4 Adessive Case

Another case marker, **-dakŋ** 'Ad' signals that the location is 'near', 'next to', or 'in front of' the noun being marked. This will be called the adessive case.

(72) ... i-bɛj-ɛni iʃi-n kujs-ka botku-ka untsŋ-ka hel
theF-monkey-Fem they-Ac2 squirrel-& baboon-& wolf-& all

deb-dn-∅ ʃub-n ɛjk-**dakŋ** kiams-ɛj.
beat-Pass-SSO die-DS lion-**Ad** accuse-3SF

'... the monkey accused the squirrel, the baboon, the wolf, all of them, **before** the lion, in order that they be beat to death.'

Like **-kojs**, this morpheme appears on reduced root pronouns.

(73) ʃigŋ k'ab a^2-**dakŋ** hot-i-go.
quickly quickly youS-**Ad** appear-Fut-3SM
'Quickly, quickly he will appear **near** you(S).'

3.5.8.6 Instrumental Case

The morpheme **-k'aŋk** 'Inst' most often signals the instrumental sense, glossed 'by means of' or 'with'. We will note other senses which occur, but first, we consider the morphological question of whether /**k'aŋk**/ is an affix or a word.

Some beginning writers of Dizin prefer to write this morpheme as a separate word: **k'ɑŋk** 'with'. Following are some reasons that it should probably be seen as an affix to mark case, rather than as a postposition.[9]

First, while most postpositions follow noun phrases that are marked for case, **-k'ɑŋk** never does. Second, the fact that some mother tongue writers think of a morpheme this long as an affix instead of a separate word is worth noting. Third, Benchnon has a very similar morpheme (**-k'ɑn**/**-kɑn**) which Breeze (1986:53) has analyzed as a case marking suffix. Fourth, the morpheme has a common variant **-k** which, because it lacks a syllable nucleus, *has* to attach to a word.[10]

Regarding the semantics of the morpheme, either 'by means of' or 'with (in the instrumental sense)' is most commonly the best gloss, as shown in (74). Another use gives the idea of accompaniment, appropriately translated as 'with', as shown in (75). The temporal sense of **-k'ɑŋk** comes through as meaning 'during', 'in', or 'at', in (76). A less common usage gives the idea of opposition, and can be glossed as 'against' (77).

(74) a. … mɛɾɸi-**k'ɑŋk** sib-∅ …
needle-**Inst** sew-SSO
'… sewing **with** a needle …'

b. … kudu mɑn-∅-z-**k'ɑŋk** …
path be_other-CR-M-**Inst**
'… **by means of/on** another path …'

(75) ɑt jɛt-ɨ-**k** nogɨm-dɑ-d-ɑ jinu ɨz ti-no.
now you-v-**InstIr** converse-Ipf-Rel-Px I he BE-1S
'The one who is converging with you now, I am he.'

(76) a. … sɛ͡ts'ɨŋ-**k'ɑŋk** gɑ͡ts-∅ …
morning-**Inst** start-SSO
'… starting **in** the morning …'

b. … sɛ͡ts'ɨŋ-**k** …
morning-**InstIr**
… '**in** the morning'

(77) jɛ in-dɛ-ki-∅ ʔn^{3}-siɛ-d-e-**k'ɑŋk** iti-ust-∅ bɑʃum-i?
that walk-Ipf-Perf-CR 1S-see-Rel-Ds-**Inst** 2P-be_able-SSO fight-FutQ
'Can you(P) fight **against** the one(s) we saw who have been walking like that?'

[9] The orthographic question would still not be clear cut, of course, even if the morphological one were.

[10] These third and fourth reasons suggest that **-k'an** and **-k** could be separate suffixes. But since **-k'an** by itself has not yet been attested in Dizin, this is not the analysis chosen.

Two more examples of the variant form of this morpheme, **-k**, are shown in (78) and (79) to show the semantic equivalence with **-k'ɑŋk** 'with'. The first has the most common 'by means of' sense, while the second could be glossed 'at' or 'at the time of.' An alternate explanation would be that these forms are contractions of two words (e.g. t͡ʃuɑʒu **k'ɑŋk ->** t͡ʃuɑʒu**k)** , or even contractions of one word (e.g. t͡ʃuɑʒu**k'ɑŋk ->** t͡ʃuɑʒu**k)**.

(78) … t͡ʃuɑʒu-**k** t͡sɑns-tɛj …
grass-**InstIr** cover-SSS
'… covering [it] **with/by means** of grass …'

(79) kubm sɑt-ɨ-**k** iːb-s jɛ-no.
four o'clock-v-**InstIr** house-Ac1 come_to-1S
'I came to the house **at** ten o'clock.' (Ethiopia has the time system used in the Middle East, which is always six hours different from Western time.)

3.5.8.7 Vocative Case

When addressing or calling someone, up to five affixes can attach to the name of the person being addressed. Both proper nouns and normal nouns take these affixes, as shown in Table 15. Note that as the forms become longer (more marked) they become more formal and respectful.

Table 15. Dizin Vocatives

PREFIX	ROOT	SUFFIX	GLOSS	TRANSLATION	FORMALITY
ɑ-	p'et'ɾos		**VocM**-Petros	'O Petros'	least
i-	mɑɾi		**VocF**-Mari	'O Mari'	least
ɑ-	p'et'ɾos	**-ɛj**	**VocM**-Petros-**Voc**	'O Petros'	medium
i-	kiɑz	**-ɛj**	**VocF**-Kiaz-**Voc**	'O Kiaz'	medium
ɑ-	kɑɸibɑb	**-ɛj**	**VocM**-arguer-**Voc**	'O arguer'	medium
ɑ-	muleŋ	**-ɛj**	**VocM**-rhinoceros-**Voc**	'O rhinoceros'	medium
ɑ-	sɑːg	**-ɛj**	**VocM**-God-**Voc**	'O God'	medium
ɑ-	sɑːg	**-ɑ-s-ɛj**	**VocM**-God-**Px-Ac1-Voc**	'O God'	most
ʔm²-	buɾd͡ʒ	**-ɑ-s-ɛj**	**my**-lord-**Px -Ac1-Voc**	'O my lord'	most
ɑ-	p'et'ɾos	**-ɑ-s-ɛj**	**VocM**-Petros-**Px-Ac1-Voc**	'O Petros'	most

A prefix is always present when employing the vocative case. The usual prefixes in the data are **ɑ-** 'VocM' (for 'vocative masculine') and **i-** 'VocF' (for 'vocative feminine'). The first person singular possessive prefix **ʔŋ²-** 'my' can replace the normal vocative prefix if the vocative case is marked by a suffix. Presumably other possessive pronoun prefixes could also occur in this position, and this should be checked. Examples (80) and (81) are from texts.

(80) **ʔm²-burd͡ʒ-ɑ-s-ɛj**, kujs-kɑ botku-kɑ unt͡sŋ-kɑ nɑn-iʃ
my-lord-Px-Ac1-Voc squirrel-and baboon-and wolf-and Neg-3P

it͡s-ɑ-s-n kek kot-dɛ-ti
grain-Px-Ac1-Ac2 properly guard-Ipf-Ng

'**O, my lord**! [the] squirrel, [the] baboon and [the] wolf have not been properly guarding the grain.'

Without any suffix the vocative is informal.

(81) **ɑ**-botk! it͡s-ɑ-s iːki tɛ-ki-∅ ʔm-ni?
VocM-baboon grain-Px-Ac1 who? BE-Perf-CR eat-CQ
'**O, baboon**! Who is it that ate the grain?'

With the suffix **-ɛj** 'Voc' (for 'vocative') the address is more formal. The most formal and polite address has one of the prefixes and three suffixes: **-ɑ-s-ɛj** 'Px-Ac1-Voc'[11]. This form is often used to address God in prayer. Addressing a person with this most formal construction is possible, but not usual. Addressing God without this most formal form is also unusual.

Related language comparison. The data Breeze provides on Benchnon[12] is significant: "A vocative phrase obligatorily consists of a noun preceded by the vocative pronoun, wo[1] for masculine and hɑ[1] for feminine. The vocative suffixes, -o[3] for masculine and -e[3] for feminine may optionally be added to the noun …" (1990:46). This grammatical

[11] Perhaps the **-ɑs** could be called 'formal' or 'vocative formal' or 'honorific', but on the assumption that morphemes are being stacked, it is being called 'Px-Ac1'.

[12] Benchnon is a neighboring and related Omotic language. It has five level tones plus a low-mid (²³) glide, so the numbers are from 1 (the lowest) to 5 (the highest) (Wedekind 1981:134).

similarity between Dizin and Benchnon should be considered by those who study genetic relationships within the Omotic family of languages.

The Benchnon data are also significant because they suggest that Dizin's vocative prefixes could have derived from vocative pronouns. (Dizin's vocative pronouns are **ɑrɛj** 'youMVoc' and **irɛj** 'youFVoc'.)

3.5.9 Interrogatives on Nouns

A couple of similar morphemes, **-so** and **-wo** , can suffix to a noun to ask the question: "What about _____?" This only occurs in certain contexts. Examples (82) and (83) illustrate their use.

(82) t͡ʃɑkl-ɑ-s ɑjs bir-k ɑ^{2}-hur-i-ni? t'ɑrɑp'ez-ɑ-**so**?
chair-Px-Ac1 how_many? *birr*-InstIr 2S-buy-Fut-CQ table-Px-**what_about?**
'With how many *birr*[13] will you(S) buy the chair? **What about** the table?'

(83) ɑk nɑk tɛ-ni? biɑru-**wo**?
today what? BE-CQ tomorrow-**what_about?**
'What is today? (What day of the week is it today?) **What about** tomorrow?'

3.5.10 Proper Nouns

Proper nouns take the same vocative morphemes that normal nouns take (cf. 3.5.8.7).

The only examples of accusative case on proper nouns are of **-n** 'Ac2' (cf. 3.5.8.2). This is a restriction that matches that of the pronouns.

(84) birɑnu **lɑk'ɛt͡ʃ-i-n** boj-o.
Birhanu **Laqech-v-Ac2** marry-3SM
Birhanu married **Laqech**.

One suffix which only occurs on proper nouns is the suffix **-in**, which changes the name of an ethnic group into the name of the language they speak.

(85) a. diz-**in** 'the_Dizi_people-**language_of'** "Dizin"
b. gol-**in** 'the_Amhara_people-**language_of'** "Amharic"
c. ingɨliz-**in** 'the_English_people-**language_of'** "English"

[13] The currency in Ethiopia.

Other case markers occur on proper nouns, just as they do on normal nouns.

(86) jɛsus-**k'ɑŋk** ʔŋ^{3}-gɑb ɑl-kɨst nɑ-ɑ^{3} ziŋg hot-i-ti.
Jesus-Inst 1P-together stay-when Neg-3SM problem appear-Fut-Ng
'When we stay together with Jesus, a problem will not appear.'

3.5.11 Subject PNG Proclitics on Nouns

Some verbal constructions require person, number, and gender (PNG) proclitics. This is explained in more detail throughout 3.8. Example (87) illustrates how the proclitic moves off a verb and attaches to a noun. If the word **ɑ^{3}-zoku** were heard in isolation, it would be understood as 'his-bull', but when the complete sentence is read, **-ni** 'CQ' indicates a content question construction, so that **ɑ^{3}-** is understood to be the PNG verbal inflection marker.

(87) "undi jiɾ-g ki-∅ gob-ɨ-g tɛ-n **ɑ^{3}-zoku** otu
in_the_past which?-In ExBE-SSO country-v-In BE-DS **3SM-bull** calf

siɑg-dɛ-**ni**?" jɛ gɛ-go.
give_birth-Ipf-**CQ** that say-3SM

' "In the past in what country was it where a **bull** gives birth to a calf?" he said that.'

3.5.12 A Prosodic Suffix

The noun suffix **-ɑ** 'ES' has no apparent semantic significance. It has only been observed in one song. A mother-tongue speaker insisted that it was only to make the rhythm of the song better. So this suffix appears because of the prosodic need for a syllable, and is glossed 'ES' for 'extra syllable'.

(88) kel-ɛn ɑk ti-ge; jɛsus-kojs-**ɑ** jɛ-n-ti.
day-Fem today BE-3SF Jesus-Dir-**ES** come-Imp-PImp
'The day is today; come to Jesus.'

3.5.13 Connectors

Dizin normally marks each of the phrases it is conjoining. First we consider conjoined noun phrases, then conjoined clauses.

The most common way to conjoin noun phrases is to suffix **-kɑ** '&' to the end of each of the phrases.

(89) kɑlk bɑz-**kɑ** gunu bɑz-**kɑ** gor bɑz-**kɑ** jɛ-k'ɑŋkɑz hel t͡ʃuɑʒu-k'ɑŋk
kalk hive-**&** *gun* hive-**&** *gor* hive-**&** that-Plur all grass-Inst

t͡sɑn-sn-∅ kɑɸ-tn-dɑ-z ti-niʃo.
cover-Pass-SSO hang-Pass-Rel-M BE-3P

'The *kalk* hive, the *gun* hive, **and** the *gor* hive, those are all covered with grass and hung [on a tree].'

Sometimes this morpheme is reduced to **-k**.

(90) jɑːb ɑ[3]-bɑːb-**k** koj-kɑ tiɾ-tɛj ɑ[3]-bɑːni-k'ɑŋk
man his-father-**&** mother-& leave-SSS his-wife-Inst

t'ít͡s'-ɨ-sɨm-i-go.
be_attached-v-Recip-Fut-3SM

'A man leaving his father and mother, will become attached together with his wife.'

However, the second **-kɑ** is not always included. Example (91) appeared in a text. When questioned, the speaker said that adding the **-kɑ** to **sɑpm** would be fine, but leaving it off was not a problem either.

(91) … t͡ʃoŋg-**kɑ** sɑpm oʃuʃ-n-∅ hɛjkŋ ɑn-dn-∅ kol-tɛj …
inside-**&** outside paint-Pass-SSO outside put-Pass-SSO dry-SSS
'… the inside **and** the outside are painted (smeared with fresh cow manure) and it is put outside and it dries …'

The occasionally employed Dizin morpheme, **-ɨnɑ** 'and', is almost certainly borrowed directly from Amharic. The fact that it only occurs on the first noun phrase, as it does in Amharic, suggests that as well.[14]

(92) ... ɛjk-kŋ zoku niɑk-∅-ɨ-z-**ɨnɑ** jɑtn-kŋ oti kot͡ʃ-∅-in
lion-Gn1 bull be_male-v-CR-M-**and** fox-Gn1 bovine be_female-CR-F

i-ki-n; …
3SF-ExBE-DS
'... the lion's bull **and** the fox's cow were there; ...'

[14] The singular feminine prefix on the verb adds a wrinkle since the plural would be expected.

The morphology that connects a series of clauses is suffixed to the subject of each clause, as shown in (93). The suffix is **-kŋ** '&CL' (and clause level).

(93) kujs-**kŋ** k'ogŋ-kɑ bik'il-kɑ-nɑn kot-s-ɨ-tɛj bɛj-**kŋ**
squirrel-**&CL** sprouts-& sprouts-&-AcCon guard-Cau-v-SSS monkey-&**CL**

ɛjtr-kɑ bɑk'il-kɑ kot-s-ɨ-tɛj botku-**kŋ** duʒ-kɑ nibu-kɑ-nɑn
lentils-& beans-& guard-Cau-v-SSS baboon-**&CL** corn-& sorghum-&-AcCon

besk-ɨ-tɛj un͡tsŋ-**kŋ** esk-ɨ-kɑ zuni-kɑ t͡ʃe͡tʃ-ɨ-s-ɨ-tɛj; ...
guard-v-SSS wolf-**&CL** goat-v-& sheep-& be_safe-v-Cau-v-SSS

'[the] squirrel guarded [the] *k'ogŋ* sprouts and *bik'il* sprouts **and** [the] monkey guarded [the] lentils and beans **and** [the] baboon guarded [the] corn and sorghum **and** the wolf shepherded [the] goats and sheep.'

3.6 Pronouns

Some common forms of Dizin pronouns are shown in Table 16. Pronouns usually take the same case markers that other nouns take, so most of the cases are not shown separately.

Table 16. Dizin Personal Pronouns

Person Number & Gender	Nominative Case	Accusative Case	Vocative Case
3SM	**i²zu²** / **i²zɑ²** 'he / it'	**izn**	---
3SF	**iʒ²** / **i²ʒi²** 'she'	**iʒn**	---
2S	**e¹tu²** / **jɛ¹tu²** / **ɛ¹tu²** 'youS'	**etn** / **jɛtn**	**e¹tu²** 'youSVoc'
2SM	---	---	**ɑ³ɾɛj³²** 'youMVoc'
2SF	---	---	**i³ɾɛj³²** 'youFVoc'
1S	**ji¹nu²** 'I'	**jinn** [jin:][15]	---
3 Dual	**i³ʃɑ²** 'theyD'	---	---
2 Dual	**i³tɑ²** 'youD'	---	**i³tɑ²** 'youDVoc'
1 Dual	**i³nɑ²** / **i³nu²** 'weD'	---	---
3P	**i³ʃi²** 'they'	**iʃin** / **iʃn** [ʔi.ʃɨn]	---
2P	**i³ti²** 'youP'	**itin** / **itn** [ʔitˈ.ʔn̩]	**i³ti²** 'youPVoc'
1P	**i³nu³** 'we'	**inn** [in:]	---

[15] In one song it is sung [**jinɨn**], but I have not heard it spoken with that extra syllable.

Dizin does not have the 'we' inclusive/exclusive distinction found in the related language, Benchnon. Breeze says that this distinction is unusual for Omotic and other Ethiopian languages. She believes this probably came from contact with Nilo-Saharan languages (1986:49).

Dizin has dual pronouns in the first, second, and third person, which Benchnon lacks:

(94) bɑb-dɑ-kɑ bɑjn-en-kɑ **iʃ-ɑ**-kŋ iː-pm nɑgŋ iz-t
husband-the-& wife-Fem-& **they-D**-Gn1 house-LocIr things it-Loc

ɑ^{3}-k-ŋ?
3SM-ExBE-PstPrQ

'Is there stuff in the house of the husband and wife? (Does the couple have any things in their(Dual) house?)'

Further unlike Benchnon, Dizin has no separate honorific pronouns (Breeze 1986:49). Sometimes the plural forms are used for one older person, which could be a borrowing from Amharic. But since this phenomenon has been observed in many diverse languages (Head 1978:190), language contact with Amharic may not be involved.

Like Benchnon, Dizin has a second person gender distinction only in the vocative forms (Breeze 1986:49). The morphology of the vocative pronouns corresponds with the normal vocatives of proper names and normal nouns (presented in 3.5.8.7). Two examples are: **ɑ-zɛrihun-ɛj** 'O Zerihun (a masculine name)!' and **i-mɑr-ɛj** 'O Mari (a feminine name)!'.

Semantically these second person vocative forms of the pronouns are interesting in that they are normally said to children and friends, and are also used to put someone down. This means they are less polite and less formal than **e^{1}tu^{2}** 'you(S)', which can also be used when addressing someone.

The similarities between the 3SM and 3SF pronouns are worth noting. The assumption is that the optional word final /**i**/ was responsible for changing the /**z**/ in the source to its present palatalized form, /**ʒ**/.

Voicing assimilation (or devoicing) is seen in the 3SM locative case pronoun. The /**z**/ is devoiced before /**t**/.

(95) a. [ʔi**z**u] b. [**ɨz**u] c. [i**s**t] d. [**ɨs**t]

i**z**u	**ɨz**u	i**z**-t	**ɨz**-t
he/it	he/it	he/it-Loc	he/it-Loc
'he/it'	'he/it'	'at him/it, etc.'	'at him/it, etc.'

Dizin is a pro-drop language. In (96) the subject is understood in the question because of the PNG prefix on the verb, and it is understood in the answer because of the PNG suffix on the verb. Pronouns are not required.

(96) jiɾ-∅ **ɑ^{2}-**bɑːs-dɛ-ni? k'ɛjdn k'ɑl-∅-**ɨ**-z bɑːs-dɛ-**no**.
what-Ac3 **2S**-search-Ipf-CQ work be_new-CR-v-M search-Ipf-**1S**
'For what are **you** searching? **I** am searching for a new job.'

The **-wo** 'what about?' suffix can also attach to pronouns, as shown in (97).

(97) "k'uɾs ɑ^{2}-ʔm-m?" "kɑːj, nɑ-n^{2} ʔm-ki-ti; **et-wo**?"
breakfast 2S-eat-PstPrQ no Neg-1S eat-Perf-Ng **youS-what_about?**
' "Did you eat breakfast?" "No, I have not eaten; **what about you(S)?**" '

3.6.1 Interrogative Pronouns

Because of the suffixes that attach to them and their syntactic behavior, a couple of question words, **iːki** 'who?' and **jiɾ** 'what?', are categorized with the pronouns. The accusative marker **-n** 'Ac2' appears on these interrogative pronouns, just as it does on other pronouns. The accusative marker **-s** 'Ac1' is not attested on these interrogative pronouns, just as it is not attested on other pronouns.

(98) biɾɑnu **iːki-n** ɑ^{3}-boj-ni?
Birhanu **who?-Ac2** 3SM-marry-CQ
'**Whom** did Birhanu marry?'

Examples of other cases are shown in (99) through (101).

(99) **iːki-kŋ** ɑːʃu ʔŋ^{2}-t͡ʃ'uɾ-i-ni?
who?-Gn1 feet 1S-wash-Fut-CQ
'**Whose** feet should I wash?'

(100) **jiɾ-s-is** tɛ-ni?
what?-Ac1-Dat BE-CQ
'What is it for?'

(101) kobu ɑt͡ʃk-ɑ-s-n **jiɾ-k'ɑŋk** ɑ^{2}-kɑt͡s-ni?
chicken meat-Px-Ac1-Ac2 **what?-Inst** 2S-cook-CQ
'With what did you(S) cook the chicken meat?'

3.7 Demonstratives

The suffixes on nouns that give the demonstrative denotation of relative distance were presented in 3.5.5. Those modify the noun phrases to which they attach. Examples of morphologically independent demonstratives that modify noun phrases are shown in (102) and (103).

(102) **jɛ gɛdn** iɑkɨz kiɛl gɛ-dn-ki-go.
that saying many time say-Pass-Perf-3SM
'**That saying** has been said many times.'

(103) **ɑ:-ke mɛt͡s'ɑɸ** d͡ʒɛj-∅-z iʃ-ti-ŋ?
this-Pl book be_good-CR-M 3P-BE-PstPrQ
'Are **these books** ones that are good?'

eː, **ɑ:-ke mɛt͡s'ɑɸ** d͡ʒɛj-∅-z ti-∅-niʃo.
yes **this-Pl book** be_good-CR-M BE-PstPr-3P
'Yes, **these books** are ones that are good.'

Independent demonstrative pronouns can also serve as complete noun phrases on their own.

(104) **ɑ:** sɑ:g-ɨ-kŋ t͡sɑnt no:gu int͡s-∅-z ti-go.
this God-v-Gn1 before thing be_difficult-CR-M BE-3SM
'**This** is a thing that is difficult before God.'

(105) **ekijo** mɛt͡s'ɑɸ tɛ-j?
that book BE-PstPrQ
'Is **that** a book?'

The sanctioned accusative case markings distinguish the demonstrative pronouns from other pronouns. No instance of the **-n** 'Ac2' suffix by itself has yet been attested on demonstratives. Instead **-s** and **-s-n** are attested.

(106) a. **ɑː-s** bɑk-t-ɑ-t kis-n.
this-Ac1 stove-Loc-Px-Loc put-Imp
'Put **this** on the stove.'

b. … **ɑː-s-n** ʔŋ^{3}-e-z nɑ-n^{3} t͡ʃɑl-i-ti.
this-Ac1-Ac2 our-do-Ger Neg-1P be_able-Fut-Ng
'… we will not be able to do **this**.'

(107) a. … **jɛ-s** ɨʃ-kob-n …
that-Ac1 3P-take-DS
… they taking **that** …

b. **jɛ-s-n** ɑ^{2}-eb-z bɑs-ɨ-s-i-go.
that-Ac1-Ac2 yourS-think-Ger want-v-Cau-Fut-3SM
'Your(S) thinking about **that** is necessary.'

An overt accusative marker is not always required on demonstrative pronouns. An example without an overt accusative marker follows in (108). The examples in (107a) and (107b) illustrate the more common overtly marked forms.

