AN OVERVIEW OF LINGUISTIC STRUCTURES IN TORWALI,

A LANGUAGE OF NORTHERN PAKISTAN

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by

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ABSTRACT

AN OVERVIEW OF LINGUISTIC STRUCTURES IN TORWALI,

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The people who speak Torwali live in the foothills of the Himalayas in Northern Pakistan. Their language belongs to the Indo-Aryan language family and can be categorized as a strong head-final language. It has a split-ergative system with ergative case markers used in the future tense and perfective aspect. Grammatical relations are indicated primarily by postpositions. The counting system uses a base-20 system as opposed to a base-10 system as found in English. This project provides an analysis of the phonological system, including a look at the phoneme inventory, phonological processes, syllable structure and tone. It also provides an introduction to the morphology and syntax systems employed in the language. Finally, an analysis of a narrative text is presented, and some initial features of Torwali discourse are described, namely characteristics of profile and peak, spectrum and participant reference according to the principles of discourse analysis put forth by Longacre (1981, 1996).

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1	first person	L	low tone
2	second person	LH	rising tone
3	third person	m	masculine
A	agent	MKR	marker
ABS	absent pronoun	MPL	masculine plural
ACC	accusative case	MSG	masculine singular
ADJ	adjective	N	noun
ADV	adverb	NEAR	present near pronoun
CAUS	causative	NOM	nominative case
CP	conjunctive participle	NP	noun phrase
Dem	demonstrative pronoun	NUM	number
ERG	ergative case	O, OBJ	object
f	feminine	OBL	oblique case
FAR	present far pronoun	PAP	perfective adjectival participle
FPL	feminine plural	PASS	passive voice
FSG	feminine singular	PFV	perfective aspect
FUT	future tense	PL	plural
GEN	genitive case	PosPh	possessive phrase
GenP	genitive phrase	Poss	possessive noun
HAB	habitual aspect	PP	postposition phrase
HL	falling tone	PRES	present tense
IAP	imperfective adv. participant	RSMKR	reported speech marker
IMP	imperative mood	S, SUB	subject
IMPFV	imperfective aspect	SG	singular
INC	inceptive aspect	SP	simple perfective
INF	infinitive	SUBMKR	subordinate clause marker
INTRNS	intransitive clause	TRNS	transitive clause
IO	indirect object	V	verb
JUS	jussive mood	vd	voiced
		vl	voiceless

1.   INTRODUCTION

Figure 1. Pakistan with Torwali language area inset.

Torwali is a language of the Indo-Aryan family, spoken by approximately 80,000 people[1] living in northern

Pakistan.

The area in which the Torwali people live is marked by the black square (my modification of the original map) in the northern region of Pakistan[2]. This square is meant only to approximate their location and is not intended to show exact boundaries. A detailed view of this area is found in Figure 2[3].
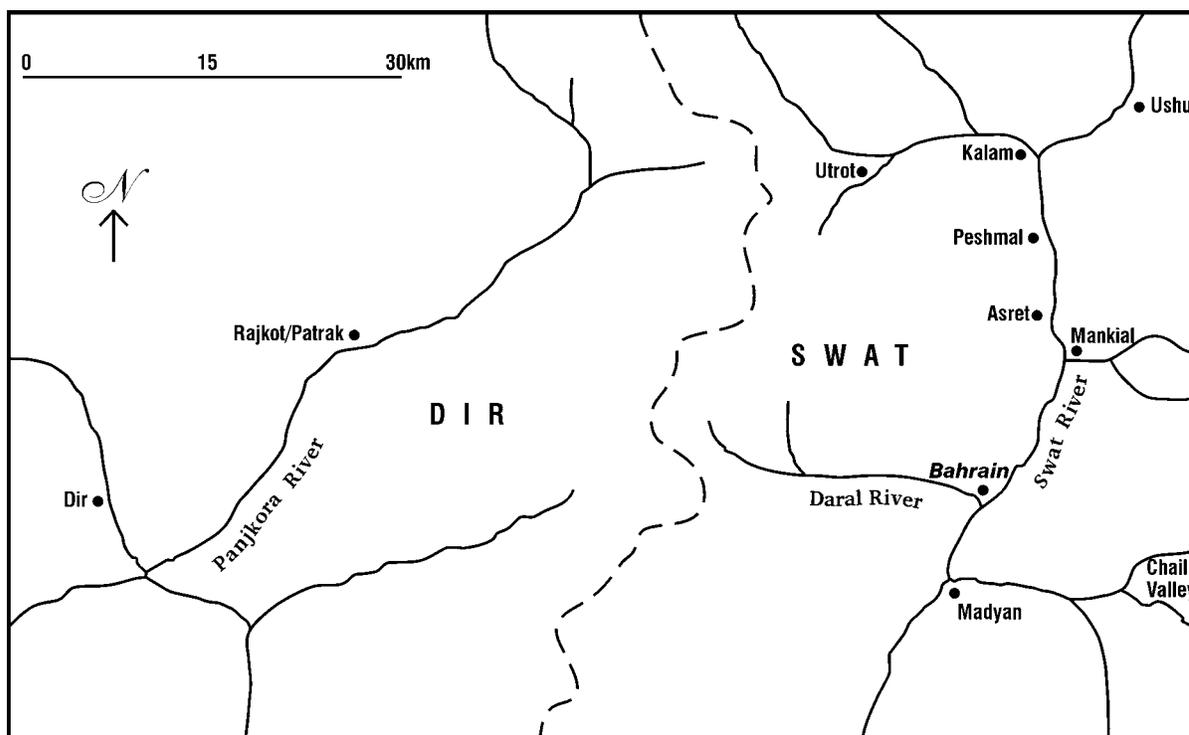
Figure 2. Swat and Dir Kohistan.

1.1 The people and their language

The Torwali people live in the Swat Valley of the North West Frontier Province in northern Pakistan. Kohistan, which means "land of mountains," is the name used by non-Kohistani speakers to refer to all the languages spoken in the mountainous region of the north. They use this term to refer to all of these languages not only because they are "of the mountains," but also because many outsiders believe they are all one language with only minor dialectal differences. However, linguistic researchers have time and again documented many of

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[2]Map courtesy of www.theodora.com/maps, used with permission.

[3]Adapted by Mike McMillan 2001.

these "dialectal differences" as being much more significant. An in-depth sociolinguistic survey carried out in the second half of the 1980s by SIL International (formerly known as The Summer Institute of Linguistics) further confirmed the diversity of these and other languages scattered throughout the northern regions of Pakistan (Rensch 1992:xiv).

Kohistani speakers use this same general term to refer to their own language, but more specific language names to distinguish other Kohistani languages from their own. For instance, Torwali speakers always refer to their own language as Kohistani. In the same way, Kalam Kohistani speakers located to the north also refer to their own language as Kohistani. However when a Torwali speaker refers to the Kalami language, he or she uses the term Kalam Kohistani or Kalami. The same is true for the Kalam Kohistani speaker, who refers to the Torwali language as Torwali, not Kohistani.

Torwali consists of two main dialects. The *Bahrain* dialect, which is the larger of the two, is spoken along the Swat River, from Madyan northward twenty to twenty-five miles to the village of Asret, south of Peshmal. Gujari speakers dominate the next few miles although speakers of Torwali and Kalam Kohistani also live there. Upon entering the town of Kalam, one enters the heart of Kalam Kohistani.

Bahrain, located about five miles north of Madyan, at an elevation of about 4,000 feet, is where the Daral [daral] River empties into the Swat River from the west. This dialect of Torwali also extends westward up this river approximately two miles before entering into Pashto-speaking territory. While Torwali is spoken in numerous villages along these two rivers, Bahrain is the cultural and administrative center for this language, and its population probably accounts for about 70% of the Torwali speakers living in the Swat valley.

Immediately east of Madyan, up into the Chail valley is where the second dialect is located. Named after the valley in which it is located, the *Chail* dialect is spoken primarily in two villages about three to five miles east of Madyan. I am told that in this same valley, a couple of other small language groups (non-mother tongue Torwali speakers) use Torwali as a local lingua franca. Chail speakers typically refer to the Torwali speakers of Bahrain as *sinkæn* which means, "bank of the river," (i.e., those who live along the bank of the Swat River).

It is reasonable to conclude that Madyan was probably a Torwali-speaking village a few centuries ago, but the Pashto-speaking traders, who dominate much of the North West Frontier Province, gradually over-

whelmed the Torwali population in Madyan splitting the language into two parts, which today manifest some slight phonological and lexical differences. Today, some Torwali speakers (a mix from both dialects, but mostly from Chail) can be found living and/or working in Madyan.

Another group of Torwali-speaking people are those who have migrated to other parts of Pakistan. Whole communities of Torwali speakers live in places like Rawalpindi, Lahore and Karachi. Smaller groupings (one or two families) also live in Islamabad, Peshawar and Nowshera, to name a few. In most cases, employment is the motivation for the move.

Both villages, Bahrain and Chail, are just under two hours' drive north of Mingora, the administrative center and a major market town for the Swat district. To the west of the Torwali-speaking area is the Dir administrative district where Pashto, Dir Kohistani (a language mutually intelligible with Kalami), Kalkoti and Gujari are spoken (Joan Baart, personal correspondence). Pashto speakers are also found from Madyan southward. Across the mountain ridge to the east in the Kohistan district is yet another language, Indus Kohistani.

Traditionally most Torwalis were subsistence farmers. Nowadays, they grow mostly corn, wheat, tomatoes, apples and pears, which they sell to local markets as well as to the larger cities to the south. Tourism has increased significantly in the Swat valley in recent decades. Although the destination of many outsiders is Kalam, 15 miles to the north, Bahrain is becoming increasingly popular for more and more Pakistanis. With the tourists have come more jobs and opportunities (hotels, restaurants and jeep rentals); however, non-Torwalis own many of the businesses so most of the money is not put back into the local economy. The Torwali people are 100% Sunni Muslim and many are involved in local, provincial and national politics.

1.2 Sociolinguistic situation

Torwali speakers are very proud of their language and culture. Although many of the men and a growing number of women also speak Urdu (the national language) and Pashto (a major language of the Frontier), they use Torwali when conversing with each other, whether in the market, fields or homes. However, primarily due to an increased exposure to other languages, Torwali speakers are incorporating Urdu, Pashto and English words and expressions into their everyday speech. Most men use words like *taxi, driver, hotel* and *jeep* in their speech, and although the elderly folk still use the distinctive Torwali words for fruits and vegetables in the mar-

ketplace, their Urdu names are increasingly used. This is also true when dealing with numbers. Although the Torwali numbering system follows a very simple pattern, Urdu numbers are commonplace. In addition to this, since the conversion of the Torwali people to Islam about four centuries ago (Grierson 1919:507), numerous Arabic words have also been introduced.

One of the responses to this trend has been the establishment of the Kohistan Cultural Promotion Society (KCPS), a group of men from the community whose vision is to preserve and promote the Torwali culture and language. One man has even taken the initiative to develop and eventually publish a dictionary of his language, paying particular attention to those words which are not used by the younger generation of speakers. It is the hope of this man along with fellow members of KCPS to preserve their language and encourage ongoing language use.

1.3 Relationship to other languages

Torwali has many cultural and linguistic distinctives, but it also shares many common attributes with neighboring languages. Careful comparison has allowed researchers to group these languages into family clusters. According to Strand (1973:302, 1999), Torwali belongs to the eastern branch of the Kohistani language group, one of several branches coming from the Indo-Aryan group. He also includes as close relatives: Kalami (Bashkarik) and Ushojo, to the north; Indus Kohistani (Maiya), Bateri and Chilisso in the Kohistan district to the east; Khowar, Palula (also Phalura) and Kalasha in Chitral; as well as Shina and Kashmiri spoken in the Northern Areas (the latter located across the line of control between India and Pakistan). Figure 3 is a graphic representation of the Indo-Aryan language family according to Strand. This chart is a simplified version of the total family. For the sake of simplicity, not all of the languages mentioned here are included. For more details, visit his website, http://users.sedona.net/~strand/lngIndex0.html.
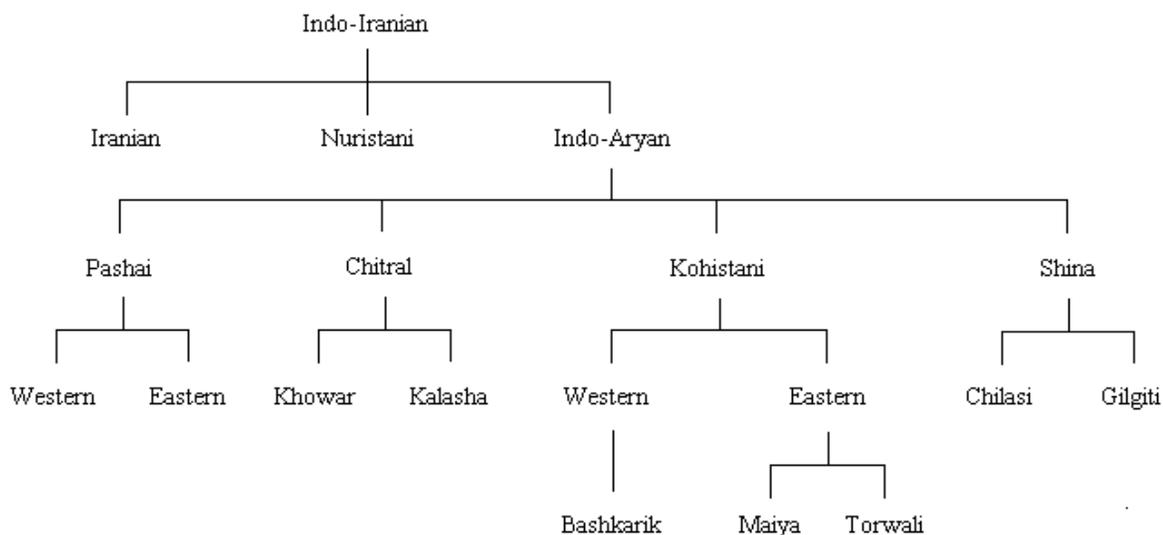
Figure 3. Genetic Classification of Torwali according to Strand.

1.4 Previous research

Over the years, researchers have used various names to refer to this language. Besides Torwali, *Torwalik* (Biddulph 1880) and *Torwalak* (Grierson 1919) have also been used.

In 1880, John Biddulph published *Tribes of the Hindoo Koosh*, which contained the first linguistic description of the Torwali language. It was a brief description, containing a one-page description of the people and where they were located, two pages of noun declensions, verb conjugations and a pronoun chart, followed by eleven pages of vocabulary. (This book also contained historical, cultural and linguistic information about a number of other languages spoken in this mountainous region.) Sir George Grierson published a linguistic article in 1919 in which he included the findings of Biddulph along with a text elicited by Sir Harold Deane in 1898.

The most extensive work on Torwali was Grierson's later work (1929). This publication, based on some historical accounts which were recorded and transcribed by another European researcher, Sir Aurel Stein, three years earlier, includes a 16-page discussion of Torwali's phonetic inventory, a 66-page grammatical sketch, three texts numbering 21 pages and a 54-page vocabulary list. In 1940, Georg Morgenstierne added his comments to Grierson's regarding the existence of retroflex sounds, and further clarified the distinction between

them and their dental counterparts. Morgenstierne also includes an 11-page list of vocabulary words, some of which are also recorded in Biddulph's and Grierson's lists. In the late 1980s, as previously mentioned, SIL International carried out a sociolinguistic survey in northern Pakistan, which focused primarily on language-use and the issue of bilingualism. For a more in-depth look at these issues as they relate to Torwali, refer to Rensch (1992:3-62).

1.5 Current study

The aim of this study, which began in 1997, is to provide an introduction to some of the linguistic characteristics of Torwali. My goal is to provide an overview of Torwali phonology, morphology and syntax, and then present an analysis of some Torwali narrative discourse features. Because of the breadth of this project, it is certainly not the intent of this researcher to examine every nuance of the language and answer all of the questions raised during the course of collecting, organizing and analyzing data. Instead by providing this grammatical sketch, an introduction of the language can be presented and a context created in which specific issues can be researched further and many of the questions raised in this paper can be addressed.

The analysis was based on a wordlist of approximately 800 words elicited in isolation and a corpus of narrative texts, approximately 150 pages, interlinearized. I also had access to a 6000-word Torwali-Urdu-English lexical database which Mr. Inamullah, a native Torwali speaker, has compiled himself. With the help of Mr. Rahimullah, Mr. Muhammad Zaman and a number of other mother-tongue speakers, the wordlist was recorded on audiotape and transcribed using a phonetic transcription. The texts were recorded and transcribed with the help of Mr. Inamullah and Mr. Muhammad Jahangir Khan. Mr. Jahangir also helped me to recheck and refine my transcriptions and glosses. Mr. Muhammad Zaman also answered many questions relating to grammatical structures, which arose during the writing of this paper. Except for Mr. Zaman, who is a native of Kalam, all of these men are from the village of Bahrain.

Chapter 2 presents the phonetic data and the phonological system in which they operate. Chapter 3 provides an introduction to the grammar section of this paper by looking at a variety of grammatical issues in the context of language universals and typologies. The purpose of chapter 4 is to narrow the focus by introducing the reader to the syntactic categories documented in the language. Chapter 5 then zeroes in on the morphologi-

cal issues related to these syntactic categories. After this groundwork is laid, we step up to clause-level features in chapter 6. Here, the focus is on how these various syntactic categories function within the clause. Finally, chapter 7 examines some introductory discourse features found in a Torwali narrative text.

Following the pattern of Baart, Radloff and others, I use a system of transcription in this paper which is similar to the "Standard Orientalist" transcription described by Masica (1991:xv) with some additions from the International Phonetic Association (IPA).

2. PHONOLOGY

This chapter is divided into several smaller sub-sections. Sections 2.1 through 2.4 describe the consonant system and the most significant phonological processes associated with Torwali consonants. Section 2.5 describes the vowel system. At the end of this chapter (sections 2.6 and 2.7), a discussion of syllable structure and some prosodic features is presented.

2.1 The consonant system

Fifty-four different phonetic consonant sounds have been identified in the language. After completing a phonemic analysis, thirty-four consonant phonemes have been established. This section includes the results of my analysis.

2.2 Consonant phones

Morgenstierne and Grierson first noted the existence of retroflex fricatives and affricates [c̣, ǰ, ṣ, ẓ]. Before 1929, writers did not distinguish between dental and retroflex fricatives and affricates, but in 1929, Grierson recognized their existence, although the contrast was not as marked as in some other languages.

> This is no doubt…that the distinction in sound between these two classes of letters is not nearly so marked in Dardic as it is in Indian [present-day India and Pakistan] languages. Sounds that in India would be called cerebral[4] are, in Dardic, merely alveolar. Even natives of India, when recording Dardic words, are not always certain as to whether this sound is cerebral or dental. For this reason, we need not be surprised that so accurate an observer as Biddulph has failed to distinguish between these two groups of sounds. Sir Aurel Stein also informs me that, in the case of some Torwali words, he has been doubtful whether a *t* or *d* was cerebral or dental. (1929:9)

Morgenstierne addresses this issue in his 1940 article and confirms the existence of these retroflex sounds.

Although voiced aspirated plosives [b^h, d^h, $ḍ^h$, g^h] are common in many South Asian languages, they do not occur in Torwali, at least not in the way they do in other Indo-Aryan languages. Grierson also comments on these sounds. While he confirms their existence, he states that they occur only in exceptional cases. He con-

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[4]Grierson uses this term to refer to the retroflex segments.

siders them borrowed sounds from Hindi. He says that in most cases when a word having one of these sounds is brought into the language, the aspiration is dropped, unless this creates confusion in distinguishing it from a word already in the language. For example, [gho] 'horse' comes from the Hindi word [ghoṛa]. Grierson believed that the aspiration was retained here to distinguish it from [go] 'bull'. However, he admits that this explanation does not account for all of the data. For example, he cannot explain why [bha] 'brother' retained its aspiration (1929:12).

It is true that many words used by Torwali speakers are borrowed from Hindi and Urdu. However, as Grierson himself admits, this analysis is lacking because it accounts for too few words. A decade later, Morgenstierne makes a significant observation. He notes, "a low, rising accent seems upon the whole to be peculiar to words with original aspirated sonants" (1940:296-7). My analysis agrees with his finding and further reveals that while remnants of breathy voice are found throughout the language, it is restricted to low tone and breathy vowels and will be discussed in more detail in the context of tone (section 2.7). As will be presented in this paper, tone is a very important feature of Torwali and affects a number of different aspects of phonology.

Table 2.1. Consonant phones

		Bilabial	Labiodental	Dental	Retroflex	Palatal	Velar	Uvular	Glottal
Plosive	vl	p		t	ṭ		k	q	ʔ
	vl	pʰ		tʰ	ṭʰ		kʰ		
	vd	b b̥		d d̥	ḍ ḍ̥		g g̥		
Affricate	vl			t͡s	ç	č			
	vl				çʰ	čʰ			
	vd				ǰ̥	ǰ ǰ̥			
Fricative	vl	ɸ	f	s	ṣ	š	x		h
	vd	β	v	z	ẓ	ž	ɣ		
Nasal		m m̥		n n̥	ṇ ṇ̥		ŋ ŋ̥		
Flap				ɾ ɾ̥	ṛ				
Liquid				l					
Glides		w					y	ɰ	

2.3 Consonant phonemes

2.3.1 Plosives and flaps

The devoiced consonants are allophones of their voiced counterparts and only occur word-finally usually in utterance-final positions. Compare the sets of Torwali words that illustrate the phonetic contrast between a voiceless plosive and the corresponding devoiced plosive in example (1).

1)   /yab/   [yab̥]   'small irrigation canal'
/ḍap/   [ḍap]   'wall'

/sid/   [sid̥]   'information'
/git/   [git]   'song'

/çug/   [çug̥]   'bee sting'
/čuk/   [čuk]   'sour'

In some languages, when voiced phonemes lose their voicing, it is said that the contrast between them and their voiceless counterparts has been neutralized. For example, when /d/ loses its voicing in one of these languages, it would be realized as [t]. However, that is not the case in Torwali. While the term *devoicing* is being used, the contrast is not actually between voiced and voiceless, but between intense and less intense. Baart has looked at the acoustic characteristics of these sounds in Kalam Kohistan and noted that the significant factor that phonetically distinguishes a devoiced consonant in Kalami from its voiceless counterpart is intensity. The intensity or magnitude of the waveform for a voiceless consonant is greater than the intensity of the devoiced phoneme (1997:13-15). Radloff makes a similar claim regarding Shina. Like Kalami, the phonetic distinction is based on the release of air at the end of an utterance. Voiceless consonants allow a greater puff of air to escape from the mouth at the conclusion of the utterance than their devoiced counterparts do. An extremely weak release would be no release at all (1999:32-34). Because this same phenomenon has been observed in Torwali, it is plausible to posit voiced plosives as phonemes having two allophones, one voiced and one devoiced, both of which contrast with their voiceless equivalent, for example, phoneme /d/ with two allophones [d] and [d̥].

Another very common phonological process occurring in Torwali is the weakening of its plosives intervocalically. /p/ and /pʰ/ can be pronounced as [ɸ] or [f]. /d/ and /ḍ/ are usually weakened to [ɾ] and [ɽ] respectively, and /g/ is reduced to [ɣ]. For example, /əgəš/ '11' can be pronounced [əgəš], particularly in slow speech, but most often as [əɣəš] in normal speech. This is not to say however that [ɣ] is only an allophonic representation of /g/. As will be shown later, /ɣ/ also has phonemic status. Intervocalically however, the contrast between these two consonants is neutralized.

One of the difficulties that arises with this analysis is knowing whether the underlying phoneme is /g/ or /ɣ/. It is plausible to conclude that /ɣ/ is realized as [ɣ] in all environments. However, since the contrast between /g/ and /ɣ/ is neutralized intervocalically, it is very difficult to tell if [ɣ] is a realization of /g/ or /ɣ/ when it occurs in that environment.

One test is to change the environment in which this neutralization occurs, and one way to do this is to inflect the morpheme, but this is not always possible. Take *lig* for example, the verb stem meaning 'write.' Which is the correct underlying form: /ligədu/ 'he is writing' or /liɣədu/? Because weakening is a major phonological process occurring intervocalically, I am inclined to posit /lig/ as the correct underlying stem form and /ligədu/ as the correct inflected form. To posit /liɣədu/ would require a strengthening rule to account for the intervocalic plosive, which is not plausible within the phonological system of Torwali (see section 2.4.1).

Another idea is to listen to the words in slow speech. If a weakening process is being applied to plosives intervocalically, chances are in slow speech it will be less apparent, if at all. Finally, mother tongue intuition is also an important factor to consider.

Similarly examples of /t/ and /d/ being realized as [ɾ] word-medially are documented in the language, and yet /r/ is a phoneme because it contrasts with /d/ and /t/ word-initially, word-medially and word-finally as will be illustrated shortly.

The tables included in this chapter illustrate the contrast that exists between these phonemes as well as their equal distribution, first word-initially then word-medially and then word-finally. When the data is insufficient to show contrast, I have inserted the phrase, "NA" Not Available.

Table 2.2. Voicing contrasted

/p/ vs. /b/	[payow]	'to cook'	[bəyu]	'to go'
	[gəŋəpur]	'spider'	[qəsabi]	'the butcher's work'
	[ḍap]	'wall'	[baḇ]	'father'
/t/ vs. /d/	[tatʰ]	'hot'	[datʰ]	'father's father'
	[čətəš]	'fourteen'	[jədəkʰ]	'sons'
	[čot]	'paw'	[kʰuḏ]	'lame person'
/ṭ/ vs. /ḍ/	[ṭiyɛl]	'words'	[ḍiɣu]	'late afternoon'
		NA		
	[baṭ]	'large rock'	[paḍ]	'bark of tree'
/t/ vs. /r/	[toti]	'female parrot'	[rəsi]	'rope'
	[sətaš]	'seventeen'	[sɛra~ṇ]	'sister's husband'
	[čʰət]	'ceiling'	[čʰəṛ]	'waterfall'
/k/ vs. /g/	[ka~ṇ]	'small irrigation canal'	[ga~ṇ]	'tree trunk'
	[suṛuku]	'owl'	[dugu~ṇ]	'double'
	[zək]	'foam, froth'	[ẓəg̊]	'vein'

I have not included any word-final aspiration comparisons in Table 2.3 because I have not been able to document sufficient contrast in this position so far. The data that I have shows a lot of free variation among speakers. Sometimes aspiration occurs and sometimes not, as shown in example (2).