(108) "jiɾ ʔŋ^{3}-e-n it-oʃk-dɛ-ni?" **jɛ-∅** gɛ-∅-gɛj.
what? 1S-do-DS 2P-call-Ipf-CQ **that-Ac3** say-PstPr-3SF
' "What should I do [since] you are calling?" she said **that**.'

Other case markers also occur. Two examples are given in (109). Example (110) shows a plural marker on a demonstrative pronoun.

(109) a. **jɛ-kŋ** t͡ʃoʃt
that-Gn1 after
'after **that**'

b. **ɑː-kŋ** t͡ʃoʃt
this-Gn1 after
'after **this**'

(110) t͡sɑn **ɑː-ke** in gɑnt diːzi dɑd iʃi-ti-so?
so_then **this-Pl** we like Dizi child 3P-BE-what_about?
'So then, what about **these** (people) being Dizi children like us?'

3.8 Verbs

The most common shape of Dizin verb roots is CVC, but many other shapes are possible. These verb roots can have up to two prefixes (e.g. **it-ɑ-**bɑːs-dɑ '**2P-Du**-want-IpfQ' (do you two want…?)' and at least six suffixes attached to them. One of the non-relativized verbs with the most attested suffixes (four) is mɑm-**s-n-ki-go**

'be_prepared-**Cau-Pass-Perf-3SM** (it has been prepared)'. Since verbs are often relativized, and can then also have nominal suffixes attached to them, a verb root has been attested with six suffixes, and more are theoretically possible. This should be sought through elicitation. The attested word with six suffixes is e-**dn-ki-d-e-s-n** 'do-**Pass-Perf-Rel-Ds-Ac1-Ac2** (what had been done)'.

After noting stative verbs, we will see three derivational suffixes, then many inflectional affixes, and a number of combinations of affixes that occur on relativized verb roots.

3.8.1 Stative Verbs

Ethiopian languages tend to utilize fewer adjectives than European languages do. One of the factors involved is that they use "stative verbs" to describe things.[16] Accordingly, Dizin uses stative verbs that convey adjective-like meanings, while acting morphologically and syntactically like verbs.

(111) jiɾam it-**jɛtɨɾ**-ɨ-ni? iɑkɨz hiɑt-∅ **jɛtɨɾ**-ɨ-nno.
why? 2P-**be_tired**-v-CQ much run-SSO **be_tired**-v-1P
'Why **are** you(P) **tired**? Running much, we **are tired**.'

(112) ʔm-m-ti! iɑkɨz **ʃiʃk**-ɨ-dɛ-go.
eat-Imp-PImp very **be_tasty**-v-Ipf-1S
'Eat! It **is** very **tasty**.'

(113) **jɛnd͡ʒiʃɨm**-k-ɨ-no.
be_happy-Pres-v-1S
'I **am happy**.'

An understanding of these stative verbs will be especially helpful when relativized verbs (3.8.10) and adjectives (3.9) are presented. Dizin does have a few words which act syntactically and morphologically like adjectives, as discussed in 3.9.

[16] Leslau lists numerous Amharic examples in his Amharic-English vocabulary (1967:563-94), e.g. **molːɑ** 'it was full/plenty' (1967:564). Bryant gives examples of the same phenomenon in Tirmaga-Chai (1999:72-5). Amharic is an Ethio-Semitic language and Tirmaga-Chai is Nilo-Saharan.

3.8.2 Derivational Suffixes and Valence

Derivational suffixes change the valence of the verbs to which they attach. Of the three derivational suffixes presented, one (causative) is a valence increasing device, and two (passive and reciprocal) are valence decreasing devices. These suffixes are added to the root root to form a stem that then takes inflectional affixes, just like an underived root.

3.8.2.1 Causative

The causative suffix, **-s** 'Cau', causes the valence of the verb to increase. For example, in (114) **-s** 'Cau' changes the intransitive verb root **sɑm** 'be_left_over' into a transitive verb, meaning '**cause** to be left over'. In (115a) **-s** 'Cau' changes the intransitive verb **t͡ʃet͡ʃ** 'be_safe' into a transitive verb meaning '**cause** to be safe (guard)'.

The example in (114) shows the underlying form, **-s**, while (115a) and (115b) show the phonologically conditioned variant [ʃ]. It occurs after the postalveolar consonants, /**t͡ʃ**/ and /**ʃ**/.

(114) ... sɑm-**s**-ɨ-kɨst ...
be_left_over-**Cau**-v-when ...
'... when [he] **caused** [tea] to be left over ...'

(115) a. [t͡ʃe.t͡ʃɨ**ʃ**.tɛj]
... unt͡sɨŋ-kŋ esk-ɨ-kɑ zuni-kɑ t͡ʃet͡ʃ-ɨ-**s**-tɛj; ...
wolf-Gn1 goat-v-& sheep-& be_safe-v-**Cau**-SSS
'... [the] wolf **guarded** [the] goats and [the] sheep; ...'

b. [wɛ.ʃɨ**ʃ**.dɛ.ni.ʃo]
… gɑnz-e-s wɛʃ-ɨ-**s**-dɛ-niʃo.
bell-Ds-Ac1 be_shaken-v-**Cau**-Ipf-3P
'… they **shake/ring** that bell.'

The phonologically conditioned variant [**z**] is shown in example (116). The phoneme /**s**/ becomes voiced when it immediately precedes /**d**/. This is also described in 2.2.4.

(116) [bɑ.sɨ**z**.dɛ.go]
dɑʃuŋk ʔŋ^{3}-jɛ-z bɑs-**s**-dɛ-go.
late_afternoon our-come-Ger want-**Cau**-Ipf-3SM
'Our coming in the late afternoon is necessary. (We need to come in the late afternoon.)'

3.8.2.2 Passive

The passive suffix, **-dn** 'Pass', causes the valence of the verb to decrease. This allows what has traditionally been called the subject of the clause not to be stated and the patient becomes what is normally thought of as the subject of the clause. In (117) **-dn** 'Pass' changes the transitive verb **sib** 'sew' into an intransitive verb, '**be** sew**n**'. In (118) **-dn** 'Pass' changes the transitive verb **ɛʃ** 'bury' into an intransitive verb, '**be** buri**ed**'.

The form of this morpheme varies significantly due to phonological conditioning. The underlying form **-dn** ([**dˀ.ʔn**]) is seen in (117) and in the first verb in (120).

(117) undi jiɾ-g tɛ-n ɑ[3]-kɑlɑ-kɑ jɛl-t gobɑ-kɑ mɛɾɸi-k'ɑŋk
in_the_past what?-In BE-DS 3SM-sky-& under-Loc land-& needle-Inst

sib-**dn**-dɛ-ni?
sew-**Pass**-Ipf-CQ

'In whose country is the sky and the earth sewn together by needle?'

The morpheme is realized as [**tˀ.ʔn̩**] immediately after a voiceless fricative when the voiceless fricative is preceded by a vowel (118). (cf. 2.2.2.)

(118) [ɛʃ**tˀ.ʔn̩**.i.gɛj]
ɛʃ-**dn**-i-gɛj.
bury-**Pass**-Fut-3SF
'She will be buried.'

The passive marker is realized as [**n**] after a coronal stop or affricate.

(119) [mɛ.tʃɨ**n**.ki]
mɛt͡ʃ-**dn**-ki-∅
grab-v-**Pass**-Perf-CR
'one who has been grabbed'

It is also realized as [**n**] after a voiceless fricative when the voiceless fricative is preceded by a consonant. The syllable structure is responsible for this realization. Examples of this are the final verb in (120) and (121). The causative suffix and the passive suffix can attach to the same root, in that order, as the final word in (120) shows.

(120) [ʔɑ.jɛ bɑ.ze nɑ.kin i.ʃe**d˺.ʔn̩** mɑm.**sɨn.**dɛ.ni]
ɑjɛ bɑz-e nɑkin iʃ-e-**dn**-∅ mɑm-**s-ɨ-n**-dɛ-ni?
these beehive-Ds how? 3P-do-**Pass-SSO** be_ready-**Cau-v-Pass**-Ipf-CQ
'How are these beehives built?'

(121) [tɑ.mɨr.**sɨn.**tɛj]
tɑmɨr-s-**dn**-tɛj
learn-Cau-**Pass**-SSS
'being taught'

It is realized as [**ŋ**] after a velar stop.

(122) [oʃk˺.ʔ**ŋ̩**.dɛ.to]
oʃk-**dn**-dɛ-to.
call-**Pass**-Ipf-2S
'You(S) are being called.'

3.8.2.3 Reciprocal

The Dizin reciprocal morpheme is unusual in that it can co-occur with a singular PNG suffix. To understand this construction, a distinction must be made between semantic valence and syntactic or grammatical valence (Payne 1997:169-170). When the Dizin reciprocal morpheme is added, the absolute number of agents (subjects) and patients (objects) remains the same, so the semantic valence does not change. But the syntactic valence normally decreases in that, instead of an agent or agents doing something to a patient or patients, the agents normally become the syntactic subjects of the clause and no syntactic object is needed. Example (123) shows this normal usage. It also shows the ordering of the causative and the reciprocal affixes, with the causative next to the root.

(123) bɑni-kɑ bɑbu-kɑ gob k'oj-∅-z-ɨ-g iʃi-boj-**s**-ɨ-**sɨm**-kɨst
wife-& husband-& area be_one-CR-M-v-In 3P-be_married-**Cau**-v-**Recip**-when

ɑ-boz-e kiɛl-t ɑm-ki-∅ nog tɛ-n giɛ-ŋ bɑːs-dɛ-no.
theM-wedding-Ds day-Loc happen-Perf-CR thing BE-DS say-Inf want-Ipf-1S

'I want to tell the things that had happened in one area when a bride and a groom married **each other** on the wedding day.'

One treatment of this morpheme states that "Reciprocity is limited to plural persons, since the action takes place between two or more persons" (Tamirat 1988:31). The example verbs given both have plural morphology. The implication is that this reciprocal morpheme would never co-occur with singular inflections on the verb. That is an understandable assumption, when thinking in terms of semantic valence, but the final verb in (124) shows a combination of **-sɨm** 'Recip' and **-go** '3SM'. Semantically a man and his wife are being attached to each other, but grammatically, given the focus on the man leaving his parents and becoming attached, the verb agreement is singular. The attachment of the case suffix **-k'ɑŋk** 'Inst' (it denotes accompaniment in this context) to **bɑ:ni** 'wife' may be a factor which allows this syntactic construction. It is also possible that this combination is limited to only this root **t'ít͡s'** 'be_attached'.

(124) jɑ:b ɑ^{3}-bɑ:b-k koj-kɑ tiɾ-tɛj ɑ^{3}-bɑ:ni-k'ɑŋk
man his-father-& mother-& leave-SSS his-wife-Inst

t'ít͡s'-ɨ-**sɨm**-i-**go**.
be_attached-v-**Recip**-Fut-**3SM**

'A man leaving his father and mother, will become attached together with his wife.'

This unusual construction should be researched further.

3.8.3 Affixes on Common Independent Verbs

The term "common independent verb" is employed to distinguish a form from a less commonly used independent form. That form is described in 3.8.4 and is labeled the "distant past independent verb."

In this most common form of independent declarative clause, the verb always takes a suffix to mark person and number. Third person singular affixes also denote gender. A tense/aspect marker always occurs between the verb stem and the person, number and gender markers. When no overt tense/aspect marker occurs, the null morpheme, 'PstPr', is present.

3.8.3.1 Person, Number, and Gender Suffixes

Table 17 shows the suffixes that attach to the independent verbs to mark the person, number, and gender (PNG) of the subject of the clause.

Table 17. Dizin Person, Number, and Gender Suffixes

SUFFIX	PNG	EXAMPLE	GLOSS	TRANSLATION
-go^{1} / -zo^{1} / -o^{1}	3SM	bɑː^{1}s-**o^{1}**	want-3SM	he wanted
-ge^{1} / -gɛj^{1} / -ze^{1} / -zɛj^{1} / -e^{1} / -ɛj^{1}	3SF	bɑː^{1}s-**ɛj^{1}**	want-3SF	she wanted
-to^{1}	2S	bɑː^{1}s-ɨ^{1}-**to^{1}**	want-v-2S	you(S) wanted
-no^{1}	1S	bɑː^{1}s-ɨ^{1}-**no^{1}**	want-v-1S	I wanted
-nɑj^{2}ʃi^{1}	3D	bɑː^{1}s-ɨ^{1}-**nɑj^{2}ʃi^{1}**	want-v-3D	they(D) wanted
-nɑj^{2}ti^{1}	2D	bɑː^{1}s-ɨ^{1}-**nɑj^{2}ti^{1}**	want-v-2D	you(D) wanted
-nɑj^{2}ni^{1}	1D	bɑː^{1}s-ɨ-**n^{12}nɑj^{1}ni^{1}**	want-v-1D	we(D) wanted
-ni^{2}ʃo^{1} / -ni^{2}ʃɑ^{1} / -ni^{2}ʃi^{1} / -ʃo^{1}	3P	bɑː^{1}s-ɨ^{1}-**ni^{2}ʃo^{1}**	want-v-3P	they wanted
-ni^{2}to^{1}	2P	bɑː^{1}s-ɨ^{1}-**ni^{2}to^{1}**	want-v-2P	you(P) wanted
-n^{13}no^{2}	1P	bɑː^{1}s-ɨ-**n^{13}no^{2}**	want-v-1P	we wanted

The variation between the consonants that begin the third person singular suffixes, /**g**/ and /**z**/, has been said to be a dialect difference (Keefer 1969b:6). I have found that speakers of both Central and Eastern Dizin speak both of these varieties, with /**g**/ being more common in both dialects. The variation between [**e**] and [**ɛj**] is also a matter of free variation.

A phonological rule explains the loss of the suffix initial consonant, /**g**/ or /**z**/, in certain contexts. This rule states that the suffix initial consonants in the third singular morphemes, /**g**/ and /**z**/, are deleted if a consonant precedes it. When those consonants are deleted, the allomorphs that occur are **-o** '3SM' and **-e** or **-ɛj** '3SF'.

The absence of /**g**/ and /**z**/ is completely predictable in that they are never present when these morphemes follow a consonant. They also never appear after ambiguous segments, which could be seen as diphthongs or VV sequences or VG (=VC) sequences. (The

phonological significance of this was presented in 2.5.4.) The presence of either of those consonants is predictable after most of the vowels, in that they always appear after /**i**/, /**e**/, /**ɛ**/, and /**o**/, and never after /**u**/. The verb roots that end in /**ɑ**/ are less straightforward, as the top (phonetic) row of (125) illustrates.

(125) a. [bi.ɑ.**o**] b. [gi.ɑ.**o**] c. [k'i.ɑ.**go**]

bi**ɑh-o**	gi**ɑh-o**	k'iɑ-**go**
open-3SM	chew-3SM	leave-3SM
'he opened'	'he chewed'	'he left'

The best explanation of the variation between the surface forms of (125a) and (125b) as opposed to (125c) seems to be that an underlying /**h**/ is present at the end of the root in (a) and (b), but not in (c). This hypothesis is reflected in the second line.

A dialect difference lends support to this analysis. The Eastern Dizin form of the first example is [**biɑho**], which follows the normal pattern of the /**g**/ or /**z**/ being deleted after a consonant. The Central Dizin form in (125a) has no overt /**h**/ but since it takes /**o**/ instead of /**go**/, we can propose that an underlying /**h**/ is still present in the lexicon. It is this underlying /**h**/, that results in the deletion of the suffix initial consonant. The same is assumed for **giɑ**. In the case of the third example, **k'iɑ**, no underlying consonant exists in the lexicon, so [**go**] is the surface form of the suffix.

My data only have five verb roots which end in /**u**/. In those cases too, since the initial consonant of 3S suffixes is never realized at the surface level, I am assuming an underlying consonant, perhaps /**w**/, or perhaps /**h**/, at the end of those roots. More data are needed to determine which of these consonants exists underlyingly.

The variation in 3P suffixes seems to be a matter of free variation, except that **-ʃo** '3P' occurs only after **-i** 'Fut'. But since **-i-niʃo** 'Fut-3P' also occurs, an obligatory rule is not possible.

The status of the dual should be researched further. The dual forms listed were elicited in isolation and do not appear in any of the natural texts collected. So it is necessary to question whether it is a form in the language which is currently being used. This question gains significance when a case is noted in (126), where it is clear that there are only two subjects, but the suffix is a plural and not a dual. It is from a text that was also edited by mother tongue speakers, and the dual form was not suggested.

(126) ... i-kot-n-dɛ-ki-∅ jɑːb-en-k i-bɑb-ɨ-z-k so
3SF-wait-Pass-Ipf-Perf-CR person-Fem-& her-husband-v-M-& above

guj-s jɛ-**niʃo**.
below-Ac1 come_to-**3P**

'... the lady who was being waited for and her husband came down from above.'

Having said that, (127) gives evidence in favor of the dual's being in current use, even though it is not from a natural text. It was elicited by asking for an Amharic sentence to be translated into Dizin. Amharic has no dual forms, so it would not have been surprising to see a plural suffix carried over into Dizin. Instead, the dual suffix **-nɑjʃi** '3D' was employed.

(127) iː-pm dɑd untɨn-en-kɑ dɑd-ɑ-kɑ ɨz-t ki-**nɑjʃi**.
house-Loc child girl-Fem-& child-Px-& it-Loc ExBE-**3D**
'The girl and the boy are at the house.'

3.8.3.2 Tense/Aspect Suffixes

A set of tense/aspect markers occur on the common independent declarative verb between the stem and the person, number, and gender suffixes. Table 18 shows these morphemes and gives the primary denotations that these morphemes signal in isolated sentences.

The first three suffixes shown in Table 18 seem to function as though they could be labeled "tense" markers, while the two after that seem to function as though they could be labeled "aspect" markers. But since those five suffixes occupy the same slot on a verb, giving

them separate labels does not seem appropriate. More research may lead to a better label for these five morphemes than "tense/aspect," which has been chosen for this thesis.

The second to last row of Table 18 shows a combination of two tense/aspect suffixes (**-dɛ-ki** 'Ipf-Perf') that have not been attested in this common independent verb form. But to complete the table, the combination is included here. Several examples of these two tense/aspect suffixes together can be found elsewhere in this thesis, as follows:

- 3.8.4: in a distant past construction
- 3.8.7: in combination with jussives and imperatives
- 3.8.8.1.1: on a medial verb
- 3.8.10.2.4: with a covert relativizer

The last row gives the "Distant Past" marker, which also does not occur in the common independent verb form. It is different from the other tense/aspect markers, in that it is always the last suffix attached to the verb. It is described more fully in 3.8.4.

Table 18. Tense/Aspect Suffixes

TENSE/ASPECT SUFFIXES	GLOSSES	PRIMARY DENOTATIONS
-∅	'PstPr'	Past (Present on Copulas)
-^{3}k[17]	'Pres'	Present
-^{3}i	'Fut'	Future
-dɛ	'Ipf'	Imperfective (Subtypes: Progressive and Habitual)
-ki	'Perf'	Perfect
-dɛ-ki	'Ipf-Perf'	Past Progressive
-tɛj	'DP'	Distant Past

[17] Credit goes to Keefer for determining that high tone on the root is associated with **-k** 'Pres' and **-i** 'Fut' (1969b:7).

The following sections will further describe each of the five tense/aspect morphemes that occur on the common independent verb form.

3.8.3.2.1 Past (Present on Copulas): -∅

The independent declarative verb without an overt tense/aspect marker is assumed to have a null tense/aspect marker. The basic meaning it conveys on action verbs is that of 'past' action. It conveys a 'present' state on copulas, so it is glossed as '**PstPr**' to cover both 'past' and 'present'. Examples of action verbs are given in (128) through (130).

(128) giɑm ɑsɑɸɑ tɨmɨɾt iː-g-is t'ɑgŋ sɑːt-k'ɑŋk tɛ-∅-go.
yesterday Asafa lesson house-In-Dat two o'clock-Inst go-**PstPr**-3SM
'Yesterday Asafa **went** to school at eight o'clock.'

(129) "jiɾ ʔŋ[3]-e-n it-oʃk-dɛ-ni?" jɛ gɛ-∅-gɛj.
what? 1S-do-DS 2P-call-Ipf-CQ that say-**PstPr**-3SF
' "What should I do [since] you(P) are calling?" she **said** that.'

(130) jɛ-kŋ t͡ʃoʃt ɛjk hiɑlm-∅ iʒ-ɨ-n gib-∅-o.
that-Gn1 after lion be_angry-SSO she-v-Ac2 chase-**PstPr**-3SM
'After that, [the] lion, being angry, **chased** her.'

When the copulas, **ti** 'BE' and **ki** 'ExBE' (existential be), lack an overt tense/aspect marker, 'present' is implied.

(131) giɑn-ɑ d͡ʒɛj-∅-z ti-∅-go.
coffee-Px be_good-CR-M BE-**PstPr**-3SM
'This is coffee that is good.'

(132) jɛtɨɾ-bɑb ti-∅-no.
weakness/tiredness-POM BE-**PstPr**-1S
'I am weak/tired.'

(133) iː k'ɑl-dɑ tɑmu ki-∅-niʃo.
house be_new-Rel ten ExBE-**PstPr**-3P
'There are ten new houses.'

The distant past construction is needed to convey the past state of these copulas in isolated sentences. This is described in 3.8.4.

Again, the assumption shown in examples (128) through (133) is that if the verb of the common independent declarative clauses does not have any of the overt tense/aspect morphemes, a null tense/aspect morpheme occupies that position. To simplify the presentation, this assumed null morpheme is not usually made explicit in the examples presented throughout this thesis.

3.8.3.2.2 Present: -k

The present is marked on action verbs with the suffix **-k**. In most words it is not possible to determine whether the /**ɨ**/ that most often follows /**k**/ is an epenthetic vowel or a part of the present morpheme. However, example (134a) suggests that the underlying form is **-k** and not **-kɨ**. As discussed in 3.8.3.1, when the '3SM' suffix immediately follows a vowel, it is realized as **-go** (or **-zo**). After a consonant it is realized as **-o**. If the present suffix were **-kɨ**, the form **-go** '3SM' should be present rather than the variant **-o** '3SM'. That unattested form is shown in (134b).

(134) a. jɛ-**k**-o
give-**Pres**-3SM
'he is coming'

b. *jɛ-**kɨ**-go
give-**Pres**-3SM
'he is coming'

This morpheme conveys that the action is being done in the present.

(135) etu gol-in ɑ^{2}-t'us-^{2}kŋ^{1}?
youS Amhara-language_of 2S-know-PresQ
'Do you(S) know Amharic?'

eː, inu gol-in iɑkɨz t'us-**k**-ɨ-no.
yes I Amhara-language_of very know-**Pres**-v-1S
'Yes, I know Amharic very well'

(136) kobu t'ɑgŋ-ɑke-s-n bɑːs-**k**-ɨ-no.
chicken two-Pl-Ac1-Ac2 want-**Pres**-v-1S
'I want two chickens.'

3.8.3.2.3 Future: -i

The suffix **-i** 'Fut' is used to communicate that something will happen in the future. The adverb for 'tomorrow' makes (137) an unambiguous case.

(137) biɑr sɛt͡s'iŋ-k tɛ-**i**-no.
tomorrow morning-InstIr go-**Fut**-1S
'Tomorrow I **will** go.'

Two other examples from texts illustrate this normal use of **-i** 'Fut':

(138) … wuŋgu-bɑb ɑm-**i**-niʃo.
thievery-POM become-**Fut**-3P
'… they **will** become (Masc) thieves.'

(139) kudu k'ɛj-dn-d-ɑ-s-is t'uk ɑm-dɛ-ki-∅ jɑːb
road work-Pass-Rel-Px-Ac1-Dat obstacle become-Ipf-Perf-CR person

ɑ[3]-ki-nt t͡s'ɑt͡s' iː-g wu-∅ t͡s'ɑs-tn-**i**-go.
3SM-ExBE-if tie house-In enter-SSO tie-Pass-**Fut**-3SM

'If there is a person who has been becoming an obstacle to the road work, entering the prison (tie house), he **will** be tied.'

An exception. One word form, **bɑːs-ɨ-s-i-go** 'want-v-Cau-**Fut**-3SM', has the **-i** tense/aspect marker, but is normally used in the present sense of 'it is necessary' or 'it needs'. It could in certain contexts mean 'it will be necessary', but that is definitely not its most common usage. Example (140) is from a behavioral text.

(140) sɑːg-ɨ-[3] kud-ɑ-s it-mɛt͡ʃ-ɨ-z bɑːs-ɨ-s-**i**-go.
God-v-Gn4 road-Px-Ac1 yourP-grab-v-Ger want-v-Cau-**Fut**-3SM
'Your(P) grabbing God's path is necessary. (You need to take hold of God's way.)'

This aberration is probably best explained as a borrowing of the following form from Amharic: **j-ɑs-fɛlːɨg-ɑl** '3SM-Cau-want-Imperfect[18] (it is necessary)' (Leslau 1967:105-8). Amharic's "imperfect" verb form covers both future and present. Amharic has no tense/aspect dedicated only to the present, as is Dizin's **-k** 'Pres'. The assumption is that when Amharic

[18] This is simplified; the vowels in the root and the gemination/lengthening of the middle consonant also belong to this "imperfect" form.

speakers came using their "future" tense/aspect for this construction, which is regularly used to convey current obligation, Dizin speakers adopted the construction and the present sense with it.

Given this example, other cases of the present use of **-i** 'Fut' should be sought.

3.8.3.2.4 Imperfective; Subtypes: Progressive and Habitual: -dɛ

The suffix **-dɛ** 'Ipf' marks imperfective tense/aspect. The most common meaning associated with **-dɛ** 'Ipf' is that of progressive action.

(141) ɛjk-ɨ-kɑ jɑtn-kɛnɑ-kŋki t͡sɛj tɛ-n t͡sɛj-ŋ gɛ-**dɛ**-no.
lion-v-& fox-both-Gn3 fable BE-DS tell_fable-Inf say-**Ipf**-1S
'It is a fable of both a lion and a fox that I am saying to tell a fable.'

(142) k'ɛjdn k'ɑl-∅-ɨ-z bɑːs-**dɛ**-no.
work be_new-CR-v-M search-**Ipf**-1S
'I am searching for a new job.'

Another meaning conveyed is that of habitual or repeated action.

(143) kiɾ-ɑ-s **t͡ʃim** kelt ɑ[2]-kes-dɑʔ eː, kiɾ-ɑ-s **t͡ʃim** kelt kes-**dɛ**-no.
rent-Px-Ac1 **every** time 2S-pay-IpfQ yes rent-Px-Ac1 **every** time pay-**Ipf**-1S
'Do you pay the rent **every** time? Yes, I pay the rent **every** time.'

3.8.3.2.5 Perfect: -ki

The suffix **-ki** 'Perf'[19] marks perfect tense/aspect. English translations of the Dizin perfect usually consist of the auxiliary verb "have" or "has", then the main verb in the past tense.

(144) et kɛj-kɑ t͡s'ɑbt-kɑ ʃub-kɑ t͡ʃɛnʃ-kɑ hel ʃoɾʃ-ɨ-**ki**-to.
youS Satan-& disease-& death-& sin-& all defeat-v-**Perf**-2S
'You **have defeated** Satan, disease, death, and sin, all [of them].'

(145) jɛ gɛdn iɑkɨz kiɛl gɛ-dn-**ki**-go.
that saying many time say-Pass-**Perf**-3SM
'That saying **has been said** many times.'

[19] In this thesis 'Perf' always stands for "perfect" and never "perfective." Perfective aspect is not marked by affixation in Dizin.

(146) ɑk k'ɛjdn hɑt ɑl-**ki**-no.
today work on/at stay-**Perf**-1S
'Today I **have stayed** at work.'

3.8.4 Affixes on Distant Past Independent Verbs

An independent verb form that is not as common as the one just described is referred to by Keefer as "distant past" (1969b:11), and that terminology is employed in this thesis as well. The morpheme unique to this construction, **-tɛj**, is given the abbreviated gloss 'DP'. This word form involves the proclitic that marks the person, number and gender; the root; either none or one or both of the tense/aspect markers **-dɛ** 'Ipf' and **-ki**, 'Perf'; and the suffix **-tɛj** 'DP'. This can be summarized as:

Distant Past Independent Verb -> PNG (…) verb_root (tense/aspect) **-tɛj**

The person, number, and gender proclitics have been shown in Table 10. The optional tense/aspect markers **-dɛ** 'Ipf' and **-ki** 'Perf' were introduced in 3.8.3.2.4 and 3.8.3.2.5, respectively. The final suffix in this construction is **-tɛj** 'DP'.

(147) ɑstɛmɑɾi **ʔŋ^{2}-ti-tɛj**.
teacher **1S-BE-DP**
'I was a teacher.'

(148) ɑ-kiɛl-e hudu **ɑ^{3}-ti-ki-tɛj**.
theM-day-Ds Sabbath **3SM-BE-Perf-DP**
'That day was the Sabbath.'

(149) ɨz ɛsi ɨz-kŋ hɑdɑ-kŋki sɑːg iː-s-is tɛ-n **ɑ^{3}-gɛ-dɛ-tɛj**.
he but he-Gn1 body-Gn3 God house-Ac1-Dat BE-DS **3SM-say-Ipf-DP**
'But it was concerning his body's house of God that he was speaking. (But he was speaking about the temple of his body.)'

(150) ɑ^{3}-tɛmɑɾ-e-ke i͡ts **ɨʃ-**huɾ-ŋ gɛ-∅ kɑtɛm-s **tiɛ-ki-tɛj**.
his-student-Ds-P food **3P-**buy-Inf say-SSO town-Ac1 **go_to-Perf-DP**
'His disciples had gone to town in order to buy food.'

(151) … **ɨʃ**-jɛ-∅ ɨz-k'ɑŋk **gɛ-s-ɨ-sɨm-dɛ-ki-tɛj**.
3P-come-SSO he-Inst **say-Cau-Recip-Ipf-Perf-DP**
'… they came and were conversing with him.'

(152) ɑː-e bɛj duŋg-e-ke ɑj-ɑ-kŋ zig-ɨ-t **iʃ-kɑs-dɛ-ki-tɛj**.
this-Ds monkey foolish-Ds-Pl water-Px-Gn1 edge-v-Loc **3P-play-Ipf-Perf-DP**
'Those foolish monkeys were playing at the edge of the water.'

As will also be seen in other constructions, the person, number, and gender proclitics do not always attach to the main verb, but can attach to other words earlier in the sentence. Two examples of these appearing separate from the main verb are in (150) and (151). The placement of these PNG proclitics needs to be investigated further.

3.8.5 The Suffix on Negated Lexical Verbs

In this section the verbal suffix **-ti** 'Ng' is presented. This suffix only occurs on the lexical verb of the independent declarative negative clause. Since **nɑn** 'Neg' is considered what John Payne (1985:212) calls an "auxiliary negative verb," that word and its suffixes are discussed further in 3.10.

(153) t͡sʼɑbt-bɑb-ɑ **nɑn-ɑ[3]** kʼut-**ki-ti**.
illness-POM-Px **Neg-3SM** get_well-Perf-**Ng**
'The sick man has not gotten well.'

(154) i-bɑːb-kɑ, i-koj-kɑ, iːbjɑːb-e **nɑn-iʃ** sɑːg-ɨ-[3] dɑd jɛsus
her-father-& her-mother-& family-Ds **Neg-3P** God-v-Gn4 child Jesus

kɾɨstos-n kob-ɨ-ki-∅ jɑːb **ti-ti.**
Christ-Ac2 receive-v-Perf-CR person **BE-Ng**

'Her father and mother, those in that family are not people who have received God's child Jesus Christ.'

An alternate analysis would be to consider **nɑn** and the PNG affixes after it to both be proclitics. This analysis is reflected in the examples that follow. These are the same sentences that were provided in (153) and (154).[20]

(155) t͡sʼɑbt-bɑb-ɑ **nɑn-ɑ[3]**-kʼut-**ki-ti**.
illness-POM-Px **Neg-3SM**-get_well-Perf-**Ng**
'The sick man has not gotten well.'

[20] Tamirat used the term "negative word" (1988:12) to describe **nɑn**, instead of "auxiliary negative verb." Most importantly, he did not analyze it as an affix.

(156) i-baːb-kɑ, i-koj-kɑ, iːbjɑːb-e **nɑn-iʃ**-sɑːg-ɨ-[3] dɑd jɛsus
her-father-& her-mother-& family-Ds **Neg-3P**-God-v-Gn4 child Jesus

kɾɨstos-n kob-ɨ-ki-∅ jɑːb **ti-ti.**
Christ-Ac2 receive-v-Perf-CR person **BE-Ng**

'Her father and mother, those in that family are not people who have received God's child Jesus Christ.'

An argument in favor of the proclitic analysis for **nɑn** is that it behaves much like the common cases of the PNG proclitics, in that it is mobile, instead of always occurring next to the lexical verb.

An argument in favor of the auxiliary negative verb analysis is that mother tongue speakers usually favor writing nɑn 'Neg' and the PNG marker that follows it as a separate word, especially when it is not adjacent to the lexical verb.

3.8.6 Affixes on Verbs of Interrogative Clauses

All questions are characterized by the absence of a PNG suffix, and the presence of a PNG proclitic instead.

Content questions ("wh-questions") are formed with question words like **ɑjs** 'how?/how_many?', **jiɾ** 'what?', **nɑŋg** 'where?', and so forth. The common PNG proclitic is employed, and after the verb root, the tense/aspect marker occurs, followed by the suffix **-ni** 'CQ' (for 'Content Question').

(157) t͡ʃɑkl-ɑ-s **ɑjs** biɾ-k **ɑ[2]-huɾ-i-ni**?
chair-Px-Ac1 **how_many?** *birr*-InstIr **2S**-buy-**Fut-CQ**
'With how many *birr*[21] will you(S) buy the chair?'

(158) **jiɾ** **ɑ[2]**-baːs-**dɛ-ni**? k'ɛjdn k'ɑl-∅-ɨ-z baːs-dɛ-no.
what? **2S**-seek-**Ipf-CQ** work be_new-CR-v-M seek-Ipf-1S
'What are you seeking? I am seeking a new job.'

(159) **nɑŋg** **ɑ[2]**-tiɛ-**k-ɨ-ni**? ʔŋ[2]-dɑmoz-ɑ tɛ-n kob-m tiɛ-k-ɨ-no.
where? **2S**-go-**Pres-v-CQ** 1S-salary-Px BE-DS receive-Inf go-Pres-v-1S
'Where are you going? It is my salary that I am going to receive.'

[21] Ethiopian currency.

Yes/no questions (polar questions) are formed by the common PNG proclitic and a question suffix after the verb root. These suffixes correspond with the five tense/aspect markers shown in the final column of Table 19.

Table 19. Yes/No Question Suffixes, With Tense/Aspect

YES/NO QUESTION SUFFIXES	GLOSSES	CORRESPONDING TENSE/ASPECT SUFFIXES
-ŋ	'PstPrQ' (Past Question; Present on Copulas)	**-∅** 'PstPr'
-^{2}kŋ^{1}	'PresQ' (Present Question)	**-k** 'Pres'
-i	'FutQ' (Future Question)	**-i** 'Fut'
-dɑ	'IpfQ' (Imperfective Question)	**-dɛ** 'Ipf'
-^{1}kŋ^{1}	'PerfQ' (Perfect Question)	**-ki** 'Perf'

In (160) through (164) one example of each of the tense/aspect markers is given, with both a question and its answer, so that the correspondence is clear. The present and perfect are only distinguished by tone, as reported by Keefer (1969b:9).

(160) ʔŋ^{2}-kɑmil iɑgn-eni et-n **i**-hoː-s-**ŋ**?
my-vehicle old-Fem youS-Ac2 3SF-rest-Cau-**PstPrQ**
'Did my old car help you?'

eː, ɑ^{2}-kɑmil iɑgn-eni in-n hoː-s-∅-**e**.
yes yourS-vehicle old-Fem me-Ac2 rest-Cau-**PstPr-3SF**
'Yes, your(S) old car helped me.'

(161) etu gol-in **ɑ^{2}**-t'us-**^{2}kŋ^{1}**?
youS Amhara-language_of **2S**-know-**PresQ**
'Do you(S) know Amharic?'

eː, inu gol-in iɑkɨz t'us-**k**-ɨ-**no**.
yes I Amhara-language_of very know-**Pres**-v-**1S**
'Yes, I know Amharic very well.'

(162) giɑn-ɑ-kɑ ug-ɑ-kɑ k'ɑb **ɑ³**-k'ez-**i**?
coffee-Px-& milk-Px-& quickly **3SM**-become_hot-**FutQ**
'Will the coffee and milk become hot quickly?'

eː, giɑn-ɑ-kɑ ug-ɑ-kɑ k'ɑb k'ez-**i**-**go**.
yes coffee-Px-& milk-Px-& quickly become_hot-**Fut-3SM**
'Yes, the coffee and milk will become hot quickly.'[22]

(163) kiɾ-ɑ-s t͡ʃim kelt **ɑ²**-kes-**dɑ**? eː, kiɾ-ɑ-s t͡ʃim kel-t kes-**dɛ**-**no**.
rent-Px-Ac1 every time **2S**-pay-**IpfQ** yes rent-Px-Ac1 all time-Loc pay-**Ipf-1S**
'Do you pay the rent every time? Yes, I pay the rent every time.'

(164) ít͡s-ɑ **ɑ³**-mɑm-[1]**kŋ¹**? eː, ít͡s-ɑ mɑm-**ki**-**go**.
food-Px **3SM**-be_prepared-**PerfQ** yes food-Px be_prepared-**Perf-3SM**
'Has the food been prepared? Yes, the food has been prepared.'

We saw previously that **-∅** 'PstPr' signals past on action verbs and present on the copulas. In the same way, **-ŋ** 'PstPrQ', signals past on action verbs and present on the copulas. Example (165) illustrates the use of the normally past question marker when present is intended.

(165) ɑː-ke mɛt͡s'ɑɸ d͡ʒɛj-∅-z **iʃ-ti-ŋ**?
this-Pl book be_good-CR-M **3P-BE-PstPrQ**
'Are these books ones which are good?'

eː, ɑː-ke mɛt͡s'ɑɸ d͡ʒɛj-∅-z **ti-∅-niʃo**.
yes this-Pl book be_good-CR-M **BE-PstPr-3P**
'Yes, these books are ones which are good.'

The copula has a different irregular form for third person singular masculine. It has no PNG prefix, and **-j** 'FutQ' is suffixed to **tɛ**, an allomorph of **ti** 'BE'. The sense is present, again. Because of syllable structure **-i** 'FutQ' is syllabified as a glide.

(166) [**tɛj**]
izu jɑːb d͡ʒɛj-∅-z **tɛ-i**?
he person be_good-CR-M **BE-FutQ**
'Is he a person who is good?'

[22] The noun phrase is plural but the verb agreement is singular. This suggests that "coffee and milk" is thought of as a single item.

3.8.7 Affixes on Imperative and Jussive Verbs

The affixes that attach to positive imperative and jussive verbs are shown in this section. One or two suffixes are required for each of these forms, but the PNG proclitics are only needed for the jussives.

Table 20. Positive Imperative and Jussive Word Forms

PNG	Underlying Representation	Surface Representation	Gloss	Translation
3MS	**ɑ^{3}-**bɑːs^{1}-**gɑ^{1}**	[ʔɑ^{3}.bɑː^{1}.sɑ^{1}]	3SM-want-Jus	'let him want'
3FS	**i^{3}-**bɑːs^{1}-**gɑ^{1}**	[ʔi^{3}.bɑː^{1}.sɑ^{1}]	3SF-want-Jus	'let her want'
2S	bɑːs^{1}-**ŋ^{1}**	[bɑː^{1}.sɨn^{1}]	want-v-Imp	'want! (Sg)'
1S	**ʔŋ^{2}-**bɑːs^{1}-**gɑ^{1}**	[ʔm̩^{2}.bɑː^{1}.sɑ^{1}]	1P-want-Jus	'let me want'
3P	**iʃ^{3}-**bɑːs^{1}-**gɑ^{1}**	[ʔiʃ^{3}.bɑː^{1}.sɑ^{1}]	3P-want-Jus	'let them want'
2P	bɑːs^{1}-**ŋ^{1}-^{2}ti^{1}**	[bɑː^{1}.sɨn^{2}.ti^{1}]	want-v-Imp-PImp	'want! (Pl)'
1P	**ʔŋ^{3}-**bɑːs^{1}-**gɑ^{1}**	[ʔm̩^{3}.bɑː^{1}.sɑ^{1}]	1P-want-Jus	'let us want'
2Pol	bɑːs^{1}-**ŋ^{1}-dɛj**	[bɑː^{1}.sɨn^{2}.dɛj^{1}]	want-v-Imp-PolImp	'want! (Polite)'

The suffix that marks both a singular and plural command is analyzed as **-ŋ** 'Imp', since the velar version of the nasal occurs after vowels, if no suffix follows it. An example is [**wuŋ**] 'enter! (Sg)'. The allomorphs **-n** and **-m** are described later in this section. Two suffixes can attach to 'Imp', though not at the same time: **-ti** 'PImp' (Plural Imperative) and **-dɛj** 'PolImp' (Polite Imperative).

(167) jin-ɨ-kojs jɛ-**n-ti**.
I-v-All come-**Imp-PImp**
'Come(P) to me!'

(168) ʔn^{2}-zuɾ-ɑ-s-e "e" koj-**n-dɛj**.
my-relative-Px-Ac1-Voc yes say-**Imp-PolImp**
'My relative, say "yes." '

As stated previously, **-ŋ** is analyzed as the underlying form of the imperative marker. Two variants, [**m**] and [**n**], are seen in the "Surface Form" column of Table 21. The velar

nasal is analyzed as the underlying form because it occurs whenever no adjacent consonant is present to influence its point of articulation, as in (a). When only one adjacent consonant is present to provide influence, as seen in examples (b), (c), (g), (i), etc., **-ŋ** assimilates to the point of articulation of that adjacent consonant. However, a conflict sometimes occurs when the plural imperative suffix **-ti** is attached after **-ŋ**. These conflicts are seen in (d), (f), (l), (n), (p) and (r). In all but one of these cases, the influence of the preceding consonant is stronger than the influence of the /**t**/ that follows it. The exception is shown in (l) where the influence of the preceding fricative /**ɸ**/ is not as strong as the influence of the following stop, /**t**/.

Table 21. Imperative Nasal Assimilation

	Underlying Form	Surface Form	Gloss	Translation
a.	wu-**ŋ**	[wu**ŋ**]	enter-Imp	'enter! (Sg)'
b.	wu-**ŋ**-ti	[wu**n**.ti]	enter-Imp-PImp	'enter! (Pl)'
c.	ɑk-**ŋ**	[ʔɑkˀ.ʔ**ŋ̣**]	gather-Imp	'gather! (Sg)'
d.	ɑk-**ŋ**-ti	[ʔɑkˀ.ʔ**ŋ̣**.ti]	gather-Imp-PImp	'gather! (Pl)'
e.	tik**ŋ**-**ŋ**	[tikˀ.ʔ**ŋ̣ː**]	hiccup-Imp	'hiccup! (Sg)'
f.	tik**ŋ**-**ŋ**-ti	[tikˀ.ʔ**ŋ̣ː**ti]	hiccup-Imp-PImp	'hiccup! (Pl)'
g.	ɑl-**ŋ**	[ʔɑ.l**ɨn**]	stay-Imp	'stay! (Sg)'
h.	ɑl-**ŋ**-ti	[ʔɑ.l**ɨn**.ti]	stay-Imp-PImp	'stay! (Pl)'
i.	jin-**ŋ**	[jin**ː**]	kiss-Imp	'kiss! (Sg)'
j.	jin-**ŋ**-ti	[jin**ː**.ti]	kiss-Imp-PImp	'kiss! (Pl)'
k.	ɑɸ-**ŋ**	[ʔɑ.ɸ**ɨm**]	look-Imp	'look! (Sg)'
l.	ɑɸ-**ŋ**-ti	[ʔɑ.ɸ**ɨn**.ti]	look-Imp-PImp	'look! (Pl)'
m.	kob-**ŋ**	[kobˀ.ʔ**m̥**]	take-Imp	'take! (Sg)'
n.	kob-**ŋ**-ti	[kobˀ.ʔ**m̥**.ti]	take-Imp-PImp	'take! (Pl)'
o.	t'ɑg**ɨ**m-**ŋ**	[t'ɑg**ɨ**m**ː**]	repeat-Imp	'repeat! (Sg)'
p.	t'ɑg**ɨ**m-**ŋ**-ti	[t'ɑg**ɨ**m**ː**ti]	repeat -Imp-PImp	'repeat! (Pl)'
q.	ʔm-**ŋ**	[ʔm̥**ː**]	eat-Imp	'eat! (Sg)'
r.	ʔm-**ŋ**-ti	[ʔm̥**ː**ti]	eat-Imp-PImp	'eat! (Pl)'

In the same way that **-go** '3SM' is reduced to **-o** following a vowel (described in 3.8.3.1), the jussive suffix **-gɑ** 'Jus' is reduced to [**ɑ**] following a consonant. To state it another way, the /**g**/ that begins 'Jus' is deleted after a consonant.

(169) ʔn^{2}-zuɾ-ɑke ʃojt ɑ^{3}-kojs ʔŋ^{3}-jɛ-**gɑ**.
my-relative-Pl all him-All 1P-come-**Jus**
'My relatives, **let** us all come to him.'

(170) [ʔiː.gɑt ʔŋ̣^{3}.ɑ.l**ɑ** …]
iː-g-ɑ-t ʔŋ̣^{3}-ɑl-**gɑ** …
house-In-Px-Loc 1P-stay-**Jus**
'**Let** us stay inside this house …'

The negative imperative and jussive forms all have the PNG proclitics, which also occur on other constructions. This is shown in Table 10, p. 53. After the verb root, the suffix **-is** 'NgIJ' (for 'Negative Imperative/Jussive') attaches. Examples are shown in Table 22.

Table 22. Negative Imperative and Jussive Word Forms

PNG	Underlying Representation	Gloss	Translation
3MS	**ɑ³-**bɑːs-**is**	**3SM**-want-**NgIJ**	'may he/it not want'
3FS	**i³**-bɑːs-**is**	**3SF**-want-**NgIJ**	'may she not want'
2S	**ɑ²**-bɑːs-**is**	**2S**-want-**NgIJ**	'may you(S) not want'
1S	**ʔŋ²-**bɑːs-**is**	**1S**-want-**NgIJ**	'may I not want'
3P	**iʃ³**-bɑːs-**is**	**3P**-want-**NgIJ**	'may they not want'
2P	**it-**bɑːs-**is**	**2P**-want-**NgIJ**	'may you(P) not want!'
1P	**ʔŋ³**-bɑːs-**is**	**1P**-want-**NgIJ**	'may we not want'

Example (171) illustrates the negative imperative.

(171) izu jɑːb d͡ʒɛj-∅-z tɛ-jʔ kɑːj, iz-ɨ-n **ɑ²-**jɑb-**is**.
he person be_good-CR-M BE-PstPrQ no he-v-Ac2 **2S**-believe-**NgIJ**
'Is he a person who is good? No, do not believe him.'

Example (172) illustrates the negative jussive (adapted from Tamirat 1988:19).

(172) **ʔŋ³**-wuŋg-**is**.
1P-steal-**NgIJ**
'Let us not steal.'

Examples (173b) and (174b) show the common construction in which the PNG proclitic moves forward and appears on **e-dɛ-ki** 'do-Ipf-Perf', immediately preceding the lexical verb of the clause, which now has no PNG marking. This lexical verb does take the normal negative imperative and jussive suffix, **-is**. The semantics of this construction are not completely understood, but the construction likely intensifies the prohibition of the command and the wish of the jussive.

Examples (173a) and (174a) show the question form of the jussive. It consists of one of the PNG proclitics, the main verb, and the suffix **-ɛj** 'JusQ'.

(173) a. suk'u-bɑb-ɑ-s-is kiɾ-ɑ-s **ʔŋ³**-kes-**ɛj**?
shop-POM-Px-Ac1-Dat rent-Px-Ac1 **1P**-pay-**JusQ**
'**Should** we pay the rent to the store owner?'

b. kɑːj, suk'u-bɑb-ɑ-s-is kiɾ-ɑ-s **it-e-dɛ-ki** kes-**is**.
no shop-POM-Px-Ac1-Dat rent-Px-Ac1 **2P-do-Ipf-Perf** pay-**NgImp**
'No, **do not** pay the owner of the store.'