2)	/čuk/	[čuk]	[čukʰ]	'sour'
	/baṭ/	[baṭ]	[baṭʰ]	'large rock'
	/bat/	[bat]	[batʰ]	'talk'
	/jɪp/	[jip]	[jipʰ]	'tongue'

What is needed to complete this analysis is to elicit these words and others like them in a context where this final consonant will not occur in the final position. Either by inflecting the word forms or by eliciting them in a text frame with the target word occurring both utterance-medially and utterance-finally, we should be able to determine which words have underlying word-final aspiration. We should also be able to posit the environments in which aspiration tends to be dropped and the environments in which it tends to be retained. Although these question remains, aspiration is a contrastive features non-finally for plosives as illustrated in Table 2.3.

Table 2.3. Aspiration contrasted

/p/ vs. /pʰ/	[pir]	'spirit'	[pʰit]	'mosquito'
	[gə~ŋa~pur]	'spider'	[upʰuɾ̥]	'lightweight'
/t/ vs. /tʰ/	[tatʰ]	'hot'	[tʰa~m̥]	'tree'
	[toti]	'female parrot'	[motʰa]	'mirror'
/ṭ/ vs. /ṭʰ/	[ṭiyɛl]	'words'	[ṭʰa~mi~l]	'tired'
	[xəṭə]	'mud'	[aṭʰə~m̥]	'eigth'
/k/ vs. /kʰ/	[kow]	'to do'	[kʰow]	'to eat'
	[čokaṭʰ]	'door frame'	[bekʰɪ~n̥]	'arm'

In Table 2.5, we see dental plosives contrasting with their retroflexed counterparts. In two instances data is insufficient to show contrast, even though each of the phonemes occur word-medially as well as word-initially and finally.

Table 2.5. Dental and retroflex segments contrasted

/t/ vs /ṭ/	[tilu]	'to walk'	[ṭiyɛl]	'word'
	[totə]	'male parrot'	[xəṭə]	'mud'
	[dæt]	'father's mother'	[lə~mæ~ṭ]	'short tail'
/tʰ/ vs. /ṭʰ/	[tʰəlu]	'to throw'	[ṭʰa~mu~]	'to become tired'
		NA		
/d/ vs. /ḍ/	[dækʰ]	'few'	[ḍækʰ]	'old woman'
		NA		
	[mi~zɛd]	'on here'	[šagəḍ]	'student'

The comparisons in Table 2.7 do not involve contrast in voicing, aspiration or retroflexion. Yet they are phonetically similar and thus must be considered.

Table 2.7. Other phonetically similar segments contrasted

/d/ vs. /r/	[dəwəy]	'medicine'	[rəsi]	'rope'
	[pəda kow]	'to create'	[šoro kow]	'to start'
	[mi~zɛd]	'on here'	[šir]	'house'

Table 2.9 summarizes the distribution of the phonemic plosives and flap occurring in Torwali.

Table 2.9. Word-level distribution of plosives and flaps

	Initial			**Medial**			**Final**	
/p/	[puš]	'cat'		[gə~ŋa~puɽ]	'spider'		[ǰip]	'tongue'
/pʰ/	[pʰukʰ]	'puff of air'		[upʰuɽ]	'lightweight'		[təbipʰ]	'doctor'
/b/	[bow]	'deaf'		[obewæ]	'single woman'		[baḇ]	'father'
/t/	[net]	'river'		[toti]	'female parrot'		[čot]	'paw'
/tʰ/	[tʰow]	'to put'		[motʰa]	'mirror'		[batʰ]	'talk'
/d/	[datʰ]	'father's father'		[čede]	'basket'		[kʰuḓ]	'lame person'
/ṭ/	[ṭiyεḽ]	'words'		[xəṭə]	'mud'		[lə~ma~ṭ]	'long tail'
/ṭʰ/	[ṭʰa~mu~]	'to become tired'		[aṭʰə~m̥]	'eighth'		[aṭʰ]	'eight'
/ḍ/	[ḍaluw]	'to spill'		[nə~ɽu]	'to play'		[paḍ̥]	'bark of tree'
/k/	[kə~mo~w]	'to shake'		[šuɽuku]	'owl'		[no~k]	'fingernail'
/kʰ/	[kʰow]	'to eat'		[bekʰi~n̥]	'arm(s)'		[čukʰ]	'sour'
/g/	[ga~n̥]	'tree trunk'		[ligu]	'to write'		[ẓəg]	'vein'
/r/	[rəsi]	'rope'		[beril]	'small pebble'		[wəzər]	'eyelash'

2.3.2 Affricates and fricatives

Affricates and fricatives are now compared because they are phonetically similar. Voicing contrast is examined first, followed by aspiration in Table 2.12 and then retroflexion in Table 2.14. One noticeable observation is that the contrast between affricates and other segments is often lacking word-medially and word-finally. This is because affricates are not permitted in word-final positions, and sometimes in word-medial positions too. This does not suggest that the phonemic status of these affricates is in question, but it could be yet one more manifestation of the weakening process that occurs frequently throughout the language, whereby affricates are realized as fricatives word-finally. Contrast in the word-initial position along with the responses of mother tongue speakers is enough to conclude that the affricates and fricatives cited in the tables of contrast are phonemes in the language. Recall that sufficient evidence for contrast in word-final aspiration has not been found; therefore, no examples can be included in Table 2.12.

Table 2.7. Voicing contrasted

/č/ vs. /ǰ/	[čəlu]	'to move' (intrans)	[ǰəlu]	'to burn' (intrans)
	[peči~mɛ~x]	'screwdriver'	[næ~ži][5]	'to hunt'
		NA		
/ç/ vs. /ǰ̣/	[çuwu]	'to sew'	[ǰəwe]	'woman'
		NA		
		NA		
/s/ vs. /z/	[satʰ]	'seven'	[zəɻ]	'gold'
	[ɣosa]	'violent'	[ǰəza]	'punishment'
	[ma~s]	'meat'	[baᶎ]	'eagle'
/ṣ/ vs. /ẓ/	[ṣa~n̥]	'field boundary made of sticks'	[ẓa~n̥]	'trad. water mill'
	[pəṣayu]	'to fight'	[haẓayu]	'to lose (an item)'
	[mu~ṣ]	'mouse'	[ṣuᶎ]	'straight'
/x/ vs. /ɣ/	[xuda]	'God'	[ɣusa]	'violent'
	[pərxa]	'dew'	[çeɣa]	'early'
	[pox]	'devout'	[dəɣ]	'stain'

Table 2.12. Aspiration contrasted

/ç/ vs. /çʰ/	[çuwu]	'to sew'	[çʰiᶎu]	'to learn'
		NA		
/ṣ/ vs. /çʰ/	[ṣa~n̥]	'a type of fence'	[çʰa~n̥]	'type of holly plant'
		NA		
/č/ vs. /čʰ/	[ča~m̥]	'skin'	[čʰa~m̥]	'street'
	[næ~čæri]	'helplessness'	[pičʰæṛi]	'end of a row'

---

[5] /ǰ/ is realized as [ž] intervocalically.

Table 2.14. Retroflex and non-retroflex segments contrasted

/č/ vs. /ç/	[čəlu]	'to move ' (intrans.)		[çeɣa]	'early'
	[tə~mə~ča]	'pistol'		[pəla~nço]	'onion'
		NA			

/čʰ/ vs. /çʰ/	[čʰa~m̥]	'street'		[çʰa~n̥]	'type of holly plant'
		NA			
		NA			

/ǰ/ vs. /ǰ̣/	[ǰip]	'tongue'		[ǰikʰ]	'tall, long'
		NA			
		NA			

/š/ vs. /ṣ/	[šayo]	'wife's brother'		[ṣayow]	'to chase'
	[dəšə~m̥]	'tenth'		[kiṣə~n̥]	'black'
	[ṣɛš]	'sixteen'		[ṣɛṣ]	'thin rope'

The comparisons in Table 2.10 do not involve contrast in voicing, aspiration or retroflexion, but the segments are phonetically similar and for this reason are compared. The phoneme /ǰ/ has two allophones: [ǰ] and [ž]. This latter allophone occurs only intervocalically in Torwali words as illustrated in (3). For this reason, contrast between these two segments is not included in the table.

3)	/šiǰo/	[šɪžo]	'beautiful'
	/bəǰədu/	[bəžədu]	'he goes'
	/čiǰol/	[čižol]	'shadow'

Table 2.12 contains a summary of affricate and fricative distribution within the language. Most revealing in this chart are the holes in the distribution of affricates word-medially and word-finally. These are not accidental gaps, but probably a result of weakening.

Table 2.10. Other phonetically similar segments contrasted

/s/ vs. /š/	[sus]	'lazy'	[šu~m̥]	'greedy'
	[oso]	'ugly'	[ošo]	'spring (of water)'
	[ma~s]	'meat'	[ma~š]	'fish'
/s/ vs. /t͡s/	[su~we~]	'rabbit'	[t͡saru]	'to see'
	[bəsa~n]	'spring (season)'	[gət͡səy]	'left-handed person'
		NA		
/š/ vs. /č/	[ša~n̥]	'roof'	[ča~m̥]	'skin'
	[peši]	'early afternoon'	[peči~mɛ~x]	'screw'
		NA		
/t͡s/ vs. /č/	[t͡so~ŋ]	'blister	[čam̥]	'skin'
	[gət͡səy]	'left-handed person'	[kəče]	'sound to drive goats'
		NA		
/x/ vs. /h/	[xəza]	'dirty'	[hazuw]	'to laugh'
	[pərxa]	'dew'	[sulha]	'solution'
		NA		
/z̧/ vs. /ǰ/	[z̧ætʰ]	'nights'	[ǰig̥]	'long'
		NA		
		NA		
/x/ vs. /k/	[xoda]	'God'	[kola]	'coal'
	[uxu]	'to climb'	[šur̥uku]	'type of small bird'
	[pox]	'strong, devout'	[no~k]	'fingernail'
/ɣ/ vs. /g/	[ɣusa]	'violent'	[gə̧səy]	'left-handed person'
	[ne~ɣæ~n̥]	'boss'	[egu~n̥]	'single'
	[dəɣ]	'stain'	[z̧əg]	'vein'

Table 2.12. Word-level distribution of affricates and fricatives

	Initial		Medial		Final	
/s/	[sus]	'lazy'	[oso]	'ugly'	[ma~s]	'meat'
/ṣ/	[ṣeṣ]	'thin rope'	[pəṣayu]	'to fight'	[ṣeṣ]	'thin rope'
/ẓ/	[ẓəg]	'vein'	[çʰiẓu]	'to learn'	[ṣuẓ]	'straight'
/z/	[zəkʰ]	'foam'	[xəza]	'dirty'	[guŋluẓ]	'strawberry'
/š/	[šuɽuku]	'type of sm. bird'	[dəšə~m̥]	'tenth'	[ma~š]	'fish'
/t͡s/	[t͡sarxa]	'spinning wheel'	[gət͡səy]	'left-handed person'	--	--
/ç/	[çukʰ]	'bee sting'	[pəla~nço]	'onion'	--	--
/č/	[čo]	'thief'	[peči~mɛ~x]	'screw'	--	--
/çʰ/	[çʰiẓu]	'to learn'	--	--	--	--
/čʰ/	[čʰo~nǰo]	'neck'	--	--	--	--
/ǰ/	[ǰig̥]	'tall, long'	--	--	--	--
/ǰ/	[ǰip]	'tongue'	[beža~n]	'non-living thing'	--	--
/x/	[xəʈə]	'mud'	[uxu]	'to climb'	[pox]	'strong, devout'
/ɣ/	[ɣosa]	'violent'	[ǰʰoɣu]	'to drink (soup)'	[dəɣ]	'stain'
/h/	[hazu]	'to laugh'	[roha]	'spirit, soul'	--	--

2.3.3 Nasals, liquids and glides

The phone [ŋ] does not occur word-initially, thus one conclusion could be that this sound is not phonemic, that it is really an /ng/ consonant cluster. Historically, it may have been a sequence of two consonants. If so, that would explain why [ŋ] does not occur word initially. However, as will be discussed later in this paper, the syllable structure does not permit tauto-syllabic consonant clusters (i.e. clusters are only allowed across syllable boundaries). The only occurrences of tauto-syllabic consonant clusters in Torwali are found in loan words from Urdu, Pashto and others. Therefore even if evidence can be produced to document this sequence in the past , the restrictions placed on the syllable structure by the language today have caused this sequence to be realized as the single unit, /ŋ/. Table 2.14 shows the contrasts which exist between the various members of these remaining classes.

Table 2.14. Nasals, liquids and glides contrasted

/m/ vs. /n/	[ma~]	'month'	[na~]	'root'
	[kə~mo~w]	'to shake'	[ǰə~no~w]	'to make...understand'
	[ga~m̥]	'village'	[ga~n̥]	'tree trunk'
/n/ vs. /ŋ/		NA		
	[mə~nu~]	'to believe'	[lʰə~ŋu~]	'to trespass'
	[ga~n̥]	'tree trunk'	[pʰa~ŋ̥]	'branch'
/l/ vs. /r/	[low]	'small, children'	[roh]	'spirit'
	[tʰəlu]	'to throw, pour'	[dʰəru]	'to live'
	[šɛl̥]	'grinding stone'	[šɪr̥]	'house'
/y/ vs. /w/	[yow]	'to come'	[wow]	'to get down'
	[buyu]	'to hear'	[obewa]	'single man'
	[dəwəy]	'medicine'	[čəw]	'four'

Table 2.16 summarizes the distribution of these three classes as they occur in the language.

Table 2.16. Word-level distribution of nasals, liquids and glides

	Initial		**Medial**		**Final**	
/m/	[mə~nu~]	'to believe'	[ṭha~mɪ~l̥]	'tired'	[šə~m̥]	'male goat'
/n/	[nɛ~k]	'boss'	[mə~na~kʰ]	'frog'	[dʰɛrɪ~n̥]	'floor'
/ŋ/	--	--	[æ~ŋi~]	'fingernail'	[pʰa~ŋ̥]	'branch'
/l/	[low]	'small, children'	[tʰəlu]	'to throw, pour'	[šɛl̥]	'grinding stone'
/r/	[rəsi]	'rope'	[hærɪṣ]	'chin'	[kur̥]	'stone wall'
/w/	[wow]	'to get down'	[su~we~]	'rabbit'	[čəw]	'four'
/y/	[yow]	'to come'	[buyu]	'to hear'	[dəwəy]	'medicine'

Table 2.18 lists thirty-four phonemic consonants. Discussion follows.

Table 2.18. Consonant phonemes

		bilabial	dental	retroflex	palatal	velar
Plosive	vl	p pʰ	t tʰ	ṭ ṭʰ		k kʰ
	vd	b	d	ḍ		g
Affricate	vl		t͡s	ç çʰ	č čʰ	
	vd			ǰ̣	ǰ	
Fricative	vl		s	ṣ	š	x
	vd		z	ẓ		ɣ
Nasal		m	n			ŋ
Liquid			l			
			r			
Glides		w			y	h

The segments [ṇ] and [f] are not included in Table 2.18 because they occur only in words borrowed from Urdu and Pashto. For some speakers, [f] also occurs as an allophone of /p/ and /pʰ/ intervocalically as will be shown later in example (4). In the same way, [v] is an allophone of /b/. See example (7). [q], the voiceless uvular plosive, occurs quite frequently throughout the language, but only in loan words, namely from Pashto, Persian and Arabic.

I have not included [ɽ] in the inventory of phonemes either because I have not found evidence that it occurs phonemically in the language. It only occurs intervocalically except in a few borrowed words from English and Urdu. [ḍ] on the other hand, never occurs intervocalically except in borrowed words. Due to the complementary distribution of these two sounds, I have posited /ḍ/ as the phoneme with two allophones, [ḍ] and [ɽ].

However, some speakers of the language disagree with this analysis. Some speakers of Torwali believe that these sounds are phonemically distinct from each other. In many places where [ɽ] has been heard in normal speech, some have argued with me that the sound is really [ḍ]. When I've carried out surveys, I have found that while these speakers may agree on the phonemic status of these two sounds, they sometimes disagree whether a particular sound is really /ḍ/ or /ɽ/ and sometimes even /ṭ/.

Contrary to my analysis, some would claim that in fact words like /kʰaɽ/ 'mating instinct', /çʰəɽ/ 'to yell' and /kuḍədu/ 'to beat' do occur. Others would say /kʰaḍ/, /çʰət/or /çʰəḍ/ and /kəɽədu/ do. Differing viewpoints regarding the occurrences of /ḍ/, /ṭ/ and /ɽ/ word-medially and word-finally are common. Intervocalic weakening (see section 2.4.1) and word-final devoicing are processes in the language that help explain why this confusion exists. The fact that /ɽ/ has phonemic status in Urdu and Pashto is also an influencing factor for some. Many speakers of Torwali not only speak these languages but also read and write them, so they are familiar with this sound and its inclusion in each alphabet. In light of these circumstances, it is not easy to make a conclusion about the phonemic status of [ɽ]. The confusion itself might be evidence that contrast between these segments is not really phonemic. So for the time being, I have chosen not to include it in the inventory of phonemes.

One could say that the phonemes /f, ŋ, q/ and possibly /ɽ/ form a *secondary* group of phonemes (in contrast to the *primary* set in Table 2.18) meaning that they are not part of the Torwali phonological system, but rather have been introduced into the language from a foreign source. Radloff explains it well, "...for a given language there would be the primary sound system which is maintained with consistency by all speakers, such as [is being] described [in this paper]. But there could also be a secondary 'subsystem' which would contain alien sounds which are used only by certain substrata of a society for certain words" (1999:43). Refer also to Masica (1991:91) for further discussion on this topic.

[ʔ, ɸ, β, v] and [ž] also lack phonemic status. The phone [ʔ] occurs always and only word-initially before vowels[6], and [ɸ, β] and [ž] occur in limited environments, which will be discussed shortly.

2.4 Phonological processes

Weakening of consonants both intervocalically and utterance finally is one of the most basic features of Torwali phonology. Palatalization is also important, and is addressed after the discussion of weakening.

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[6]For the sake of convenience and due to its predictability, [ʔ] is not included in the transcriptions in this paper.

2.4.1 Weakening

In addition to the utterance-final devoicing process (a form of weakening) that introduced the section on consonant phonemes, *intervocalic weakening* is also a very common and productive phonological process; <u>common</u> in that basically all Torwali speakers consistently apply this process to their speech; <u>productive</u> in that the process is applied to a wide range of phonemes.

The first example, (4), illustrates /pʰ/ changing to [f] or [ɸ]. Actually, these two allophones serve to mark the range in which this sound is found. Most often, the actual sound is in the middle of these two allophones. In each of the examples, (4) through (6), the consonant weakens increasingly as you move from left to right. An alternative way to describe this process is to say that plosives and affricates becomes *continuant* vowel-medially. Which exact form is used varies from speaker to speaker.

4)   /upʰur/   [upʰur̥]   [ufur̥]   [uɸur̥] 'lightweight'

The phoneme /g/ is also subject to this kind of conditioning as shown in (5). Intervocalically, this pho-neme is reduced to its fricative counterpart [ɣ] and often even further to the velar glide [ɰ] as shown in (5). Bear in mind that although [ɣ] is an allophone of /g/, it is also an allophone of /ɣ/ due to its distribution and contrast with [g] in the language. Similarly, /ɣ/ undergoes the same kind of weakening intervocalically as /g/. A couple of examples are also included in (5).

5)   /sigəl/   [sigə̥l]   [siɣə̥l]   [siɰə̥l] 'sand'
        /tigel/   [tigɛ̥l]   [tiɣɛ̥l]   [tiɰɛ̥l] 'word'
        /bəɣəl/   [bəɣəl]   [bəɰəl] 'ditch'
        /čəɣəṛa/   [čəɣəṛa]   [čəɰəṛa] 'crushed'

Still another illustration of this process is seen with /ǰ/ occurring between vowels. Example (6) shows that when this weakening is applied, it, like /g/, is reduced to its fricative and approximant counterparts[7].

6)   /bəǰu/   [bəǰu]   [bəžu]   [bəyu] 'to go'
        /næǰæl/   [næ~ǰæ̥l]   [næ~žæ̥l]   [næ~yæ̥l] 'hunter'
        /uǰəl/   [uǰə̥l]   [užə̥l]   [uyə̥l] 'white'

---

[7]Although he doesn't say anything about this additional weakening, [ž] becoming [y], Grierson does document the initial reduction process of /ǰ/ becoming [ž] (1929:10-13).

Based on these examples, it is not unreasonable to state a generalization and predict that / čʰ, çʰ/ and /ǰ/ become [š, ṣ] and [ẓ] respectively between vowels. Not a lot of evidence can be found either for or against this hypothesis, but consider the sentence /æ kimi čʰi/ 'It is a worm.' It can be stated either [æ kimi čʰi] or [æ kimi ši] where /čʰi/ becomes [ši] since the word preceding it ends with a vowel. Add to this the fact that the dental and retroflexed plosives are often pronounced as dental and retroflex flaps respectively when occurring intervocalically, and we can conclude that intervocalic weakening of Torwali consonants is one of the most basic features of Torwali phonology. In fact, Masica notes this to be very typical throughout the Indo-Aryan language family (1991:180-2).

Finally, some words illustrate how the underlying forms are no longer considered phonemic by native speakers as a result of applying this weakening process over time. In these words, /b/ has become [w] intervocalically. Today the word for 'apple' in Torwali is most often pronounced [bowəy] or [boβəy]. If one posits /bowəy/ as the underlying form, it is difficult to offer an acceptable explanation for the frictivizing of the /w/. A strengthening process could be suggested, but it is not a very productive process in the language. On the contrary, the weakening of consonants intervocalically is.

The same word in Kalami is /bobəy/ or /bowəy/, depending on which dialect is referenced. Historically, one can posit the underlying form as /bobəy/ (although [bobəy] has not been documented) and account for [boβəy] and [bowəy] by stating that they are forms which have undergone the intervocalic weakening process. With the weakening of /b/ over generations, it has evolved to a point now where most speakers today would consider the form to be /bowəy/ rather than /bobəy/. We can make a similar claim for the words shown in example (7). The occurrence of the fricative and approximant are remnants of a process that has almost become complete.

7)   /čubu/   [čuβu]   [čuvu]   [čuwu]   'to sew'
       /hubu/   [huβu]   [huvu]   [huwu]   'to sleep'

2.4.2 Palatalization

Palatalization is also a very common occurrence, but limited to one specific environment in Torwali speech. Nearly every consonant which occurs immediately before a front vowel can optionally be palatalized as shown in example (8).

8)   /sæt/   [sæt]   [syæt]   'companion'
       /pænu/   [pæ~nu~]   [pyæ~nu~]   'to know'
       /ǰeṣ/   [ǰɛṣ]   [ǰyɛṣ]   'caterpillar'
       /kæṣ/   [kæṣ]   [kyæṣ]   'female lion or bear'
       /pečimex/   [peči~me~x]   [peči~mye~x]   'screw'

2.5 The vowel system

In the small amount of literature previously written about this language, only a short paragraph is found which addresses the topic of vowels, and that is only a passing reference to an aphaeresis and a metathesis process which Grierson claims to have occurred in the language over time according to the data collected from Torwali speakers and comparing them to data from other nearby languages (1929:8). He includes no in-depth discussion of these two processes, neither does he discuss the Torwali vowel system itself.

The vowel phones, as shown in Table 2.20, have been extracted from the data corpus. The inventory includes twelve oral phones, eight of which also have nasalized counterparts. It is possible that [ɨ~] and [o~] also exist, but I have not found them during my research. The two vowels,[ẹ] and [ə̣] include a diacritic which is phonetic transcription meaning that they have the feature of retracted tongue root (RTR). They will be singled out for discussion shortly.

Table 2.20. Vowel phones

	Front	Central	Back
Close	i i~	ɨ	u u~
	ɪ ɪ~		
Close-mid	e e~ ẹ		o
		ə ə~ ə̣	

Open-mid	ɛ ɛ̃		
Open	æ æ̃		a ã

2.5.1 Oral vowels

Of particular interest are [ɨ, e̤, ə̤]. In spite of its limited occurrences and distribution, some Torwali speakers perceive the close central vowel [ɨ], also referred to as the 'barred i', as distinct from the remaining vowels. Example (9) illustrates that this sound only occurs before or after a velar consonant.

9) a. /gɨyu/   [gɨyu]   'to return'   d. /ɨgi/   [ɨɣi]   'heavy (f)'
    b. /bəkɨ/   [bəkɨ]   'hoof'   e. /kɨgi/   [kɨɣi]   'hen'
    c. /hɨku/   [hɨku]   'brave man'   f. /hɨkɨ/   [hɨkɨ]   'brave woman'

One observation relating to this particular vowel segment is that masculine counterparts are marked with the vowel /u/. For example the masculine form of 'heavy' (cf. (9d)) is /ugu/ which is often realized as [uɣu]. In the same way, a 'male chicken' or 'cock' is /kugu/ [kuɣu]. In both examples, the vowels of both syllables are different. The masculine forms use [u], and the feminine forms use [i] and [ɨ]. However, looking at examples (9c) and (9f), we see that only the final vowel changes. No explanation can be offered as to why this difference exists, but we can generalize and say within the set of words containing this barred "i", [ɨ] and [u] usually distinguish feminine and masculine respectively.

Another observation is the environment in which this barred "i" occurs. It only occurs in the proximity of a velar consonant which is suspect when considering the distribution of this vowel, and yet even in the examples previously cited, we see an example of word-final contrast between [ɨ] and [i] in (9b) and (9e). Numerous examples can also be cited where [i] occurs in the proximity of a velar consonant without undergoing any sort of phonological change: [kiži] 'dog', [ǰig] 'tall', [himan] 'winter' and /mirgi/ 'to possess someone' to name a few.

The other two unique sounds involve a retraction of the tongue root on two of the oral vowels [e̤, ə̤], and are marked with a retracting sign under the vowel. They too do not occur often in the language, yet are recognized by some mother tongue speakers as distinct from other vowel sounds. Note the occurrences of these

sounds in the examples cited in (10). Items a. through e. include the sound [ə̪] while items f. through g. have the sound [e̪].