(174) a. dɑd-ɑ-ke tɛmɑɾi iː-g tɛ-dn **iʃ**-gɑ͡ts-**ɛj**?
child-Px-Pl student house-In go-Inf **3P**-begin-**JusQ**
'**Should** the children begin to go to school? (**Should** the children be enrolled in school?)'

b. kɑːj, dɑd-ɑ-ke tɛmɑɾi iː-g tɛ-dn **iʃ-e-dɛ-ki** gɑ͡ts-**is**.
no child-Px-Pl student house-In go-Inf **3P-do-Ipf-Perf** begin-**Jus**
'No, **may** the children **not** begin to go to school. (No, the children **should not** be enrolled in school.)'

3.8.8 Affixes on Dependent Verbs

This section presents the affixes that appear on five different dependent verb forms: the medial verbs, the infinitives, the gerund, the conditional verb and the temporal verb. These are called dependent verb forms because they must occur in conjunction with a separate independent verb in order to be grammatical.

3.8.8.1 Affixes on Medial Verbs

Before presenting the affixes that occur on what will be called medial verbs, some background will be given. It is clear that a number of Omotic languages have similar dependent[23] clause constructions. One of these types of medial constructions includes a morpheme that marks a change in the subjects of the connected clauses. The terminology chosen by researchers has not been consistent.

[23] Christian Rapold labels these constructions in Benchnon "co-subordinate verbs" (2005, personal communication), instead of "dependent" or "subordinate." This warrants further attention.

Keefer (1969b:10) used the term "participle" for this construction in Dizin, as did Breeze (1990:27) for Benchnon. The term "converb" has been employed by Adams (1983) for Wolaitta, by Hayward (1992) for Korette (Koyra), and Azeb (2001:190) for Male. Christian Rapold (2005, personal communication) has chosen the label "medial verb" in his analysis of Benchnon.

Thomas Payne writes a few pages relevant to this discussion under the heading: "Clause chaining, medial clauses, and switch reference" (1997:321). Since my Dizin data correspond so well with what Payne describes, I will be using "medial verb" to label these Dizin constructions.

Payne defines a clause-chaining language as one "that employs sequences of medial clauses completed by a final clause as a major discourse-structuring device" (1997:321).[24] He goes on to say that a "prototypical **switch-reference** system is verbal inflection that indicates whether the subject of the verb is coreferential with (i.e., the same as) the subject of some other verb" (1997:322). The data in this section (as well as in the rest of this chapter and especially in Appendix A) will illustrate that Dizin is prototypical with regard to clause chaining, medial clauses, and switch reference.

3.8.8.1.1 'Different Subject' Constructions

The different subject or switch reference marker, **-n** 'DS', only occurs in medial clause constructions. This switch reference morpheme signals that the following verb has a different subject.

Examples of medial verb constructions that have no affixation besides **-n** 'DS' are given in (175) through (179).

[24] "Independent" is the term used in this thesis, instead of "final."

(175) in-kŋ ɑːb **t͡s'ɑbt-n** jɛ-nno.
we-Gn1 eye **be_sick-DS** come-1P
'Our eyes **being sick**, we came. (Since our eyes are sick, we came [to the hospital].)'

(176) ɑ^{3}-gɛ-∅ **tɑ-n** t͡ʃɑk bɑŋgɨr-∅ tɛ-∅-go.
3SM-say-SSO **give-DS** again return-SSO go-PstPr-3SM
'He [the lion] telling [the fox], **giving** [an invitation], [the fox] returning again he went.'

(177) ɑ^{3}-bɑŋgɨr-∅ **tɛ-n** t͡ʃɑk so t͡ʃon-t i-jɛ-dɑ-d-ɑ gɑnt
3SM-return-Imp **go-DS** again up middle-Loc 3SF-come-Ipf-Rel-Px like

so t͡ʃon-t jɛ-∅-ge.
up middle-Loc come-PstPr-3SF

'Returning, he **went**, again like this one that comes up to the middle [of the sky] she [the sun] came up to the middle [of the sky].'

A very common use of the different subject morpheme is to suffix onto the copula, which is an irregular form, **tɛ**, an allomorph of **ti**. This results in a cleft construction that adds focus, in this case, to the object, as shown in (178).

(178) ʔŋ^{2}-dɑmoz-ɑ **tɛ-n** kob-m tiɛ-k-ɨ-no.
my-salary-Px **BE-DS** receive-Inf go-Pres-v-1S
'**It is** my salary that I am going to receive.'

An adverbial phrase can also be put into focus by means of this copula, with the different subject morpheme, as shown in (179).

(179) sog-ɨ-t sɛt͡s'in-t **tɛ-n** k'ɛj-dɛ-no.
sleep-v-Loc morning-Loc **BE-DS** wake_up-Ipf-1S
'**It is** in the morning that I wake up (regularly) from sleep.'

Further, a PNG prefix can occur on the verb that has **-n** 'DS' suffixed to it, but this is not as common. This construction is illustrated in (180) and (181).

(180) wɛk iʒ-kŋ hel-t **ɑ^{3}-tiɑɸ-n** niɑt͡s'-k-ɨ-no gɛ-∅ t'uh-∅
down she-Gn1 chest-Loc **3SM-drip-DS** lick-Pres-v-1S say-SSO burst-SSO

ʃub-∅-ɛj; jɛ gɛ-dn-dɛ-go.
die-PstPr-3SF that say-Pass-Ipf-3SM

'**It** [**the milk**] **dripped** down onto her chest and [she] saying, "I am licking (it)" (trying to lick it) bursting, she died; that is said.'

(181) "jiɾ **ʔŋ³-e-n** it-oʃk-dɛ-ni?" jɛ gɛ-∅-gɛj.
what? **1S-do-DS** 2P-call-Ipf-CQ that say-PstPr-3SF
' "What should I do [since] you(P) are calling?" she said that.'

Also less common are tense/aspect markers appearing in conjunction with **-n** 'DS'. In examples (182) and (183) the present morpheme, **-k**, suggests that the going and running has just begun.

(182) ʔŋ³-gab ɑ:j-ɑ-s k'ɛj-∅ ho:t͡s-∅ ɨʃ-baŋgɨɾ-∅ gujs
1P-together water-Px-Ac1 work-SSO finish-SSO 3P-return-SSO down

kɑtɑm-s **tiɛ-k-ɨ-n** ɛs kɑmil-eni ku-t boɾk-∅ wut-ɛj.
town-Ac1 **go_to-Pres-v-DS** furthermore vehicle-Fem road-Loc roll-SSO fall-3SF

'After we worked on the water together and finished, they were returning, **going** down to town, and the pickup, rolling on the road, fell.'

(183) wuŋg-ɨ-bɑb-ɑ **ɑ³-hiɑt-k-ɨ-n** kotɛbɑb-ɑ mɛt͡ʃ-o.
theivery-v-POM-Px **3SM-run-Pres-v-DS** guard-Px catch-3SM
'As the thief began to run, the guard caught him. (When the thief took off running, the guard grabbed him.)'

Example (184) has the combination **-dɛ-ki** '-Ipf-Perf', which we saw before on the distant past clause. This combination denotes past progressive action.

(184) ɨz-kɑ ku-t **ɑ³-in-dɛ-ki-n** ɑ³-bɑɾn-e-ke ɨz-k'ɑŋk kiɛm-∅
he-&[25] way-Loc **3S-go-Ipf-Perf-DS** his-slave-Ds-Pl he-Inst meet-SSO

"ɑ²-dɑdɑ k'ut-n-ki-go" gɛ-∅ ɨz-s-is ge-niʃo.
yourS-child be_healed-Pass-Perf-3SM say-SSO he-Ac1-Dat say-3P

'And while he **was going** on the way, his slaves met him, and they reported to him, saying, "Your child has been healed." '

3.8.8.1.2 The 'Same Subject Succession' Construction

A very common morpheme is the medial verb marker **-tɛj** 'SSS'. It is given the gloss, 'Same Subject Succession', because it signals that the subject of the following verb will stay

[25] This example is from an unchecked draft of scripture, and the use of a single **-kɑ** '&' for "and" in the source text is likely not natural. It will be checked.

the same, and it denotes succession. In other words, the action of the following verb occurs after the action of the marked verb. The word 'then' is often useful in a translation.

(185) jɑːb ɑ^{3}-bɑːb-k koj-kɑ **tiɾ-tɛj** ɑ^{3}-bɑːni-k'ɑŋk
man his-father-& mother-& **leave-SSS** his-wife-Inst

t'i͡ts'-ɨ-sɨm-i-go.
be_attached-v-Recip-Fut-3SM

'A man **leaves** his father and mother, **then** he will become attached together with his wife.'

(186) dɑd-ɑ ɑ^{3}-i͡ts-ɑ-s ʔm-∅ ugu **bɛj-tɛj** kɑɾ tamɑɾi
child-Px his-food-Px-Ac1 eat-SSO milk **drink-SSS** to student

iː-g-is bɑŋgɨɾ-o.
house-In-Dat return-3SM

'The child, having eaten his food and **drunk** milk, returned to school. ('The child, ate his food and drank his milk, **then** returned to school.)"

Unlike the other two medial verb markers, the 'Same Subject Succession' morpheme has not yet been attested co-occurring with other suffixes or the PNG proclitics. This apparent constraint should be researched further.

3.8.8.1.3 'Same Subject Overlap' Constructions

A very common form of the medial verb has no segmental affixes at all. This is analyzed as the verb root followed by a covert suffix for "same subject overlap": -∅ 'SSO'. This form signals that the subject of the following verb will stay the same, and it denotes that the action of the following verb overlaps in time with the action of the marked verb. The word 'while' is often useful in translations.

A common construction has no overt affixation on the verb root.

(187) jɛ-kŋ t͡ʃoʃt ɛjk **hiɑlm-∅** iʒ-n gib-o.
that-Gn1 after lion **be_angry-SSO** she-Ac2 chase-3SM
'After that, the lion **being angry**, chased her.'

(For comparison: **hiɑlm-o** 'be_angry-3SM / he was angry')

(188) ɑ^{3}-kodn-ɑ-s hel **kob-∅** tɛ-go.
his-thing-Px-Ac1 all **carry-SSO** go-3SM
'He went, **carrying** all his things.'

(For comparison: **kob-o** 'carry-3SM / he carried')

(189) boz-ɑ kiɛl-t ʔŋ^{3}-tiɛ-kɨst mugu-∅ **bɛj-∅** **ɑɸt-∅**
wedding-Px day-on 1P-go-when beer-Ac3 **drink-SSO** **be_intoxicated-SSO**

ɛj **ɛj-∅** te-gɑ.
dance **dance-SSO** go-Jus

'When we go on the wedding day, let us go drinking beer, being intoxicated, and dancing a dance.'

(190) … **bɑŋgɨrs-∅** tɑt͡ʃ-ɨ-tɑ kɑr saːg-ɨ-kojs jɛ-gɑ.
return-SSO change-v-ID1 to God-v-All come-ID2
'… returning, change and come to God.'

A PNG prefix can occur on the verb that has -∅ 'SSO' suffixed to it, as (191) through (193) illustrate:

(191) **ɑ^{3}-gɛ-∅** tɑ-n t͡ʃɑk bɑŋgɨr-∅ tɛ-∅-go.
3SM-say-SSO give-DS again return-SSO go-PstPr-3SM
'He [the lion] **telling** [the fox], giving [an invitation], [the fox] returning again he went.'

(192) … **ɨʃ-jɛ-∅** ɨz-kˈɑŋk gɛ-s-ɨ-sɨm-dɛ-ki-tɛj.
3P-come-SSO he-Inst say-Cau-Recip-Ipf-Perf-DP
'… **they came** and were conversing with him.'

(193) ... utn wɛkɑ bolu tokŋ-e-g und **ɑ^{3}-kɑrs-∅**
rat below tree_species hole-Ds-In in_the_past **3SM-carve/chew-SSO**

mɑm-s-d-iɛ-g ɨz-ɨ-g gus koʃkoʃ kˈiɑ-∅ tɛ-n; ...
be_ready-Cau-Rel-Ds-In it-v-In down quickly leave-SSO go-DS

'... and the rat went down the hole that he had prepared by chewing before and went down it, quickly leaving and going; ...'

3.8.8.2 Affixes on Infinitive Verbs

The form of the Dizin verb that is best translated as "to ____" will be called an infinitive. Dizin verbs can be divided into two general classes. One class takes infinitive affixation with no segmental marking, though the tone pattern is significant. The other class

takes an overt suffix that is usually a stop followed by a nasal or a nasal by itself. Some of the variation can be predicted phonologically, but at this point not all of it can. It is probable that further study of tone patterns, or some other feature of these verbs, would explain more of the variation.

A very common form of the Dizin infinitive has no segmental marking.

(194)

a. tiɾ-∅	b. jɑt͡s-∅	c. k'ol-∅
throw-**Inf**	winnow-**Inf**	beg-Inf
'to throw'	'to winnow'	'to beg'

The most common of the segmentally marked infinitive forms is the suffix **-kŋ** 'Inf'.

(195)

a. ɑj-**kŋ**	b. deb-**kŋ**	c. k'ɑt͡ʃ'-**kŋ**
spend_the_night-**Inf**	hit-**Inf**	knock-**Inf**
'**to** spend the night'	'**to** hit'	'**to** knock'

The suffix **-dn** 'Inf' only occurs after a verb root that ends with a vowel or a glide.

(196)

dɑd-ɑ-ke	tɛmɑɾi	iː-g	tɛ-**dn**	iʃ-gɑt͡s-ɛj?
child-Px-Pl	student	house-In	go-**Inf**	3P-begin-JusQ

'Should the children begin **to** go to school?'

However, the form **-kŋ** 'Inf' is also possible after a root that ends in a vowel or glide. Example (197) illustrates this for a glide:

(197)

… giɑn	bɛ**j-kŋ**	ɑɾk-ɨ-s-ki-go.
coffee	drink-**Inf**	be_prohibited-v-Cau-Perf-3SM

'… (he) has made it prohibited **to** drink coffee.'

A single nasal segment **-ŋ** 'Inf' also occurs. Example (198) shows this after a vowel. This segment assimilates to the place of articulation of any consonant that it immediately follows, as (199) and (200) illustrate.

(198)

kɛ	bɑːb-e-kɑ	iː-b	jɑːb-e-ke-kŋ	t͡ʃon-g	k'oj
furthermore	father-Ds-&	house-Loc	person-Ds-Pl-Gn1	heart-In	one

k'oj-dɑ	kɑɾ	saːg	kojs	jɛ-ŋ	bɑːs-dɛ-niʃo.
be_one-Rel	to	God	to	come-**Inf**	want-Ipf-3P

'Furthermore the father and some of the family want **to** come to God.'

(199) ɑ. hurɾ**t-n** b. int͡ʃ**-n** c. diz-in tɑmɨɾ**-n** bɑs-dɛ-no.
leave-**Inf** collect_firewood-**Inf** Dizi-lg_of learn-**Inf** want-Ipf-1S
'**to** leave' '**to** collect_firewood' 'I want **to** learn Dizin,'

(200) jin-kojs ɑ[2]-jɛ-nt jɛt-n ko**b-m** gɛ[26] mɑm-k-ɨ-no.
I-All 2S-come-if youS receive-**Inf** Purpose be_ready-Pres-v-1S
'If you(S) come to me I am ready **to** receive you(S).'

More elicitation and processing will provide a better understand the variety of ways that the infinitive is marked.

3.8.8.3 Affixes on Gerunds

A construction similar to the infinitive in meaning is analyzed as a gerund. It is best translated as "____-ing." The PNG prefix always appears on this construction, along with the suffix **-z** 'Ger'.

(201) sɑgu ʃun ti-go; ɨz-is guɸ-ŋ-ki-d-e-ke ʃun-k'ɑŋk-ɨ-kɑ
God spirit BE-3SM he-Dat worship-??-Perf-Rel-Ds-Pl spirit-Inst-v-&

jɛʃu-k'ɑŋk-ɨ-kɑ ɨz-is **iʃ-guɸ-ɨ-z** bɑs-ɨ-s-i-go.
truth-Inst-v-& he-Dat their-worship-v-Ger want-v-Cau-Fut-3SM

'God is a spirit; those who worship him, **their worshipping** needs to be by spirit and by truth'

(202) jɛ-s-is ʃɨgŋ ʃɨgŋ **ʔŋ[3]-jɛ-z** nɑ-n[3] t͡ʃɑl-i-ti.
that-Ac1-Dat quickly quickly **our-come-Ger** Neg-1P be_able-Fut-Ng
'… therefore we are not able [to do] **our coming** quickly.'

(203) ɑ[3]-sɑt͡s'-ɨ-kɨst **ʔŋ[2]-sog-ɨ-z** nɑ-n[2] t͡ʃɑl-i-ti.
3SM-become_morning-when **my-sleep-v-Ger** Neg-1S can-Fut-Ng
'When it becomes morning I will not be able [to do] **my sleeping**.'

3.8.8.4 Affixes on Conditional Verbs

The morpheme **-nt** 'if' marks the conditional dependent verb.

(204) iti ziŋgɨm kel-t jin-is **it-gɛ-nt** nɑgŋ it-is tɑs-i-no.
youP difficulty time-Loc I-Dat **2P-tell-if** money youP-Dat give-Fut-1S
'**If you tell** me in your(P) time of need, I will give you(P) money.'

[26] Keefer said that **gɛ** puts an "emphasis on purpose" (1969b:11).

(205) kudu k'ɛj-dn-d-ɑ-s-is t'uk ɑm-dɛ-ki-∅ jɑːb
road work-Pass-Rel-Px-Ac1-Dat obstacle become-Ipf-Perf-CR person

ɑ³-ki-nt t͡s'ɑt͡s' iː-g wu-∅ t͡s'ɑs-tn-i-go.
3SM-ExBE-if tie house-In enter-SSO tie-Pass-Fut-3SM

'If there is a person who has become an obstacle to the road work, entering the prison (tie house) he will be tied.'

3.8.8.5 Affixes on Temporal Verbs

A temporal dependent verb takes the form of an optional PNG proclitic, the verb root, and then the suffix, -**kɨst** 'when'. Example (206) shows the absence of the optional PNG prefix, while (207) shows its presence.

(206) gɑru **jɛ-kɨst** int͡ʃ-ɑ hel t͡ʃ'ili-∅-ʒ ɑm-dɛ-go.
rainy_season **come-when** tree-Px all be_green-CR-M become-Ipf-3SM
'**When** rainy season comes, all the trees become green.'

(207) **ɑ³-sɑt͡s'-ɨ-kɨst** ʔŋ²-sog-ɨ-z nɑ-n² t͡ʃɑl-i-ti.
3SM-become_morning-when my-sleep-v-Ger Neg-1S can-Fut-Ng
'**When** it becomes morning I will not be able [to do] my sleeping.'

All of the attested cases of the absence of the PNG proclitic are third person, as in (206). Although the first and second person PNG proclitics do not always attach directly to the temporal verbs, they always do appear earlier in the clause.

(208) jɛsus-k'ɑŋk **ʔŋ³**-gɑb **ɑl-kɨst** nɑ-ɑ³ ziŋg hot-i-ti.
Jesus-Inst **1P**-together **stay-when** Neg-3SM problem appear-Fut-Ng
'**When** we stay (together) with Jesus, a problem will not appear.'

In the three examples just given, the subject in the first clause is different from the subject of the second clause. So, the possibility of -**kɨst** marking 'different subject' needed to be considered. It turns out that many examples also occur where the subject in the first clause is the same as the subject of the second clause.

(209) ɑ²-tɨmɨrt-ɑ-s **ɑ²-hot͡s-ɨ-kɨst** jiɾ **ɑ²**-k'ɛj-ni?
yourS-study-Px-Ac1 **2S-finish-v-when** what? **2S**-work-CQ
'When **you(S) finish** your(S) studies, what will **you(S) work**? (what will your job be?)'

3.8.9 Affixes on Interdependent Verbs

The Dizin interdependent verbs are attested for three distinct, but related, uses, all suggesting "coordination." The coordination morphemes **-tɑ** … **-gɑ**[27] are glossed as 'ID1' and 'ID2' for 'interdependent 1' and 'interdependent 2'. These morphemes are not independent because they always appear with the other morpheme. They are not dependent on other independent verbs, just dependent on each other.

This construction is unusual in that neither a PNG prefix nor a PNG suffix appears in connection with either verb. In addition, the subject must be supplied by an overt noun phrase, or the broader context of a discourse. For example, in (210) it is clear that the teacher is the subject. The subject never changes between the first and the second of the interdependent verbs. The first of these morphemes **-tɑ** always attaches directly to the stem, and no suffixes follow it. The tense/aspect markers **-dɛ** 'Ipf' and **-ki** 'Perf' are attested before the second of these morphemes **-gɑ**, as (211) and (214) illustrate.

Three related but different meanings have been attested so far for the **-tɑ** … **-gɑ** interdependent verb constructions. Coordination is the commonality in these three uses. The first use coordinates two past actions, while the second coordinates two commands. The third use could be seen as coordinating a past state and a past action, but the construction has the effect of relativizing the first clause and making it the subject of the second clause.

No examples are attested of these morphemes coordinating more than two clauses. This should be sought through elicitation.

Coordinating Two Past Actions. A common use for these morphemes is to coordinate two past actions by suffixing **-tɑ** to the verb of the first clause and suffixing **-gɑ** to the verb of the final clause.

[27] This morpheme must not be confused with **-gɑ** 'Jus'.

(210) dɑd-ɑ-ke iʃ-debm-kɨst iːki tɑb-ɨ-ni? dɑd-ɑ-ke iʃ-debm-kɨst
child-Px-P 3P-fight-when who? separate-v-CQ child-Px-P 3P-fight-when

ɑstɑmɑɾi-ɑ dɑn-**tɑ** iʃ-n tɑb-**gɑ**.
teacher-Px come_close-**ID1** they-Ac2 separate-**ID2**

'When the children fought, who separated [them]? When the children fought, the teacher came close and separated them.'

(211) iɾɑdon-ɑ ɛj-kɑj ɑ[3]-k'iɑ-dɑ? eː, iɾɑdon-ɑ ded-**tɑ** ɛj-kɑj
radio-Px sing-Neg 3SM-leave-IpfQ yes radio-Px be_ruined-**ID1** sing-Neg

k'iɑ-**dɛ**-**gɑ**.
leave-**Ipf**-**ID2**

'Does the radio not sing (work)? No, the radio has been ruined so it does not sing (work).'

Two Related Commands. A second use for these morphemes is in a command when two related things are commanded. Note the absence of any of the normal imperative suffixes.

(212) … bɑŋgɨɾs-∅ tɑt͡ʃ-ɨ-**tɑ** kɑɾ sɑːg-ɨ-kojs jɛ-**gɑ**.
return-SSO change-v-**ID1** to God-v-All come-**ID2**
'… returning, change and come to God.'

(213) ɸilip'os-kɑ "jɛ-**tɑ** sɛ-**gɑ**" gɛ-go.
Philip-& come-**ID1** see-**ID2** say-3SM
'And[28] Philip said, "Come and see." '

Relativizing a Subject. A third use of this construction has **-tɑ** suffixed to a form of the 'BE' verb and **-gɑ** suffixed to the final interdependent verb. The first clause is relativized and becomes the subject of the final clause. This adds prominence to the subject.

(214) "ʔŋ[2]-zokɑ ti-**tɑ** ɑ[3]-siɑg-**ki**-**gɑ**" jɛ gɛ-∅ iɑz-o.
my-bull BE-**ID1** 3SM-give_birth-**Perf**-**ID2** that say-SSO lie-3SM
' "It is my bull that has given birth," saying that, he lied.'

Morphemes of this type and the interdependent nature of these constructions are not common in the languages of the world. Further investigation into similar constructions in

[28] This example is from an unchecked draft of scripture, and the use of a single **-kɑ** '&' for "and" in the source text is likely not natural. It will be checked.

other Omotic languages and neighboring languages could give clues that might be helpful in resolving outstanding language family questions (Bender 2003:xii).

3.8.10 Affixes on Relativized Verbs

This section presents a number of different constructions that are built from verb stems to make relative clauses, and identifies the affixes that occur.