10)   a.   /ə̪y/   [ə̪y]   'ewe'
       b.   /ə̪n/   [ə̪n]   'blind'
       c.   /bə̪y/   [bə̪y]   'deaf woman'
       d.   /mə̪k/   [mə̪k]   'death'
       e.   /bukʰə̪/   [bukʰə̪]   'difficult'
       f.   /ke̪y/   [ke̪y]   'why'
       g.   /he̪/   [he̪]   'heart'

Like the "barred i", the distribution and occurrences of these two sounds are limited. And just as contrast between [i] and [ɨ] was cited, contrast between these RTR vowels and their non-RTR vowels can also be shown, and in fact is illustrated in Table 2.22.

A linguistic comparison of the words in (10) with their cognates in other related languages reveals that retroflexion was probably historically present in these words at one time. Consider the Palula words, [yɪːɽi] 'sheep' and [hiɽo] 'heart', and the Shina word [eːɽi] 'ewe'. Baart has also furnished a list of cognates from Kalami (personal correspondence). It is shown in example (11) with most of the Torwali forms from the previous examples repeated on the left side and Kalami phonetic equivalents on the right.

11)   a.   /ə̪y/   [ə̪y]   'ewe'   [iːr]   'sheep'
       c.   /bə̪y/   [bə̪y]   'deaf woman'   [beːr]   'deaf (f)'
       d.   /mə̪k/   [mə̪k]   'death'   [maːraːg]   'death'
       e.   /bukʰə̪/   [bukʰə̪]   'difficult'   [bikʰaːr]   'difficult'
       g.   /he̪/   [he̪]   'heart'   [hiːr]   'heart'

One possible explanation is that over time the retroflexion became less prominent and the retraction of the tongue root, which is physiologically a part of retroflexion, became the significant feature of these two vowels. I am not certain I can offer a reasonable explanation as to why this would happen, especially in a language which has a large number of retroflex sounds. Nevertheless, this vowel quality seems to differ from the vowel quality occurring immediately before a retroflex consonant. For example, the vowel qualities of [e̪] in [ke̪y] 'why' and [e] in [peɽi] 'many, many years' are not the same, thus the reason for the distinctive phonetic representation.

Having said all of this, I hesitate to posit these three sounds as phonemes for several reasons. First of all, the vowel systems in other languages of the region are nicely balanced and symmetrical so one would have to ask why Torwali would apply RTR to only two oral vowels? Secondly, in spite of the contrast between [i] and [ɨ] and the RTR and non-RTR vowels, the distribution of [ɨ] and these two RTR vowels is very restricted, mostly to environments with velar consonants. In fact, because of the shared distributional restrictions of these vowels, it could be posited that the "barred i" is also a result of tongue root retraction. If this statement is true, then one could go a step further to say that only front vowels can undergo this retraction process because the back vowels cannot be retracted further. And thirdly, although some speakers of Torwali believe these vowels are phonemic, others do not share their belief. For them, the words cited in examples (9) and (10) do not have the vowels [ɨ], [e̞] and [ə̞]. Instead, they pronounce these words with [i], [e] and [ə] respectively.

There may be a combination of factors that have so far eluded me that are causing these vowels to be retracted or it may be that these sounds are indeed vowel phonemes. At this point, we cannot say for certain. Therefore, I have chosen to label them as part of the secondary group of phonemes, along with /f, ŋ, q/ and /ɽ/ until more study can be done and this issue resolved.

Table 2.22 shows the contrast that exists between the oral vowel phonemes in Torwali. Two sounds not included are [ɛ, ɪ]. They are allophones of /e/ and /i/ respectively, and restricted in their distribution to closed syllables. /e/ and in most cases /i/ are realized as their more open counterparts [ɛ] and [ɪ] in closed syllables.

One problem arises with this generalization, however. While it is true that [ɪ] is restricted to closed syllables, I have also found [i] occurring in two words with closed syllables where we would expect [ɪ], [miṭ] 'sweet' and [ṭiṭ] 'spicy'. Aside from these two words, I have not documented any other words with [i] occurring within a closed syllable so generally speaking, this hypothesis holds true. I should also add that this uncertainty is associated only with /i/, not /e/. The rule stated previously is an accurate description of what happens with /e/ in normal speech without exception. Some examples are listed in (12).

12)   /netkʰel/   [nɛ~tkʰɛl̥]   'small nose'
        /ek/   [ɛk]   'one'
        /nek/   [n~ɛk]   'boss'
        /šen/   [šɛ~n̥]   'small bed'

Another piece of information that confirms this conclusion is when the word /ek/ is used in a phrase or in a sentence, it is often pronounced without the final /k/. When this happens, since it no longer occurs in a closed syllable, the pronunciation changes from [ɛ] to [e], like in [æ e po tʰu.] 'It is a (or one) boy.' [æ ɛ po tʰu] is not an acceptable pronunciation. Table 2.22 presents the contrast of oral vowels found in Torwali.

Table 2.22. Contrast of oral vowels

/e/ vs. /æ/	[ækir̥]	'ring'	[egu~n̥]	'single'
	[čæri how]	'to become dumb'	[čeri how]	'to be increased'
	[dæ]	'beard'	[te]	'to'
/æ/ vs. /a/	[æ]	'this'	[a]	'I'
	[dæt]	'father's mother'	[dat]	'father's father'
	[obevæ]	'single man'	[obeva]	'single woman'
/a/ vs. /ə/	[awəw]	'to arrive'	[əwə~n]	'left'
	[yap]	'small irrigation canal'	[yəp]	'small irrigation canals'
			NA	
/o/ vs. /u/	[uṣu]	'to pick up'	[ošo]	'ugly'
	[čuṭi]	'small bundle'	[čot]	'paw'
	[bu]	'look (IMP)'	[bo]	'deaf'
/e/ vs. /ȩ/			NA	
	[bȩjey]	'brother's wife'	[kȩy]	'why'
	[ke]	'to'	[hȩ]	'heart'
/ə/ vs/ /ə̧/	[əṣ]	'not burnable (green)'	[ə̧~n]	'blind'
	[ṣəy]	'ankle'	[bə̧y]	'deaf woman'
	[ma~nə~]	'meaning'	[bukʰə]	'difficult'
/i/ vs. /ɨ/	[ifir̥]	'lightweight'	[ɨgi]	'heavy (f)'
	[šigə̥]	'sand'	[kɨgi]	'hen'
	[æ~ŋi~]	'finger'	[hɨkɨ]	'brave woman'

Based on the evidence presented thus far then, it is reasonable to conclude that Torwali operates on a 7-vowel system. These vowels are represented in Table 2.24.

Table 2.24. Oral vowel phonemes

	Front	Central	Back
Close	i		u
Mid	e	ə	o
Open	æ		a

2.5.2 Nasalized vowels

Nasalization is phonemic in the language, as shown by the examples of contrast in Table 2.26. Unfortunately, no satisfactory examples of contrast between /i/ and /o/ and their nasal counterparts can be found in the data corpus. I have documented examples of these nasalized vowels occurring, like /ji~/ 'louse', /ṣi~ṣa~/ 'loud argument' and /æṣiko~e/ 'wink', but I cannot find good examples of contrast.

Table 2.26. Contrast of oral and nasalized vowels

/a/ vs. /a~/	[a]	'I'	[a~]	'peach'
	[čʰay]	'large cliff-like rock'	[pa~y]	'five'
/æ/ vs. /æ~/	[æ]	'this'	[æ~]	'mouth'
	[kʰæɾ̥]	'streams'	[kæ~t]	'sometimes'
/e/ vs. /e~/	[peši]	'early afternoon'	[pɛ~š]	'fifteen'
	[nu~we]	'near'	[su~we~]	'rabbit'
/u/ vs. /u~/	[suwa~n̥]	'right'	[su~we~]	'rabbit'

In words like [bo~ŋo~] 'eyebrow', [æ~ŋgəɾ̥] 'blacksmith' and [nyæ~] 'roots', the contrast of oral and nasal vowels is neutralized in the environment of the nasal consonant. Their underlying forms are /boŋo/, /æŋgər/ and /næ/ respectively.

Based on the contrastive examples shown in Table 2.26 and the fact that the same phonological process of /i~/ and /e~/ becoming [ɪ~] and [ɛ~] respectively in the same way as their oral counterparts do, I posit the nasal vowel phonemes listed in Table 2.28.

Table 2.28. Nasalized vowel phonemes

	Front	Back
Close	i~	u~
Close-mid	e~	o~
Open	æ~	a~

2.6 Syllable structure

2.6.1 Inventory of syllable types

Example (13) shows the syllable structures found in the language:

13)   V   /ošo/   [ošo]   'ugly'
                 VC   /ek/   [ɛk]   'one'
                 CV   /pušu/   [pušu]   'flower'
                 CVC   /pox/   [pox]   'strong, devout'

Simply stated the phonemic syllable structure is (C)V(C) which means that a vowel is required, but consonants are not. Consonants can occur in the initial position of the syllable or in the final position. Consonant clusters exist across syllable boundaries, but not within any given syllable.

2.6.2 Phoneme distribution within the syllable

As previously mentioned, the phoneme /ŋ/ does not occur word-initially, but it can occur syllable-initially within words as in, /æŋi/ 'finger' and /boŋo/ 'eyebrow'. Aside from this one exception, the language puts no additional restrictions on the distribution of phonemes in the syllable-initial position. A distinction needs to be made at this point, however, between word-internal syllable onsets that follow a vowel and word-internal onsets that fill the second slot of consonant clusters across syllable boundaries. The language does place some restrictions on this latter position. More will be said in a moment, but for now, it is enough to say that glide consonants are not permitted to occur in this environment, and nasals are allowed but only in morphologically complex forms.

Although syllable-initial clusters do not occur in underlying forms in Torwali, the *Cw* cluster can be found on the surface level of many words. Some common words that illustrate this are [kʰwami] 'in the feet' and [zwəŋ̊] 'young'. [kʰwami] consists of three morphemes, [kʰu] 'foot', [-a] OBL/PL marker and [-mi] 'in'. When combined, a phonological blurring of morpheme boundaries takes place so that /kʰuami/ is realized as [kʰwami]. [zwəŋ̊] differs a bit in that it is a single morpheme. If we look at related languages, we find [zəwan] in Kalami and [jəwan] in Urdu. This cross-linguistic comparison confirms that positing /zəwan/ as

the underlying form in Torwali is correct. In modern day normal speech, the initial vowel is dropped and the word becomes one syllable.

The nucleus of the Torwali syllable contains a single vowel. It can be oral or nasalized but only one vowel occurs in this position.

Regarding the syllable-final position, devoiced consonants, as discussed in section 2.4, occur only in this position, while affricates on the other hand are the only phonemes that never occur in this environment. At first glance the word [baǰ.ri] 'a mixture of stone and sand used to make cement' would seem to contradict this statement with [ǰ] positioned in the coda of the first syllable, but it does not. This is because a common variant pronunciation of this word is [ba.ǰə.ri] where the segment in question occurs in the onset of the syllable. I would posit /baǰəri/ as the underlying form, and say that [ə] is omitted in some people's normal or fast speech. All other consonant phonemes are permitted in the coda.

As already pointed out, it is helpful when analyzing the syllable structure of a language to separate the onsets and codas which occur at word boundaries from those that occur word-medially. The distribution of phonemes may differ at these two places, particularly when we are looking at consonant clusters across syllable boundaries. Making this distinction enables us to not only note what phonemes are permitted in each of these slots, but also what consonant classes tend to co-occur in consonant clusters.

The purpose of Table 2.30 is to show the general makeup of these clusters. Nasals and liquids are the most frequent coda fillers. At the bottom of that same column, we see that plosives occur least frequently of all the classes in the syllable coda of a consonant cluster. The second column shows what classes tend to occur in the syllable's onset when the preceding syllable ends with a consonant. So for example, the class of affricates is one class which can co-occur with nasal phonemes in consonant clusters across syllable boundaries. The third column includes examples of Torwali words to further illustrate the point. The dot between the first two columns serves as a reminder that a syllable boundary exists between the two consonants.

The point of this table is not to show an exhaustive list of all CC combinations, but, as previously stated, to illustrate that the onset position of non-word-initial syllables have more restrictions on phoneme distribution than onsets word-initially.

Table 2.30. Common consonant clusters across syllable boundaries

Coda	.	Onset	
Nasals	.	Affricates	*čʰonǰo* 'neck'
		Plosives	*mombəti* 'candle'
		Fricatives	*ləmsəy* 'hand-made carpet'
		Liquids	*guŋluz* 'strawberry'
Liquids	.	Plosives	*čarpa* 'four-legged animal'
		Fricatives	*barzən* 'slingshot'
Dental Fricatives	.	Plosives	*šazda* 'son of a king'
Glides	.	Plosives	*payda* 'creation'
Plosives	.	Plosives	*netkʰol* 'nose'

Based on the findings presented in Table 2.30, a couple of other restrictions are noted in the onset position of these consonant clusters. First of all, according to the data I have studied, glides are generally not permitted here. Although I have seen a few examples to the contrary, the vast majority are found in words borrowed from Urdu, Pashto and Persian. Secondly, the only occurrences of nasal consonants in this slot are at morpheme boundaries. For example *lignin* 'will write' and *bušnin* 'will listen' consist of two morphemes each *lig –nin* and *buš –nin* where *–nin* functions as the marker for future tense.

2.7 Prosodic features

This section serves only as a starting point. As the analysis progressed, I realized more and more how prominent a role tone plays in the language. The observations and conclusions stated in this section serve as an introduction to the features of tone in Torwali. In addition to this introduction, there are some grammatical issues that involve tone, such as marking plurality, which will be discussed in subsequent chapters of this paper. Even so, a lot more tonal analysis is needed.

2.7.1 Torwali tone

Pitch plays a significant role in distinguishing lexical meaning among many of the languages of Pakistan. Torwali like its neighbor to the north, Kalami, uses pitch to mark all lexical items in the language. In some cases, pitch is the only acoustic element that distinguishes one word from another.

From my database of Torwali words, I carefully chose about 20% or about 160 words and recorded my language assistants saying each of them in the utterance, "Javed says ____", for example *ǰaved ẓat bənədu*. 'Javed says morning.' *ǰaved čonǰo bənədu*. 'Javed says neck.' and so on. These frames were then analyzed with the help of Speech Analyzer and Praat, two software programs designed for analyzing waveforms, to extract pitch graphs. Because Torwali is an SOV language, the target word was recorded utterance-medially in a fixed frame. This provided an ideal environment where the utterances before and after the target words were always the same so I was then able to draw conclusions regarding the tone of each word.

In my research, I have documented four contrastive tone patterns, high (H), low (L), rising (LH) and falling (HL). They are shown in example (14). Each Torwali word carries one of these four configurations.

14)	/ẓat/	HL	[ẓatʰ]	'morning'
	/ẓat/	H	[ẓatʰ]	'blood (sg)'
	/ẓat/	L	[ẓatʰ]	'blood (pl)'
	/ẓat/	LH	[ẓatʰ]	'night'

The following presentation of how these tone patterns are applied to the words in (14) may help illustrate how they are applied to Torwali words in general. Beginning with the description of falling tone (HL), the pitch begins low on the frame *ǰaved ẓat bənədu*, rises on the second syllable of *ǰaved* so that the target word begins high, and then begins to fall on the first syllable of *bənədu.* It continues to fall until the end of the utterance. The characteristics of this HL tone are fascinating. It does not follow a right-to-left spreading rule like one finds in the tone patterns (see below). As I have examined the data, I have found that the high pitch occurs on the target word and the low pitch is not realized until the first syllable of the following word. Baart has described a similar phenomenon in Kalami. He documents the same four tone patterns in Kalami that I have posited in Torwali, but he has also notes a fifth pattern. In contrast to a falling pitch which he marks HL, where the contour tone is applied solely to the target word and the pitch falls during utterance of this word, Kalami also has a *delayed* falling pitch, which Baart labels H(L), which means that the tone falls from the final syllable of the target word to the first syllable of the word that follows. (1997:41). This is exactly the same feature that is associated with Torwali's HL tone pattern.

Looking at *ẓat* 'blood (sg)' which has high tone (H), again the tone begins low on *ǰaved* and rises during the second syllable where it peaks at the beginning of *ẓat*. It then remains high until the final syllable of *bənədu*, at which point it falls.

Low pitch (L) begins low and stays low until the second syllable of the verb *bənədu*, at which time the pitch pattern rises quickly, peaks and falls through the final syllable.

Lastly, the rising pitch (LH) is low for the word *ǰaved* and rises during the target word *ẓat* 'night'. The high pitch peaks however, not on *ẓat*, but on the first syllable of *bənədu* where it remains high until the final syllable, then falls. If the target word were more than one syllable, the tone would usually not begin to rise until the final syllable of that target word. In this case, we do see an example of right-to-left spreading of tone. H is applied to the final syllable, and L spreads to the left.

A couple of generalizations can be made from these observations. One is that the effect of tone is observed more in the word following the target word than in the one preceding it, although it also has an effect there as well. However, in doing tonal analysis of Torwali words, much more insight into the tonal features of words can be gained by observing not only what is happening during the utterance of the target word, but also what is happening to the word following it. The second is that regardless of lexical tone patterns of words, in utterance-final position, the pitch always falls, as one would expect.

One interesting discovery made was the relationship between tone and vowel length. Words having an L or LH pitch pattern have shorter vowels than words having H or HL patterns. Furthermore when words are spoken in isolation, the phonetic realization of the H, L and LH pitch patterns are all L (i.e., the tone distinctions are neutralized). Only HL remains unchanged. The distinction between the longer and shorter vowels is still evident however. This means that words having L and LH, which tend to have shorter vowels no longer have any distinguishing characteristics because their tonal distinctions no longer exist. However, words having H and HL tone, because their vowels are typically longer and their tone remains contrastive, are distinguishable from each other even in isolation.

One experiment we carried out was to record the singular and plural forms of 'blood' separately and in isolation. (Note from example (14) that their phonemic tone patterns are H and L respectively.) As previously

stated, in isolation the phonetic tonal distinction between these two words disappears. They both sound equally low. Using Praat software, we removed a small part of the vowel portion in 'blood (sg.)' from the sound wave, which resulted in a slightly shorter vowel duration. Now, when both sound files were played back for the mother tongue speakers to listen to—the plural form of blood and the singular form which had been shortened—they could not be distinguished because the length of both vowels was now the same. They were short. Both speakers understood the words to be the plural form of blood.

The findings from this particular session are not sufficient to suggest that vowel length is phonemic in Torwali, but raise more questions regarding tone and vowel length, particularly the relationship between them.

2.7.2 Breathiness

Breathiness is a feature associated with low tone, although there are some exceptions and some speakers of the language give this phenomenon more prominence in their speech than others. It is restricted to the nucleus of a syllable having an L or LH pitch pattern and a voiced consonant (i.e., plosives, affricates, nasals and the liquid) in the onset of the syllable. If we compare some of the Torwali words in example (15) (using [h] in the phonetic representation only as a representation of breathiness in the syllable) with their cognates in related non-tonal languages, we find voiced-aspirated consonants occurring in those languages. /gʱas/ 'grass' and /bʱai/ 'brother' are Urdu cognates. /bʱūm/ 'field' and /dʱərəṇ/ 'floor' come from Palula, a closely related language located to the west. I believe that while historically aspiration might have been a significant feature of these words in Torwali, now it is the low tone that has become the significant feature.

15) a. /ga/   L   [gha]   'grass'
     b. /nigalu/   L   [nhi~ghalu]   'to dig up'
     c. /madum/   L   [mha~du~m̥]   'vulture'
     d. /mindəl/   L   [mɪ~ndhəl̥]   'sheep (m)'
     e. /ba/   LH   [bha]   'brother'
     f. /bum/   LH   [bhu~m̥]   'field'
     g. /dɛrin/   LH   [dhɛrɪ~n̥]   'floor'
     h. /batʰ/   LH   [bhatʰ]   'cooked rice'

What is interesting about the words in (15b), (15c) and (15d) is that even though a low tone is applied to the whole word, not every vowel is breathy. In fact, the first syllable of /mindəl/ does not even have a breathy vowel.

It is possible that voiced aspirated consonants were once very prominent in Torwali. However, in today's speech, breathiness has been relegated to an optional occurrence related to low tone. This same phenomenon occurs also in Kalam Kohistani (Baart 1997).

3. TYPOLOGY OF TORWALI

As the number of languages being researched increases, linguists grow in their understanding of language in general. Language patterns or *typologies* become more evident. Understanding the typology of one language or a group of language helps linguists know what (not) to expect in other related languages. Linguists like Greenberg, Shopen and Comrie claim that languages can be categorized according to their morphological and syntactic characteristics. This chapter focuses on the general tendencies of languages and how they are manifested in Torwali. (Details pertaining to morphology and phrase structure will be left for later in this paper.) The purpose of this section is to examine some basic typological features of the language which are relevant to discussions in subsequent chapters. Our findings enable us to group Torwali with other languages with similar structures. This not only leads to a better understanding of some of the generalizations specific to Torwali, but also contributes to the ongoing process of generalizing universal characteristics of languages.

As much as possible illustrative sentences and phrases cited in this paper have been taken from natural texts. In those instances, references to the original texts are also included in brackets at the end of the English translation of the sentence. All other times, they have been specifically elicited from mother-tongue speakers of the language and no reference is included.

3.1 Morphological typology

Synthesis index

The morphology of languages can be categorized in a variety of ways. One way, according to an index of *synthesis*, refers to how many morphemes tend to occur per word. To one extreme are the *isolating* languages where words do not contain more than one morpheme. To the other extreme are the *polysynthetic* languages where words contain multiple morphemes. Between these two extremes is a continuum where languages display various degrees of synthesis. See Comrie (1989:45f) for more discussion.

Torwali finds itself in the middle of this continuum. Many words contain only one morpheme, and yet many are formed from two or more morphemes. Seldom if ever will one find more than two or three morphemes combined to form a word. Compared to some languages, which can attach a large number of morphemes in a single word, Torwali is more restrictive in the number of morphemes that can be combined. Example (16) shows an oblique form of an inflected noun, an inflected verb and a noun derived from an adjective, respectively; each word consists of two morphemes, as indicated.

16) kʰəmana   bənudud   linača
     kʰəman -a   bən -udud   lin   -ača

     husband   OBL/PL   go   IMPFV   bald   Nominalizer
     'husband.OBL/PL'   'was going'   'baldness'

Fusion index

Another index, known as *fusion*, "has to do with the degree to which units of meaning are 'fused' into single morphological shapes" (Payne 1997:28). Again, a continuum exists between two extreme positions. Among polysynthetic languages, morphemes found in strictly *fusional* languages contain several meanings within them. In contrast, each morpheme found in highly *agglutinative* languages contains only one meaning. Torwali is in between these two positions, but is primarily a fusional language. One example is illustrated in the inflected verb *bənədu* 'he goes' where *-u* indicates that the gender of the subject is masculine and the number is singular. Gender and number cannot be separated in this morpheme. The oblique/plural suffix, which attaches to nouns, is another example. The 'oblique-ness' and the 'plural-ness' of this suffix (refer again to (16)) cannot be distinguished from each other.

Altering the stem form is characteristic of fusional languages according to Payne (1997:29f), and he lists several morphological processes used by speakers of the world's languages to alter stem forms. Torwali also uses several of these strategies. They include *stem modification*, *suprasegmental modification* and *reduplication*.

In regard to stem modification, consider example (17) where the stem vowel of the feminine verb form (FSG) has been fronted. For nouns, vowel fronting and suprasegmental (specifically tonal) modification are

often combined to mark plurality. Example (18) illustrates how these combine to cause a change in number. The words in (19) exhibit no vowel shift, but a change in tone is noted. Finally, as shown in (20), gender distinctions can sometimes be marked by a fronting of the stem vowel. Once again, we note a change in pitch also marking the change. So in just a few examples, we have seen that stem modification along with suprasegmental modification are strategies applied to many different areas of Torwali grammar. We have also seen how they work together in the phonology as well.

17) jə̆ndəru   jæ̆nderi   jə̆ndəri
    jə̆ndər -u   jə̆ndər -i   jə̆ndər -ui
    'he lived.MSG'   'she lived.**FSG'**   'they lived.PL'[8]

18) kan   kən   yap   yəp
    LH   HL   H   L
    'ear' 'ears'   'irrigation canal' 'irrigation canals'

19) korsi korsi   šir   šir
    LH   HL   LH   L
    'chair' 'chairs'   'house'   'houses'

20) ḍak   ḍæk   ispor   isper
    H   LH   HL   LH
    'old man' 'old woman'   'tasteless (m)'   'tasteless (f)'

There are two known uses of reduplication in Torwali. The first one, used to express plurality, and illustrated in (21), occurs when a morpheme is duplicated and then attached to the end of the original stem. The only change is made to the initial consonant of the duplicated form, which is replaced with /m/. This second morpheme never occurs in isolation so it is treated as a bound morpheme. These newly derived forms are glossed '… and such' meaning that other things are included in the package. For example, 'tea and such' suggests that in addition to the tea, the host or hostess will also provide cookies, crackers or bread. 'Bread and such' might include jam or honey along with something to drink. Looking at the examples in (21), the first two columns show the singular form, while the third and fourth columns show the reduplicated plural forms.

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[8] -*ui* has been posited as the underlying form even though *u* does not occur on the surface. Its function is to block the fronting of the stem vowel which the feminine singular suffix -*i* causes in the feminine singular form. Without this blocking phoneme, the plural suffix would incorrectly cause the stem vowel to become fronted. See section 5.1.2 for discussion.

21)

gal	'weed'	galmal	'weeds and such'
čey	'tea'	čeymey	'tea and such'
gel	'bread'	gelmel	'bread and such'
lon	'salt'	lonmon	'salt and such'
pela	'cup'	pelamela	'cups and such'
dərwaz	'door'	dərwazmərwaz	'doors and such'

The second use of reduplication is to intensify the meaning of the original word. In these cases, it is usu-ally a reduplication of the stem form but with no modification to the initial consonant. For example, *jeldi* means 'quickly', but when stem reduplication is applied, *jeldi jeldi* means 'very quickly'. Similarly *asuda asuda* suggests 'very slowly.' Finally, *pʰit* and *ṭoṭe* are two separate words meaning 'piece', but when these stems occur redundantly as in *pʰit pʰit* and *ṭoṭe ṭoṭe*, they mean 'lots of pieces'.

To summarize the morphological typology of Torwali, it is a language which is somewhat polysynthetic, not heavily polysynthetic and not heavily isolating. It also manifests numerous characteristics of being a fu-sional language. It uses multiple fusional strategies to modify the meanings of words, namely stem modifica-tion, suprasegmental modification and reduplication.

3.2 Constituent order typology

If we consider the distribution of word-, phrase- and clause-level components in this language, we find that the head component typically occurs at the end of the phrase or clause. The purpose of this section is to show that the order of Torwali constituents in pragmatically neutral clauses reveals that it is a strong head-final language. What has become known as "Greenberg's Universals" states that syntactic characteristics correlate with the basic constituent order found in languages (Greenberg 1966). Torwali, having a basic SOV order, should, according to Greenberg, demonstrate many head-final characteristics. The next few sections examine various syntactic components, and illustrate through examples that Torwali has many head-final correlations.

All of the syntactic components listed in Table 3.1 follow the universal correlations put forth by Greenberg (1966:76-113).

Table 3.1. Greenberg's typology correlations attested in Torwali

Feature	Universal Rule #	Structure in Torwali
Main clauses		O-V
Affixes	27	Suffixes
Adpositions	4	Postpositions
Comparatives	22	Std-Mkr-Adj
Modifier and head noun	18	M-N
Genitive and head noun	2	G-N
Subordinate clauses	13	Subordinate-main

3.2.1 Main clauses

In most communication events, and certainly in pragmatically neutral clauses, Torwali verbs occur at the end of the clause. This is very common in Indo-Aryan languages.

22) tu   i   mhe   ye gel   pəǰa.
    2.SG.NOM TOP?   1SG.OBL to   bread cook.IMP
    S   IO   O   V
    'Cook bread for me.' [Bangabilo065]

Ordering of direct objects and indirect objects can vary depending on the emphasis the speaker wants to make, as illustrated by the free translations in examples (23) and (24). To emphasize a particular constituent and make it the focus of the sentence, the speaker places it closer to the final verb.

23) es   ke iskul   si kæ dərxas   da.
    NEAR.SG.OBL to   school of for application   give.IMP
    IO   O   V
    'Give an application for a school to him.'(emphasis on the application)

24) iskul si kæ dərxas   es   ke da.
    school of for application NEAR.SG.OBL to give.IMP
    O   IO   V
    'Give him the application for a school.'(emphasis on who to give it to) [Bachagul022]

25) tʰo   əmən   set čəw ya pa~y dæl   sæt   rəpəle səmane gina.
    2PL.NOM yourself with 4   or 5   other companions rifles   with   take
    S   PP   O   PP   V
    'Take four or five other companions with rifles along with you.' [Danghara007]

Although the positioning of the verb is relatively rigid, the remaining constituents can at times change position. The subject and indirect object can switch positions. Subjects, which typically occur before objects, can be placed after objects, as in example (26). In sentences that are not pragmatically neutral, the slot immediately before the verb functions as a focus position. When speakers want to focus attention on a particular constituent within the clause, they place it here.

26) bəhərhal seræn ge æ   xəbər əwe.
    Anyhow   girl   to NEAR.NOM news   arrived.SP
              IO   S   V
    'Anyhow, this news reached the girl.' [Bangabilo013]

3.2.2 Affixes

Torwali uses suffixes almost exclusively. In fact, no indigenous prefixes have been documented to date. As will be discussed in Chapter 5, both inflectional and derivational morphology rely heavily on suffixation. The data set in (27) is the same set cited earlier in example (16). It illustrates how suffixes attach to nouns, verbs and adjectives.

27) kʰəmana   bənudud   linača
    kʰəman -a   bən -udud   lin -ača

    husband   OBL/PL   go   IMPFV   bald Nominalizer
    'husband.OBL/PL'   'was going'   'baldness'

3.2.3 Adpositional phrases

Postpositions, not prepositions, are used in Torwali. They operate with noun phrases, as shown in (28) and (29).

28) šir ma   šire ma   šir ke   šir me

     'from the house'   'from the houses'   'to the house'   'in the house'

29) pəy   kun   si pən de

     FAR.NOM   Kun (place name)of   way   on

     'on that way to Kun' (Lit. 'on that Kun's way') [hunting017]'

3.2.4 Comparatives

The comparative construction in Torwali is an areal feature found in neighboring languages, Urdu, Pashto (personal experience) and Kalami (Baart 1999:28) to name a few. The item serving as the *standard (Std)* occurs in a postpositional phrase with ***ma*** 'from' used as the comparative *marker (Mkr)*. The subject of the sentence (***po*** 'boy' in examples (30) and (31)) can occur before the comparative construction or after it. The order of these two constituents causes no confusion because the standard is always in the postpositional phrase. Following both items being compared comes the adjective, referred to as the *quality*. Either syntactic formula is acceptable, and both are commonly used.

N   PP   Adj   PP   N   Adj

Subject   Standard + Marker   Adj.   Standard + Marker   Subject   Adj.

In either case, both the marker ***ma*** and the adjective follow the standard. The postpositional phrase containing the standard and marker are bracketed in examples (30) through (32) for easier reference.

30) po   [tunu šu   ma]   gən   tʰu

     boy   own   sister   from   big   is.PRES.MSG

     'The boy is bigger/older than his sister.'

31) [tunu šu   ma]   po   gən   tʰu

     own   sister   from   boy   big   is.PRES.MSG

     'The boy is bigger/older than his sister'

32) [Bahrain ma]   kalam du   tʰu

     Bahrain   from   Kalam   far   is.PRES.MSG

     'Kalam is farther than Bahrain (from here)'

3.2.5 Noun phrases

From the list of Greenberg's universals, two issues will be discussed in this section: (1) the ordering of

the possessor and its head noun, and (2) the ordering of modifiers and their head nouns. To start with, the basic

noun phrase ordering is as follows:

(PossPh) + (Dem) + (Num*) + (Adj*) + Noun

A head noun can be modified by a demonstrative pronoun, possessive phrase, one or more numbers and

one or more adjectives, all of which optionally occur in any given noun phrase, but in that order. Regardless of

which of these constituents occur in any given noun phrase or how many, the head noun always occurs in the

final slot of the noun phrase construction. Example (33) illustrates the ordering of noun phrase constituents.

33) pəy   maṣ   si   se   du   kolowol   nəswari   pʰaŋ
     FAR.NOM   man   of   those   2   crooked   brown   branches
     [PossPh   ]   Dem   Num Adj   Adj   Noun
      'Those two crooked brown branches of that man'

Examples (34) through (36) also show that possessive phrases and modifiers occur before their head nouns.

34) [pəy   kun si]   pən
     [ABS.NOM   Kun of]   way
     [PosPh   ]   N
     'the way of that Kun' [Hunt017]

35) [bača   si]   du   ça   gulæm
     [king   of]   2   3   female.servants
     [PosPh   ]   Num   Num   N
     'two (or) three servants of the king' [Bangabilo016]

36) [du]   [kostəni]   məlan
     [2]   [Kohistani] mullahs
     [Num] [Adj   ] N
     'two Kohistani mullahs' [Darolay043]

3.2.6 Subordinate clauses

As predicted by Greenberg's universals, subordinate clauses in Torwali precede main or independent

clauses in sentences because it is an O-V language. One key feature of subordinate clauses is the clause-final

subordinate marker *da*. The sentence in (37) contains a subordinate clause containing a fully inflected verb fol-

lowed by the main clause.

37) [se   la   luṭ   ašu   da]   tisi   bab mu.
[ABS.NOM   yet child was.PAST.MSG SUBMKR] ABS.SG.GEN   father died.SP.MSG
'When he was yet a child, his father died.' [Bachagul003]

Another type of subordinate clause, which is very frequently used by Torwali speakers, is the *participial*

clause. It is distinct in that it does not use a subordinate marker and its verb is not fully-inflected. Verbs occur-

ring as the head of participial clauses take the form of *perfective adjectival participles,* and carry no gender or

number marking. These verb forms, as their label suggests, communicate the idea of something already com-

pleted. Masica (1991:323) and other linguists working in this region refer to these as *conjunctive participles*

(CP) so this will be the term used in this paper as well. Example sentences are cited below in (38) and (39).

38) se   [tʰæ   xət   učət kede]
ABS.NOM   [ABS.ACC   letter up   having.done.CP]

[tunu ɣosolxanə ye læŋde]   lamo dedu.
[self bathroom   to having.entered.CP] bath   gives.PRES.MSG
'He, having picked up those letters, having entered his bathroom, takes a bath.' [dailypres004]

Sentence (38) could be more loosely paraphrased to better illustrate the fact that this is a sequence of

events, "He picked up those letters, then he entered his bathroom, then he took a bath." It is important to note

that when a series of participial clauses are strung together, the subject is the same for the whole sentence.

Compare (38) to (37) where the subject can be different. This is yet another difference between these two types

of subordinate clauses. Example (39) contains two consecutive sentences from a text with participial clauses

marking a sequence of events.

39) [koyo læde]   ti   našta   si keǰa baynin.
[clothes having.put.on.CP] ABS.ERG   breakfast of for   will.sit.FUT

[našta   kede]   ti   tunu   dəftər ke bəynin.
[breakfast [having.done.CP] ABS.ERG   own   office to will.go.FUT
'After putting his clothes on, he will sit down for breakfast. Having eaten breakfast, he will go to
his office.' [dailyfut005]

3.2.7 Content questions

Although content questions are not traditionally included in discussions of constituent order typology, I have included some data along with a brief discussion because some important generalizations can be made that relate to typological issues. One important issue worth noting is that the question words typically occur at the end of the sentence immediately before the final verb. As already mentioned in earlier discussions, this position serves as a <u>focus</u> position for the sentence. (Refer back to examples (23) and (24) which illustrate focus in non-questions.) Here are a few sample *who*, *when*, *why, where* and *how* questions.

40) me   kale   ban   ge [kam]   bəji?
     this year.OBL mtn.pasture to   who   should.go.JUS
     'Who should go to the mountain pastures this year (for grazing the herds)?'

41) tu o čʰi   sæt   karači ye [key] bəjədi?
     you and your friend Karachi to   when are.going.PRES.PL
     'When are you and your friend going to Karachi'

42) lo   pəy   het   [kəy] nəṛədi?
     children   that.FAR there   why   are.playing.PRES.PL
     'Why are the children playing over there?'

43) Bahrain me   kəbab   [kʰal] payadu?
     Bahrain in   meat.kebab how   is.cooking.PRES.MSG
     'How do you cook kebabs in Bahrain?'

44) mi po [ket] tʰu?   mi po   [kʰæde] bəjədu?
     my son where is.PRES.MSG   my son   to.where go.PRES.MSG
     'Where is my son?'   'Where is my son going?'

The next series of example sentences show *kam* 'who' occurring in various clause positions (subject, object, etc.). These sentences confirm, just as the preceding questions do, that question words typically occur immediately before the verb. Also as this word moves from constituent position to constituent position, one notices that different pronouns are used to represent the different semantic functions. They are shown in (45).

45) **NOM   ERG   ACC   GEN   OBL**
     kam   *ki*   *kes*   *kisi*   *kis*

Example (46) includes a question with 'who' as the subject. The answer to this question is located to the right. Examples (47) and (48) focus on the agent position of the clause with the former stating the question, and the latter, the answer.

46) dukan ge [kam] bəǰədu?   dukan   ge   [a]   bəǰədu.
    store   to   who   goes.PRES.MSG   store   to   I   go.PRES.MSG
    'Who is going to the store?'   'I am going to the store.'

47) bel   mi koǰo   [ki]   isri   kiši?
    yesterday my clothes who   iron   had.done.PAST.PFV.FSG
    'Yesterday, who ironed my clothes?'

48) bel   [mæ] mi koǰo   isri   kiši.
    yesterday I   my clothes iron   had.done.PAST.PFV.FSG
    'Yesterday, I ironed my clothes.'

Examples (49) and (50) illustrate the genitive slot. Genitive pronoun forms occur immediately before the

nouns they modify just as ordinary modifiers do. The question in (51) contains the accusative form 'whom'.

49) æ   [kisi   po]   tʰu?   æ   [mi   po]   tʰu.
    this whose son   is.PRES.MSG   this   my   son   is.PRES.MSG
    'Whose son is this?'   'This is my son.'

50) æ   [kisi   kitab]tʰu?   æ   [mi   kitab] tʰu.
    this whose book is.PRES.MSG   this   my   book   is.PRES.MSG
    'This is whose book?'   'This is my book.'

51) ǰahangir [kes]   gintu?   ǰahangir   [po]   gintu.
    Jahangir   whom   carried.PRES.PFV.MSG   Jahangir   boy   carried.PRES.PFV.MSG
    'Whom has Jahangir carried?'   'Jahangir has carried (the) boy.'

The final pair, (52) and (53) shows 'who' as an indirect object. In this position, it occurs as an object of a post-

position which requires the oblique form along with a postposition.

52) ti rəpəl [kis   ke] dit?
    he rifle   whom to   gave.SP.MSG
    'To whom did he give rifle?'

53) ti rəpəl [ǰahangir   ke] dit.
    he rifle   Jahangir   to   gave.SP.MSG
    'He gave the rifle to Jahangir.'

4. SYNTACTIC CATEGORIES

This portion of the paper presents an introduction to the various syntactic categories documented in the language. Subsequent sections will describe the morphology issues relevant to these categories and their form and function at the phrase, clause and discourse levels.

4.1 Nouns

Nouns, which Payne describes as "words that express the most time-stable concepts" are defined as having distributional and structural properties which distinguish them from other syntactic categories (1997:33). In this section we will discuss the distributional attributes of nouns in Torwali and a few subcategories of nouns.

Noun phrases can function as subject, direct object or object of postposition, and nouns function as the head of noun phrases and occur phrase-finally. See example (54).

54) se   duem   ba
    ABS.NOM   second brother
    'that second brother'

Modifiers are inflected to agree in gender with the head noun of the noun phrase in which they occur as illustrated in example (55).

55) puran   kuǰu   upʰur   paṣ
    old (m.) dog (m.)   light (m.) paper (m.)
    'old male dog'   'light paper'

    puræn   kiji   ipʰir   pəṣal
    old (f.) dog (f.)   light (f.) wing (f.)
    'old female dog'   'light wing'

Example (56) shows how possessive phrases and pronouns can also be used to modify nouns.

56) mi kʰəman
    my husband
    'my husband'

sed   mamud   dada   si   šir
Said.Mamud   older.brother   of   house
'older brother Said Mamud's house' [hunting033]

Payne states that many languages distinguish between proper nouns and common nouns, either by means of distribution or by morphology. While Torwali does not make any morphological distinctions between these two classes, they differ somewhat by their distribution. Proper nouns do not usually carry additional modifiers like determiners, demonstratives, adjectives and quantifiers. In contrast these co-occur readily with common nouns. There are special circumstances when proper nouns can carry a modifier. For example, the Torwali people have a folktale about a young lady named Bangabilo. Early in the story, she runs away. After a long period of time, when her mother sees her, she cries out, *m^hi baŋabilo č^hi* 'It is my Bangabilo!' This usage is similarly used in English, and while I have not documented any examples, I suspect that in similar circumstances, phrases like 'tired Bangabilo' or 'that Bangabilo' are possible. Nevertheless, they would not be used frequently, only under special circumstances when the speaker or author needs to emphasize something in particular about the person.

The distinction between count and mass nouns is simpler. Most nouns found in the language are in fact count nouns meaning that they can be pluralized. However, some nouns cannot be pluralized. Some mass nouns are *sigəl* 'sand', *çi* 'milk' *šela* 'wood', *ga* 'grass' and *hawa* 'wind'. In order to specify quantity, another noun must be added to the end of the phrase to serve as a kind of classifier as in *ça sigəl si p^hit* 'three grains of sand', *ça çi si ǰik* 'three drops of milk', *pom si čik* 'bunch of wool' and *ça šela si kəy* 'three boards of wood' where *p^hit, ǰik, čik* and *kəy* are translated 'grains', 'drops', 'bunch' and 'boards' respectively.

Nouns do not exhibit an extensive case and number system. Inflected nouns typically occur only when they are oblique and plural. For example *poe* 'boy.OBL' contains two morphemes. In addition to the noun stem *po* 'boy' it contains an inflectional suffix *-e* marking it for oblique case and plurality. Another example is given in (57). These inflectional features of nouns, however, will be addressed in more detail in section 5.1.1 with other inflectional characteristics of the language.

57)   šire   ye
       šir   -e   ye
       house   PL.OBL   to
       'to the houses'

Nouns can also be subcategorized by two genders, masculine and feminine. Grammatical gender can be distinguished by biological gender where applicable. For example, if a noun has biological gender, its grammatical gender will be the same. This is an areal feature found in several other Indo-Aryan languages. Words like 'girl', 'daughter', 'mother' and 'female cat' are all biologically feminine, so their grammatical gender is also feminine. The adjectives and verbs associated with these words in any given sentence are marked accordingly so as to agree in gender with them. See example (55) above. The same is true for the inherently masculine words 'man', 'son' and 'male horse'. Table 4.1 shows a sampling of data to illustrate the point.

Table 4.1. Gender: with biological correlations

Feminine nouns		Masculine nouns	
det	father's mother	dat	father's father
toti	female parrot	tota	male parrot
ḍæk	old woman	ḍak	old man
mem	mother's mother	məm	mother's father
ge	female horse	ɡo	male horse
kiǰi	female dog	kuǰu	male dog
lemæ	female fox	ləma	male fox
čʰæl	female goat	šəm	male goat
ǰæmel	husband's sister	dey	husband's brother
seræn	wife's sister	šaǰo	wife's brother

Generally speaking vowels occurring in masculine nouns are back (/u/, /ə/ and /a/). In contrast, vowels in feminine nouns are fronted (/i/, /e/ and /æ/). Neither however follows any kind of hard and fast rule. Sometimes the words for a male and a female individual of a certain class are morphologically related, as in the first seven examples in the table, and sometimes the words used for the male and the female individual are entirely different (as in the last three).

Torwali also correlates gender with size. Large items are masculine, while their smaller counterparts are feminine. For example, *ləmaṭ*, *nətkʰol*, *borol* and *boro* are references to a large tail, large nose, large stone and

a large earthen cooking pot, all of which are masculine. Their feminine equivalents, *lemæṭ*, *netkʰel*, *beril* and *bere* are their smaller counterparts.

In many cases throughout the language, however, gender seems arbitrarily applied. For example, *šir* 'house' and *derin* 'floor' are both feminine while *šan* 'roof' and *čokaṭ* 'door frame' are both masculine. More examples are included in (58).

58) **Feminine** *ṣeṣ* 'rope'   *mu* 'face'   *si* 'sun'

      Masculine *leb* 'quilt'   *čam* 'skin'   *di* 'day'

4.2 Personal pronouns

While Torwali nouns carry only one morphological case marker (i.e. oblique), personal pronouns carry morphological case marking to distinguish five cases which include first and second person, singular and plural forms, as shown in Table 4.3. Third person pronouns have distinguishing characteristics in that they can also be used to modify nouns, and they mark relative distance. They will be addressed separately in section 4.3. Ergative case is used to mark agents in ergative constructions (discussed in section 6.3). The oblique case includes those pronouns which occur in postposition phrases. Following the table are examples of each of these cases starting with nominative case in (59), ergative in (60), accusative in (61), genitive and oblique in (62), and finally oblique in (63).

Table 4.3. Personal pronouns

	Nominative	Ergative	Accusative	Genitive	Oblique
1 SG	a	mæ	mæ	mi	me
2 SG	tu	tæ	tʰæ	čʰi	tʰe
1 PL	mo	moe	mo	mun	mo
2 PL	tʰo	tʰoe	tʰo	tʰun	tʰo

59) pəy   kʰən ge a   dugona gudu.
     ABS   mtn. to <u>1SG.NOM</u> twice   had.gone.PAST.PFV.MSG
     'I had gone twice to that mountain.' [hunting038]

60) mæ   ça   let   tʰəliši.
     <u>1SG.ERG</u> three   pheasants   had.thrown.PAST.PFV.PL
     'I had shot three pheasants.' [hunting004]

61) ti   čiga ki   mæ   mow.
he.ERG.ABS   cry   did.SP 1SG.ACC killed.SP.MSG
'He cried out, 'He killed me!'' [BraveMan035]

62) dæk die   muš bəsa mi mi   e sæt me   ye bənu....
few days.PL.OBL before summer in 1SG.GEN one friend 1SG.OBL to said.SP.MSG
'A few days ago, in the summer, one of my friends said to me, ….' [Danghara001]

63) maṣ me   keja pes   ginde   ga.
man 1SG.OBL from money having.taken.CP went.SP.MSG
'The man took the money from me and left.'

In addition to the genitive or possessive pronouns listed in Table 4.3, Torwali also has several *reflexive* pronouns. In the case of *tunu*, which simply translates as "one's own," person, gender and number are not coded in this word, but in the noun or pronoun with which it is associated. In example (64), because the subject and possessor are not the same, the regular possessive pronoun is used. However, the subject and possessor *are* the same in (65) and (66), a criterion required to use *tunu*. Without the pronouns, the sentences would say simply, 'He is/I am repairing a car.'

64) æ mi gaṛe səwadu.
he my car repair.PRES.MSG
'**He** is repairing **my** car.'

65) æ tunu gaṛe səwadu.
he one's.own car repair.PRES.MSG
'**He** is repairing **his own** car.'

66) a tunu gaṛe səwadu
I one's own car repair.PRES.MSG
'**I** am repairing **my own** car.'

Another reflexive pronoun, *əmən* 'one's self', is restricted to oblique and object positions.

67) a   [əmən   set] gel anədu.
1SG.NOM oneself.OBL   for bread bring.PRES.MSG
'**I** am bringing bread **for myself**'

68) mæ   [əmən]   kuṛu.
1SG.ERG oneself   hit.SP
'**I** hit **myself**'

Torwali also uses an *emphatic* pronoun, *æmede*, which has the same meaning as *əmən*, but differs in its function and distribution. It serves to give emphasis to the subject of a sentence, and thus only occurs with the

subject of the sentence. One feature that distinguishes emphatic pronouns from reflexive pronouns is the fact that emphatic pronouns do not have any independent status within the clause. Note the following:

69) a   æmede   gel   anədu.
1SG.ERG   oneself   bread   buy.PRES.MSG
'**I myself** am buying bread'

70) po   æmede   əmən   kuṛədu.
boy   oneself   oneself   hits.PRES.MSG
'The **boy himself** hits **himself**.'

A couple of observations are noted here. In this language, reflexive and emphatic pronouns do not include coding for person, number or gender, and unlike English the emphatic pronoun can only modify the subject of a sentence. My findings thus far reveal that a sentence like 'I had dinner with the governor <u>himself</u>' with emphasis on the governor is not possible using an emphatic pronoun, only 'I myself had dinner with the governor.' I have also found no evidence to suggest that these pronouns can refer to subjects of higher clauses.

4.3 Demonstrative pronouns

In addition to personal pronouns, Torwali also has three sets of *demonstrative* pronouns (pronouns used to modify nouns). Each set, used according to the distance between the speaker and a reference in the clause, uses the same five cases to specify its role in the sentence that the personal pronouns use. The *present NEAR* pronoun refers to a referent that is in very close proximity to the speaker. The *FAR* pronoun refers to someone or something that is not close yet can still be seen. The ABS(ent) pronoun refers to a person or thing that is not in the presence of the speaker and in fact cannot be seen. This is a feature that commonly occurs in languages throughout Pakistan even though some only have a two-way distinction. Torwali does not distinguish third person pronouns from demonstrative pronouns. The same form is used for both classes of pronouns.

71) [he çhi]   u   punudud.   [he]   u   punudud
[this woman] water   was.drinking.IMPFV   [she]   water   was.drinking.IMPFV
'**This woman** was drinking water' [Deo010]   '**She** was drinking water….'

At this point in my analysis, I cannot explain the various alternative forms listed in the columns of Table 4.5. They could be the result of phonological processes or they could serve different discourse functions. Further study is needed.

Table 4.5. Demonstrative pronouns

	Nominative	Ergative	Accusative	Genitive	Oblique
NEAR SG	æ / he	i / mi	me / es / mes	misi	me / es
FAR SG	pəy	pəy	pəs	isi / pəysi	pəs / pəy
ABS SG	se	ti	te / tes	tisi	ti / te / tis
NEAR PL	æ / he	me	mæ	min	hæ / me
FAR PL	pəy	pəy / pəhe	pəhæ	pəhin pəhæsi	pəhæ
ABS PL	se	tʰe	tæ	tʰin	tʰæ / tʰe

Sentence (72) contains two demonstrative pronouns. One is the agent of the ergative clause, and the other modifies the subject of the clause. The form for both nominative singular and plural is the same. Compare to (73). The sentences in (74) and (75) illustrate the use of an alternative NEAR singular demonstrative pronoun form positioned in the subject slot.

72) [ti]   bənu   [æ]   pot   čer   šijo   tʰu.
     [ABS.SG.ERG]   said.SP.MSG   [NEAR.NOM]   place very pretty is.PRES.MSG

     ase   čer   xətərnak   tʰu.
     but   very   dangerous   it.PRES.MSG
     '**He** said, "**This** place is very beautiful, but very dangerous."' [Danghara003]

73) ...ase   mun   sæta   set   [æ]   du waqeya   hui.
       but   1PL.NOM   companions.OBL.PL with [NEAR.NOM] 2   accidents became.SP.PL
     '…but there were **these** two accidents (which happened) with our companions.' [Danghara037]

74) [he]   bešte   tunu   yey   si   qəwər   zed ẓiŋusæt.
     [NEAR.NOM]   having.gone.CP one's.own   mother of   grave   on start.to.weep.INC
     'Having gone, **he** began to weep on the grave of his own mother.'[zadul013]

75) [he]   wəja   čʰi   yeræ me   gam   ge   kənḍər   bənədi.
     [NEAR.NOM]reason it.is.FSG that this village to   place.name they.say.PRES.PL
     'This is why this village is called Kandar.' [Darolay031]

Sentences (76)and (77) illustrate the use of demonstrative pronouns with distant referents as subjects.