"Headless" relative clauses, "prenominal" relative clauses (Relativized_Verb Noun), and "postnominal" relative clauses (Noun Relativized_Verb) will be mentioned briefly a few places that they occur in the examples. However, the focus here is on the morphology of the relativized verbs. These syntactic distinctions should be addressed and clarified when the syntax of Dizin is studied.

Many relative clauses have no easily recognizable overt morpheme. Tone patterns are likely candidates for being 'Relativizer' markers, so determining how tone is involved in these constructions needs to be a priority for future research. As a provisional measure, a null morpheme, -∅, is inserted after the verb root (and any verbal suffixes) and before nominal suffixes. It will be glossed 'CR' for 'Covert Relativizer'.

These relativized verb constructions are rather complex and varied. They should be studied further to understand why the overt relativizer, **-dɑ**, is sometimes employed, and other times why the covert relativizer is employed instead.

The data are intended to be representative, not exhaustive. It will be divided into two main parts: overt relativizer constructions and covert relativizer constructions. Each of these parts will be subdivided into three parts: relativized constructions without tense/aspect marking, relativized constructions with perfect marking, and relativized constructions with imperfective marking. A fourth part for the covert relativizer constructions will be relativized constructions with imperfective and perfect marking.

No stative verbs are presented in sections 3.8.10.1 or 3.8.10.2, so that clear cases of relativized verbs can be clearly understood on their own. Then in section 3.8.10.3, stative verbs are brought into the picture and it becomes clear that many of the words which were previously seen as adjectives can be analyzed as relativized stative verbs.

3.8.10.1 Overt Relativizer Constructions

The morpheme **-dɑ** is glossed as 'Rel' for 'Relativizer'. The variant **-d** occurs before vowels.

3.8.10.1.1 Overt Relativizer Constructions Without Tense/Aspect Marking

'Rel-M': -dɑ-z and 'Rel-F': -dɑ-jn. Examples (215) and (216)[29] provide clear evidence regarding the gender markers that attach to relativized verbs. Since the only difference between these two examples is the gender of the one who causes a child to learn, it is easy to see that the gender markers are **-z** 'M' and **-jn** 'F'.

The relative clauses in (215) through (221) are headless.

(215) dɑdu tɑmɨɾ-s-**dɑ-z** ɑ^2-ti-ŋ?
child learn-Cau-**Rel-M** 2S-BE-PstPrQ
'Are you one(M) who causes a child to learn? (Are you a teacher(M)?)'

(216) dɑdu tɑmɨɾ-s-**dɑ-jn** ɑ^2-ti-ŋ?
child learn-Cau-**Rel-F** 2S-BE-PstPrQ
'Are you one(F) who causes a child to learn? (Are you a teacher(F)?)'

The previous two examples also provide evidence for **-dɑ** being the underlying form of the relativizer, rather than **-d**. The words for 'teacher' are indefinite in both sentences, so the suffix **-ɑ** 'Px', which carries definiteness with it, is not present.

Another example of the masculine is given in (217).

(217) jɛtɨɾ-ki-d-ɑ-s hoː-s-**dɑ-z** ti-go.
be_tired-Perf-Rel-Px-Ac1 rest-Cau-**Rel-M** BE-3SM
'He is one who helps the one who has become tired.'

[29] These two examples are from Zerihun, Mekonnen, and Beachy (2003:6).

'Rel-Ds': -ɗ-e. In (218) the distal morpheme occurs immediately after the relativizer, and the variant **-ɗ** occurs.

(218) … ɨz-kŋ hɑt jɑb-**ɗ-e** hel …
he-Gn1 on believe-**Rel-Ds** all
'… all those who believe on[30] him …'

'Rel-Px': -ɗ-ɑ. The question and answer in (219) illustrate that the suffix **-ɑ** 'Px' can immediately follow the relativizer.

(219) a. ɛjkŋ-ɑ-s k'iɑ-s-**ɗ-ɑ** iːki tɛ-ni?
appointment-Px-Ac1 leave-Cau-**Rel-Px** who? BE-CQ
'Who is the one who cancelled (caused to leave) the appointment?

b. ɛjkŋ-ɑ-s k'iɑ-s-**ɗ-ɑ** ɑsɑɸɑ ti-go.
appointment-Px-Ac1 leave-Cau-**Rel-Px** Asafa BE-3SM
'Asafa is the one who cancelled the appointment (caused it to leave).'

'Rel-Px-Ac1': -ɗ-ɑ-s and 'Rel-Ds-Ac1': -ɗ-e-s. Relative clauses are frequently direct objects. Examples (220) and (221) show the accusative case marker, **-s** 'Ac1', marking relativized verbs that are direct objects, just as it marks simple nouns that are direct objects.

(220) ɑ^{3}-gɛl-is jɑːb-kŋ t͡ʃon-g ki-**ɗ-ɑ-s** ɑ^{3}-t'us-ki-tɛj
his-head-Dat person-Gn1 heart-In ExBE-**Rel-Px-Ac1** 3SM-know-Perf-DP
'he himself had known what is inside a person'

(221) … mɑm-s-ɨ-n-**ɗ-e-s** hel ʔm-o.
be_prepared-Cau-v-Pass-**Rel-Ds-Ac1** all eat-3SM
'… he ate all that was prepared.'

'Rel-Px-Ac1-Dat': -ɗ-ɑ-s-is and 'Rel-Ds-Inst' -ɗ-e-k'ɑŋk. Other cases also appear on relativized verbs.

(222) kudu k'ɛj-dn-**ɗ-ɑ-s-is** t'uk ɑm-dɛ-ki-∅ jɑːb
road work-Pass-**Rel-Px-Ac1-Dat** obstacle become-Ipf-Perf-CR person

ɑ^{3}-ki-nt t͡s'ɑt͡s' iː-g wu-∅ t͡s'ɑs-tn-i-go.
3SM-ExBE-if tie house-In enter-SSO tie-Pass-Fut-3SM

'If there is a person who has become an obstacle to the road work, entering the prison (tie house) he will be tied.'

[30] This example is from an unchecked draft of scripture, and the use of "believe on (on top of) him" is likely not natural. It will be checked.

(223) jɛ in-dɛ-ki-∅ ʔn^{3}-siɛ-**d-e-k'ɑŋk** iti-ust-∅ bɑʃum-i?
that walk-Ipf-Perf-CR 1S-see-**Rel-Ds-Inst** 2P-be_able-SSO fight-FutQ
'Can you(P) fight against the one(s) we saw who were walking like that?'

'Rel-Pl': -dɑ-ke and 'Rel-M-&': -dɑ-z-kɑ. Examples (224) and (225) illustrate other nominal suffixes following the relativizer:

(224) jɛ-kŋ t͡ʃoŋg k'iɑ-**dɑ-ke** nɑn-ɨʃ iɑkɨz ʃoɾ-dn-dɑ-z ti-ti.
that-Gn1 in(side) remain-**Rel-Pl** Neg-3P very fear-Pass-Px-M BE-Ng
'Of those who remain, they are not ones who are feared much.'

(225) buk-**dɑ-z-kɑ** ɑk-**dɑ-z-kɑ** …
sow-**Rel-M-&** harvest-**Rel-M-&**
'One who sows and one who harvests…'

3.8.10.1.2 Overt Relativizer Constructions With Perfect Marking

It is common for relative clauses to have the perfect marker to convey the idea of an action that happened in the past, but still has an effect on the present.

(226) bolɨm-**ki-d-ɑ** ʔŋ^{3}-iː iɑg-d-ɑ ti-go.
be_demolished-**Perf-Rel-Px** our-house be_old-Rel-Px BE-3SM
'That which has been demolished is our house which is old.'

(227) jɛtɨɾ-**ki-d-ɑ-s** hoː-s-dɑ-z ti-go.
be_tired-**Perf-Rel-Px-Ac1** rest-Cau-Rel-M BE-3SM
'He is the one who helps the one who has become tired.'

(228) t͡sˈɑs-tn-**ki-d-e-s** wut͡ʃku-s-i-go.
tie-Pass-Perf-Rel-Ds-Ac1 untie-Cau-Fut-3SM
'He will untie those who have been tied.'

3.8.10.1.3 Overt Relativizer Constructions With Imperfective Marking

In this section it is proposed that **-dɛ** 'Ipf' has a variant form, **-dɑ**, which occurs before **-dɑ** 'Rel'. Several pieces of evidence support this hypothesis.

First, for any other slot in which **-ki** 'Perf' occurs in the language, **-dɛ** 'Ipf' also occurs. (These occurrences are presented in 3.8.3.2, 3.8.4, and 3.8.9.) So, the form **-ki-dɑ** 'Perf-Rel' suggests that *-**dɛ-dɑ** 'Ipf-Rel' should occur, but it does not. Instead **-dɑ-dɑ** 'Ipf-Rel' occurs.

Second, the shape of the imperfective question morpheme is also: **-dɑ** (cf. 3.8.6).

Third, it is possible that vowel harmony is the motivation. We have seen evidence of vowel harmony taking place with regard to the /**o**/ in the borrowed words, **orob** and **moskot** (cf. 2.3). Since forms like **-dɑ-d-e** 'Ipf-Rel-Ds' occur, rule ordering is required, if indeed vowel harmony is happening. The vowel harmony rule needs to cause **-dɛ** 'Ipf' to become **-dɑ** before the rule that reduces **-dɑ** 'Rel' to **-d** applies.

(229) ɑt jɛt-ɨ-k nogɨm-**dɑ-d-ɑ** jinu ɨz ti-no.
now you-v-InstIr converse-**Ipf-Rel-Px** I he BE-1S
'The one who is conversing with you now, I am he.'

(230) tubŋ-g dog-**dɑ-d-e** t'ɑgŋ ʃi ɑmigo.
Tum-In live-**Ipf-Rel-Ds** two thousand become-Fut-3SM
'Those who (**regularly**) live in Tum will be (are) two thousand.'

(231) … zɑmɨr-**dɑ-dɑ-ke-kŋ** t͡ʃon-g …
sing-**Ipf-Rel-Pl-Gn1** middle-In
'… in the midst of these who (**regularly**) sing … (in the choir)'

As (232) illustrates, the optional PNG prefix can occur on this construction.

(232) ɑ^{3}-bɑŋgɨr-∅ tɛ-n t͡ʃɑk so t͡ʃon-t **i**-jɛ-**dɑ-d-ɑ** gɑnt
3SM-return-Imp go-DS again up middle-Loc **3SF**-come-**Ipf-Rel-Px** like

so t͡ʃon-t jɛ-∅-ge.
up middle-Loc come-PstPr-3SF

'Returning, he went, again like this one that (**habitually**) comes up to the middle [of the sky] she [the sun] came up to the middle [of the sky].'

3.8.10.2 Covert Relativizer Constructions

Now our attention turns to the relative constructions which have no segmental marking of the relativizer. The reason for choosing the covert relative construction, rather than the overt relative construction, is not yet understood.

3.8.10.2.1 Covert Relativizer Constructions Without Tense/Aspect Marking

Examples (233) through (235) show relative constructions without tense/aspect marking or segmental marking of the relativizer. These are all masculine, but with an opportunity to elicit more data, it seems likely that feminine counterparts would be found.

(233) aːj gab-**∅-ɨ-z** jɛsus ti-go.
water create-**CR-v-M** Jesus BE-3SM
'The one (Masc) who created water is Jesus.'

(234) dɨɾedɛwa haɾaɾ-kŋ t͡ʃoŋg ki-**∅-z** ti-go.
Dire Dawa Harar-Gn1 in ExBE-**CR-M** BE-3SM
'Dire Dawa [a city] is something (Masc) that exists in Harar [a province].'

(235) ak a^2-sɛ-ki-∅ nog-a et-n ut-s-ki-d-a biaɾ
today 2S-see-Perf-CR thing-Px youS-Ac2 like-Cau-Perf-Rel-Px tomorrow

hel kaj-∅-z ti-go.
all disappear-**CR-M** BE-3SM

'What you have seen today, the things that have caused you to like [them] are all the things that will disappear tomorrow.'

3.8.10.2.2 Covert Relativizer Constructions With Perfect Marking

The perfect marker **-ki** also occurs with no segmental marking of the relativizer. Two examples are given without gender marking, then one example each for masculine and feminine. Gender agreement is evident in (238) and (239). For (239), the copula makes it clear that /**n**/ could not be an accusative case marker.

Example (236) contains a prenominal relative clause: mɛt͡ʃɨnki jaːbsis (to the-one-who-has-been-grabbed person).

(236) … eds-k'aŋk mɛt͡ʃ-ɨ-n-**ki-∅** jaːb-s-is a^2-tasɸa-s-ɨ-n
AIDS-Inst grab-v-Pass-**Perf-CR** person-Ac1-Dat 2S-hope-Ac1-v-Ac2

a^2-ta-s-ɨ-z ust-i-to.
2S-give-Cau-v-Inf be_able-Fut-2S

'… you will be able to give hope to the person who **has been grabbed** by (**infected** with) AIDS.'

(237) ɑk ɑ[2]-sɛ-**ki-∅** nog-ɑ et-n ut-s-ki-d-ɑ biɑɾ
today 2S-see-**Perf-CR** thing-Px youS-Ac2 like-Cau-Perf-Rel-Px tomorrow

hel kɑj-∅-z ti-go.
all disappear-CR-M BE-3SM

'What you **have seen** today, the things which have caused you to like [them] are all the things that will disappear tomorrow.'

(238) ʔn[2]-t͡ʃɛnʃ-ɑ-s-is gɛ ʃub-**ki-∅-z** iz ti-**go**.
my-sin-Px-Ac1-Dat Purpose[31] die-**Perf-CR-M** he BE-**3SM**
'He is the one who **has died** for my sin.'

(239) … jɑʃ tɑt͡ʃ-m-**ki-∅-in** ti-**gɛj**.
slightly change-Rflex-**Perf-CR-F** BE-**3SF**
'… she is one who **has changed** herself a little.'

3.8.10.2.3 Covert Relativizer Constructions With Imperfective Marking

Examples (240) and (241) show **-dɛ**, the standard imperfective marker, appearing with the covert relativizer and **-n**, an accusative case marker. This construction is not common.

(240) … sɛt͡s'in-t iti-tɛ-**dɛ-∅-n** sɛ-dɛ-no.
morning-Loc 2P-go-**Ipf-CR-Ac2** see-Ipf-1S
'… I (regularly) see those of you who (regularly) go in the morning.'

(241) … ɑ[3]-gɛ-dn-**dɛ-∅-n** sis-ki-no.
3MS-say-Pass-**Ipf-CR-Ac2** hear-Perf-1S
'… I have heard what is (repeatedly) said.'

3.8.10.2.4 Covert Relativizer Constructions With Imperfective and Perfect Marking

The examples in this section show the combination of two tense/aspect markers in conjunction with a covert relativizer. Other examples of **-dɛ-ki** '-Ipf-Perf ' can be seen in 3.8.4, 3.8.7, and 3.8.8.1.1. In this context, the combination conveys the usual idea of past progressive action.

[31] **gɛ** 'say' seems to have grammaticalized into a particle that denotes purpose. Amharic also has a purpose clause which includes its word for 'say'.

(242) kudu k'ɛj-dn-d-ɑ-s-is t'uk ɑm-**dɛ-ki-∅** jɑːb
road work-Pass-Rel-Px-Ac1-Dat obstacle become-**Ipf-Perf-CR** person

ɑ^{3}-ki-nt t͡s'ɑt͡s' iː-g wu-∅ t͡s'ɑs-tn-i-go.
3SM-ExBE-if tie house-In enter-SSO tie-Pass-Fut-3SM

'If there is a person who has become an obstacle to the road work, entering the prison (tie house) he will be tied.'

(243) ... i-kot-n-**dɛ-ki-∅** jɑːb-e-n-k i-bɑb-ɨz-k so
3SF-wait-Pass-**Ipf-Perf-CR** person-Ds-Fem-& her-husband-Masc-& above

guj-s jɛ-niʃo.
below-Ac1 come_to-3P

'... the lady who was being waited for and her husband came down from above.'

(244) … jɑːb-is ʃojt utn-k'ɑŋk tɑ-**dɛ-ki-∅** …
person-Dat all love-Inst give-**Ipf-Perf-CR**
'… the one who has given to all people with love …'

The relative constructions in the examples (245) and (246) are both direct objects. However, the example in (245) is not segmentally marked for accusative.

(245) jɛ in-**dɛ-ki-∅-∅** ʔn^{3}-siɛ-d-e-k'ɑŋk iti-ust-∅ bɑʃum-i?
that walk-**Ipf-Perf-CR-Ac3** 1S-see-Rel-Ds-Inst 2P-be_able-SSO fight-FutQ
'Can you(P) fight against the one(s) we saw who were walking like that?'

Example (246) has a postnominal relative clause: **nuhŋ k'oj usu ɑ^{3}giɑdɛkin** (a hyena that-was-chewing-on-a-bone).

(246) … nuhŋ k'oj usu **ɑ^{3}-**giɑ-**dɛ-ki-∅-n** jɑɸ-∅-niʃo.
hyena one bone **3SM-**chew-**Ipf-Perf-CR-Ac1** find-PstPr-3P
'… they found a hyena that was chewing a bone.'

3.8.10.3 Analyzing Words That Resemble Adjectives as Relativized Stative Verbs

Dizin has many modifiers of nouns that resemble adjectives, but in this section it should become clear that analyzing these modifiers as relativized stative verbs is possible and preferable. Example (247) is a sentence that previously would have been analyzed as having two adjectives (cf. Allen 1976:380-3). The grammatical category labels in the third line clarify that analysis.

(247) eː, sɑːt **iɑk-dɑ** **melkŋ-i-z** ti-go.
yes watch **big-the** **beautiful**-v-M BE-3SM
interjection noun **adjective** **adjective** verb
'Yes, the big watch is beautiful.'

But now that relative clauses are understood as described in 3.8.10.1 and 3.8.10.2, it is possible to understand this same sentence as follows:

(248) eː, sɑːt **iɑk-dɑ** **melkŋ-Ø-i-z** ti-go.
yes watch **be_big-Rel** **be_beautiful-CR-v-M** BE-3SM
interjection noun **verb** **verb** verb
'Yes, the watch that is big is one that is beautiful. (Yes, the big watch is beautiful.)'

The analysis in (248) is preferred, because it allows us to treat all the suffixes on noun modifiers the same, not as suffixes on relativized verbs sometimes, and suffixes on adjectives at other times. As described in 3.9, we are actually left with no suffixes on "true" adjectives, which is a simpler, and therefore preferable, morphological analysis.

3.8.10.3.1 Analyzing [d͡ʒɛjʒ] 'good/fine' as a Relativized Stative Verb

At first glance, the very frequently spoken word [**d͡ʒɛjʒ**], previously glossed as 'good/fine', might appear to be a "true" adjective rather that a relativized stative verb. But a closer look reveals that [**d͡ʒɛjʒ**] fits the analysis of a relativized verb. This is shown in (249), where the first line shows the proposed underlying form, and the second line shows the surface representation, after palatalization, caused by the preceding /**j**/.

(249) UR: **d͡ʒɛj-Ø-z** 'be_fine/good-CR-M'
SR: [**d͡ʒɛjʒ**] 'that which is fine/good'

In (250) this word is shown in a complete sentence.

(250) [**d͡ʒɛjʒ**]
t͡ʃoʃt bɑt͡ʃi **d͡ʒɛj-Ø-z** oɸ-∅ kɑr gɑb-is tɛ-gɛj.
afterwards clothes **be_fine-CR-M** put_on-SSO to market-Dat go-3SF
'Afterwards she put on clothes **that are fine** and went to (the) market.'

This palatalization is not evident in other cases where /**z**/ immediately follows /**j**/, as is illustrated in (251). Therefore the rule is a morpheme specific (morphophonemic) process.

(251) ɑk ɑ^{2}-sɛ-ki-∅ nog-ɑ et-n ut-s-ki-d-ɑ biɑɾ
today 2S-see-Perf-CR thing-Px youS-Ac2 like-Cau-Perf-Rel-Px tomorrow

[**kɑjz**]
hel **kɑj**-∅-**z** ti-go.
all **disappear-CR-M** BE-3SM

'What you have seen today, the things that have caused you to like [them] are all the things that will disappear tomorrow.'

Two more word forms built from the root **d͡ʒɛj** lend additional support to the relativized stative verb analysis of [**d͡ʒɛjʒ**]:

(252) eː, iʒ k'ɛjdn-bɑjn **d͡ʒɛj-∅-in** ti-ge.
yes she work-POF **be_good-CR-F** BE-3SF
'Yes, she is a worker **who is good**.'

(253) iɾsɑs **d͡ʒɛj-dɑ-s** giɑmu kotɛ-ge.
pencil **be_good-Rel-Ac1** yesterday take-3SF
'Yesterday she took the pencil **that is good**.'

To summarize, **d͡ʒɛj** is seen as a stative verb, glossed 'be_good/be_fine', and is now not understood to be an adjective root.

3.8.10.3.2 Relativized Numeric Stative Verbs?

The suffixes found on numerals need to be given extra attention. They can be seen as evidence that modifiers of nouns that look like relativized stative verbs should be analyzed as adjectives, and the suffixes in question are now adjectival suffixes. This evidence is not considered as strong as the evidence for the "relativized stative verb" analysis. For example, we need to ask what the basis would be for a class of adjectives that take **-dɑ** 'Rel', **-z** 'M', etc., and a class of adjectives that do not. These suffixes found on numerals are presented here to reflect reality and to provide a basis for further research.

Numerals Without -dɑ 'Rel'. Often numerals appear without any affixation, whether they stand on their own as cardinal numbers or as modifiers of nouns, such as **k'ɔj** 'one' and **t'ɑgŋ** 'two'. Examples of this appear in (254) and in the subject of (255). Other times numerals

have the suffixes (e.g. 'Plural' and the case markers) that normally occur on nouns. As will be shown in 3.9.2, those suffixes are enclitics that attach to the right edge of noun phrases, though they do not occur to the right side of quantifiers that are final elements of noun phrases. Examples of these enclitics are in the object of (255) and in (256).

(254) … **kɑːdu** t'iti-k'ɑŋk but-tɛj …
three bullet-Inst miss-SSS
'… missing with **three** bullets …'

(255) tɛmɑri **k'oj** moskot **t'ɑgŋ-ɑ-s** biɑh-o.
student **one** window **two-Px-Ac1** open-3SM
'**One** student opened the **two** windows.

(256) kobu **t'ɑgŋ-ɑke-s-n** bɑːs-k-ɨ-no.
chicken **two-Pl-Ac1-Ac2** want-Pres-v-1S
'I want **two** chickens.'

Numerals With -dɑ 'Rel'. Examples (257) and (258) show numerals that have suffixes that have been seen before on relativized verbs. Based on the analyses in 3.8.10, the proposed glossing warrants particular attention:

(257) tɛmɑri **k'oj-dɑ** mɛt͡s'ɑɸ-ɑ-s sɛ-go.
student **be_one-Rel** book-Px-Ac1 see-3SM
'The student **who was one** (person) saw the book. (The one student saw the book.)'

(258) t͡ʃɑpmis **t'ɑgŋ-d-e-s** nɑbɨb-m.
page **be_two-Rel-Ds-Ac1** read-Imp
'Read **that** page **that is two**. (Read page two.)'

The proposal is that **-dɑ** is a relativizer of a verb rather than a suffix on an adjective. If this proposal is correct, we are dealing with stative verbs: **k'oj** 'be_one' and **t'ɑgŋ** 'be_two'. The evidence for this is indirect since we have not yet seen any numeric stative verbs in the data with PNG suffixes. Examples of numeric stative verbs are the hypothetical ***k'oj-o** 'be_one-3SM' (it/he is one) and ***kɑːdu-niʃo** 'be_three-3P' (they are three). This type of data should still be sought through elicitation. Not that its absence would necessarily disprove the relativized stative verb hypothesis, since sometimes indirect evidence is compelling enough

to still be considered stronger than the alternatives. Compare this data with that shown in 3.9.2, "Numerals as Adjectives."

Conclusion. As evidenced by the examples throughout this thesis, the wordforms that appear to be relativized stative verbs are currently being considered relativized verbs, rather than historical forms that have grammaticalized into full-fledged adjectives. But more research is needed and that analysis could change, depending on the nature of the evidence.

3.9 Adjectives

When Mary Breeze discussed Benchnon noun phrase structure, she distinguished "quantifiers" from other "modifiers," which included "adjectives" (1990:39). This distinction is proving helpful for analyzing Dizin as well.

3.9.1 Ordinary Adjectives

The adjectives in this section are called "ordinary" because they are not numerals or quantifiers. The limited data available has no plural markers, demonstrative clitics or case markers to see whether they attach to these ordinary adjectives. If Dizin is like Benchnon they will attach to ordinary adjectives. It is important to elicit data to confirm or reject this hypothesis. Examples of these adjectives are given, both in the attributive position (259) to (261), and as a modifier of a noun in a noun phrase (262).

Since the data only contain three "ordinary" adjectives (one borrowed), two are shown twice: **kek** 'correct/proper' is presented in both (259) and (262) to illustrate the attested syntactic constructions, and **guɸ** 'exceptional/dangerous' is presented in (260) and (261) to show the two meanings it conveys.

(259) **kek** tɛ-j? eː, **kek** ti-go.
correct BE-FutQ yes **correct** BE-3SM
'Is it **correct**? Yes, it is **correct**.'

(260) eː, k'ejdn-bɑb-ɑ ɑ^{3}-k'ɛjdn-ɑ hɑt iɑkɨz **guɸ** ti-go.
yes work-POM-Px his-work-Px at very **exceptional** BE-3SM
'Yes, the worker is very **exceptional** at his work.'

(261) ɑzu iɑkɨz **guɸ** ti-go.
crocodile very **dangerous** BE-3SM
'A crocodile is very **dangerous**.'

(262) **bɛgm kɛk** iʃ-kŋ t͡ʃoŋg iz-t ki-go.
separation proper they-Gn1 between it-Loc ExBE-3SM
'**Proper separation** exists between them.'

Example (263) shows a borrowed lexical item (from Amharic [**dɨhɑ**]), and the less usual noun phrase structure: (modifier head). The borrowed adjective is grammatically exceptional.

(263) **dɑhɑ zuru** dɑn-kɑj ɑ^{3}-k'iɑ-dɑʔ
poor relative come_close-Neg 3SM-be_absent-IpfQ
'Does the **poor relative**, not coming close, remain absent?'

3.9.2 Numerals as Adjectives

When numerals modify nouns and appear without any affixation, they are classified as adjectives. (cf. 3.8.10.3.2 Relativized Numeric Stative Verbs?) Examples are seen in (264) and the first numeral in (265). Numerals are also classed as adjectives when they have the suffixes that normally occur on nouns (plural markers, demonstrative clitics or case markers), as in the second numeral in (265) and in (266). The suffixes are enclitics that move to the right edge of the noun phrase, except that they do not move to the right of quantifiers.

(264) … **kɑːdu** t'iti-k'ɑŋk but-tɛj …
three bullet-Inst miss-SSS
'… missing with **three** bullets …'

(265) tɛmɑri **k'oj** moskot **t'ɑgŋ-ɑ-s** biɑh-o.
student **one** window **two-Px-Ac1** open-3SM
'**One** student opened the **two** windows.

(266) kobu **t'ɑgŋ-ɑke-s-n** bɑːs-k-ɨ-no.
chicken **two-Pl-Ac1-Ac2** want-Pres-v-1S
'I want **two** chickens.'

Syntactically, numerals occur before or after the nouns they modify. To occur following the noun is most common.

3.9.3 Quantifiers: A Subcategory of Adjectives

The subcategory "quantifiers" is posited to distinguish a set of modifiers of noun phrases from adjectival numerals. More data are needed, but "ordinary" adjectives will likely also need to be distinguished from quantifiers. Quantifiers always occur on the right edge of noun phrases. They do not allow the enclitics (plural markers, demonstrative clitics or case markers) to attach to them. Instead, the enclitics attach to the right of the word in the noun phrase that is immediately to the left of the quantifier.

(267) … jɑːb-**is** **ʃojt** utn-k'ɑŋk tɑ-dɛ-ki-CR …
person-**Dat** **all** love-Inst give-Ipf-Perf-CR
'… the one who has given to all people with love …'

(268) ... ket-ɨ-s kɑɸ-tɛj iʃi i͡ts-**e-s** **ʃojt** ɨz-ɨ-g ɑn-∅; ...
uprights-v-Ac1 build-SSS theyD grain-**Ds-Ac1** **all** it-v-In put-SSO
'... building uprights [for the attic] and putting **all** their(D) grain in it, ...'

(269) jɑːb-**e-ke** **hel** bɑŋgɨr-∅ ...
person-**Ds-Pl** **all** change-SSO
'**All** the (those) people changing, ...'

(270) ɑ[3]-kodn-**ɑ-s** **hel** kob-∅ tɛ-go.
his-thing-**Px-Ac1** **all** carry-SSO go-3SM
'He went, carrying **all** his things.'

(271) … nog-**ɑ** **mɑt** nɑn-ɑ[3] in-s-is sɛ-dn-dɛ-ti.
thing-**Px** **many** Neg-3SM I-Ac1-Dat see-Pass-Ipf-Ng
'… **many** things are not visible to me.'

(272) … nog t͡ʃiɛn-∅-ɨ-z **mɑt …**
thing be_bad-CR-v-M **many**
'… **many** things that are bad …'

The morpheme, **t͡ʃim** 'every', occurs frequently in the data, but always before **kelt** 'time'. Since it is the only quantifier attested before the head of the noun phrase, it could be seen as an idiom, or perhaps as a compound word: **t͡ʃimkelt** 'always'.

(273) kiɾ-ɑ-s **t͡ʃim** kelt ɑ^{2}-kes-dɑʔ eː, kiɾ-ɑ-s **t͡ʃim** kelt kes-dɛ-no.
rent-Px-Ac1 **every** time 2S-pay-IpfQ yes rent-Px-Ac1 **every** time pay-Ipf-1S
'Do you pay the rent **every** time? Yes, I pay the rent **every** time.'

In (274) the conjoiner **-kɑ** '&' is attested on the quantifier, **mɑt** 'many'.

(274) kud-ɑ-kŋ hɑt jɑːb **mɑt-kɑ** kɑmil-kɑ iz-t ki-niʃo.
road-Px-Gn1 on person **many-&** vehicle-& it-Loc Ex-BE-3P
'There are **many** people **and** vehicles on the road.'

3.10 The Auxiliary Negative Verb

The Dizin grammatical category "auxiliary negative verb" (Payne 1985:212) is a class with only one member: **nɑn** 'Neg'. The chart of suffixes that attach to the auxiliary negative word appears in 3.3 The independent negative verb construction was shown in 3.8.5, but this section will focus on the variation in the shape of the auxiliary negative verb.

The word **nɑn** 'Neg' always co-occurs with another negative marker, **-ti** 'Ng', which is suffixed to the lexical verb being negated. So, verbal negation is redundantly marked. This can be seen in all the examples in this section.

Example (275) shows what is assumed to be the underlying form: **nɑn**.

(275) ɑ^{3}-sɑɾ-ɑ-s **nɑn-ɑ^{3}** jin-is gɛ-ki-**ti**.
his-name-Px-Ac1 **Neg-3SM** I-Dat say-Perf-**Ng**
'He **has not said** his name to me. (He **has not told** me his name.)'

A shortened variant, **nɑ**, occurs in free variation only before **-ɑ^{3}** '3SM' and **-ɑ^{2}** '2S'. While this is phonologically conditioned allomorphy, it is not obligatorily applied; so we have free variation. These combinations result in phonetically long vowels with contour tones. In (276) this is realized as [nɑː^{13}].

(276) [… **nɑː^{13}** ʔɨst **ki.ti**]
… **nɑ^{1}-ɑ^{3}** ɨz-t **ki-ti**
Neg-3SM it-Loc ExBE-**Ng**
'There is not any ...'

Another variant, **nɛ**, also occurs in free variation, but only before the PNG suffixes that begin with /**i**/. In all the following forms on the left, the syllable structure results in the /**i**/

being realized as a glide, [**j**]. On the right is the usual form of **nɑn** that also occurs with these suffixes.

(277) a. [**nɛj.t-ɨ** t'us.ki.**ti**]
nɛ-it-ɨ t'us-ki-**ti**
Neg-2P-v know-Perf-**Ng**
'youP have **not** known'

b. [**nɑ.ni.ti** t'us.ki.**ti**]
nɑn-it-ɨ t'us-ki-**ti**
Neg-2P-v know-Perf-**Ng**
'youP have **not** known'

c. [**nɛj.tɑ** bɑ:.si.**ti**]
nɛ-it-ɑ bɑ:s-i-**ti**
Neg-2P-D want-Fut-**Ng**
'youD will **not** want'

d. [**nɑ.ni.tɑ** bɑ:.si.**ti**]
nɑn-it-ɑ bɑ:s-i-**ti**
Neg-2P-D want-Fut-**Ng**
'youD will **not** want'

e. [**nɛjʃ** (…) ʔɨst ki.**ti**]
nɛ-iʃ (…) ʔɨz-t ki-**ti**
Neg-3P it-Loc ExBE-**Ng**
'there are **none**'

f. [**nɑ.niʃ** (…) ʔɨst ki.**ti**]
nɑniʃ (…) ɨz-t ki-**ti**
Neg-3P it-Loc ExBE-**Ng**
'there are **none**'

g. [**nɛj** (…) ʔist ki.**ti**]
nɛ-i (…) iz-t ki-**ti**
Neg-3SF it-Loc ExBE-**Ng**
'there is **no (Fem)**'

h. [**nɑ.ni** (…) ʔist ki.**ti**]
nɑn-i (…) iz-t ki-**ti /**
Neg-3SF it-Loc ExBE-**Ng**
'there are **no (Fem)**'

A free variant of **nɑn** 'Neg' is **tɑn**. It seems to be more common in Central Dizin than in Eastern Dizin.

(278) ɨz t͡ʃɑk iti-n **tɑn-ɑ**[3] oj-dɛ-**ti**.
he again youP-Ac2 **Neg-3SM** refuse-Ipf-**Ng**
'Again, he does **not** refuse you (Pl).'

3.11 Adverbs

Adverbs are usually thought of as modifiers of verbs and adjectives. Many Dizin words fit into that category. A few examples are given from each of the semantic subdivisions of adverbs with the most members (manner, time, and location). A few of the less common ones (degree and duplication) are also given. Note the varied shapes of adverbial roots, and the scarcity of affixes.

3.11.1 Manner Adverbs

Many words, including all the ideophones collected to date, can be labeled manner adverbs. We see a few non-ideophone manner adverbs in (279) to (282), along with all the ideophones in 3.11.1.1. The example in (279) shows an adverb describing the manner in which grain was grown.

(279) botku-kɑ utn-kɑ **gɑb** i͡tsu koʃ-∅ ….
baboon-& rat-& **together** grain farm-SSO
'A baboon and a rat growing grain **together** ….'

In (280) we see **gɑb** 'together' again, this time in a complete elicited sentence, describing how Paul knelt and prayed.

(280) jɛ-kŋ t͡ʃoʃt p'ɑwlos hel ki-d-ɑke-k **gɑb** kon-∅
that-Gn1 after Paul all ExBE-Rel-Pl-InstIr **together** kneel-SSO

k'ol-o.
pray-3SM
'After that Paul knelt and prayed **together** with all who were there.'

In (281) we see **kek,** which we had seen previously as an adjective in (259) and (262), glossed as 'correct' and 'right'. Here it modifies the verb **kot** 'guard' and is given the gloss 'properly'.

(281) ʔm^{2}-burd͡ʒ-ɑ-s-ɛj, kujs-kɑ botku-kɑ unt͡sŋ-kɑ nɑn-iʃ
my-lord-Px-Ac1-Voc squirrel-and baboon-and wolf-and Neg-3P

i͡ts-ɑ-s-n **kek** kot-dɛ-ti
grain-Px-Ac1-Ac2 **properly** guard-Ipf-Ng
'Oh, my lord! [the] squirrel, [the] baboon and [the] wolf have not been properly guarding the grain.'

Both of the manner adverbs glossed 'quickly' in (282) also appear separately in other examples.

(282) **ʃigŋ k'ɑb** ɑ^{2}-dɑkŋ hot-i-go.
quickly quickly you(S)-Ad appear-Fut-3SM
'**Quickly**, **quickly** he will appear near you.'

Probably the most commonly heard manner adverb is **d͡ʒɛjʒ** 'well'. Morphologically it originated from a stative verb: **d͡ʒɛj-∅-z** 'be_fine-CR-M', as described before in 3.8.10.3.1.

However, in contexts such as (283), it does not function as a relativized verb, but as a modifier of a verb. So, this form is assumed to have been grammaticalized into an adverb.

(283) **d͡ʒɛjʒ** ɑl-n-ti.
well stay-Imp-PImp
'Stay(P) **well**.'

3.11.1.1 Ideophones

Two linguists have recently published their work on ideophones in separate Omotic languages. Jean Lydall has done this for Hamar (2000), as has Azeb Amha for Wolaitta (2001).[32] Ideophones also exist in Dizin, though they are probably not as common as Lydall reports them to be in Hamar; her list numbered over 300 and was still growing (2000:3).

It is always worth asking whether ideophones should be a separate grammatical category. A case could be made for that analysis for Dizin ideophones, based on the phonological features unique to them (addressed below). But since they all share the syntactic and semantic characteristics of adverbs, they are considered a subtype of adverbs.

Example (284) contains an ideophone, **koʃkoʃ** 'quickly', which became evident in the transcription of a recorded text.

(284) ... utn wɛkɑ bolu tokŋ-e-g und ɑ[3]-kɑrs-∅
rat below tree_species hole-Ds-In in_the_past 3SM-carve/chew-SSO

mɑm-s-d-iɛ-g ɨz-ɨ-g gus **koʃkoʃ** k'iɑ-∅ tɛ-n; ...
be_ready-Cau-Rel-Ds-In it-v-In down **quickly** leave-SSO go-DS

'... and the rat went down the hole that he had prepared by chewing before and went down it, **quickly** leaving and going; ...'

A few generalizations can be made regarding the Dizin ideophones shown in Table 23. Regarding the morphology of these ideophones, the root, which consists of one or two syllables, is usually reduplicated just once, but it can be reduplicated more than once.

[32] Hamar is more closely related to Dizin than Wolaitta is.

Phonologically, Dizin ideophones fit the cross-linguistic pattern of having "special phonology" (Voeltz and Kilian-Hatz 2001:2). The third example in Table 23 contains two strongly nasalized segments, [ɑ̃] and [w̃], and a voiceless nasal stop, [n̥], none of which have been attested elsewhere in the language. The eighth example contains [lː], a lengthened segment that has not been attested elsewhere in the language either. The onomatopoeia employed to reproduce the sound of gulping explains the "special phonology." It may be significant that /k/ begins six of these words, 60% of a small sample.

Semantically, succinct English glosses are often difficult to find. Also note that four sets of synonyms, or near synonyms, appear in Table 23. Several times while trying to understand one ideophone, I would be given another ideophone that communicated the same idea.

Gestures often occur in conjunction with these ideophones. You can imagine the hand motions that go along with the Dizin words for 'scatteringly' or 'sprinklingly', and the tilting back of the head that goes along with 'gulpingly'.

Table 23. Dizin Ideophones

IDEOPHONE	GLOSS	CONTEXT USED
di³ki³di³ki³	'quickly'	chickens coming quickly while a child chases
hɑj²hɑj²hɑj²hɑj²	'scatteringly'	sowing grain by hand
kɑ̃w̃n̥¹kɑ̃w̃n̥¹	'gulpingly'	drinking water, beer or traditional medicine quickly
kɛʃkɛʃ	'rustlingly'	a small creature like a rat or snake scurrying away
kɨʃ²kɨʃ²	'sprinklingly'	sprinkling water from hand to put the last of a fire out
koɸ¹koɸ²	'burningly'	fire burning
koʃ³koʃ³	'quickly'	a rat leaving through a hole in a big hurry
ku²gɨlː¹ku²gɨlː¹	'gulpingly'	drinking water, beer or traditional medicine quickly
tɨb¹tɨb²	'burningly'	fire burning
t͡se²t͡se²	'scatteringly'	sowing grain by hand

3.11.2 Time Adverbs

Three common time adverbs are similar to some nouns, with their root-final vowels, /**u**/, which are also often not pronounced.

(285) a. **giɑm(u)** b. **ɑk(u)** c. **biaɾ(u)**
'yesterday' 'today' 'tomorrow'

Two time adverbs are of special semantic interest because they specify that the past or future referred to does not extend beyond the present day.

(286) ʔŋ^{2}-zokɑ **mo** otu dɑd siɑg-o.
my-bull **earlier_today** calf child give_birth-3SM
'**Earlier today** my bull gave birth to a calf.'

(287) **ɑnt** bɑŋgɨɾ-de-jo-ŋ.
later_today return-come-come-Imp[33]
'Come back **later** today.'

In (288) the word, **t͡sɑnt** 'before', serves as an adverb of time. It most often functions as a postposition meaning 'in front of' or 'before'. However, syntactically it occurs at the beginning of the clause, a location that a postposition could never occupy.[34] So it is analyzed as an adverb.

(288) **t͡sɑnt** ʃub-kɑj ɑ^{3}-ki-∅ kel-t-ɑ-t benti
before die-Neg 3SM-ExBE-SSO day-Loc-Px-Loc shaman

ɑt͡s-tɛj ɑ^{3}-sɑːg-ɨ-^{3} iː-ɑ-s tiɾ-ki-niʃo.
get_fortune_told-SSS Det-God-v-Gn4 house-Px-Ac1 quit_going_to-Perf-3P

'**Before** the day/time that he died, a shaman told his fortune and they had quit going to God's house.'

[33] The "come-come" gloss is intentional. The wordform is a compound construction, which is not yet completely understood.

[34] Morphologically, it looks like the noun **t͡sɑn** 'face', with the case marker, **-t** 'Loc'. That is discussed further on in 3.12.1.

Another Dizin adverb of time is **undi** 'in the past'.

(289) **undi** ɨʃ-gob gɑd-e tiɾm-kɑ teʒ-kɑ gɛ-dn-dɛ-ki-∅
in the past 3P-area boundary-Ds Tirm-& Tezh-& call-Pass-Ipf-Perf-CR

gob-ɨ-g tɛ-n dog-ki-niʃo.
area-v-In BE-DS live-Perf-3P

'**In the past** the boundary of their area was what was called Tirm and Tezh; it was in that area that they had lived.'

This adverb is noteworthy since it provides provides another example (besides **t͡sɑnt** 'before') of grammaticalization from a body part noun to an adverb of time. In Sheko, **undi** means 'buttock' (Aklilu 1996:36). Although the Dizin word given to me for 'buttock' is **tɑkŋ**, the grammaticalization appears to have taken place in Proto-Maji times.

3.11.3 Location Adverbs

A few adverbs denote location. The first shows the word **ɑŋg** 'here':

(290) … **ɑŋg** in-kŋ t͡ʃoŋg wu-e.
here we-Gn1 among enter-3SF
'… she entered among us **here**.'

A more common variation of **ɑŋg** is **ɑŋgɑt** 'here'. This looks morphologically as though nominal suffixes (**-ɑ-t** '-Px-Loc') attach to **ɑŋg**. But no other data suggest that **ɑŋg** is a noun. More data should be sought.

(291) bɑt͡ʃ-ɑ **ɑŋgɑt** ki-go.
clothes-Px **here** ExBE-3SM
'The clothes are **here**.'

The adverbs in (292) and (293) denote both location and direction. Note the normal noun phrase conjoining suffix, **-kɑ** '&', attaching to adverbs in (293).

(292) **ʃɑɾ** gob-∅ ɑːʃ-o.
up jump-SSO stood-3SM
'Jumping **up**, he stood.'

(293) toɾtɑ kokŋ zig-ɨ-t **gujs-kɑ** **ʃɑɾ-kɑ** hiɑt-o.
Torta way edge-v-Loc **down-&** **up-&** run-3SM
'Torta ran **up and down** on the bank.'

3.11.4 Degree Adverbs

A very commonly spoken adverb is **ɪɑkɨz** 'very'. It is labeled a degree adverb. It modifies adjectives, as shown here, but also verbs. Morphologically it likely originated from **ɪɑk-∅-z** 'be_big-CR-M', but in contexts such as (294) it does not function as a relativized verb, but as an adverb. So this form is assumed to have grammaticalized into an adverb.

(294) eː, k'ejdn-bɑb-ɑ ɑ^{3}-k'ɛjdn-ɑ hɑt **ɪɑkɨz** guɸ ti-go.
yes work-POM-Px his-work-Px on **very** exceptional BE-3SM
'Yes, the worker is **very** exceptional at his work.'

Another degree adverb is **jɑʃ** 'slightly'.

(295) … **jɑʃ** tɑt͡ʃ-m-ki-∅-in ti-gɛj.
slightly change-Rflex-Perf-CR-F BE-3SF
'… she is one who has changed herself **a little**.'

3.11.5 A Duplication Adverb

One adverb, **t͡ʃɑk** 'again', refers to the repetition of the action that the verb denotes.

(296) eː, nog-ɑ-s **t͡ʃɑk** et-is ʔŋ^{2}-ge-z t͡ʃɑl-i-no.
yes news-Px-Ac1 **again** youS-Dat my-say-Ger be_able-Fut-1S
'Yes, I can tell you(S) the news **again**. (Yes, I am able [to do] my saying of the news to you(S) **again**.)'

3.12 Adpositions

All but one of the Dizin morphemes analyzed as adpositions are postpositions, as presented in Table 24. The words, **hɑt** and **kɑr**, appear in the table more than once to show the possible case markings on the noun phrases which precede or follow them.

Table 24. Dizin Adpositions

ADPOSITIONAL PHRASES	GLOSSES	OVERT CASE CO-OCCURRENCE
NP-**kŋ t͡sant**	NP-**Gn1 before**	Always Genitive
NP-**kŋ t͡ʃoŋg**	NP-**Gn1 inside**	Always Genitive
NP-**kŋ akŋ**	NP-**Gn1 above**	Always Genitive
NP-**kŋ sapm**	NP-**Gn1 above**	Always Genitive
NP-**kŋ k'aŋg**	NP-**Gn1 under**	Always Genitive
NP-**kŋ bot**	NP-**Gn1 on**	Always Genitive
NP-**kŋ bont**	NP-**Gn1 across**	Always Genitive
NP-**kŋ t͡ʃoʃt**	NP-**Gn1 after**	Always Genitive
NP-**kŋ hat** NP **hat**	NP-**Gn1 on** NP **from**	Usually Genitive
NP **gant**	NP **'like'**	No Overt Case
NP **dires**	NP **'up_to/next_to'**	No Overt Case
kar NP-**kojs** **kar** NP-**g-is** **kar** NP-**g** **kar** NP-**is** **kar** NP	**to** NP-**All** **to** NP-**In-Dat** **to** NP-**In** **to** NP-**Dat** **to** NP	Sometimes Allative Sometimes Inessive and/or Dative Sometimes No Overt Case

3.12.1 Grammaticalization of Nouns into Postpositions

At least two of the postpositions are the result of grammaticalization from nouns. They are noun roots with case, functioning as adpositions. Hopper and Traugott (1993:106-108), and others, have written about how this common phenomenon works. The first of these examples is shown in (297) and (298). The word **t͡sant** could be analyzed as either a noun with locative case (297a) or as a postposition (297b).

(297) a. **t͡san-t**
noun-case marker
'face-Locative'

b. **t͡sant**
postposition
'before/in front of/in the presence of'

A complete sentence follows, in which **t͡sant** is analyzed as a completely grammaticalized postposition.

(298) ɑ: sɑ:g-ɨ-**kŋ** **t͡sɑnt** no:gu int͡s-∅-z ti-go.
this God-v-**Gn1** **before** thing difficult-CR-M BE-3SM
'This is a thing which is difficult **before** God.'

Example (299) shows a similar case in which the word could be treated with the analysis shown in either (a) or (b). Example (300) shows it in a complete sentence.

(299) a. **t͡ʃon-g**
noun-case marker
'heart/stomach/belly/middle-Inessive'

b. t͡ʃoŋg
postposition
'in/inside'

(300) jɑtn-eni wɛt͡ʃi-**kŋ** **t͡ʃoŋg** hurt-ɛj.
fox-Fem forest-**Gn1** **inside** go_out_from-3SF
'The fox came out from **inside** the forest.'