76) [pəy]   kʰən ge dugona   gudu.
     [FAR.NOM]   mtns. to twice   had.gone.PAST.PFV.MSG
     '**They** had gone twice to the mountains.

77) [se]   xələq čer   gora aši.
    [ABS]   people very good were.SP.PL
    '**Those** people were very good.' [Danghara026]

The preceding examples have illustrated nominative forms in action. It is not possible to provide an example sentence for every word in Table 4.5, but examples (78) and (79) show two alternative accusative singular forms used to denote nearness. I do not believe that these and other alternative forms listed in the previous table exemplify free variation. Certainly more in-depth analysis is needed in order to shed more light on the distributional and functional features of each of these. The sentence in (80) contains the homonyms *t^{h}æ* 'ABS.PL.ACC' and *t^{h}æ* 'ABS.PL.OBL occurring in the accusative position in the first clause, and in the oblique position in the second clause, respectively.

78) poe   [es]   ginde   ç^{h}ay ge ga.
    boy.ERG [NEAR.SG.ACC]   having.taken.CP cliff to went.
    'The son, having taken **him**, went to the cliff.' [Tradition05]

79) bənəji   tæ   [mes]   ka   anua?
    she.says.PRES.FSG 2SG.ERG [NEAR.SG.ACC]   what brought.SP.MSG
    'She says, 'What did you bring?''

80) [ti]   [t^{h}æ]   egær kede   [t^{h}æ]   ye
    [ABS.ERG]   [ABS.PL.ACC]   gathered having.done.CP [ABS.PL.OBL]   to

    səwəq bənu.
    lesson said.SP.MSG
    '**He** gathered **them** (together) and taught a lesson to **them**.' [Bachagul020]

4.4 Descriptive adjectives

Adjectives are used to modify nouns. They share gender agreement with the head noun, but exhibit no case or number features. Note that for some words, masculine and feminine forms are the same.

Table 4.7. Masculine and feminine adjective forms

Masculine	Feminine	English gloss
puran	puræn	old
gən	gen	big
čono	čæne	yellow
čuk	čik	sour
upʰur	ipʰir	lightweight
lin	lin	bald
miṭ	miṭ	sweet
lut	lut	small
olon	olin	saltless
ispor	isper	tasteless
ošo	eše	ugly
bar	bær	fat

With exceptions of course, the formation of the feminine form from the basic masculine one usually involves a fronting of the vowel: /a/ to /æ/, /u/ to /i/, and /o/ and /ə/ to /e/.

4.5 Numerals

Unlike the English base-10 counting system, Torwali utilizes a base-20 system, which means that the numbers 1-20 are all unique forms, although it is apparent that a few of the lower ten are similar to a few of the upper ten. Just as the English decimal cycles on every ten, Torwali's vigesimal system cycles every twenty. Once these first twenty are learned, one can count indefinitely with ease, for example, *biš* '20', *dubiš* '2 20s (40)', *çabiš* '3 20s (60)', *čəwbiš* '4 20s (80)', *pãybiš* '5 20s (100)', *ṣobiš* '6 20s (120)', *satbiš* '7 20s (140)', etc. *nom o dubiš* literally means '9 and 2 20s (49)'. There are two ways to say numbers like '35': *pẽš o biš* which means '15 and 20', or *pãy kəm dubiš* '5 less than 2 20s'. Either is acceptable, but usually the closer one comes to the higher multiple of twenty, the more likely *...kəm...* is used. The Urdu number for 100 *so* is used more frequently nowadays so for example *dəšbiš* and *du so* are both used to refer to 200. *e so ər* lit. '100 and a half' is probably more frequently used than *dəš o satbis* '10 and 7 twenties'. The words *læk* '100,000' and *kəror* '1,000,000' are borrowed from Urdu and used by Torwali speakers and speakers throughout the country. Torwali numbers have no gender or case distinctions. A more complete list of cardinal numbers can be found in Table 4.8.

Table 4.8. Cardinal numbers

1	ek, e	24	čəw o biš	47	sat o dubiš
2	du	25	panǰ o biš	48	aṭʰ o dubiš
3	ça	26	șo o biš	49	nom o dubiš
4	čəw	27	sat o biš	50	dəš o dubiš
5	pa~y	28	atʰ o biš	55	panǰe kəm çabiš
6	șo	29	nom o biš	60	çabiš
7	sat	30	dəš o biš	65	panǰ o çabiš
8	aṭʰ	31	əgaš o biš	70	dəš o çabiš
9	nom	32	dwaš o biš	75	panǰe kəm čəwbiš
10	dəš	33	çeš o biš	80	čəw o biš
11	əgaš	34	čətəš o biš	85	panǰ o čəwbiš
12	duaš	35	pe~š o biš	90	dəš o čəwbiš
13	çeš	36	șeš o biš	95	panǰe kəm pa~ybiš
14	čətəš	37	sətaš o biš	100	pa~ybiš, so
15	pe~š	38	əṭʰaš o biš	120	șobiš
16	șeš	39	anbiš o biš	150	e so ər
17	sətaš	40	dubiš	200	dəšbiš, du so
18	əṭʰaš	41	ek o dubiš	300	ça so
19	anbiš	42	du o dubiš	500	pa~y so
20	biš	43	ça o dubiš	1,000	e zər
21	ek o biš	44	čəw o dubiš	2,000	du zər
22	du o biš	45	panǰ o dubiš	100,000	e læk
23	ça o biš	46	șo o dubiš	1,000,000	e kəroṛ

Ordinal numbers are included in Table 4.10 along with other related forms With the exception of the first five, they are formed by adding the suffix -*m* to their corresponding cardinal number. As with the cardinal numbers, gender and case distinctions do not exist.

Table 4.10. Ordinal numbers and other related forms

1ˢᵗ	awəl	once	egon	single	egun
2ⁿᵈ	dwem	twice	dugon	double	dugun
3ʳᵈ	çwi	three times	çagon	triple	çagun
4ᵗʰ	čoṭʰom	four times	čogon	quadruple	čogun
5ᵗʰ	pənǰəm	five times	pa˜ygon	quintuple	pa˜ygun
6ᵗʰ	ṣom	six times	ṣogon	sextuple	ṣogun
7ᵗʰ	satəm	seven times	satgon	septuple	satgun
8ᵗʰ	aṭʰəm	eight times	aṭʰgon	octuple	aṭʰgun
9ᵗʰ	nomom	nine times	nomgon	ninefold	nomgun
10ᵗʰ	dəšəm	ten times	dəšgon	decuple	dəšgun

4.6 Verbs

As with all other syntactic categories, verbs are defined by their distributional and structural properties. They typically occur sentence-finally, or more specifically, clause-finally—whether the clause is independent or subordinate.

Finite verbs carry inflection to mark tense, aspect and mood. Events that have been completed in the past are labeled *perfective*. The most basic form is *simple perfective* (also referred to by some linguists as preterite tense). If this past event has present relevance, then the verb is encoded *present perfective*. If the past event instead has only past relevance, then the verb is encoded *past perfective*. Events that are either ongoing in the past or habitually carried out in the past are marked with an *imperfective* aspect. While some languages distinguish imperfective and habitual aspect marking, Torwali does not. Verb conjugation paradigms are presented in section 5.1.2 where verb inflection is discussed. The language also makes use of an *inceptive aspect*, which describes an event that is just beginning. Events occurring now or in the future are encoded with *present* and *future* tenses, respectively.

Jussive mood is like a mitigated imperative mood and includes a three-person distinction, e.g., **mho beni**. 'Let's read!' More discussion and examples are in section 5.1.2 *Potential* mood refers to one's ability to do something. **æ ṭol gel kʰabadu**. 'He <u>can</u> eat all the food.'

Torwali also has several non-finite verb forms: infinitives, perfective adverbial participles, perfective adjectival participles and imperfective adverbial participles. These will also be discussed in section 5.1.2.

Turning briefly to the Torwali copula, we find that it, like most other finite verb forms, uses morphological marking to distinguish masculine singular, feminine singular and plural. Data analyzed so far suggest that the copula is always required in predicate nominals, existentials, locatives and possessive clauses (see section 6.2). In no case can it be omitted. Tenses include present and past, but no future. To express future states, another verb *how* 'to become' is required. *how* can be fully inflected like any other verb and when used suggests that the subject has or is undergoing a change of state.

Table 4.12. The Torwali copula

	MSG	FSG	PL
Present	tʰu	čʰi	tʰi
Past	ašu	æši	aši

Following is a series of sentences to illustrate the usage of these verb forms. In sentence (82), because the state of Bangabilo's wisdom did not change, the past tense form of 'to be' is applied. In contrast, the subject in (84) does exhibit a change of state, from not being sad to being sad; therefore, the past tense form of 'to become' is found.

81) hed   əbadi   pakistan   si dæl   xare   ma čər   čʰi.
    there population place.name of another city.PL.OBL from much is.PRES.FSG
    'There the population is more dense than other cities of Pakistan.' [travel043]

82) baŋabilo   hušæ   æši.
    Bangabilo wise   was.SP.FSG
    'Bangabilo was wise.' [Bangabilo080]

83) a~   tæ   hadisa   ma   hum bəč   honin.
    and 2SG.ERG   accident from also safe will.become.FUT
    'And you will also be safe from an accident.' [travel013]

84) mho səx   xəpə hui.
    1PL extremely sad   became.SP.PL
    'We became extremely sad.' [Danghara023]

4.7 Adverbs

The function of adverbs is to modify verbs, adjectives and clauses, but not nouns. Few restrictions are placed on their distribution within a sentence. They are used to designate manner, time, degree, direction, etc. Here is a sampling of what can be found in the language.

Manner

85) *tʰamu* 'likewise', *næsæp* 'suddenly', *ekdəm* 'immediately', *asuda* 'slowly', *dəsti* 'hurriedly', *sərte* 'quickly', *čʰuṭe* 'suddenly, abruptly'

Time

86) *axer* 'finally', *aǰ* 'today', *z̧æte* 'tomorrow morning', *mæde* 'now', *bil* 'yesterday', *lolo* 'tomorrow'

Degree

87) *čer* 'very, much, many', *medek* 'very', *ǰan* 'much'

Location

88) *bar* 'outside', *andəre* 'inside', *pæš* 'behind' *kæš* 'close', *mel* 'here' *tet* 'there', *itkemitke* 'here and there'

Evidential

89) *aǰan* 'maybe', *xamxa* 'absolutely', *ɣalibən* 'maybe' (Urdu)

Adverbial clauses usually occur sentence-initially and serve to modify the main clause in the same way adverbs modify individual constituents within a clause. The sentence in (90) contains an adverbial clause which expresses the idea of manner by offering more details about how exactly she climbed into the swing.

90) ti   [ekdəm   ṭop   dede]   diǰan ge   ugæt   a~
ABS.SG.ERG immediately jump having.given.CP swing to   climbed and

yun   ge   z̧iŋen   bašen wapəs gæ.
moon to   weeping crying back   passed.SP.FSG
'Having immediately jumped, she climbed into the swing and returned to the moon crying and weeping.' [bangabilo113]

The sentences in (91) have clauses which express temporal ideas. The first one contains both a phrase and a participial clause which illustrate temporal succession, while the second one illustrates concurrent time.

91) [te   la   pæš] se   [relgaṛe ye iste]   tunu   əxbar
    [ABS.SG.OBL from after] ABS.NOM [train   to having.boarded.CP]one's own newspaper
    budu.
    looks.PRES.MSG
    'After that, having boarded the train, he looks at his newspaper.' [dailypres009]

    [də   he   çʰi   u   punudud   da]   i
    [then NEAR.NOM   woman   water was.drinking.IMPFV SUBMKR] NEAR.SG.ERG
    pæš   ke buda.
    backside to looked.SP.3SG
    'Then, when this woman was drinking water, she looked back.' [Deo010]

Example (92) expresses a degree of time, 'many days,' and direction is referenced in (93). In the case of this latter one, the speaker adds extra emphasis to the direction he is referring to by adding an afterthought, 'to that Koshegen.'

92) čer   die   bat se   pexor   ke ga.
    many day.PL.OBL after ABS.NOM Peshawar to went.SP.MSG
    'After many days, he went to Peshawar.' [Bachugul011]

93) pəy   kʰən   ge a   dugona gudu,   pəy
    FAR.NOM   mtns.   to 1SG.NOM   twice had.gone.PAST.PFV.MSG   FAR.NOM
    koṣegen   ge.
    Koshegen to
    'To those mountains I had gone twice, to Koshegen.' [hunting038]

5. FEATURES OF MORPHOLOGY

5.1 Inflectional morphology

5.1.1 Noun inflection

Structure of nouns

Torwali nouns can inflect for number and case, and they can be characterized by the following formula:

94)   STEM   +   (PL)   +   (OBL)

In other words, the stem can be joined with an optional plural suffix and an optional oblique case marker. The purpose of this section is to describe how these suffixes join with noun stems and how they are used to mark the function of nouns within a clause.

Number

Torwali uses several strategies, both morphological and syntactic, to mark plurality. The primary morphological method is tone. For example the word for 'house', aside from tone, has the same singular and plural form as is illustrated in (95). The difference is that the singular form has LH tone and the plural form has L tone. Verb agreement also confirms that the first one is singular and the second is plural.

95)   æ   šir   čʰi.   æ   šir   tʰi.
      LH   L
      this   house   it.is.PRES.FSG   this   house   are.PRES.PL
      'This is a house.'   'These are houses.'

The tone shift used to mark plural forms follows a systematic pattern and is illustrated in (96). If the tone of a singular form ends on a high pitch (H), then the tone changes in the plural. The change that occurs however depends on whether the stem ends with a consonant or vowel. If it ends with a consonant, the plural form will have a low pitch (L), but if it ends with a vowel, it becomes falling (HL). If however the singular form of a word ends on a low tone, no tonal distinction exists between it and its plural form.

96)   a. /derin /   LH   [derɪŋ̥]   'floor'
          /derin /   L   [derɪŋ̥]   'floors'

       b. /çʰi/   H   [çʰi]   'woman'
          /çʰi/   HL   [çʰi]   'women'

       c. /anəbaṣ/   L   [anəbaṣ]   'underground water channel'
          /anəbaṣ/   L   [anəbaṣ]   'underground water channels'

       d. /ṭʰoŋ/   HL   [ṭʰoŋ̥]   'axe'
          /ṭʰoŋ/   HL   [ṭʰoŋ̥]   'axes'

Sometimes, a plural form may involve a tone change alone, or a tone change along with a fronting of the stem vowel, as illustrated in Table 5.1. The last four pairs illustrate that some words have identical singular and plural forms, i.e., no tone change or stem vowel shift. So far the data has not revealed any examples of nouns becoming plural through vowel change alone. This could suggest that tone is the primary feature, and it may be causing the vowel shift in specific environments.

Table 5.1. Inflection of nouns

Singular forms			Plural forms		
yap	H	small canal	yəp	L	small canals (f.)
dan	H	tooth	dən	L	teeth (m.)
ǰumat	LH	mosque	ǰumæt	L	mosques (f.)
ḍæk	LH	old woman	ḍek	HL⁹	old women (f.)
çʰi	H	woman	çʰi	HL	women (f.)
dut	H	lip	dut	L	lips (m.)
ageš	**HL**	an abandoned sheep	ageš	**HL**	abandoned sheep (m.)
bal	**HL**	hair	bal	**HL**	hairs (m.)
netkʰel	**L**	small nose	netkʰel	**L**	small nose (f.)
ben	**L**	miscarriage	ben	**L**	miscarriages (m)

Gender often helps determine whether the vowel changes from /a/ to /ə/ or /a/ to /æ/. The former is generally applied to masculine nouns and the latter, feminine. However, this is an oversimplification and one that is not always correct. Some feminine words can inflect /a/ to /ə/, *yap*, listed in Table 5.1, is one example. Some masculine nouns also make the change from /a/ to /æ/, for example, *kətʰan* 'long fable' becomes *ketʰæn* (pl.).

⁹Does not follow the normal tone pattern for marking plurality.

Generally speaking, however, the vowel change posited in the preceding sentences is typical for plural inflection.

Reduplication is also used in certain instances to communicate a sense of plurality. It does not communicate the same plural meaning as tone does however. For instance, if *čey* means 'tea,' *čeymey* does not mean 'many teas.' When someone invites another to join him for tea. He might use the word *čeymey,* which means that in addition to tea, his guest would also be served cookies, fruit or some other kind of snack. *ṭoṭe ṭoṭe* is another example, but here, it really does mean 'lots of pieces.' Refer back to the end of section 3.1 for more discussion and examples.

Case

In his manuscript published in 1929, Grierson accounts for a number of basic grammatical issues found in Torwali. His sketch, based on three historical type texts elicited by Sir Aurel Stein in 1926, begins by discussing the gender marking of nouns and adjectives. He also describes the case system as it applies to nouns. He claims eight different cases: nominative, accusative, agentive (ergative), instrumental, dative, ablative, genitive and locative.

While it is true all of these cases are present semantically, nouns functioning as instrumental, dative, ablative, genitive or locative occur in postpositional phrases and are all morphologically marked the same with the grammatical label *oblique*. Nouns marked for ergative case function as agents of ergative constructions and use the same morphological markers used to mark the oblique case.

An issue regarding the accusative case is not so clear. Semantically speaking, of course, there is no question that it exists. The question that we are faced with is whether or not the language morphologically distinguishes this case from the others, particularly the oblique case. Masica makes the claim that Indo-Aryan languages do not have a distinct accusative case (1991:365). If the discussion is restricted only to morphological case-marking on nouns, then there is no problem with this statement. If, however, the discussion includes pronouns, then the issue is not so easily resolved. On one hand, there is some evidence to substantiate his claim; after all when accusative case pronouns are compared with oblique case pronouns, we find that some significant similarities exist. Consider the first and second personal pronouns from Table 4.3: *mæ* 'me' and *me* '(to) me',

t^hæ 'you' and *t^he* '(to) you', *mo* used for both 'us' and '(to) us', as well as *t^ho*, also used for both accusative

and oblique forms, 'you all' and '(to) you all.' Also we can see an overlap between demonstrative pronouns

marked for accusative and oblique case in Table 4.5, which shows several forms used to mark both cases. Even

the forms that are different have only a small phonological difference—a change in vowel quality or aspiration.

Within the interrogative pronoun system (discussed in section 3.2.7), the distinction between accusative *kes* and

oblique *kis* is also very small.

Even so, there are some important factors that suggest that the accusative case is indeed a distinct case.

For one thing even though the phonological differences are small, no evidence has been found to support an

argument that these differences are merely phonological variants of the same word. Therefore, even though the

words are phonologically very similar, they are nonetheless minimal pairs. In fact, I would argue that some

forms have two or more functions and that the categories for case can be distinguished by looking at the com-

plete paradigm.

Furthermore, not only are they contrastive by their phonemes, but they are also contrastive in their distri-

bution. Consider the following examples:

97) mi   lowe   hum [mæ]   ç^hay ma   t^helnin.
    1SG.GEN children.ERG also 1SG.ACC cliff from throw.FUT
    'My children will also throw me from the cliff.'

98) ti   [me   qisa] tunu æ~   de   kiǰi.
    ABS.SG.ERG   NEAR.SG.ACC   story own   mouth with has.done.PRES.PFV
    'She has told this story with her own mouth.'

99) ṭol xələk [tes]   yad   kodi.
    all people ABS.SG.ACC remember do.PRES.MSG
    'Everybody remembers him.'

100) [tis   ke] nin   æp.
     ABS.SG.OBL to   sleep came.SP.FSG
     'She fell asleep.' (lit. 'Sleep came to her.')

The constituents in (97) consist of a noun phrase subject, 'my children,' a noun phrase direct object, 'me',

a postpositional phrase 'from the cliff' and a verb 'will throw.' In this sentence, *mæ* functions as the direct ob-

ject and is marked accordingly. Sentence (98) also contains a direct object 'this story' which contains an accusa-

tive case demonstrative pronoun. The sentences in (99) and (100) illustrate how the minimal pairs *tes* (ACC) and *tis* (OBL) contrast in their distribution. *tes* never occurs in a postpositional phrase and *tis* always does. The sentences in (101) and (102) were cited earlier, but are helpful here to illustrate again how the accusative pronoun and oblique pronoun contrast in their distribution.

101) ǰahangir [kes]   gintu?
     Jahangir whom carried.PRES.PFV.MSG
     'Who has Jahangir carried?'

102) ti rəpəl   [kiske] dit?
     he rifle whom   to gave.SP.MSG
     'To whom did he give a rifle?'

Finally, one last pair of sentences to illustrate this contrast is shown in (103) and (104).

103) šərte [mes]   gi   de   wa leɣhiri koa
     quickly NEAR.SG.ACC butter.oil with up fry   do.2PL.JUS
     'Quickly, fry this up in butter oil.' [fugitive007]

104) [mis   ma], mo   kalam ge bəǰnin.
     NEAR.SG.OBL from 1PL.NOM Kalam to go.FUT
     'From here, we will go to Kalam.'

One interesting observation about these phonologically similar words is that the accusative forms are 'e' words: *tes*, *kes* and *mes*, and the oblique counterparts are the 'i' words: *tis*, *kis* and *mis*. So while there may be an overlap of pronouns having the same form and functioning both in the accusative case at times and in the oblique case at other times (like *mo* and *tʰo* previously mentioned), there are some forms that are distinctly accusative and others that are distinctly oblique. As already stated earlier more in-depth study of the Torwali pronoun system is needed. However, regarding the status of the accusative case, I have found no evidence to suggest that it is not an important part of the language.

Now then, as previously mentioned, except for pronouns (see section 4.2), the language does not have a full-fledged morphological case-marking system. Subjects are not marked unless they occur as the agent in an ergative construction (see section 6.3). In that context, the noun takes an ergative suffix marker *-e* or *-a*. By contrast, subjects of intransitive clauses and direct objects are not marked for case.

Generally speaking singular ergative and oblique forms do not carry an overt case marker. Only when they are also plural, is the suffix attached to the noun stem as illustrated in (105).

105) *a šir   ma   ap.*   *a   šir -e   ma   ap.*
    I   house from came.SP.MSG   I   house.OBL.PL   from came.SP.MSG
    'I came from the house'   'I came from the houses.'

The noun *šir* occurs in postpositional phrases in example (105). In the first sentence, *šir* is singular. In the second sentence, it is plural. Notice that it is in this environment of oblique and plural that the conditions are met for the oblique suffix to occur. However, there are times when exceptions to this generalization occur. The subject of sentence (106) for instance is singular; therefore, the ergative suffix marker is not expected. One would not expect *šir* in (107) to have a case marker either. Compare this sentence with another similar sentence cited earlier (95) where the plural form does not include the suffix *–e*. The sentence in (107) is perplexing because *šir* does not occur in a postpositional phrase, and the sentence construction is certainly not an ergative construction and yet it carries an oblique marker.

106) ti   po -e   soč   ki.
    ABS.SG.ERG   boy.ERG.SG   thought did.SP
    'That boy thought' [tradition007]

107) pura kun o   towal me təgribən čəw so   šir -e tʰi.
    all   Kun and Torwal in about   four hundred houses are.PRES.PL
    'In all Torwal and Kun there are about four hundred houses.' [kun009]

Several more examples like these can be found in the data corpus used for this analysis. I suspect that tone is probably an important factor here. As the analysis of Torwali grammar has progressed, I have come to realize that tone plays a very significant role in the language, more than just distinguishing lexical morphemes in phonology. It affects many different areas of Torwali grammar as has been mentioned throughout this paper. It is evident that tone will need to be analyzed from a lot of different angles to address all of the questions that have been raised thus far in the paper.

To conclude this section on noun inflection, I cite a few examples to illustrate how the majority of ergative and oblique-marked nouns operate within the language. The first two are ergative constructions where the agent is plural, and the last one contains a clause with an oblique form of a plural noun.

108) so -e   næ zər -e   ti   ma səwəq çiẓu.
     100s.**ERG** no 1000s.**ERG**   ABS.SG.OBL from lesson learned.PFV.MSG
     'Hundreds, no thousands (of boys) learned lessons from him.' [bachagul026]

   tʰed mo -e   tunu saman   tʰəw   o gəy....
   there 1PL.**ERG** own belongings threw.SP.MSG and went.SP.PL
   'We put our bags there and went....' [hunting029]

   du kul   tunu kən -e   wa tʰelde....
   two kernels.of.grain own ears.PL.**OBL** up having.thrown.CP
   'Having thrown two kernels of grain into her ears,....[zadul030]

5.1.2 Verb inflection

Structure of finite verbs

Masica posits the structure in (109) as a basic structure of finite verbs in Indo-Aryan languages, and claims that nearly all languages within this family use this template with only small modifications (1991:258-9).

109) Stem   +   Aspect marker   +   (c)   +   Tense/Mood marker   +   (c)

Simply stated, this means that suffixed to the verb stem is an aspect marker followed by an agreement marker for some Indo-Aryan languages (marked 'c' for concord) which is followed by a tense or mood marker and an agreement marker, again optionally occurring in some languages. A modification of this proposed template has proven very helpful in analyzing the realis verb forms documented in Torwali as shown in Table 5.3. In Torwali, the aspect marker and its agreement marker slots have been merged into one and marked ASP. Most all verb forms make gender and number distinctions only, no distinction for person. This results in a three-way verb agreement system, masculine singular, feminine singular and plural. Note that masculine and feminine plural are both marked the same. Jussive mood is the one case where distinctions are made between person and number, not gender and number. It will be addressed later in this section.

The irrealis forms, namely the future tense and inceptive aspect, do not include gender, number or person agreement on the verb, as shown in Table 5.5. The repetition in that table is meant to illustrate this point. This is also true for the imperfective aspect. Although semantically it should be grouped with other realis forms, imperfective has been grouped with irrealis forms in this paper since it follows the same morphological pattern. In

addition to realis, irrealis and jussive moods just mentioned, Torwali also has a potential mood which is marked by a special suffix. It too will be discussed shortly.

Tense, aspect and mode

Torwali has three tenses: past, present, and future. It also makes three aspectual distinctions: perfective, used to mark completed events, imperfective, used to mark events either ongoing in the past or habitually reoccurring, and inceptive, which refers to events about to begin. As already stated, only realis forms carry gender and number agreement marking.