Breeze (1990:38) provides evidence of this process in Benchnon also. She lists seven pairs of words, each with a noun and the postposition which is derived from it.

The grammaticalization process which results in Dizin postpositions should be investigated further. More vocabulary should be elicited and other postpositions may also be understood as **t͡sɑnt** and **t͡ʃoŋg** presently are. Since not all the words that function like postpositions can be analyzed as nouns, the grammatical category, postposition, is needed.

3.12.2 A Case of Optional Case Marking

As the data in Table 24 reveal, most of the postpositions either always co-occur with **-kŋ** Gn1 or never co-occur with case markers. The exception is **hɑt** 'on/at/in/from'. An example of each option is in (301) and (302).[35]

(301) kɑmil-eni i-borku-kŋɑt dɑdu k'oj-**kŋ** **hɑt** wut-∅ ɨz-n
vehicle-Fem 3SF-roll-when child one-**Gn1** **on** fall-SSO he-Ac2

d͡ʒɨt mɛt͡ʃ-ki-gɛj.
pressing_down hold-Perf-3SF

'When the vehicle rolled it fell **on** a teenager and it held him, pressing down.'

[35] While these two constructions are glossed differently, there is no clear pattern of the presence of **-kŋ** 'Gn1' affecting meaning. For example: **iti-kɑmil-eni-kŋ hɑt** 'from your(P) vehicle' versus **t'ɑrp'ezɑ hɑt** 'from the table'.

(302) ɑk k'ɛjdn **hɑt** ɑl-ki-no.
today work **at** stay-Perf-1S
'Today I have been staying **at** work.'

3.12.3 The Lone Preposition

All but one of the Dizin adpositions identified to date are postpositions. Five example sentences with the preposition **kɑr** 'to' are given in (303) through (307), to illustrate that it appears separate from case suffixes and in combination with the case suffixes **-kojs** 'All', **-g-is** 'In-Dat', **-g** 'In', and **-is** 'Dat'.

(303) kɛ bɑːb-e-kɑ iː-b jɑːb-e-ke-kŋ t͡ʃon-g k'oj k'oj-dɑ
furthermore father-Ds-& house-Loc person-Ds-Pl-Gn1 heart-In one one-Rel

kɑr sɑːg-ɨ-**kojs** jɛ-ŋ bɑːs-dɛ-niʃo.
to God-v-All come-Inf want-Ipf-3P

'Furthermore, the father and some of the family want to come to God.'

(304) dɑd-ɑ ɑ[3]-ɨt͡s-ɑ-s ʔm-∅ ugu bɛj-tɛj **kɑr** tɑmɑri
child-Px his-food-Px-Ac1 eat-SSO milk drink-SSS **to** student

iː-**g-is** bɑŋgɨr-o.
house-**In-Dat** return-3SM

'The child, having eaten his food and drunk milk, returned to school.'

(305) tiɑtrɑ-kŋ t͡ʃoʃt **kɑr** iː-**g** wu-we.
drama-Gn1 after to house-**In** enter-3SF
'After the drama she went **in/inside** a house.'

(306) t͡ʃoʃt bɑt͡ʃi d͡ʒɛj-∅-z oɸ-∅ **kɑr** gɑb-**is** tɛ-gɛj.
after clothes be_fine-CR-M put_on-SSO **to** market-**Dat** go-3SF
'Putting on clothing which is fine, she went to the market.'

(307) ɑt **kɑr** jɑːb d͡ʒɛj-∅-z ɑ[2]-ɑm-ŋ eb-mt sɑg-ɨ[3] k'ɑl-ɑ
now **to** person be_good-CR-M 2S-become-Inf think-if God-Gn4 word-Px

gɛ-dɛ-ki-∅ kud-ɑ-s bɑŋgɨr-n.
say-Ipf-Perf-CR road-Px-Ac1 return-Imp

'Now if you(S) are thinking of turning into (becoming) a person who is good, return to the path that God's word has been saying.'

3.12.4 Case Markers or Postpositions?

Dizin reinforces the generalization given by Payne: "It is difficult to distinguish case marking from adpositions" (1997:100). This is especially true of **gɑnt** 'like' and **dɨrɛs** 'up to'. Since they never assign overt case, as most postpositions do, we need to consider reanalyzing them as case suffixes. But since **hɑt** sometimes doesn't assign overt case, leaving the present analysis alone has some justification.

Another factor to consider with **dɨrɛs** 'next to', is that it was borrowed from Amharic [**dɨrɛs**] as a postposition. Interestingly, [**dɨrɛs**] had already grammaticalized from the Amharic verb, **dɛr:ɛsɛ** 'he/it arrived', before the borrowing occurred.

Regarding (303), the possibility also needs to be considered that **kojs** is a postposition meaning 'to' or 'toward', especially since mother tongue speakers have sometimes written it as a separate word. But that would require the combination of a preposition and a postposition in the same adpositional phrase. While that does occur in some languages, it is not attested elsewhere in Dizin.

Further investigation should continue on all the case markers and adpositions, and new conclusions are possible.

3.13 Interjections

The Dizin interjections that have been identified are shown in (308) through (310).

(308) i͡ts-ɑ ɑ^{3}-mɑm-^{1}kŋ^{1}? **e:**, i͡ts-ɑ mɑm-ki-go.
food-Px 3SM-be_prepared-PerfQ **yes** food-Px be_prepared-Perf-3SM
'Has the food been prepared? **Yes**, the food has been prepared.'

(309) izu jɑ:b d͡ʒɛj-∅-z tɛ-j? **kɑ:j**, iz-ɨ-n ɑ^{2}-jɑb-is.
he person be_good-CR-M BE-FutQ **no** he-v-Ac2 2S-believe-NgIJ
'Is he a person who is good? **No**, do not believe him.'

(310) a. **sɑ^{2}ro^{2}**
hello/hi
'A generic greeting'

b. **wu:h^{3}**
ya
'A reply to a call'

c. **wo:h^{12}**
ya
'A reply to a call'

CHAPTER 4

SUMMARY AND SUGGESTIONS FOR FURTHER RESEARCH

This thesis has given an overview of Central Dizin phonology and morphology, and has provided some data from Eastern and Western Dizin, as well. This chapter will summarize some of the important features of the language that are known, and give suggestions for further research.

The introductory chapter noted the significant language contact between Dizin and Amharic and between Dizin and Tirmaga-Chai. At a number of points throughout the thesis, references were made to borrowings from Amharic. A borrowing from a SE Surmic language, probably Tirmaga-Chai, was discussed in the phonology chapter (2.2.6). The extent to which Dizin has borrowed from surrounding Surmic languages still needs to be researched. The three main dialects of Dizin (Eastern, Central, and Western) and the less divergent varieties of Dizin still need to be systematically surveyed.

Some of the more significant phonological features of Dizin are glottalized stops and affricates, retroflex consonants (in Western Dizin), phonetically syllabic nasal consonants, lengthened vowels, and tone. The phonetically retroflex consonants that Aklilu identified in Central and Eastern Dizin should be researched further, as well as the phonemic ones in Western Dizin. The origins of the syllabic nasals and the nature of the glottal stop which co-occurs with them could be understood better with more data from Dizin and related languages.

Dizin tone is both lexical and grammatical, but some feature of the tone system are still not fully understood. It seems clear that three tone levels are operating, along with a

number of phonetic contour tones on single syllables. However, the interactions between adjacent tones and the phonemic status of the contour tones need to be researched further.

A number of significant morphological features have been described in this thesis. Dizin is a polysynthetic language, which is more agglutinative than fusional. Many of the noun roots end with a vowel that is deleted when vowel initial suffixes attach. The Dizin case system includes some clear, and some not so clear, instances of what some have called "stacked case." Genitive case is marked in a few different ways, but alienable and inalienable possession are not differentiated. It is not always clear whether some morphemes should be considered case markers or postpositions. These morphemes should be researched further.

A set of five verbal suffixes (**-∅** 'PstPr', **-k** 'Pres', **-i** 'Fut', **-dɛ** 'Ipf', **-ki** 'Perf ') are labeled as "tense/aspect" markers. Three of these suffixes seem to function as though they could be labeled "tense" markers, while the other two seem to function as though they could be labeled "aspect" markers. But since those suffixes occupy the same slot on a verb, giving them separate labels does not seem appropriate. A better understanding of the functions of these five morphemes may lead to a better label than "tense/aspect."

Clause chaining, medial clauses, and switch reference are attested. The Dizin switch reference morpheme, **-n** 'DS', signals that a different subject will follow. An unusual construction of interdependent verbs has also been discovered. The morphemes that connect two interdependent verbs are **-tɑ** 'ID1' and **-gɑ** 'ID2'. These need to be researched further.

The relativized verb constructions are rather complex and varied. They should be studied more to understand why the overt relativizer, **-dɑ**, is sometimes employed and other times, what is called a covert relativizer, is employed instead.

While a few Dizin adjectives are found, by far most of the words that modify nouns are now understood to be relativized verbs.

Two of the postpositions are clearly derived from nouns with case marking. The rest of the postpositions should be researched further to see whether they are similar. Depending what is found, "postposition" may not be needed as a Dizin grammatical category.

The syntax and discourse features of Dizin have not been addressed in this thesis. Future research on these topics should build on what Keefer (1969b), Allen (1976a) and Aklilu (2000) have written. Priority should be given to the study of Dizin syntax and discourse features.

We can be grateful for all that is now known about Dizin and can look forward to the understanding that will come in the future as research continues.

APPENDIX A

SELECTED TEXTS

SELECTED TEXTS

The two texts that follow have been selected to show larger units of Dizin discourse. Both texts are fables.

A Lion and a Fox

(1) ɛjk-ɨ-kɑ jɑtn-kɛnɑ-kŋki t͡sɛj tɛ-n t͡sɛj-ŋ gɛ-dɛ-no.
lion-v-& fox-both-Gn3 fable BE-DS tell_fable-Inf say-Ipf-1S
'It is a fable of both a lion and a fox that I am speaking to tell a fable.'

(2) ɛjk-ɨ-kɑ jɑtn-kɑ iʃ-ɑl-∅ ki-n ɛjk-kŋ zoku
lion-v-& fox-& 3P-stay-SSO ExBE-DS lion-Gn1 male_bovine

niɑk-ɨz-ɨnɑ jɑtn-kŋ oti kot͡ʃin i-ki-n; jɑtn kɛj-ɛ-ni
male-M-and fox-Gn1 cow female 3SF-ExBE-DS fox sun-Ds-F

kes-n "wɛk ɑl-e-n tɛ-∅ kode-n ɑ-ot-ɑ-s
go_out-DS down fire-Ds-Ac2 go-SSO bring-DS theM-cow-Px-Ac1

t͡ʃok-∅ gɑm-∅ ʔm-ʔm-ɑ" jɑ gɛ-∅ jɑtn-n wɛs-∅
slaughter-SSO roast-SSO 1P-eat-Jus this say-SSO fox-Ac2 send-SSO

tɑ-n tɛ-∅-go.
give-DS go-PstPr-3SM

'A lion and a fox were staying in one place; the lion's bull and the fox's cow were there; at sunrise fox said like that: "Go bring that fire down and let us slaughter a cow and roast it and eat it"; [lion] sending the fox, giving [an order], the fox went.'

(3) ɑ[3]-tɛ-n i-kɛj-ɛ-ni wɛk-ɑ-t i-ki-d-e-s so
3SM-go-DS theF-sun-Ds-F down-Px-Loc 3SF-ExBE-Rel-Ds-Ac1 up

t͡ʃon-t t͡sɑk-n t͡ʃɑk bɑŋgɨr-deː-∅ "ʔŋ[2]-tɛ-n so t͡ʃon-t
middle-Loc pass-DS again return-come-SSO 1S-go-DS up middle-Loc

tɛ-ge" gɛ-deː-∅ gɛ-∅-go.
go-3SF say-come-SSO say-PstPr-3SM

'When he [fox] went it was just after sunrise, and when he came back again it was midday; then the fox came saying to the lion, "When I went [down to the fire] it went up to the middle [of the sky]." '

(4) jɑ gɛ-n ɛjk "ɑnt i-tɛ-nt jɛ-dɛj-ki
this say-DS lion therefore 3SF-go-if/since come-spend_night-Perf-CR

biɑɾ to-ŋ."
tomorrow go-Imp

'The lion saying like this, "Therefore, since it goes up, come and spend the night and go tomorrow." '

(5) ɑ^{3}-gɛ-∅ tɑ-n t͡ʃɑk bɑŋgɨɾ-∅ tɛ-∅-go.
3SM-say-SSO give-DS again return-SSO go-PstPr-3SM
'He [the lion] telling [the fox], giving [an invitation], and again returning he [the fox] went.'

(6) ɑ^{3}-bɑŋgɨɾ-∅ tɛ-n t͡ʃɑk so t͡ʃon-t i-jɛ-dɑ-d-ɑ gɑnt
3SM-return-Imp go-DS again up middle-Loc 3SF-come-Ipf-Rel-Px like

so t͡ʃon-t jɛ-∅-ge.
up middle-Loc come-PstPr-3SF

'When he returned, again like this one that came up to the middle [of the sky] she [the sun] came up to the middle [of the sky].'

(7) kɑːdu god-ɨ-kŋ t͡ʃoʃt ɑ^{3}-wɛs-tɑ-n ɑ^{3}-tɛ-n esi kɛj-ɛni
three evening/day-v-Gn1 after 3SM-send-??-DS 3SM-go-DS and sun-Fem

so t͡ʃon-t i-jɛ-n ɑ^{3}-tɛ-∅ bɑŋgɨɾ-∅ ge-kɨdɑt ɑŋg
up middle-Loc 3SF-come-DS 3SM-go-SSO return-SSO tell-when here

jɑtn-^{3} ot-e-ni siɑg-n; ɛjk "ʔŋ^{2}-zokɑ mo otu
fox-Gn4 cow-Ds-Fem give_birth-DS lion my-bull earlier_today calf

dɑd siɑg-o" jɛ gɛ-go.
child give_birth-3SM that say-3SM

'After three days he [lion] sent him [fox], and he [fox] went, and the sun came up to [the] middle [of the sky]; he [fox] going, returns and tells [lion]; and fox's cow gave birth here; and lion [said], "Earlier today my bull gave birth to a calf," he said that.'

(8) jɑtn jiɾ ɑ^{3}-ge-ni?
fox what? 3SM-say-CQ
'What did [the] fox say?'

(9) "undi jiɾ-g ki-∅ gob-ɨ-g tɛ-n ɑ^{3}-zoku otu
in_the_past which?-In ExBE-SSO country-v-In BE-DS 3SM-bull calf

siɑg-dɛ-ni?" jɛ gɛ-∅-go.
give_birth-Ipf-CQ that say-PstPr-3SM

' "In the past in what country was it where a bull gives birth to a calf?" he said that.'

(10) "ʔŋ^{2}-zok-ɑ ti-tɑ ɑ^{3}-siɑg-ki-gɑ" jɛ gɛ-∅ iɑz-o.
my-bull-Px BE-ID1 3SM-give_birth-Perf-ID2 that say-SSO lie-3SM
'It is my bull that has given birth," saying that, he lied.'

(11) jɑ gɛ-∅ iɑz-n jɛ-kŋ t͡ʃoʃt "ʔŋ^{3}-tɛ-n iʃi-wɛt͡ʃi-g ki-∅
this say-SSO lie-DS that-Gn1 after 1P-go-DS 3P-forest-In ExBE-SSO

nudu hel mɑskɾ-ɑ" jɑ gɛ-n tiɛ-∅-nɑʃi.
animal all testify-Jus this say-DS go-PstPr-3P

'After he lied like that, he [the fox] said like this, "Let us go to the forest and let all the wild animals who are there give witness," saying like that, they [lion and fox] went.'

(12) iʃ-ɑ-tɛ-n esi wɛt͡ʃi-g ki nud-ɑ hel ɛjk-ɨ-n ʃoɾ ɛjk-kŋ
3P-D-go-DS and forest-In ExBE animal-Px all lion-v-Ac2 fear lion-Gn1

ti-go "ɛjk zok-e ti-tɑ siɑg-ki-gɑ" gɛ-∅-niʃo.
BE-3SM lion bull-Ds BE-ID1 give_birth-Perf-ID2 say-PstPr-3P

'When they went, all the wild animals in the forest, fearing the lion said, "It is the lion's bull that gave birth."'

(13) iʃ-in-dɛ-ki-∅ bɛj-dɑkŋ tɛ-n; bɛj oʃk-n, jiɾ i-gɛ-ni?
3P-go-Ipf-Perf-CR monkey-near_to go-DS monkey call-DS what? 3SF-say-CQ
'Those who were walking went near to a monkey and [someone] called the monkey, [and] what did she say?'

(14) "ɑk k'ɛj-dn hɑt ɑl-ki-no.
today work-Nzr on stay-Perf-1S
' "Today I have been staying at work.'

(15) jiɾ ʔŋ^{3}-ɛ-n it-oʃk-dɛ-ni?" jɛ gɛ-∅-gɛj.
what? 1S-do-DS 2P-call-Ipf-CQ that say-PstPr-3SF
'What shall I do [since] you have been calling?" she said that.'

(16) "nog-ɑ-s sis-ŋ; gɛ-dn-dɛ-to."
matter-Px-Ac2 listen-Imp tell-Pass-Ipf-2S
'Listen to the matter; you are being told.'

(17) "jiɾ tɛ-ni?
what? BE-CQ
'What is it?'

(18) kɑl-ɑ-kɑ jɛl-t gob-ɑ-k t'ɑgŋ begɨm-∅ tiɛ-t ʔŋ^{2}-ɑl-∅
sky-Px-& under-Loc land-Px-& two be_divided-SSO go-ID1 1S-stay-SSO

mɛrɸi-k'ɑŋk sib-∅ hiɛʃ-∅ ki-∅ jɛ-k-ɨ-gɑ."
needle-Inst sew-SSO spend_day-SSO ExBE-SSO come-Pres-v-ID2

'The sky and the earth are divided [into] two and I have gone and have sat and with a needle I have been spending the day sewing [it back together] and [now] I am coming.'

(19) "undi jiɾ-g tɛ-n ɑ^{3}-kɑl-ɑ-kɑ jɛl-t gob-ɑ-kɑ
in_the_past what?-In BE-DS 3SM-sky-Px-& under-Loc land-Px-&

mɛrɸi-k'ɑŋk sib-dn-dɛ-ni?"
needle-Inst sew-Pass-Ipf-CQ

'[The lion said,] "In whose country is the sky and the earth sewn together by needle?"'

(20) "undi jiɾ-g ki-∅ zoku tɛ-ki-∅ otu siɑg-dɛ-ni?"
in_the_past what?-In ExBE-SSO bull BE-Perf-CR calf give_birth-Ipf-CQ

jɛ gɛ-gɛj bɛj.
that say-3SF monkey

' "In whose country does a bull give birth to a calf?" the monkey said that.'

(21) jɛ-kŋ t͡ʃoʃt ɛjk hiɑlm-∅ iʒ-ɨ-n gib-∅-o.
that-Gn1 after lion be_angry-SSO she-v-Ac2 chase-PstPr-3SM
'After that, [the] lion, being angry, chased her.'

(22) ɑ^{3}-gib-∅ kob-∅ sɑk zɑŋg-t tɛ-n ɛs ek int͡ʃi-kŋ hɑt
3SM-chase-SSO take-SSO gorge edge-Loc go-DS and there tree-Gn1 on

i-gob-n gob-k-ɨ-no gɛ-∅ sɑk-g-e-t gus boɾk-∅ ʃub-o.
3SF-jump-DS jump-Pres-v-1S say-SSO gorge-In-Ds-Loc down roll-SSO die-3SM

'Chasing, going to the edge of a gorge, and [he thought], "When she jumps on the tree there, I will try to jump [and grab her]," [but instead] rolling down into the gorge, he died.'

(23) ɑ^{3}-boɾk-∅ ʃub-n bɑŋgɨɾ-de-∅ ɑŋg jɑtn duŋgɨs-∅
3SM-roll-SSO die-DS return-come-SSO here fox cheat-SSO

"ɑ^{2}-bɑʒu-bɑb-ɑ-s kote-t ʔn-debuʃ-de-k-ɨ-gɑ" jɛ gɛ-∅ so
2S-conflict-PsrM-Px-Ac1 take-ID1 1S-kill-come-Pres-v-ID2 that say-SSO above

jɑtn dɑn-t ge-n ɑ-jɑtn ug-ɑ-s ɑ^{3}-tɑ-n bɛj-t
fox near-Loc say-DS theM-fox milk-Px-Ac1 3SM-give-DS drink-??

i-bɛj-∅ hiɛʃ-∅ ki-∅ jiɾ i-ɑm-ni?
3SF-drink-SSO spend_day-SSO ExBE-SSO what? 3SF-become-CQ

'After he rolled and died, [the monkey] returning to here to cheat the fox said like that, "I have taken your enemy and killed [him] and have come"; [the monkey] spoke up to the fox and the fox gave milk and the monkey drank and drank and spending the day there, what happened to her?'

(24) wɛk iʒ-kŋ hel-t ɑ^{3}-tiɑɸ-n niɑ͡ts'-k-ɨ-no gɛ-∅ t'uh-∅
down she-Gn1 chest-Loc 3SM-drip-DS lick-Pres-v-1S say-SSO burst-SSO

ʃub-∅-ɛj; jɛ gɛ-dn-dɛ-go.
die-PstPr-3SF that say-Pass-Ipf-3SM

'It [the milk] dripped down onto her chest and [she] said (thought), "I am licking it (I will try to lick it)," and bursting, she died; that is said.'

A Baboon and a Rat

(25) botku-kɑ utn-kɑ gɑb i͡tsu koʃ-∅ kotɛ-∅ kotn
baboon-& rat-& together grain farm-SSO grab.and.go-SSO attic

kɑɸ-tn-tɑ iz-ɨ-g iɑɾ͡ts-n-dɑ-di-gɑ; jɛ ɨʃ-giɛ-n ɑ-utn
build-Pass-ID1 it-v-In put_inside-Pass-Ipf-??-ID2 that 3P-say-DS theM-rat

int͡ʃi mɑn-∅-ɨ-z-kɑ kɑlb-∅-ɨ-z giɛ-kɑj k'iɑ-∅ "bol
tree be_other-CR-v-M-& be_strong-CR-v-M say-Neg leave-SSO *bol*[1]

ti-ki-∅ kɑlb-∅-ɨ-z ti-∅-go" ge-∅ t͡s'iɑkŋ-∅
BE-Perf-CR be_strong-CR-v-M BE-PstPr-3SM say-SSO choose-SSO

ket-ɨ-s kɑɸ-tɛj; iʃi i͡ts-e-s ʃojt ɨz-ɨ-g ɑn-∅
uprights-v-Ac1 build-SSS they grain-Ds-Ac1 all it-v-In put-SSO

t͡ʃuɑʒu-k t͡sɑns-tɛj ʃojt e-∅ ɑn-∅ k'iɑ-n; utn bol-e-kŋ
grass-InstIr cover-SSS all do-SSO put-SSO leave-DS rat *bol*-Ds-Gn1

jɛl-ɨ-g ʃɑr tosk-∅ so kes-∅ i͡ts-e-s guɸt
bottom-v-In up chew_hole-SSO above go_up-SSO grain-Ds-Ac1 completely

ʔm-∅ k'iɑ-n; "ɑk ʔŋ[3]-ɑ-i͡ts-ɑ ɑ[3]-sɛ-dn-ɑ" ge-n
eat-SSO leave-DS today our-D-grain-Px 3SM-see-Pass-Jus say-DS

ɑ-botku jɛ-n-ɑ iʃi nogm-∅ i͡ts-ɑ-s d͡ʒuɑj-kɨst
theM-baboon come-DS-?? they speak-SSO grain-Px-Ac1 tear(open)-when

"nɑ-ki-ŋ?"
where?-ExBE-PstQ

'A baboon and a rat grew grain together, took it and built an attic, and put it inside it; and they were saying like that, the rat, not saying [he wants] other strong poles, says, "*Bol* poles are strong," and choosing them, they build uprights [for the attic] and put all their grain in it, and covering it with grass, having done all these things, leaving; and the rat chewed a hole in the *bol* pole from the bottom up, and going up, ate the grain until it was gone, and left; and [the rat] said, "Today let our (dual) grain be seen;" and the baboon came, and talking when they tore open the grain [storage place], said, "Where is it?" '

[1] A tree species.