At least two phonological issues are illustrated in Table 5.3 and following: palatalization of the plosive *-d* used to mark present tense on the feminine singular forms, and the fronting of the stem vowel, also on the feminine singular forms. It seems reasonable to conclude that the suffix *-i* is causing both phonological processes to occur. It also seems reasonable to conclude that since the plural forms do not undergo this process that the suffix marking these forms has an abstract phoneme /u/ which blocks both the palatalization and vowel-fronting. With this in mind, I am positing *-u* as the masculine singular suffix, *-i* as the feminine singular suffix and *-ui* as the plural suffix. If we make a rule that states ə → e/__Ci and order it before the abstract /u/ is deleted by a second rule, then we can account for the fronting of the stem vowel in the feminine forms. A separate weakening rule that states that the plosive becomes continuant before the suffix *-i* would also apply before the deletion of the /u/ in the suffix *-ui*.

Another process to note is the epenthesis of the schwa between the stem and tense marker in the present tense. If we order the fronting rule before this epenthesis rule, then the epenthetic schwa will not be affected.

An alternative analysis would be to suggest that the feminine singular marker includes, in addition to the suffix, an autosegmental feature that spreads leftward and palatalizes the tense marker and fronts the quality of the stem vowel. The plural marker would not have a similar feature to cause stem vowel change so positing *-ui* would not be necessary. In other words, it is morphologically determined for feminine forms only. The advantage of this analysis is that one autosegmental feature alone could be posited to explain both processes. Unfortunately, a complete analysis of this phonological issue is beyond the scope of this paper. For the purposes of this paper, I've chosen the more traditional analysis of positing the underlying phoneme and the ordering of

rules to account for these phonological processes. Nevertheless this preliminary analysis has uncovered a very interesting problem that can be examined more fully sometime in the future.

Blank spaces in the tables denote irrelevance for that grammatical feature. Placing null (Ø) in the tense and agreement column for simple perfective verbs means that the feature tense is relevant, but is not overtly marked.

Table 5.3. Realis: Torwali finite verb forms, *həz* 'laugh'

		Stem	Asp/C	T/M	C		
Present	MSG	həz		-d	-u	həzədu	'he laughs'
(PRES)	FSG	həz		-d	-i	həzə̆ji	'she laughs'
	PL	həz		-d	-ui	həzədi	'they laugh'
Simple perfective	MSG	həz	-u	Ø	Ø	həzu	'he laughed'
(SP)	FSG	həz	-i	Ø	Ø	hezi	'she laughed'
	PL	həz	-ui	Ø	Ø	həzi	'they laughed'
Present perfective	MSG	həz	-u	-d	-u	həzudu	'he has laughed'
(PRES PFV)	FSG	həz	-i	-d	-i	heziǰi	'she has laughed'
	PL	həz	-ui	-d	-ui	həzidi	'they have laughed'
Past perfective	MSG	həz	-u	-š	-u	həzušu	'he had laughed'
(PAST PFV)	FSG	həz	-i	-š	-i	heziši	'she had laughed'
	PL	həz	-ui	-š	-ui	həziši	'they had laughed'

Table 5.5. Irrealis: Torwali finite verb forms, *həz* 'laugh'

		Stem	T/M		
Future	1st	həz	-nin	həznin	'I/we will laugh'
(FUT)	2nd	həz	-nin	həznin	'you/you all will laugh'
	3rd	həz	-nin	həznin	'he/she/they will laugh'
Inceptive	1st	həz	-usæt	həzusæt	'I/we start to laugh'
(INC)	2nd	həz	-usæt	həzusæt	'you/you all start to laugh'
	3rd	həz	-usæt	həzusæt	'he/she/they start(s) to laugh'
Imperfective	1st	həz	-udud	həzudud	'I/we was/were laughing' 'I/we used to laugh'
(IMPFV)	2nd	həz	-udud	həzudud	'you/you all were laughing' 'you/you all used to laugh'
	3rd	həz	-udud	həzudud	'he/she/they was/were laughing' 'he/she/they used to laugh'

Table 5.7 illustrates how this vowel fronting process spreads even through verb stems having more than one syllable. Notice that the vowel /ə/ in both the first and second syllables of *jə̆ndər* are fronted for feminine singular perfective forms. (The previous tables were designed to illustrate the difference between realis and irrealis mode forms. For the sake of space, the remaining tables will combine them, although the irrealis forms are retained at the bottom for quick reference.)

Table 5.7. Conjugation of a two-syllable Torwali finite verb, *jə̆ndər* 'live'

		Stem	Asp/C	T/M	C	
Present	MSG	jə̆ndər		-d	-u	jə̆ndərədu
	FSG	jə̆ndər		-d	-i	jə̆ndərəji
	PL	jə̆ndər		-d	-ui	jə̆ndərədi
Simple perfective	MSG	jə̆ndər	-u	Ø	Ø	jə̆ndəru
	FSG	jə̆ndər	-i	Ø	Ø	jæ̆ndæri
	PL	jə̆ndər	-ui	Ø	Ø	jə̆ndəri
Present perfective	MSG	jə̆ndər	-u	-d	-u	jə̆ndərudu
	FSG	jə̆ndər	-i	-d	-i	jæ̆ndæriji
	PL	jə̆ndər	-ui	-d	-ui	jə̆ndəridi
Past perfective	MSG	jə̆ndər	-u	-š	-u	jə̆ndərušu
	FSG	jə̆ndər	-i	-š	-i	jæ̆ndæriši
	PL	jə̆ndər	-ui	-š	-ui	jə̆ndəriši
Future	ALL	jə̆ndər		-nin		jə̆ndərnin
Inceptive	ALL	jə̆ndər		-usæt		jə̆ndərusæt
Imperfective	ALL	jə̆ndər		-udud		jə̆ndərudud

The preceding tables have presented finite verbs whose stems end with a consonant. Vowel-final stems follow the same pattern as consonant-final stems with only a minor modification. Plural forms tend to have an *əy* syllable-final stem before the plural suffix is added; however, not all vowel-final verb stems follow this same pattern. For example *ko* 'do' makes no distinction between gender and number in the perfective aspect. *ki* is used for masculine singular, feminine singular and plural forms. An interesting observation: One wonders if the simple perfective plural form reflects the underlying *-ui* agreement suffix that has been posited for this position. If so it could help explain the presence of /w/ in *məwi*.

One word of caution, when looking over Table 5.9, be aware that the second vowel in each of the double vowel sets is not located in the syllable coda position. Each vowel is the nucleus of its own syllable.

Table 5.9. Torwali finite verb ending with a vowel, *mə* 'kill'

		Stem	Asp/C	T/M	C	
Present	MSG	mə		-d	-u	məodu
	FSG	mə		-d	-i	məǰi
	PL	mə		-d	-ui	məydi
Simple perfective	MSG	mə	-u	Ø	Ø	məw
	FSG	mə	-i	Ø	Ø	məy
	PL	mə	-ui	Ø	Ø	məwi
Present perfective	MSG	mə	-u	-d	-u	məudu
	FSG	mə	-i	-d	-i	məǰi
	PL	mə	-ui	-d	-ui	məydi
Past perfective	MSG	mə	-u	-š	-u	məušu
	FSG	mə	-i	-š	-i	məyši
	PL	mə	-ui	-š	-ui	məyši
Future	ALL	mə		-nin		manin
Inceptive	ALL	mə		-usæt		məusæt
Imperfective	ALL	mə		-udud		məudud

Not all verb conjugation patterns are predictable. There are irregularities, as shown in Table 5.11.

Table 5.11. Irregular conjugation of a Torwali finite verb ending with a vowel, *ye* 'come'

		Stem	Asp/C	T/M	C	
Present	MSG	ye		-d	-u	yedu
	FSG	ye		-d	-i	yeǰi
	PL	ye		-d	-ui	yedi
Simple perfective	MSG	ye	-u	Ø	Ø	ap
	FSG	ye	-i	Ø	Ø	æp
	PL	ye	-ui	Ø	Ø	əy
Present perfective	MSG	ye	-u	-d	-u	aptu
	FSG	ye	-i	-d	-i	æpči
	PL	ye	-ui	-d	-ui	əydi
Past perfective	MSG	ye	-u	-š	-u	apušu
	FSG	ye	-i	-š	-i	æpiši
	PL	ye	-ui	-š	-ui	əyši
Future	ALL	ye		-nin		yenin
Inceptive	ALL	ye		-usæt		yəwsæt
Imperfective	ALL	ye		-udud		yəwdud

The most obvious irregularity in the conjugation of **ye** 'come' are the new lexical forms occurring in the perfective aspect series (**ap**, **æp** and **əy**, etc), an example of stem suppletion. Once again, the same vowel-fronting process remains on the feminine singular form.

Torwali attaches the suffix -**a** to any transitive or intransitive verb to form its causative counterpart. It attaches directly to the verb stem as illustrated in Table 5.13 and in this example is translated to mean 'make (someone) write.'

Table 5.13. Causative verb forms (realis and irrealis combined), **lig** 'write'

		Stem	Caus	Asp/C	T/M	C	
Present	MSG	lig	-a		-d	-u	ligadu
	FSG	lig	-a		-d	-i	ligaǰi
	PL	lig	-a		-d	-ui	ligadi
Simple perfective	MSG	lig	-a	-u	-t	Ø	ligat
	FSG	lig	-a	-i	-t	Ø	ligæt
	PL	lig	-a	-ui	-t	Ø	ligæt
Present perfective	MSG	lig	-a	-u	-t	-u	ligatu
	FSG	lig	-a	-i	-t	-i	ligači
	PL	lig	-a	-ui	-t	-ui	ligati
Past perfective	MSG	lig	-a	-u	-š	-u	ligadušu
	FSG	lig	-a	-i	-š	-i	ligædiši
	PL	lig	-a	-ui	-š	-ui	ligædiši
Future	ALL	lig	-a		-nin		liganin
Inceptive	ALL	lig	-a		-usæt		ligawsæt
Imperfective	ALL	lig	-a		-udud		ligawdud

A couple of observations concerning the tense markers in Table 5.13 are noted. First of all, simple perfective, which is unmarked for tense in non-causative constructions, is marked with the suffix -**t**. Similarly present perfective forms also mark past tense with -**t**. There does not seem to be any phonological reasoning for the voiced tense marked used in non-causative forms becoming voiceless in these forms, especially when we see this occurring between vowels. Yet we can see once again the same pattern of the plosive becoming a fricative before the high front vowel marking the feminine singular form in the present tense. Past perfective uses -**š**, the same as is used in non-causative constructions.

One final observation concerning this table is that the paradigm reveals a vowel-fronting process involv-

ing not only the feminine singular form, but also the plural. In non-causative forms, this process is primarily relegated to the feminine forms. However, here it is evident that it is the causative suffix *-a* undergoing the fronting process in both positions.

Torwali also has a *potential mood*, which refers to one's ability to do something, and a *jussive mood,* which includes imperative forms. The former involves a suffix *-ba*, which attaches to the verb stem. In the case of a causative verb, it attaches after the causative suffix. For example *ligbadu* means 'he can write', and *ligabadu* means 'he can make (someone) write'. Table 5.15 contains a few examples to illustrate the morphological breakdown of this form.

Table 5.15. Potential mood forms

		Stem	POT	Asp/C	T/M	C		
Present	MSG	pu	-ba		-d	-u	pubadu	'he can drink'
Future	ALL	lig	-ba		-nin		ligbanin	'will be able to write'
Simple perfective	MSG	pæn	-ba	-u	Ø	Ø	pænbaw	'could recognize'
Simple perfective	FSG	gəṣ	-ba	-i	Ø	Ø	gəṣbay	'could catch'
Past perfective	PL	bəǰ	-ba	-ui	-š	-ui	bəǰbayši	'she/they could go'

Jussive mood has a unique morphological structure in the language. Rather than marking gender and number distinctions, it marks person and number. Two paradigms are provided in Table 5.17 for illustration, *bənu* 'to read' and *kow* 'to do'. Rough English equivalents would be 'I should read', 'you should read', etc.

Table 5.17. Jussive and imperative mood forms

	Singular	Plural			Singular	Plural
1	beni	beni		**1**	keyi	keyi
2	bən	bəna		**2**	ko	koa
3	bəne	bənən		**3**	kuwe	kuən

Following Palmer's suggestion (1986:111), second person forms take the label imperative, while first and third person forms take jussive. The second person singular form is unmarked, nearly always identical to the verb stem form, while the plural form adds the suffix *-a*. Third person forms add *-e* and *-ən* to the singular and

plural forms respectively. Some data include: *kitab beni* 'Let's read a book,' *bəne* 'Let him read' and *kam kuən* 'Let them do the work.'

Non-finite verb forms

Torwali has several non-finite verb forms: *infinitives*, *perfective adverbial participles* (referred to by Masica (1991:323) and other linguists working in this region as *conjunctive participles*), *perfective adjectival participles* and *imperfective adverbial participles*. The purpose of this section is to provide a brief description of the word-level features relating to all of these forms.

The structure of non-finite verbs includes the verb stem plus a suffix as illustrated by the formula in (110).

110)　Stem + Suffix

Infinitive

The suffix *-u* is applied to verb stems to form infinitives (INF). Because vowel clusters are not permitted within a given syllable, this suffix is transcribed as *-w* when attaching to vowel-final stems. Here are some examples.

111)　lig　-u　　　jəndər -u　　　ko　-u　　　ho　-u
　　　ligu　　　jəndəru　　　kow　　　　how
　　　'to write'　　'to live'　　　'to do'　　　'to become'

112)　a　mali　　si　biš　　　tʰəlu　　　ma　pæš　ap.
　　　I　gardener　of　seed(s)　to.throw.INF　from after　came.MSG.SP
　　　'After the gardener's throwing (planting) of the seeds, I came.'

Conjunctive participle

Conjunctive participles (CP) communicate the idea of a completed event. They also express a sequence of events. In English, these can be translated, 'having completed the first action, I did something else.' Aside from the suffix *-de* marking these kinds of verb forms, there is no additional morphological marking containing grammatical information on the verb. When this suffix attaches to a verb stem ending with a voiceless consonant, the initial consonant of the suffix also becomes voiceless, as in [-te]. Another fairly regular phonological feature is the fronting of the stem vowel. Consider *pešte* in example (113). The stem form is *pəš*, however, as

the inflected form is created, the vowel undergoes a fronting process, not unlike that which has already been discussed on several occasions already.

113) tə   mimi   yam çhie   tes   pešte
      then in.the.meantime some women.PL.OBL 3SG.OBJ.ABS having.looked.CP

      bənədi   æ   guǰuræn   kheda   æpčia?
      they.are.saying this Gujar.woman   from.where.OBL has.come.PRES.PFV.FSG
      'Then in the meantime, some women, having looked at her, said, 'From where has this Gujar woman (a low caste woman) come?' [Bangabilo103]

Perfective adjectival participle

The suffix *-el* can attach to verb stems and create perfective adjectival participles (PAP) as illustrated in examples (114) and (115). As will be discussed shortly, this same suffix can derive adjectives from nouns. See Table 5.21.

114) se   bəǰel   čʰi;   nə ušbaǰi.
      ABS.NOM   lying.down.PAP is.PRES.FSG not can.get.up.POT.PRES.FSG
      'She is lying down; she cannot get up.' [fugitive009]

115) se   ka   šey yabəne burel   hu,
      ABS.NOM   what thing that   concealed.PAP became.SP.MSG

      mo   tis   ke pərda   bənədi.
      1PL.NOM   ABS.SG.OBL   to covering say.PRES.PL
      'Whatever thing became concealed, we say (refer to that as) covering' [parda003]

Imperfective adverbial participle

Lastly, the suffix *-en* can attach to verb stems to create yet another non-finite verb form, imperfective adverbial participles (IAP). The sentence in (116) contains a pair of these forms to modify the final verb. The verbs **crying** and **weeping** are used to modify how the character **returned**.

116) ti   ekdəm   ṭop dede   diǰan ge ugæt   a~
      NEAR immediately jump having.given.CP swing to climbed and

      yun   ge [z̧iŋen   bašen]   wapəs gæ.
      moon to weeping.IAP crying.IAP back   passed.SP.FSG
      'Having immediately jumped, she climbed into the swing and returned to the moon crying and weeping.' [bangabilo113]

5.2 Derivational morphology

5.2.1 Compounding

Both nouns and adjectives can be combined with other nouns to create compound words. For example, *kiṣən* means 'black' and *kak* means 'crow'. Both words can occur independently of each other, but when combined as a compound word, the meaning is similar to the English word 'jet-black.'

117) æ   še   kiṣən-kak   tʰu.
      NEAR   thing   black-crow is.PRES.MSG
      'This thing is crow-black/jet-black.' (pointing to something)

Here are some additional examples. Each compound word in (118) consists of an adjective and a noun. Semantic and morphological evidence for these newly-formed compound words is presented after the examples.

118) ujil-zər   laᵍur-zər   lo-aŋa   gən-aŋa   čuk-ša
      ujil   zər   laᵍur zər   lo   aŋa   gə   aŋa   čuk   ša
      white gold.mineral   red   gold.mineral small fire   big fire   sour spinach
      'silver'   'gold'   'Saturday'   'Tuesday'   'mustard plant'

Pairs of nouns can also be combined to create compounds.

119) biṣ-pʰiẓik   ṣa-šul   čam-sak   lamo-ǰan
      biṣ   pʰiẓik   ṣa   šul   čam   sak   lamo   ǰan
      hunger worm-related.disease   head pain   skin relative   bath   person
      'cancerous tumor, abscess'   'headache'   'epidermis'   'swimmer'

According to Payne (1997:92-3), making compound words requires one of two criteria to be fulfilled. One is *semantic* in which the meaning of the compound word is different from the sum of its parts. Some of the previous examples meet this criterion. No one could predict that 'sour' plus 'spinach' would equal 'mustard plant', neither would one expect 'skin' and 'relative' to refer specifically to the 'epidermis,' although one can see a relationship in this latter set.

Other examples meet a *grammatical* criterion. In Torwali, compound words exhibit a change in tone—at least in some circumstances. For example, *ṣa* and *šul* both have a HL tone melody. However, when combined, the tone of the compound word changes to H. *kiṣən* is HL and *kak* is H, but *kiṣən-kak* is LH. Tone does not change in every case however. Consider *biṣ-pʰiẓik*. Both morphemes have H tone, but so does the compound

word. I would argue in this case that this word meets the semantic criterion. This compound word does not equal the sum of its parts.

Kalami Kohistan also uses tone change to mark compound words. Baart states that in that language, if both elements have a monotone melody, the tone does not change (1999:65). For example, H-H, L-L, H-L and L-H combinations exhibit no change from their isolate to compound forms. However, a complex combination like H-LH cannot remain HLH, but changes to HL. A similar grammatical system may be at work in Torwali but further study is needed.

5.2.2 Nominalization

Torwali noun forms can be derived from adjectives as well as from verbs. Nouns can be derived from adjectives by adding the suffix *-ača* to the adjective regardless of gender. Here are some examples to illustrate.

Table 5.10. Nouns derived from adjectives

Adjective	*buk* 'dull' *masculine*	*bik* 'dull' *feminine*	*lin* 'bald' *m. and f.*	*tʰoŋ* 'foolish' *masculine*	*tʰeŋ* 'foolish' *feminine*
Noun	*bukača* 'dullness'	*bikača* 'dullness'	*linača* 'baldness'	*tʰoŋača* 'foolishness'	*tʰeŋača* 'foolishness'
Adjective	*bar* 'fat' *masculine*	*bær* 'fat' *feminine*	*ǰik* 'long' *m. and f.*	*ispor* 'tasteless' *masculine*	*isper* 'tasteless' *feminine*
Noun	*barača* 'fatness'	*bærača* 'fatness'	*ǰikača* 'length'	*isporača* 'tastelessness'	*isperača* 'tastelessness'

Verb infinitives function as nouns as well. In English, these phrases would translate like a gerund: running, walking, etc. In Torwali, one can say that the infinitive is governed by the genitive case, which is marked by the postposition *si*, in the same way nouns can be governed by this case. Compare examples (120) and (121). The surface structure at least in both sentences is identical. In sentence (122) the infinitive is embedded within the possessive phrase, and (123) contains two infinitives governed by *si*. I have bracketed the relevant phrases for easier reference.

120) baŋabilo yeræ [mi ləsu si] pan ni čʰi.
Bangabilo that my.NOM to.escape of way not is.PRES.FSG
'Bangabilo (realized) that there was no way of my escaping.' [bangabilo050]

121) [tisi ɡam si] luṭ.
ABS.SG.GEN village of children
'the children of his village' [Bachagul019]

122) čər [[səraṛu si] pota si] xət yæ hodu da
very to.gather.INF of place.PL.OBL of letter ?? become.PRES.MSG SUBMKR

di mi dugonša pəda hodu.
day in twice open become.PRES.MSG
'Where there are places of much gathering of letters (in places where the boxes fill up quickly
with letters), they are opened twice a day.' [post003]

123) [bogow how si] sat mi he pəda hodi.
to.distribute.INF to.become.INF of time in they.OBL.FAR open become.PRES.PL
'At the time of distribution, they are opened.' [post015]

Not only can an infinitive be governed by *si*, but it can also occur as the object of another postposition,

ma 'from' as in (124).

124) a mali si biš [tʰəlu ma] pæš ap.
I gardener of seed(s) to.throw.INF from after came.MSG.SP
'After the gardener throwing (planting) of the seeds, I came.'

They can also be used for expressing purpose (i.e. for the purpose of...). Many verbs can be used in this way as

illustrated in (125) and (126).

125) te wəx me çhi [u si anu si] keǰa osoa ye
ABS.SG.OBL time in woman water of to.bring.INF of for spring to

bəǰudud.
was.going.IMPFV
'At that time, a woman was going to the spring for the purpose of bringing water.'[Deo007]

126) legel [pot ǰanu si] keǰa čʰi.
broom place to.sweep.INF of for.the.purpose is.PRES.FSG
'A broom is for sweeping an area.'

Finally, infinitive clauses can occur as subjects of predicate nominal constructions as seen in (127).

127) [gel kʰow] ɣora hodu. [kʰow] ɣora hodu.
food to.eat.INF good becomes.PRES.MSG to.eat.INF good becomes.PRES.MSG
'Eating food is good.' 'Eating is good.'

5.2.3 Denominalization

A common process, adjectives are derived from nouns with the suffix *-gan*. These newly created words can be defined in English as 'having the qualities of [the noun]', and are usually used to describe a person. Interestingly, this suffix most often associates itself with words having negative connotations. It may be that it can attach to more positive ideas and things, but so far few have been documented. Some examples are included in Table 5.11 with a pair of sentences in (128).

Table 5.11. Adjectives derived from nouns using *-gan*

Noun		Derived adjective	
xəʈa	'mud, slush'	*xəʈagan*	'muddy'
balas	'dirt'	*balasgan*	'dirty, offensive'
u	'water'	*ugan*	'watery'
mal	'dirt'	*malgan*	'dirty'
zaŋ	'rust, scum'	*zaŋgan*	'rusty, scummy' m.
zaŋ	'rust, scum'	*zaŋgæn*	'rusty, scummy' f.

128) pəy   mal tʰu.   pəy   malgan tʰu.
      FAR.NOM. dirt is.PRES.MSG   FAR.NOM dirty   is.PRES.MSG
      'That is dirt.'   'He is dirty.'

Another strategy, common in Indo-Aryan languages is to use *-i* and *-el*. Note Table 5.21.

Table 5.21. Adjectives derived from nouns using *-i* and *-el*

Noun		Derived adjective	
amal	'action'	*amali*	'practical'
čəkər	'madness'	*čəkri*	'mentally abnormal'
kitab	'book'	*kitabi*	'relating to a book'
biṣ	'hunger'	*biṣel*	'hungry'
æšim	'silk'	*æšimel*	'silky'
ænčig	'darkness'	*ænčigel*	'dark'

129) tisi   [biṣ]   čer   gən hodu.
      ABS.GEN   hunger very big becomes.PRES.MSG
      'His hunger is becoming very big.'

130) æ   po [biṣel] hodud.
      NEAR.NOM   boy hungry was.becoming.IMPFV
      'This boy was becoming hungry.'

5.2.4 Causatives and passives

According to Payne (1997:169), languages use various devices to mark the relationship between semantic and grammatical roles in clauses. Semantically, valence refers to the number of participants a verb communicates are 'on stage' in a given scene. Grammatically, it refers to the number of non-oblique noun phrase arguments present in that clause. Voice expresses the relationship between the verb and its grammatical subject. In a passive construction, for example, the grammatical subject of a sentence is not the agent of the verb. Instead a non-agent holds that position. Passive voice constructions, at least grammatically, usually reduce the valency of a verb by removing an argument, while causative constructions increase it. This section provides a brief overview of *transitive*, *intransitive*, *causative* and *passive* constructions as they have been documented in the language.

Torwali verbs are categorized by the number of noun phrase arguments with which they associate. Transitive verbs have two noun phrase arguments. Intransitive verbs have only one as illustrated in (131).

131) maṣ čey pudi.   čey payədu.
      man tea   drinks.PRES.PL   tea   cooks.PRES.MSG
      'Men are drinking tea.'   'Tea is brewing.'

One of the features of the Torwali verb system is the ability to change the valency of verb by adding the suffix *-a* to the verb stem (which is found by dropping the infinitive suffix *-u* from either the intransitive or transitive forms). This suffix, when added to any transitive or intransitive verb, produces a *causative* verb. A few examples are included in Table 5.14. Some Torwali verbs have all three grammatical distinctions—intransitive, transitive and causative as illustrated in row nine. These cases usually involve a change in vowel quality to mark its transitive form. I have included example sentences after Table 5.14 to help illustrate the grammatical and semantic difference of these words.

Table 5.14. Intransitive, transitive and causative verb forms

	Intransitive	Transitive	Causative
1	*tílu* 'to walk'		*tilaw* 'to cause to walk'
2	*dəru* 'to live (in a place)'		*dəraw* 'to cause to live'
3	*čəlu* 'to move'		*čəlaw* 'to cause to move'
4	*jənu* 'to understand'		*jənaw* 'to cause to understand, to teach'
5	*pʰumu* 'to swell'		*pʰumaw* 'to cause to swell'
6		*anu* 'to bring'	*anaw* 'to cause to bring'
7		*čuwu* 'to sew	*čuwaw* 'to cause to sew'
8		*pəšu* 'to see'	*pəšaw* 'to cause to see, to show'
9	*jəlu* 'to burn'	*jalu* 'to burn (something)'	*jəlaw* 'to cause something to burn'

The series of example sentences, (132) through (135) illustrate how these words function in a sentence. (132) through (134) each include two sentences side by side. The first sentence is intransitive, and the second one shows its causative counterpart. Notice in (133) that the words in both sentences are the same. The only difference is that the verb in the second sentence is causative. As a result the demonstrative which modifies the subject in the first sentence occurs as an independent pronominal argument in the second sentence as the subject. Also what served as the grammatical subject noun in the intransitive sentence occurs as the object of the transitive verb in the second. A similar example, but without the pronouns, is shown in (134). Example (135) also contains intransitive and causative, but due to space, the causative construction is listed under the intransitive one.

132) a   tilədu.   a   mi   po   tiladu.
     1SG.NOM   walks.PRES.MSG   1SG.NOM 1SG.GEN son   walks.CAUS.PRES.MSG
     'I am walking.'   'I am making my son walk.'

133) æ   motor čılədu.   æ   motor čıladu.
     NEAR   car   moves.PRES.MSG NEAR   car   moves.CAUS.PRES.MSG
     'This car is moving.'   'He is driving the car.'

134) motor čılədu.   javed   motor čıladu
     car   moves.   PRES.MSG car   moves.CAUS.PRES.MSG
     'The car is moving.'   'Javed drives the car.'

135) se   tælib   jənədi.
      ABS.NOM   student understands.PRES.PL
      'Those students understand.'

      ostaz   se   tælib   jǎnadu.
      teacher ABS.NOM   student understands.CAUS.PRES.MSG
      'The teacher is making those students understand.' or 'The teacher is teaching those students.'

The three sentences in (136) illustrate the intransitive, transitive and causative forms of the word *jǎlu* 'to burn' respectively. The difference between the final two sentences (transitive and causative) relates to the degree of control the agent has over the object. In a sense, the agent in the causative construction is more indirectly involved, whereas the agent of the transitive construction is more directly involved in the burning of wood.

136) šəla   si   kəy   jǎlədu.
      wood   of   board burns.PRES.MSG
      'A piece of wood burns.'

      a səla jalədu.
      I wood burn.PRES.MSG
      'I burn wood.'

      a plastik jǎladu.
      I plastic burn.PRES.CAUS.MSG
      'I am causing the plastic to burn.'

In Torwali, a passive construction consists of two verbs. The first one, containing the semantic meaning for the clause and inflected with the suffix *-a* attached to its verb stem, is followed by the second, a fully inflected form of *bəǰu* 'to go' which functions as an auxiliary verb providing the grammatical information: tense, aspect and agreement for the clause. The agent, which is optionally stated, is marked with the postposition *keǰa.* (137) presents a typical active voice construction to which the remaining examples can be compared. The subject of (138) is masculine, and the subject of (139) is feminine. These are contrasted to illustrate verb agreement. (The final verb is the past tense form of *bəǰu* .)

137) a   ǰaved   pænədu.
      1SG.NOM   Javed   recognize.PRES.MSG
      [SUB   ]
      'I recognize Javed.'

138) me   keǰa   ǰaved   pæn -a   ga.
1SG.OBL   by   Javed.M   recognize.PASS go.SP.MSG
[AGENT]   [SUB]
'Javed was recognized by me.'

139) me   keǰa seræn   pæn -a   gæ.
1SG.OBL by   girl.F   recognize.PASS go.SP.FSG
[AGENT]   [SUB]
'The girl was recognized by me.'

(140) and (141) show additional tense inflection. Notice also that the agent in (141) has been omitted. As previously stated, it does not need to be stated overtly within the sentence. The ordering of the agent and subject is not rigid. Either can occur sentence-initially. The decision to move one closer to the verb and not the other is probably a pragmatic concern, but will not be addressed in this paper.

140)   seræn me   keǰa pæn -a   bəjnin.
girl   1SG.OBL by   recognize.PASS go.FUT
[SUB] [AGENT]
'The girl will be recognized by me.'

141)   seræn pæn -a   bəjudud.
girl   recognize.PASS   go.IMPFV
[SUB]
'The girl was recognized.'

6. CLAUSE-LEVEL FEATURES

This paper began with a phonological analysis. Next, by examining the typological issues of Torwali, we were able to place some of basic grammatical features in the context of language universals. We then examined the various grammatical categories that exist within the language, after which we zeroed in even more closely on the morphological issues related to these categories. We move now to a higher level—the clause level and look at how these various grammatical categories operate at the clause level within the language.

6.1 Verb operations

Section 5.1.2 presented a discussion of issues related to verb morphology. This chapter begins with a look at verbs and their function within the clause.

6.1.1 Complex verbs

Complex verbs, or complex predicates, are formed when lexicalized combinations of nouns and verbs or adjectives and verbs work together to function as a single predicate. Torwali has many examples: *ban kodu* 'he closes', š*oro kodu* 'he starts', *təwəs kodu* 'he asks a question', *ban hodu* 'becomes closed', *pəda hodu* 'becomes open', *jʰik dedu* 'he pulls', *tʰel dedu* 'he throws', *jəwab dedu* 'he answers.' When these verbs occur in their simple form (i.e. just *kodu*, *hodu* and *dedu*), they can be translated into English as 'he does/makes', 'he becomes' and 'he gives,' respectively. In sentence (142), the object of the verb is *dukan*. *ban*, which is an adjective meaning 'closed', is combined with the verb *kodu* to give it new meaning.

142) æ   maṣ dukan [ban   kodu].
      This man store   closed do.PRES.MSG
      'This man is closing the store'

The sentences in (143) and (144) further illustrate that the noun components of these complex predicates are in fact direct objects of the verb when compared to a typical sentence with a direct object, as in (145). **he maṣ goa na əwaz kodu*. and **æ maṣ ne dæ~ dedu.* are not grammatically correct because the negation particle must occur immediately before the verb in Torwali. It cannot occur before the direct object. Therefore, even

though a semantic relationship exists between the noun and verb in complex predicates, it is evident that the nouns retain their grammatical independence at the clause level.

143) he   maṣ goa   [əwaz na   kodu].
     this   man oxen.OBL.PL sound not   do.PRES.MSG
     'This man does not make a sound (does not call) to the oxen.'

144) æ   maṣ   [dæ~   ne dedu].
     NEAR.NOM   man   movement not gives.   PRES.MSG
     'This man is not running.'

145) har   pa~yšime o   šugæra tʰet ka~   ek [ləŋgər   hum dedi].
     every Thursday and Friday there something one charity.meal also give.PRES.PL
     'They also give a charity meal every Thursday and Friday there.' [kun035]

Other complex predicates are included in (146). They are cited in their base form (as infinitives) for simplicity.

146) istri kow   kam kow   kʰæn kow   paydə kow
     iron   to do   work to do   cough to do   birth   to do
     'to iron'   'to work'   'to cough'   'to create'

     zərurət   how   paydə how
     necessary   to become   birth   to become
     'to be in need'   'to be born'

     dæ~   deow   git   deow   lamo   deow
     movement to give   song   to give   shower to give
     'to run'   'to sing'   'to shower'

6.1.2 Location and direction

Payne states, "as tense grounds a situation in time, location and directional marking ground situations in space (1997:248)." Some languages such as Pashto use verbal affixes to mark direction in relation to a specific participant in a speech act. The sentences, 'He is coming to my house', 'He is going to your house' and 'He is going to his house' all contain distinct verbal affixes to mark the direction that *he* is going.

Torwali does not use these, but instead relies mostly on postpositions to express direction, for example, *šir ma* 'from the house' and *bazaar te* 'to the market.'

It does however have a pair of verbs which are commonly used to contrast the idea of 'going/coming *up*' and 'going/coming *down*'. This feature is probably due to the mountainous region in which the Torwali people live. For them, this vertical distinction is an important one. So for example, even though sentence (147) is

grammatically and semantically correct, sentence (148) is clearer if we are standing in Bahrain, which is higher in elevation than Peshawar.

147) a pexor   ge baǰadu.
      I Peshawar to going
      'I am going to Peshawar.'

148) a pexor   ge wodu.
      I Peshawar to go.down.PRES.MSG
      'I am going down to Peshawar.'

149) mo   ḍoḍa si ban   ge oxadi.
      1PL.NOM   Doda of pastures to go.up.PRES.PL
      'We are going up to mountain pastures of Doda.'

Examples (150) and (151) show more of the same, but they have been taken from natural texts.

150) tisi   e   ba   bənədu   baŋabilo bilo   wo.
      ABS.SG.GEN   one brother say.PRES.MSG Bangabilo Bangabilo come.down.IMP
      "Her brother says, 'Bangabilo, come down'" [Bangabilo038]

151) go ẓat   mi bəǰusæt   a~ ḍigua   zadul si bešel set   wowsæt.
      ox morning in goes.INC and evening.OBL Zadul of flute with comes.down.INC
      'The ox goes (out) in the morning and comes back down in the evening with (the sound of) Zadul's flute.' [zadul052]

6.2 Predicate nominals and related constructions

This section describes the features that characterize predicate nominals, predicate adjectives, existentials, locatives and possessive clauses. These are grouped together because they share some linguistic features; they use the same basic clause structure governed by the copula. Note that within all of the examples in this section, the copula carries gender and number agreement with the subject.

6.2.1 Predicate nominals

Payne draws a distinction between two types of predicate nominals—proper inclusion and equative. An example of proper inclusion in English is *He is a teacher* where *he* is a member of a larger group known as *teachers*. This example differs from *He is my father*, where both the subject and predicate noun are identical. Some languages make a grammatical distinction between these two types of sentences. However, most do not.

Torwali does not either. Here are some examples of predicate nominals in present and past tense. Each predicate

nominal has a slightly different form, but the clause structure is the same.

152) se   mi   šu   čʰi.
     ABS   1SG.GEN sister   is.PRES.FSG
     [SUB]   [PRED NP   ]
     'She is my sister.' [Fugitive009]

153) ek   ḍakxana   wala   thu.
     one   post office person   is.PRES.MSG
     [SUB] [PRED NP   ]
     'One is a postal worker.' [Darolay037]

154) se   ǰumæt   si tælib   ašu.
     ABS   mosque of student was.PAST.MSG
     [SUB]   [PRED NP   ]
     'He was a student of the mosque.' [Bachagul016]

6.2.2 Predicate adjectives

Predicate adjectives use the same grammatical form as predicate nominals with the predicate occurring

immediately before the copula. The sentences in examples (155) through (158) show subject-verb agreement, as

well as gender agreement between predicate adjectives and the subjects they modify. (Remember from discus-

sions in section 4.4 that Torwali adjectives only inflect for gender. They make no distinctions between singular

and plural. Also remember that plural verb forms do not distinguish gender (see section 5.1.2)).

155) ti   bənu   æ pot   čer šijo   tʰu
     ABS.SG.ERG said.SP.MSG this place.**MSG** very beautiful.**M** is.PRES.**MSG**
                           [SUB   ]   [PRED ADJ]

     ase čer   xətərnak   tʰu.
     but very dangerous.**M** is.PRES.**MSG**
        [PRED ADJ   ]
     "He said, 'This place is very beautiful, but very dangerous'." [Danghara003]

156) æ   pot   čer šijo   tʰi.
     NEAR.NOM   place.**MPL** very beautiful are.PRES.**PL**
     'These places are very beautiful.'

157) æ   šir   čer šije   čʰi.
     NEAR.NOM   house.**FSG** very beautiful.**F** are.PRES.**FSG**
     'This house is very beautiful.'

158) æ   šir   čer šiǰe   tʰi.
     NEAR.NOM   house.**FPL** very beautiful.**F** are.PRES.**PL**
     'These houses are very beautiful.'

6.2.3 Existentials

Existentials differ a little in that only the subject position is filled. Unlike English, which uses the seman-

tically empty filler *there* as the subject like in *There is a house*, Torwali speakers position the noun phrase as the

subject. They say the 'one mountain village is' as shown in (159) and following:

159x135) bahrain ma du kʰəna   mi   ye [e ban]   tʰu.
          Bahrain from far mountain.PL.OBL inside to   one mtn.village.M is.PRES.MSG
          [LOCATIVE PHRASE   ] [SUB NP   ]
          'There is one mountain village in the mountains far from Bahrain.' [Belae003]

160) buma si u   si keǰa mamuṛ yab   čʰi.
      field.F of water.M of for   that.is   canal.F. is.PRES.FSG
      [EXISTENTIAL PURPOSE PH.]   [SUB NP]
      'For watering the fields, there is a canal.' [Kun018]

161) tel   čer gən iṣ   tʰi.
      over.there   very many bears   are.PRES.PL
       [LOC PH] [SUB NP   ]
      'Over there are many, many bears.' [Danghara004]

Regarding the status of weather like 'it is raining' or 'it is snowing', Torwali uses a separate verb form

for these. An example is cited in (162). (One comment, the postpositional phrase *ẓed ma* 'from the top' has

been phonologically merged into a single word, *ẓeda*. This is a common occurrence in the language.)

162) a~ ẓeda   him muǰəji.
      and top.from snow snowing.PRES.FSG
      'From the top (of the mountain), it is snowing.' [hunting012]

6.2.4 Locatives

Locatives also resemble the predicate noun and adjective clause form as illustrated in (163) and the fol-

lowing:

163) mudam   mo   kəna   mi aši.
     always   1PL.NOM   mountains.PL.OBL   in were.PAST.PL
                  [SUB   ]   [LOC PHASE   ]
          'We were always in these hills.' [hunting002]

164) dwi   muṣ   tukri   ma   bar   tʰu.
     other mouse.M trash.can from outside is.PRES.MSG
     [SUB   ]   [LOC PHRASE   ]
          'The other mouse is outside the trash can.'

165) də se   ke~t   bešte   činær   si ẓed bet   čhia.
     ?? ABS   where having.gone.CP poplar.tree.PL of top sitting   is.PRES.FSG
         [SUB]   [LOC PHRASE   ] [PRED ADJ]
          'She, having gone somewhere, is sitting in the poplar tree.' (She went somewhere, and is (now)
     sitting in a tree.) [Bangabilo033]

6.2.5 Possessive clauses

As with the existential examples (159) to (160), semantically empty units are not used to fill vacant con-

stituent slots. Example (166) literally says 'my two children are.'

166) mi   du   lo   tʰi.
      1SG.GEN   two children.PL are.PRES.PL
      [POS NP SUB   ]
      'I have two children.'

Alienable possession expressed as a clause uses a locative phrase construction as illustrated in (167). This

example means that the speaker does not know if the listener owns a car or not. In contrast, the speaker in ex-

ample (168) knows that his friend owns a car, but he or she does not know if it is available to use or not. Per-

haps, it is broken down or being used by someone else. The use of possessive pronouns here and in (169) sug-

gests a more permanent ownership of the car. Payne refers to underlined permanent possession as *inalienable* possession,

and would probably not apply this term to a car since it can be sold. Nevertheless, the grammatical construction

suggests that in their culture, a car is reasonably permanent. In contrast to the sentence in (169), *me keš gare*

čʰi 'I have a car' suggests that the car he or she has is not his or her own, but someone else's.

167) tʰe   keš   gare čʰi?
      2SG.OBL   with   car.F is.PRES.FSG
      [LOC PHRASE] [SUB]
       'Do you have a car?'

168) čʰi   gare čʰi?
     2SG.GEN   car.F is.PRES.FSG
     [POS NP SUB   ]
     'Do you have a car?' (The assumption is that you have a car, but the question is, "is it available?")

169) mi   gare čʰi.
     1SG.GEN   car.F is.PRES.FSG
     [POS NP SUB   ]
     'I have a car.' (This could be a response to the question asked in either (167) and (168))

The purpose of this section has been to illustrate two things. First of all, whether it is a predicate nominal, existential, locative or possessive clause structure, the copular verb is used. Secondly, we can group predicate nominal, predicate adjective and locative clauses together as being the most similar to each other, and existential and possessive clauses in another sub-group because of the similarities in clause structure they share. (I am thinking of the 'My children are' and 'Mountain village is' examples.) A similar grouping can be found in neighboring languages.

6.3 Grammatical relations

6.3.1 Split ergative system

Dixon (1994) outlines a variety of *split systems*, systems that mix nominative-accusative and absolutive-ergative types. These splits may be based on the semantic nature of either the verb or noun phrase, or based on main clause versus dependent clause occurrences or it might be conditioned by tense, aspect or mood[10]. It is this latter feature that is key in understanding the split-ergative system operating in Torwali. In order to prevent any ambiguity in this section of the paper, I have followed Dixon's method of referring to the subject of an intransitive verb as *subject* and the subject of a transitive verb as *agent*.

6.3.2 Nominative-accusative case marking and agreement

Clauses having a non-perfective aspect or non-future tense use a nominative-accusative system where both the agent of a transitive verb and the subject of an intransitive verb manifest the same agreement marking on the verb (as discussed in section 5.1.2). Morphologically, unless they are pronouns, these subjects and agents are themselves unmarked. Word order, verb agreement and/or any case marking on other noun phrases in the

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[10]See Dixon (1994:70-110) for more discussion on these various types.

same clause distinguish constituent positions. Some examples are provided for illustration. Sentences (170) and

(171) contain an unmarked noun phrase and pronoun respectively functioning as agent, and take the nominative

case. Verb agreement in both sentences shows agreement with these agents as well. The verb in (172) is marked

for imperfective aspect, which does not inflect to show number and gender agreement, but the agent of this sen-

tence is the pronoun *se*, which is in the nominative case. The last example contains an intransitive present tense

verb. Case and subject-verb agreement follows the same pattern here as in the other examples. These features

characterize the nominative-accusative system.

170) e   po   nin   ma   ište   tem   budu.
     one boy.**MSG** sleep from having.awakened.CP time   looks.PRES.**MSG**
     'A boy, having awakened, looks at the time.' [dailypres001]

171) tu   kərači si bəju   si kæ ça təriqa   istimal kobadu.
     2SG.**NOM** Karachi of to.go.INF of. for 3   methods   use   can.do.PRES.MSG
     'You can use three means to go to Karachi.' [travel016]

172) se   məze   məze   de   kʰowdud.
     ABS.**NOM**   enjoyment enjoyment with   was.eating.IMPFV
     'He ate with much enjoyment.' [zadul011]

173) a   æmede kun me dərədu.
     1SG.**NOM** self   Kun in   live.PRES.MSG
     'I myself live in Kun.' [kun001]

6.3.3 Ergative case marking system

In contrast to the previous discussion, clauses with a perfective aspect or future tense are governed by the

system of ergativity. Here the subject and object are marked the same, and distinguished from the agent of the

clause. The subject and object are unmarked and the agent takes the ergative case marker. In contrast to the

nominative-accusative system, the clause-final verb agrees in gender and number with the subject and object,

and never the agent. Note example (174) where the agent takes the ergative case and the verb shows agreement

with the object.

174) so -e   næ zər -e   jədəg -e ti   ma səwəq çiʐu.
     100s.**ERG** no 1000s.ERG boys.**PL**.**ERG**ABS.SG.OBL from lesson.**MSG** learned.SP.**MSG**
     'A hundred, no a thousand boys learned a lesson from him' [Bachagul026]

175) i   ti   zed yæri si kow   si košiš konin.
   NEAR.SG.**ERG** ABS.SG.OBL   on love of to.do.INF of try   will.do.**FUT**
   'She will try to make love with him.' [parda012]

The sentence in (175) illustrates ergativity in the future tense. However, since verb inflection in future tense carries no gender or number marking, only the agent is marked. This same sentence is reproduced in (176) but in the present tense to show the shift in case for the pronoun from ergative to nominative. More examples of ergative clauses occurring in future tense are cited in (177) and the following:

176) æ   ti   zed yæri si kow   si košiš koji.
   NEAR.**NOM**   ABS.SG.OBL   on love of to.do.INF of try   does.PRES.FSG
   'She tries to make love with him.'

177) tæ   tis   ki kitab denin.
   2SG.**ERG** ABS.SG.OBL to book give.**FUT**
   'You will give the book to him.'

178) po -e   səwəq çiẓanin.
   boys.**ERG** lesson learn.**FUT**
   'The boys will learn the lesson.'

179) mi   lo -e   hum mæ   çʰay ma tʰelnin.
   1SG.GEN children.**ERG** also 1SG.ACC cliff from throw.**FUT**
   'My children will also throw me from the cliff.'

Here is one more example. (180) contains a complex sentence with both transitive and intransitive clauses, both of which are marked perfective. The matrix clause *tʰe buda* has a transitive verb. This combination of perfective aspect and transitivity requires the ergative construction. The agent takes the ergative case and the verb agrees in gender and number with the object *Bangabilo*, even though that noun phrase is not overtly marked in the clause. The complement clause on the other hand is intransitive and as a result we see subject-verb agreement. Here *Bangabilo* switches to the subject position and the final verb agrees with this subject in gender and number. In contrast, if present tense were used in both clauses, then this sentence would no longer have an ergative construction and both verbs would agree with their respective subjects. This is illustrated in (181).

180) tʰe   buda   baɳabilo činær   zed beḍiši.
   ABS.**PL.ERG** saw.SP.**FSG** Bangabilo.**F** poplar.trees.OBL.PL on had.sat.PAST.PFV.**FSG**
   'They saw that Bangabilo had sat on the poplar trees.' [Bangabilo037]

181) se   budi   bangbilo činær   zed bəjəji.
     ABS.NOM   sees.PRES.**PL** **Bangabilo** poplar.trees.OBL.PL on   sits.PRES.**FSG**
     '**They** see that Bangabilo sits on the poplar trees.'

What is unusual about this split system is that both future and past events are combined under the ergative system. Dixon states that the orientation of a clause—whether it is a known event or merely a potential happening—helps one predict the form of the split. If a language has an ergative system, it will most likely be found in the past tense or perfective aspect where a series of events can be associated with the subject or object of a verb (1994:99). So the fact that Torwali applies ergativity to its perfective aspect clauses is not surprising. In fact, many of the surrounding languages have a similar system. Kalami perfective aspect has ergative marking and Pashto marks all of its past tense forms with ergative forms.

However, what about the ergative clauses occurring in the future tense? Dixon documents a language, Newari, which uses obligatory ergative marking in past *and* future tenses and optional ergative marking in the durative or progressive mood depending on other criteria (1999:101).

Similar to the Newari system, Torwali requires ergative markers for both perfective aspect and future tense. As just illustrated, all other tenses and aspects require a nominative structure. If the subject of an intransitive verb occurs in a clause having either perfective aspect or future tense, it is unmarked. The agent of a transitive clause, however, is marked in the ergative case. The objects in these same clauses are unmarked.

7. DISCOURSE FEATURES

7.1 Introduction

Discourse analysis allows the researcher to more fully understand clause-level phenomena including noun phrase operations, tense, aspect, occurrence of special particles and even what may seem to be free variation in constituent order. When viewed in its natural context rather than in isolation, we can find semantic and pragmatic answers to many questions which otherwise may not seem to follow any predictable pattern.

Natural texts can be subdivided into several types of genre, namely *procedural, expository, behavioral* and *narrative* (Longacre 1996: 8-10). These genre types have their own distinguishing characteristics; therefore, it is critical when one begins analyzing a text that he know what type of text it is. Procedural texts contain a series of steps that must be taken in order to complete a given task like building a house, and are often characterized by imperative verb forms. Expository texts may describe some place or they present a problem along with a proposed solution and supporting argumentation. Behavioral texts seek to change another person's conduct, and narrative texts consist of a series of sequential events involving one or more participants, such as stories and folktales and are usually marked by the rising and falling of tension.

In the following pages, we will take an in-depth look at a Torwali narrative text, a folktale that is widely known throughout the mountainous region of northern Pakistan. The story revolves around two main characters, a woman and a spirit-like giant referred to as *deo* by Torwali speakers. My claim that this text is a narrative is based on four binary parameters posited by Longacre (1996:8-10): agent orientation, contingent succession, projected time and tension.

Agent orientation refers to whether or not an agent can be identified within the text. Narrative and behavioral texts are *plus* agent orientation because they have at least one agent or character doing something in the discourse. Procedural and expository texts do not have any characters, so they are classified as *minus* agent orientation.

Contingent succession refers to whether or not a discourse contains a framework of temporal succession in which some events are contingent upon previous events. For example, a typical story contains a series of events that occur, each one building on events that have already happened; therefore, Longacre labels it plus contingent succession. A how-to procedural text also follows a sequence of events where each new step is contingent upon the completion of a previous step: "first you..., then you..." and so on. In contrast, behavioral and expository texts are not organized and presented in any kind of temporal ordering of events. Instead they may be arranged thematically and follow some kind of logical organization where certain conclusions are contingent upon other previously stated conclusions or assumptions.

These two parameters with their binary features are the parameters that distinguish narrative, procedural, behavioral and expository texts. Narrative texts are both plus agent orientation and plus contingent succession. Procedural texts are minus agent orientation, but plus contingent succession. Behavioral texts are plus agent orientation and minus contingent succession; and expository texts are minus agent orientation and contingent succession. This thesis is an example of an expository text. It has no character that is following a particular script, and it contains no framework whereby the events of one chapter are contingent upon the events of a preceding chapter. In fact, there are no events, simply a presentation of facts in a logical arrangement, not temporal.

The third parameter, projected time, distinguishes between events anticipated but not realized and events realized. An example of a narrative text that is classified as having plus projection would be a prophetic text. A budget proposal would also be categorized as an expository text having plus projection. On the other hand a folktale would be labeled as a narrative with minus projection. A eulogy would be classified as a behavioral text also having minus projection.

The fourth parameter, tension, is used to distinguish narratives with a plot and climax from narratives with only episodes but no tension. It is a more difficult to illustrate how this parameter is used to distinguish procedural, behavioral and expository type texts, but theoretically it would separate texts having arguments from those that do not. The text used for this project is classified as having plus features for agent orientation, contingent succession and tension, and a minus feature for projected time which in layman's terms means it is a

narrative story with a plot and climax. See Longacre (1996:8-10) for more discussion on these parameters as they are used to distinguish discourse types.