(26) ít͡s-ɑ wɛl hundu, ɨz-t ki-z kɑj; "ɑ-botk! ít͡s-ɑs iki
grain-Px just chaff it-at ExBE-Inf Neg Voc-baboon grain-Ac1 who?

tɛ-ki-∅ ʔm-ni?
BE-Perf-CR eat-CQ

'There was no grain there, just chaff; "Oh, baboon! Who has been the one who ate the grain?'

(27) in ít͡s ʔn^{2}-sɛ-ki-ŋ?
I grain 1S-see-Perf-PstPrQ
'Have I seen the grain?'

(28) iː-g-ɑ-t ʔŋ^{3}-ɑl-ɑ iː-ɑ ɑl-k kiɑb-n" ɑ-jɛ
house-In-Px-Loc 1P-stay-Jus house-Px fire-InstIr get_fire_going-DS this-Ds

ɑ^{3}-gɛ-dn-∅ "iʃ-ɑ iː-g-ɑ-t ɑl-ɑ iː-ɑ ɑl-k
3SM-say-Pass-SSO they-D house-In-Px-Loc stay-Jus house-Px fire-InstIr

ɑt͡s-ɨ-n" utn wɛkɑ bolu tokŋ-e-g und ɑ^{3}-kɑɾs-∅
burn-v-DS rat below *bol* hole-Ds-In in_the_past 3SM-carve-SSO

mɑm-s-d-iɛ-g ɨz-ɨ-g gus koʃkoʃ k'iɑ-∅ tɛ-n; botku
be_ready-Cau-Rel-Ds-In it-v-In down quickly leave-SSO go-DS baboon

"kiɛs-k-ɨ-no" giɛ-n "ɑl-e gibs-iɛ-s ɑ^{3}-ʔm-nt et
go_out-Pres-v-1S say-DS fire-Ds facial_hair-Ds-Ac1 3SM-eat-if youS

ti-ki-∅ ʔm-ki-to" ɑ^{3}-ge-∅ iɑz-n; bol tokŋ-g-e-t k'iɑ-∅
BE-Perf-CR eat-Perf-2S 3SM-say-SSO lie-DS *bol* hole-In-Ds-Loc leave-SSO

tɛ-n, botku kiɛs-k-ɨ-no giɛ-n ɑl-e iz-kŋ ɑb-t
go-DS baboon go_out-Pres-v-1S say-DS fire-Ds he-Gn1 eye-Loc

gibs-e-s-n mɨlɨt͡ʃ' ɑ^{3}-ʔm-tɑ-n botku wut-∅ k'iɑ-∅
facial_hair-Ds-Ac1-Ac2 all 3SM-eat-??-DS baboon fall-SSO leave-SSO

tɛ-n; jɛ utn-kɑ botku-kɑ ít͡s iʃ-ɑ koʃ-kŋ-ki iʃ-ɑ t͡sɛj.
go-DS that rat-& baboon-& grain they-D farm-Inf-?? they-D fable

Let us stay in the house and get the house started on fire," and the house will be burned by fire," and the rat went down the hole that he had prepared by chewing before and went down it, quickly leaving, going; and the baboon was trying to go out and [the rat] said lying, "If the fire burns your facial hair, then you are the one who ate [the grain];" and he left through the hole in the *bol*, and went, and as the baboon was going out the fire burned up all his facial hair, and the baboon fell down and left, going away; that [is] the story of the rat and baboon who grew grain [together].

APPENDIX B

WORDLISTS

Bender's Comparative List

M. L. Bender provided wordlists of many Ethiopian languages in an important 1971 article, "The Languages of Ethiopia: A New Lexicostatistic Classification and Some Problems of Diffusion." His wordlist for Maji (Dizin) appears on page 261 of that article. What follows is an updated version of the ninety-eight lexical entries on that list.

#	Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
1	ʃojt	**ሾይት**	all	**ሁሉ**
2	t͡s'iɑkŋ	**ፂያክኝ**	ashes	**አመድ**
3	orgŋ	**ኦርግኝ**	bark (tree)	**ልጥ**
4	t͡ʃoːnu	**ቾኑ**	belly	**ሆድ**
5	bɑbɨz	**ባብዝ**	that which is big	**ትልቅ**
6	kɛbi	**ከቢ**	bird	**ወፍ**
7	wɛt͡s'o	**ወያ**	he bit	**ነከሰ**
8	t͡s'ɑnɨz	**ፃንዝ**	that which is black	**ጥቁር**
9	jɑrbm	**ያርብም**	blood	**ደም**
10	uːsu	**ኡሱ**	bone	**አጥንት**
11	tiɑmu	**ቲያሙ**	breast	**ጡት**
12	ɑtso	**ኣትሶ**	he burned (transitive)	**አቃጠለ**
13	hi^{3}ɑ^{3}lu^{3}	**ኺያሉ**	claw (animal)	**ጥፍር**
14	diw^{3}	**ዲው**	cloud	**ደመና**
15	t͡ʃow^{2}	**ቾው**	cold (of air)	**ብርድ**
16	jɛgo	**የጎ**	he came	**መጣ**
17	ʃubo	**ሹቦ**	he died	**ሞት**
18	kiɑnu	**ኪያኑ**	dog	**ውሻ**

#	Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
19	bɛjo	በዮ	he drank	ጠጣ
20	kol^{2}iz^{2}	ኮልዝ	that which is dry	ደረቅ
21	ɑːj^{12}	ኣይ	ear	ጆሮ
22	ʔmo	እሞ	he ate	በላ
23	miɑgu	ሚያጉ	egg	እንቁላል
24	ɑbu	ኣቡ	eye	አይን
25	tujdniz	ቱይድንዝ	that which is fat	ጮማ
26	bɑbu	ባቡ	father	አባት
27	ɑːl	ኣል	fire	እሳት
28	wurgi͡ts	ዉርጊሥ	fish (noun)	አሳ
29	wɛŋgi	ወኝጊ	fly (insect)	ዝምብ
30	ɑːʃu	ኣሹ	foot	እግር
31	tɑːso	ታሶ	he gave	ሰጠ
32	tɛgo	ተጎ	he went	ሄደ
33	d͡ʒɛjʒ	ጀይዥ	that which is good	ጥሩ
34	t͡ʃuɑʒu	ቿዙ	grass	ሳር
35	sɑːru	ሳሩ	hair (of head)	ጠጉር
36	kut͡ʃu	ኩቹ	hand	እጅ
37	gɛ^{2}li^{1}	ገሊ	head	ራስ
38	siso	ሲሶ	he heard	ሰማ
39	t͡ʃoːnu	ቾኑ	heart	ልብ
40	uʃum	ኡሹም	horn	ቀንድ
41	ji^{1}nu^{3}	ዩኑ	I	እኔ
42	dɛbuʃo	ደቡሾ	he killed	ገደለ
43	t'uso	ጡሶ	he knew	አወቀ

#	Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
44	ko^{3}lu^{3}	**ኮሉ**	knee	**ጉልበት**
45	int͡ʃɑːj	**ኢንቻይ / ኢንች'ኣይ**	leaf	**ቂጠል**
46	bow^{12}	**ቦው**	liver	**ጉበት**
47	ʃɑdnɨz	**ሻድንዝ**	that which is long	**ረጅም**
48	t͡ʃ'ut͡ʃ'u	**ጩጩ**	louse	**ቅማል**
49	jɑːb	**ያብ**	man	**ሰው**
50	iɑkɨz	**ኢያክዝ**	those which are many	**ብዙ**
51	at͡ʃku	**ኣችኩ**	meat	**ስጋ**
52	at͡sɨm	**ኣሥም**	moon	**ጨረቃ**
53	t'u^{3}mu^{3}	**ጡሙ**	mountain	**ተራራ**
54	eːdu	**ኤዱ**	mouth	**ኣፍ**
55	sumu	**ሱሙ**	name	**ስም**
56	kum	**ኩም**	neck	**አንገት**
57	k'ɑlɨz	**ቃልዝ**	new	**አዲስ**
58	goːt	**ጎት**	night	**ሌሊት**
59	---	---	---	---
60	sinu	**ሲኑ**	nose	**አፍንጫ**
61	k'oːj	**ቆይ**	one	**አንድ**
62	mɑnɨz	**ማንዝ**	that which is other	**ሌላ**
63	iːɾu	**ኢሩ**	rain (noun)	**ዝናብ**
64	t͡subɨz	**ሡብዝ**	that which is red	**ቀይ**
65	k'udu	**ቁዱ**	road	**መንገድ**
66	t͡ʃ'uɑt͡ʃ'u	**ጯጩ**	root	**ስር**
67	kɑsɛj	**ካሰይ**	sand	**አሸዋ**
68	gɛgo	**ገጎ**	he said	**አለ**

#	Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
69	sɛgo	**ሰጎ**	he saw	**አየ**
70	bukum	**ቡኩም**	seed	**ዘር**
71	ɑlo	**ኣሎ**	he sat	**ተቀመጠ**
72	kutu	**ኩቱ**	skin (human)	**ቆዳ**
73	sog-o	**ሶጎ**	he slept	**ተኛ**
74	jɑsɨz	**ያስዝ**	that which is small	**ትንሽ**
75	t͡ʃ'ubu	**ፁቡ**	smoke (noun)	**ጢስ**
76	t͡ʃuɑʒu	**ጀገቡ**	snake	**እባብ**
77	ɑːʃo	**ኣሾ**	he stood	**ቆመ**
78	dɑɾsu	**ዳርሱ**	star	**ኮከብ**
79	ni^{2}ɑ^{2}lu^{3}	**ኒያሉ**	stone	**ድንጋይ**
80	t͡ʃɑʒ	**ቻኛ**	sun	**ጸሃይ**
81	boɾo	**ቦሮ**	he swam	**ዋኘ**
82	t͡ʃ'iɾu	**ጪሩ**	tail	**ጅራት**
83	kol^{2}ɨz^{2}	**ኮልዝ**	that which is thin	**ቀጭን**
84	ɑː^{1}	**ኣ**	this	**ይህ**
85	kɑː^{1}du^{2}	**ካዱ**	three	**ሶስት**
86	jɛtu	**የቱ**	thou (you S)	**አንተ**
87	iɑbɨl	**ኢያብል**	tongue	**ምላስ**
88	ɑː^{3}ʒu^{2}	**ኣገቡ**	tooth	**ጥርስ**
89	int͡ʃ	**ኢንች**	tree	**ዛፍ**
90	t'ɑːg^{1}ŋ^{2}	**ጣግኝ**	two	**ሁለት**
91	k'et͡s'ɨz	**ቄፅዝ**	that which is warm	**ሙቅ**
92	ɑːj^{3}	**ኣይ**	water	**ውሃ**
93	i^{3}nu^{3}	**ኢኑ**	we	**እኛ**

#	Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
94	ujdnɨz	**ኡይድንዘ**	that which is wet	**እርጥብ**
95	nɑk	**ናክ**	what?	**ምን**
96	gowdnɨz	**ጎውድንዘ**	that which is white	**ነጭ**
97	iki	**ኢኪ**	who?	**ማን**
98	koːt͡ʃɨn	**ኮችን**	woman	**ሴት**
99	$i^{3}ti^{2}$	**ኢቲ**	ye (you P)	**እናንተ**

Surface Tone on Nouns

The data in this table is the basis of the tone discussion in 2.7, pp. 47 ff. It could be useful to those who want to do further research on Dizin tone. It is presented in alphabetic order, based on IPA.

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
ɑb^{1}m^{2}	አብም	sister's son	የእህት ወንድ ልጅ
ɑb^{1}ʃi^{3}	ኣብሺ	tree species	ዋንዛ
ɑ^{1}but^{3}	ኣቡት	gooseberries	አውጥ
ɑrg^{23}ŋ^{3}	ኣርግኝ	palm tree	ዘምባባ
ɑ^{3}ɾu^{3}	ኣሩ	hippopotamus	ጉማሬ
ɑː^{13}ɾu^{3}	ኣሩ	kind of knife	የቢላዋ አይነት
bɑm^{3}bɨɾn^{1}	ባምብርን	insect bite	ሸፍታ
bɑːj^{3}	ባይ	acacia	ግራር
bɑɾ^{3}	ባር	cow area	በረት
bɑɾ^{13}bɑɾ^{1}	ባርባር	red hot pepper	በርበሬ
bɑ^{2}ɾu^{3}	ባሩ	millet	ዳጉሳ
bɑ^{12}zu^{1}	ብዙ	war, conflict	ጦርነት
bɛj^{3}ti^{3}	በይቲ	Me'en	መኤኒት
bɛɾ^{3}gi^{3}	በርጊ	a person's name	የሰው ስም
bɛɾ^{3}gi^{2}	በርጊ	hoof	ሽሆና
bo^{3}ku^{3}	ቦኩ	arrowroot	ጎደሬ
bol^{2}ku^{1}	ቦልኩ	aardvark	የአራዊት ዓይነት
bo^{12}lu^{1}	ቦሉ	castor oil	ጉሎ
bo^{2}tu^{2}	ቦቱ	pumpkin	ዱባ
bo^{1}tu^{2}	ቦቱ	soil	አፈር

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
bow^{12}	ቦው	liver	ጉበት
da^{1}bu^{2}	ዳቡ	bread	ዳቦ
daː^{3}bu^{1}	ዳቡ	juniper tree	ጥጅ
daj^{12}	ዳይ	arrowhead	ቀስት
daːʒ^{12}	ዳዥ	worm	ትል
dɛm^{3}si^{3}	ደምሲ	lady's belt	መከነት
dow^{12}	ዶው	duiker[1]	ድኩላ
dujd^{2}n^{2}	ዱይድን	grub worm	ትል
duː^{2}ki^{1}	ዱኪ	kind of cattle disease	አባጉርባ
duːn^{31}	ዱን	waterbuck	ዲፋርሳ
eb^{2}m^{3}	ኤብም	sibling's daughter	የዕህት ወይም ወንድም ሴት ልጅ
eg^{3}ŋ^{1}	ኤግኝ	sweat bee	ጣዝማማር
e^{3}kɨr^{3}	ኤክር	bed bug	ትኧን
er^{2}gu^{2}	ኤርጉ	tree species	የዛፍ ዓይነት
gɑ^{3}di^{3}	ጋዲ	boundary	ድንበር
gɑː^{2}zi^{1}	ጋዚ	curse	እርግማን
ge^{1}bil^{2}	ጌቢል	armpit	ብብት
gem^{1}bɨl^{2}	ጌምብል	tree species	የዛፍ አይነት
gem$\widehat{\text{dʒ}}^{21}$	ጌምጅ	jaw	አገጪ
ge^{1}ru^{1}	ጌሩ	colobus monkey	ጉሬዛ
ge^{1}zɨm^{2}	ጌዝም	lower large intestines	ሽንፍላ
gilf^{3}	ጊልፍ	dry honeycomb	ገጋ
gi$^{3}\widehat{\text{ts'}}$u^{3}	ጊፁ	sisal plant	ቃንጫ
giːʒ^{32}	ጊዥ	cheek	ጊንጭ
gi^{2}ʒɨr^{1}	ጊዥር	heel	ተረከዝ

[1] A wild animal, similar to a small deer.

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
gow^{12}	ጎው	metal bracelet	አምባር
gu^{2}t͡ɬʃ^{3}	ጉትች	metal earrings	ጉትቻ
guːt^{1}n^{2}	ጉትን	tree species	የዛፍ አይነት
haː^{3}t͡ʃu^{1}	ሻቹ	platform	ማማ
haː^{2}lu^{3}	ሻሉ	room inside trees	የዛፍ ውስጣዊ ክፍል
ha^{2}lu^{3}	ሻሉ	tapeworm	ኮሶ
ha^{1}ɾu^{3}t͡ʃa^{3}t͡ʃi^{3}	ሻሩቻቺ	mule-keeper bird	የወፍ አይነት
haː^{1}ʒi^{1}	ሻዠ	Blue Nile River	ያባይ ወንዝ
hin^{2}tu^{2}	ሺንቱ	vine species	የሓርግ አይነት
hoː^{3}	ሾ	lung	ሳንባ
iel^{32}	ኢዩል	rabbit	ጥንቸል
jaː^{13}mu^{3}	ያሙ	dry twig, branch	ጭራሮ
jaɾb^{3}m^{3}mɛɾ^{1}ti^{1}	ያርብምመርቲ	artery, vein	ደም ቅዳ፥ ደም መልስ
jiː^{13}nu^{2}	ዩኑ	intestines	አንደት
ji^{1}nu^{3}	ዩኑ	I	እኔ
ka^{12}lu^{1}	ካሉ	enset[2] trunk	የእንሰት ግንድ
ka^{3}lu^{3}	ካሉ	hole in ground	ጉድጓድ
kaːɾ^{12}	ካር	game ring	የሚጫወቻ አይነት
kaɾ^{3}	ካር	molar	መንጋጋ
kaɾ^{3}t͡ʃi^{3}	ካርቺ	external ulcer	የቆላ ቁስል
kaɾ^{3}ma^{3}	ካርማ	tree species	የቆላ ጠንካራ ዛፍ
kaː^{1}zi^{2}	ካዚ	tree species	ልጥ
kaŋ^{1}gɨt͡ʃ^{2}	ካኝግች	coffee grounds	አተላ
kɛ^{1}bi^{1}	ከቢ	bird	ወፍ
kɛm^{1}ti^{2}	ከምቲ	red-necked spur fowl	ቅቆ

[2] Often called "false banana."

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
kɛʃk^{2}ŋ^{3}	ከሸክኝ	porcupine	ጀርት
ki^{1}mɑm^{2}	ኪማም	spices	ቅመም
kiːn^{12}	ኪን	coals	ፍም
kin^{1}su^{2}	ኪንሱ	kite bird	ጭልፍት
kiɾ^{3}n^{3}	ኪርን	thread	ክር
koːf^{12}	ኮፍ	gourd cup	ከሁለት የተከፈል ቅል
ko^{3}ku^{3}	ኮኩ	name	ስም
ko^{3}li^{3}	ኮሊ	dipper	ማንኪያ
ko^{3}lu^{3}	ኮሉ	knee	ጉልበት
koɾ^{3}boj^{1}	ኮርቦይ	morning star	የንጋት ኮከብ
koŋ^{1}gu^{2}	ኮኝጉ	wing	ክንፍ
kurs^{32}	ኩርስ	swelling	ቡጉንጂ
ku^{3}sɨm^{3}	ኩስም	flower	አበባ
ku^{1}sɨŋ^{1}	ኩስኝ	leather sack	ስልቻ
k'ɑ^{1}lɑj^{2}	ቃላይ	bullet cartridge	ቀለህ
k'os^{1}	ቆስ	strainer	ወንፊት
muːd^{12}	ሙድ	awl	ወስፌ
murd^{32}	ሙርድ	grass species	ሰርዶ
noj^{1}	ኖይ	ostrich	ሰጉን
o^{3}t͡ʃi^{3}	ኦቺ	mushroom species	የእንጉዳይ አይነት
oːl^{31}	ኦል	bird species	የወፍ አይነት
oɾg^{1}ŋ^{2}	ኦርግኝ	tree bark	ቅርፊት
ot^{2}n^{1}	ኦትን	horn	ጡርንባ
p'i^{1}ɑɾ^{1}gu^{2}	ጲያርጉ	tree species	የዛፍ አይነት
sɑn^{2}t'ɑ^{3}	ሳንጣ	walking stick bag	ሻንጣ
sɑrb^{2}m^{3}	ሳርብም	oldest son	በኩር
sɑrb^{2}m^{2}i^{3}	ሳርብሚ	oldest daughter	የመጀማሪያ ሴት ልጅ

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
si^{3}ɾɨz^{1}	ሲርዝ	stripe	ቡራቡሬ
ʃɑ^{1}fɨd^{2}	ሻፍድ	buffalo skin shoes	ጫማ
ʃɑːm^{23}	ሻም	tree species	የዛፍ አይነት
ʃɑ^{2}ɾi^{3}	ሻሪ	termite	ምስጥ
ʃɛm^{3}di^{1}	ሸምዲ	vine species	የሐረግ አይነት
ʃiɾg^{1}ŋ^{1}	ሺርግኝ	soil with minerals	ጨው ጨው የሚል አፈር
ʃoj^{12}	ሾይ	tick	መዥገር
ʃoɾk^{1}ŋ^{2}ɨz^{2}	ሾርክኝዝ	coward	ፈሪ
tɑː^{1}lu^{2}	ታሉ	plum tree species	ኮሽም
tɑɾ^{1}gu^{2}	ታርጉ	drum	ከበሮ
tiː^{1}	ቲ	tree species	የዛፍ አይነት
tiː^{3}ʃu^{1}	ቲሹ	fresh corn	እሸት
to^{1}bɨɾ^{2}	ቶብር	weed species	የአረም አይነት
to^{2}lu^{3}	ቶሉ	muddy water	ድፍርስ ውኃ
toːɾ^{12}	ቶር	cowrie shell	ዛጎል
toːz^{3}	ቶዝ	in-law	አማች
tu^{3}mu^{3}	ቱሙ	water hole in river	ብህር
tuɾ^{3}gi^{3}	ቱርጊ	plant species	እምቧይ
tuɾ^{3}gu^{3}	ቱርጉ	tree trunk	ጉቶ
tuː^{3}su^{3}	ቱሱ	center pole	ምሰሶ
t'uː^{3}mu^{3}	ጡሙ	mountain	ተራራ
t͡se^{2}ɾi^{1}	ሜሪ	locust	አንበጣ
t͡s'u^{3}ɾu^{3}	ፀሩ	limb muscles	ባት፥ ጡንቻ
t͡ʃɑ^{3}ɾɨz^{1}	ቻርዝ	spots	ቡራቡሬ
t͡ʃɑŋ^{2}gɨʒ^{2}	ቻኝግዥ	sun's heat	የፀሐይ ሙቀት
t͡ʃɑŋ^{3}gl^{3}	ቻኝግል	flora species	የእፀዋት ዓይነት
t͡ʃoɾ^{23}	ቾር	tree species	ዶቅማ

Dizin (Phonemic IPA)	Dizin (Tentative Orthography)	English Gloss	Amharic Gloss
t͡ʃo^{3}ɾɑ^{3}	ቾራ	bird species	ድንቢጥ
t͡ʃow^{2}	ቾው	coldness	ብርድ
t͡ʃoŋ^{1}gi^{2}	ቾኝጊ	guitar[3]	ክራር
t͡ʃʼɑ^{3}tʼu^{3}	ጫጡ	tapeworm	ኮሶ
t͡ʃʼu^{1}ɑd^{2}	ቁ.ድ	hunter	ተኳሽ አለሚ
t͡ʃʼu^{3}du^{3}	ጩዱ	spit	ምራቅ
t͡ʃʼuɾ^{3}ti^{1}	ጩርቲ	switch	አርጩሜ
u^{3}gi^{1}	ኡጊ	termite mound	ኩይሳ
u^{1}gu^{2}	ኡጉ	milk	ወተት
uɾs^{31}	ኡርስ	plum tree species	እንኮይ
wɛ^{1}ʃi^{2}	ወሺ	second harvest	ብሳና
woː^{1}ʒi^{2}	ዎዢ	bamboo	ቀርቀሃ
wuː^{1}ɾi^{2}	ዉሪ	gourd	ቅል
zɑj^{12}	ዛይ	back of neck	ማደራት
zɑ^{2}lu^{2}	ዛሉ	tsetse fly	የጎሽ ዝምብ
zɑɾ^{2}zɨɾ^{1}	ዛርዝር	sieve	ወንፊት
zoː^{3}bu^{3}	ዞቡ	grass species	የእፅዋት አይነት

[3] This is a traditional five stringed instrument similar to a guitar.

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BIOGRAPHICAL SKETCH

The author graduated from Grace College in 1993 with a bachelor of arts in linguistics. His minor was Biblical languages. In 1995 he became a member of the Summer Institute of Linguistics, now "SIL International." Since 1998 he has worked with the Ethiopian Evangelical Church Mekane Yesus, serving as translation coordinator in the Maji Parish of the South West Bethel Synod. His focus has been on analyzing Dizin phonology for orthography development and analyzing the morphology and syntax of the language. His current academic interests include Omotic languages, orthography development, Optimality Theory, and communication and translation theory and practice.