Many discourse issues could be addressed, but the focus of this paper will be on three features: *profile, spectrum* and *participant reference*. One feature of a narrative is its rising and falling tension. Linguists refer to the highest point of tension as the climax. It is this rising and falling of tension that marks the profile of a text. Longacre proposes an etic template to describe a narrative's profile (1996:36-37) and we will apply it to *The Giant* text in order to observe some of its attributes.

The feature Longacre calls spectrum deals with how information is packaged and then ranked in a narrative text, ranging from the most dynamic (storyline events) to the most static (non-events like setting and evaluation) (Longacre 1981). He states that the positions along this line of ranking not only have semantic characteristics, but also correlations with morphosyntactic features, such as tense, aspect, mood, word order, affixes or adverbs. Spectral features of narratives vary from language to language so the goal of this project is to note those features which are specific to Torwali.

Languages also have their own way of introducing and referring to participants in a story, and with that are systems that track each participant through the story. Chafe (1994) and others have discussed the idea of new, given and accessible information presented in texts. If something has already been mentioned in the immediate preceding context, Chafe refers to this as given information. Accessible information refers to information that might not have been mentioned in the recent past, but the hearer can "access" his mental database for the information. New information refers to information that has not been mentioned before in the text. See Chafe (1994) for more discussion. Language-specific tools are used to mark these distinctions.

The text used for this analysis was recorded by Jahangir Khan, a mother-tongue speaker of Torwali. The speaker was a relative of his, an eighty-five year old woman. Together, he and I listened to the recording, transcribed it in Shoebox, glossed it word-by-word and added a free translation to each of the thirty-eight sentences. In addition to this primary text, I also referred to several other texts, ranging from thirty to one hundred sentences in length in order to double-check the generalizations that were made based on the primary narrative. (All sentences in this text have been numbered (S1, S2, S3, etc.) so that they refer to the corresponding sentence

in the text.) Sometimes the example is included with the discussion for easy reference. Other times the reader may want to refer to the appendix where the complete text has been included.

The goal of this chapter is to present some generalizations about some of the basic discourse features found in Torwali narratives. Because only a few texts were studied, the results of this analysis are only meant to serve as a starting point, an introduction to Torwali narrative features. Further studies are encouraged. To date, there has not been any published work describing any of the discourse features of this language.

7.2 Profile and peak

Narrative texts that have tension do not have a uniform level of tension, but instead have a rising of tension throughout the story which at some point reaches a high point and then falls. This rising and falling of tension is marked by various discourse features on the surface structure of the text. If we assign labels to the various points along this line of tension, this allows us to systematically dissect the text and examine the discourse features of each section. The assumption here is that such discourse features vary throughout the text. Longacre posits a set of labels which corresponds to the surface structure of a narrative text, and another set which corresponds to the notional structure. Surface structure features include morphosyntactic forms that mark shifts in time, location or agent, and they correspond to the notional level, which deals with issues of thematic unity. Two levels are posited because there is not always a one-to-one correspondence between the surface and notional structures. Sometimes such a correspondence may exist, but a storyteller can skew the lines between them in order to produce a desired effect, usually making the story more interesting. The details of how these two levels relate to each other in a general sense is beyond the scope of this paper; however, a very thorough discussion on this topic can be found in Longacre (1996:35f).

To begin the analysis, we can apply Longacre's template to *The Giant* following the principles that he has put forth. The result is a macrosegmentation of the text shown in Table 7.1. The labels mark important divisions in the story and each one, particularly the peak, has unique features which will be examined shortly.

Table 7.1. Macrosegmentation of *The Giant*

Surface Structure slot	Notional Structure slot	Sentence references	Summary of sentences
Stage	Exposition	S2-8	Setting of location and introduction to the main participants (woman, giant)
Prepeak episode 1	Inciting moment	S9-20	The woman meets the giant, learns of his love for her and begins visiting regularly
Prepeak episode 2	Developing conflict	S21-26	They become angry at each other and the giant hurts the woman
Peak episode	Climax	S27-32	The giant kidnaps the woman, but later decides to imprison her in her own house
Closure	Conclusion	S33-37	The woman still lives although she is old, and is visited only by the giant
Explanation	Implied moral	S38	Women should wear an amulet to protect themselves against the giant

The slot "Explanation" included in Table 7.1 is a slot that Longacre does not include in his etic version. However, it is not uncommon for folktales in this language to end with a one-sentence explanation of something. In this story, it is a comment made by the storyteller that has nothing to do with the storyline but highlights the purpose for which this story was told. Not all folktales include this "author's comment," but some do.

The reason for including (S38) at the end of the story would not be clear to someone from outside the Torwali culture unless they know something about the culture—that is, amulets are worn by women to protect them from spirits. By not wearing amulets or even removing them for a short time, there is a fear that a spirit, like the giant spoken of in this story, will visit them and the result could turn out to be disastrous. So with that knowledge, one can deduce from the narrator's last sentence that the moral of the story is contained in an mitigated imperative: women should wear an amulet around their necks and not risk danger by removing it. This illustrates very clearly why Longacre posits a surface structure as well as a notional structure and how the lines between them can be skewed. On the surface, this text is a simple narrative, a legend, a folktale. However, it is not until the final sentence that the audience realizes that this narrative is told for a purpose—to encourage a certain behavior. Notionally, this text is classified as a hortatory text that uses a story to support its argument.

In another folktale, the main character Bangabilo runs away from her family and escapes to the moon where she meets an old woman weaving wool. After the conclusion of the story, the narrator adds one final ex-

planatory statement. He states that the dark part of the moon which is visible to the eye is actually Bangabilo weaving wool. In contrast to these two narratives, I also have other stories which have no additional explanatory comment. So this extra slot is not an obligatory slot in Torwali folktales, but it does occur in some stories and it is helpful to provide a slot in order to distinguish it from the story itself.

Stage   Episode 1   Episode 2   Peak   Closure   Explanation
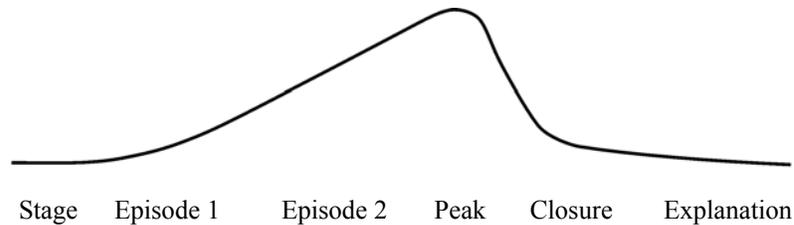
Figure 4. Profile of the narrative text, *The Giant*.

7.2.1 Stage: Exposition, S1-8

Except for (S1), which includes the title of the text, the *stage* is set in the first eight sentences of the story. Here the narrator introduces the two main characters of the story, the woman and the giant, to the audience. They learn where the woman is from and how she, like most women in her village, would go regularly to a spring to get water. They also learn of a giant with supernatural powers who has fallen in love with her. The narrator also explains that the story that will soon unfold was originally told by the woman herself. Most of these sentences use the copula in the present tense. Other verbs also occur with imperfective aspect. There is even one flashback sentence marked with the past perfective aspect.

7.2.2 Prepeak episodes, S9-20, S21-26

Episode 1 begins in (S9) with the temporal phrase, *e di* 'one day.' This sentence functions as the stage for this first episode, and the shift to simple perfective aspect in (S10) marks the beginning of the eventline. Although (S9) is not eventline, it is not included as part of stage because it provides the context for episode 1 only, not the whole story. It is included in this episode because going to the spring was necessary for her to meet the giant.

(S9)   he   e   di   u   anudud.
NEAR.NOM one day water was.bringing.IMPFV

(æ   oso   e kʰən si miye   ašu.)
NEAR.NOM spring   one mtn. of inside   was.PAST.MSG
'One day she was bringing water. (This spring was in the mountains.)'

(S10)   də   he   çʰi   u   punudud   da   i   pæš
then? NEAR.NOM woman water was.drinking.IMPFV SUBMKR NEAR.ERG backside

ke budu.
to   looked.SP.FSG
'Then, when she was drinking water, she looked back.'

(S11)   e   čæl   zed gən e šey (maṣ) bəyel
one large.rock.OBL on big   one thing man   sitting

tʰu,   a~ me   çʰi   ye həzudud.
is.PRES.MSG and NEAR.SG.OBL woman to   was.laughing.IMPFV
'A big thing was sitting on a large rock, and laughing at this woman.'

The audience has already been told in a previous sentence that she used to go to the spring. There is no reason to mention it again unless something happened during one of those trips, which is the case here. We can summarize these sentences as one thought: on one of those occasions when she was going to the spring to get water, she was drinking and suddenly she looked and saw a huge thing sitting on a nearby rock. It seems reasonable to see these sentences as part of the same thematic unit.

This first episode is also distinguishable from the stage by the initiation of a sequence of events. She looked back, she poured her water and left and she initiated a conversation with the giant by asking him a question. Each of these events is marked with perfective aspect and helps move the story along. With each event the tension rises a bit.

The second part of this initial episode contains a brief dialogue between the woman and the giant. Following this dialogue, the narrator adds some additional information. The spirit begins to visit the woman every night, and they begin talking with each other a lot.

(S20) te   dia bat se   deo hər ʐæt e me   çʰi   si
       ABS.SG.OBL   day after   ABS.NOM giant every night in NEAR.SG.OBL woman of

       kæš   ke   **yewsæt**   a˜ me   çʰi   zed betmet
       nearby to   started.to.come.**INC**   and NEAR.SG.OBL woman on a.lot.of.talking

       kowsæt
       start.to.do.**INC**
       'After that day, that giant started to come to this woman every night, and started to do a lot of talk-ing with this woman.'

The verbs of both clauses are encoded with inceptive aspect which is best translated in English as "start/started to (do something)." The emphasis is on the initiation of an action. In other words, it contrasts with an imperfective aspect which suggests an ongoing action just as in English. "He was visiting her every night" (imperfective) does not mean the same as "He began visiting her every night" (inceptive). While it is true that the latter sentence does suggest that he came regularly, the focus is on a specific moment in time when he **be-gan** to visit and he **began** to talk with her. In this way, it has some features which are similar to perfective.

Episode 2 begins in (S21) with another temporal shift, *e di* 'one day,' a return to the simple perfective aspect and the introduction of a new prop, one that will cause even more tension between the two main charac-ters. When the spirit-like giant brings the leg of a human, she becomes very angry, and her reaction causes him to become angry and he injures her. What is interesting in this part of the text are the two sentences that state that each of these characters became angry.

(S22) ti   ma æ   çʰi   es   te qara **gəy.**
       ABS.SG.OBL   from NEAR.NOM woman NEAR.SG.OBL to rage **went**.SP
       'After that, this woman became enraged toward him.' (lit., '...this woman [directed] rage toward him.'

(S24) me   deo de qar ap.
       NEAR.SG.OBL giant on rage **came**.SP.MSG
       'This giant became enraged.' (lit., 'Rage came on the giant.')

In neither case is the verb *how* 'to become' used to express this sudden change in state. Instead, verbs of motion and direction are supplied. One gets the impression from (S22) that the woman did not only become angry, but "directed her anger toward the giant." In the same way, instead of communicating to his audience that the giant became characterized by a different attribute (i.e. rage), the narrator gives *qar* 'rage' an agent-like quality which acts upon its patient, the giant, which further results in the action of (S25-26) where the giant inflicts the woman

with a significant and ironic injury. By using these verbs, the storyteller moves the story forward and simultaneously increases the tension.

7.2.3 Peak: Climax, S27-32

The story begins to peak in (S27) with the longest preposed adverbial phrase marking a temporal shift.

(S27a) bi   te   dəwi di   ye...
       again ABS.SG.OBL   other day to
       'Then, on another day...'

Longacre describes the peak of a story as a "zone of turbulence" where the "routine features of the storyline may be distorted or phased out (1996:38)." Typically, dramatic changes in tense, aspect and mood, or deviations in word order can occur. Sometimes the focus shifts to a more specific person (third person to second or even first person). Sequential markers stop occurring, which means the apparent forward movement of the narrative ceases. The peak is usually characterized by a change in pace. There are a number of ways that the pace can be slowed or sped up, and Longacre offers an illustration from Ga'dang, a language from the Philippines (1996:40). He reports that in non-peak episodes, the verb-to-non-verb (mostly nouns) ratio is about 1:7 in Ga'dang narrative texts. At peak, however, the ratio proportion is 1:3 suggesting that the pace quickens at peak.

Just the opposite has been documented at the peak of this story. The verb-to-non-verb ratio at peak is 1:4 while in non-peak episodes it is 1:2. The number of non-verbs doubles during the peak of this text suggesting that the pace slows in order to include more description and less action, an example of *rhetorical underlining*. Another interesting statistical observation relates to how frequently the proximal and distal deictics are used in the text. The results are included in Table 7.3.

Table 7.3. Statistical analysis of spatial deictics

	Frequency of occurrence		Clause Count	Average percentage of occurrences per clause	
	NEAR	*ABSENT*		*NEAR*	*ABSENT*
Episode 1	10	7	20	50%	35%
Episode 2	8	4	11	72%	36%
Peak	6	11	9	63%	**122%**

The preceding table lists the number of occurrences that both the proximal deictic (marked NEAR) and the distal deictic (marked ABS) occur during the three episodes of the story. The middle column shows how many clauses are in each episode. Finally, the last column divides the number of occurrences for each deictic into the number of clauses to calculate an average number of occurrences per clause. For example, during the first episode, the proximal deictic occurred ten times. I also counted twenty clauses in the same episode. So this deictic occurs 50% of the time, or on average every two clauses. The part of this table which is significant is the average number of times the distal deictic occurs. A huge difference exists between peak (122%), meaning that on average a distal deictic occurs in every clause and sometimes more than once, and non-peak (35% for Episode 1 and 36% for Episode 2), where they average about every third clause. What seems strange about this is that one would expect just the opposite, more proximal decitics at peak to crowd the stage. It does not seem reasonable to mark the primary participants as being off center-stage during the peak of the narrative, and yet this is the strategy used by the narrator to emphasize what is most crucial when the proximal deictic are in fact used. When we discuss the participant reference system later in this paper and how it marks these two participants, we will find that they switch more quickly from center-stage to the periphery at peak as the focus shifts from one to the other. In (S29), at the point within the peak where the tension reaches maximum height, both participants are in fact center-stage, marked by proximal deictics.

(S29) he ər pən ge əwow da mi çʰi es
NEAR.NOM half way to to.arrive SUBMKR **NEAR**.SG.ERG woman **NEAR**.SG.OBL

ke čer minət.zæri ki.
to much much.insistence did.SP
'When they arrived half way, this woman really pleaded with him.'

A quick look at another narrative text, *Bangabilo*, reveals that its peak is marked mostly by a shift from verbs denoting action in simple perfective to verbs denoting a state of being or a change of state. In that story, not as many different deictic forms are used to distinguish on-stage/off-stage, etc. Instead the narrator uses mostly distal pronouns throughout the story.

In summary, it is important to realize that from story to story and from storyteller to storyteller, information can be packaged in many different ways to serve many different purposes. Whatever the storyline features

are in the non-peak episodes of a particular narrative, they will be "distorted" in some way at peak. In Torwali, we have accounted for two strategies so far: by shifting to a higher rate of non-verbs (rhetorical underlining) and by strategically using proximal and distal deictics to heighten the vividness of certain participants and their situations.

7.2.4 Closure: Conclusion, S33-37

The last part of the story is called the *closure*. It too has several characteristics that distinguish it from the episode portions of the story. In some ways, its surface form characteristics resemble the stage portion of the narrative. The present tense occurs in nearly every sentence, and the copula reappears. However, unlike the stage, the closure does not have any imperfective marked verbs. The only jussive verb form occurring in the story is found here.

(S33) se   çʰi   aš   hum te   šir   e   əmən sed
       ABS.NOM   woman   today also ABS.SG.OBL   house in   oneself with

       howe.
       should.become.3SG.JUS
       'That woman should be (live) by herself in that house, even today.'

This sentence appears to be an evaluation made by the narrator. At the end of the peak episode, the woman is confined to her home, and the giant refuses to allow anyone to visit her. Now, as the narrator concludes the story his first comment is that she should be (live) by herself.

Another discourse feature of closure is the fact that the storyline no longer moves forward. As expected, this section contains no eventline verb or verb tense to express any kind of forward progression. Lastly, there is a repetitive temporal phrase that occurs in nearly every sentence in the closure part of the text: *aš hum* 'even today' (S33), *mere hum* 'even now' (S34), *aš ma čəw biš kale muš si* 'from eighty years before' (S35), *mere hum* 'even now' (S36) and *aš hum* 'even today' (S37). The purpose of this part of the narrative is to bring the audience up-to-date on the present status of the woman and the giant. After this summary, the narrator adds the explanatory comment in (S38) which includes the implied moral of the story. "Do not remove the amulet from your neck or the giant will visit you."

(S38) te   çʰi   si maṛ   me e   teyis   čʰi   te
       ABS.SG.OBL   woman of neckline in one amulet it.is.PRES.FSG ABS.SG.ACC

       teyis yə nigaləǰi   da   se   deo te
       amulet ?? remove.PRES.FSG SUBMKR   ABS.NOM   giant ABS.SG.OBL

       sat me tisi   kæš   ke hazer hodu.
       time in ABS.SG.GEN nearby to present becomes.PRES.MSG
       'When there is an amulet on the neckline of a woman that she removes, at that time, that spirit-like giant becomes present near her.'

7.3 Spectrum

Based on the profile of *The Giant*, we can posit some generalization regarding the spectrum of Torwali narratives. The term spectrum is used to refer to the packaging and ranking of information ranging from the most dynamic to the most static. As previously stated, these characteristics are language-specific. For example, the past tense in English characterizes both the storyline as well as some types of supportive material. However, Spanish and French use aspectual markings to distinguish them (Longacre 1996:23).

Longacre (1996:21) and others have stated the importance of distinguishing between events and non-events, which provide supportive material for the main eventline of the story, when discussing the ranking of information. He then divides these non-events into several sub-groupings: background, flashback, setting, irre-alis, evaluation and cohesion. These groupings from storyline events down to cohesive material are termed *bands* and numbered from one to seven. Band 1 is the eventline and represents the most dynamic components of the narrative, Band 2 is background, and so forth all the way down to Band 7, the cohesive band. Bands 2-7 represent the more static components. Band 1 contains mainline or foregrounded information while the remain-der of the bands typically contain non-mainline or offline information. From Band 2 to Band 7, there is also a gradation of saliency in that even within this category of offline information, Band 2 is higher than Band 7 in saliency.

Longacre has analyzed English narratives and made a number of conclusions regarding the packaging and ranking of information in English narratives. I have included his conclusions to illustrate how these bands are used to "package discourse information." See (Longacre 1996:24f) for more discussion.

Band 1: The eventline is usually reported in past tense.

Band 2: Background information is usually reported in past progressive tense.

Band 3: Flashbacks are usually encoded using pluperfect.

Band 4: Setting is described using stative verbs and adjectival predicates.

Band 5: Irrealis references are reported with negatives and future tense.

Band 6: Evaluation often occurs in what he calls gnomic present and may include adjectives.

Band 7: Cohesion is achieved using back references, usually in adverbial clauses and is script predictable.

The assumption made by discourse analysts is that there is no free variation within discourse. Words, tenses, modes, adjectives, clause and phrase constructions, and word order are all chosen by the narrator for a particular reason (even when it is not always evident to the researcher). These all serve a higher discourse function. The next few paragraphs will consider some of the morphosyntactic forms in light of the discourse functions of the different types of information in Torwali.

7.3.1 Band 1: Eventline information

In Torwali, the simple perfective aspect marks the eventline of the narrative. If we extract all occurrences of the verbs with this marking in the story of *The Giant*, we will find that it contains a complete summary of the actions and motions of the story, a kind of macrostructure.

(S10) *buda* 'she looked'

(S12) *bi* 'she feared'

(S14) *dæ~y dit* 'she left'

(S16) *təwəs ki* 'she questioned'

(S21) *ap* 'he came'

(S22) *gəy* 'she directed (her rage toward him)'

(S24) *ap* '(rage) came (to him)'

(S25) *dak dit* 'he shot'

(S25) *ga* 'he went'

(S27) *qisa ki* 'she told the story'

(S28) *geṛi* '(awareness) arrived'

(S29) *minət zæri ki* 'she insisted'

(S30) *æni* 'brought her (back)'

Note that none of these occur in the stage or closure of the narrative, only in one of the three episodes. This band does not include past tense forms of stative verbs like 'to be' or 'to become.' It also does not include negated verbs. They are accounted for elsewhere.

7.3.2 Band 2: Background information

Background information is usually encoded with imperfective aspect, for example (S7-8) *bəjudud* 'used to go, was going' and (S9) *anudud* 'was bringing.' Narratives provide most of this kind of information during the stage; however, during the story, the narrator sometimes interjects some additional background information which has relevance for the immediate situation.

7.3.3 Band 3: Flashback

Flashback encodes as past perfective in Torwali, which is similar to pluperfect in English. Two examples occur in *The Giant*. If flashback is defined as more than simply the narrator taking the audience back to a previous time period, but actually refers to a past event mentioned out of sequence then the sentence in (S26) can be classified as a flashback too. When the woman woke up, the meat from her leg <u>had already</u> disappeared.

(S6)   e   deo   ti   zed məyən hušu.
        one giant ABS.OBL on   love   had.become.PAST.PFV.MSG
        'A giant had loved her.'

(S26b) ...tisi   məndəl ma   ǰan   mas gušu.
        ABS.SG.GEN   thigh   from much meat had.gone.PAST.PFV.MSG
        '...a lot of meat from her thigh had disappeared.'

7.3.4 Band 4: Setting

The setting contains expository information which encodes using stative verbs ('to be' and 'to become') and adjectival predicates. It provides the context in which the narrative takes place, which includes information about the location, time, circumstances and sometimes participants. Usually it is all presented together at the beginning of the narrative in the slot labeled stage.

7.3.5 Band 5: Irrealis information

Irrealis information refers to information that either may happen (future), could happen (subjunctive) or did not happen (negative). Hwang states that questions have been raised about the function of this band since narratives are supposed to tell what **did** happen rather than what did not. Her response is that irrealis information serves several purposes, one is to mark turning points in the story and another is to provide additional explanation. She also says that in English this kind of information (particularly negated information) typically occurs more frequently at the peak, another way to emphasize the fact that tension is peaking (Hwang 1997:311). In *The Giant*, two of the four negated verbs occur in back-to-back sentences in the peak.

(S31) æ   deo te   çʰi   zed tisi   šir   mi
        NEAR.NOM giant ABS.SG.OBL   woman on   ABS.SG.GEN   house in

        yes   hum nə čʰowdud.
        other.people also not was.leaving.IMPFV
        'This giant was not even allowing other people into that woman's house.'

(S32) ...ti   çʰi   bi   te   deo ye qar si ki bad ni ki.
        ABS.SG.ERG   woman again ABS.SG.OBL   giant to rage of any words not did.SP
        '...that woman did not say any words of rage to the giant'

7.3.6 Band 6: Evaluative information

When the narrator wants to interject an opinion or evaluation about a participant or an event, he or she can use the jussive mood to express them just as is done in (S33).

(S33) se   çʰi   aš   hum te   šir   e   əmən sed
        ABS.NOM   woman today also ABS.SG.OBL   house in   oneself with

        howe.
        should.become.3SG.JUS
        'That woman should be living by herself in that house even today.'

Other likely evaluative realizations in the language would include descriptive adjectives, but I have not found any examples in the few texts I have studied to confirm this hypothesis.

7.3.7 Band 7: Cohesive information

In Torwali, subordinate clauses only occur before the main independent clause (also referred to by some researchers as preposed subordinate clauses). If subordinate clauses can be postposed in this language, they are

rare. Thus far, I have not come across one. In Torwali, these subordinate clauses serve the function of providing cohesion. They link sentences together making the transition between them more fluid. One of the functions of these clauses is to provide a time frame in which the events of the main clause occur. For example, in (S10) 'When this woman was drinking, she looked back.' In (S15) 'When she arrived at the house, that spirit was sitting near her fireplace.' Similarly in (S14) 'This woman, having poured water by hand into her water jug, she left.' In most cases, but not all, the proximal deictic is used in conjunction with the subject indicating that the information in the subordinate clause is given or accessible information.

In conclusion, based on the discussion over the preceding pages, I propose the following salience scheme for Torwali narratives.

Table 7.5. Proposed salience scheme for Torwali narratives

Band 1
  Eventline
	Simple perfective aspect
	  (excluding stative and negated verbs)

Band 2 Background	Imperfective
Band 3 Flashback	Past perfective
Band 4 Setting	Stative verbs, adjectival predicates
Band 5 Irrealis	Negatives, future, jussive mood
Band 6 Evaluation	Jussive mood, descriptive adjectives
Band 7 Cohesion	Preposed adverbial/subordinate clauses

7.4 Participant reference

Every language has its own rules and restrictions concerning how participants can be introduced into a story and then tracked through the discourse. In English, a common strategy of introducing a new participant is with an indefinite article in a presentative construction, "There was a boy." When the boy is mentioned a second time soon afterward, we might use a definite article, "The boy was thirteen years old" or a pronoun, "He was thirteen years old." Using Chafe's terminology, the indefinite article in English is used to mark *new information* and the definite article or pronoun, even the omission of the noun or pronoun in a clause, marks *given informa-*

tion, information that has already been made available in the story (1994). The purpose of this section is to examine this issue using this same Torwali text to see what generalizations can be made about the introduction and tracking of its characters.

This narrative contains two major participants, a woman and a giant, whose names are not revealed. The

let', mentioned in the final sentence of the text, is also introduced in the subject position. In contrast, *gam* 'village' where the original storyteller is from, along with the remaining props, *šir* 'house', *noseya* 'grandchildren' and *oso* 'spring' are not mentioned initially as subjects in their respective sentences, but as objects of postpositions. The reason *noseya* 'grandchildren' is interpreted as a prop rather than as a participant is because they (the grandchildren) do nothing in the story. It is not uncommon for some characters of a story to be treated like props, having absolutely no control over what happens to them. For this reason, it makes sense to group them with props rather than participants.

The second grouping, routine tracking, uses two primary strategies: demonstrative pronouns and zero anaphora. Both are used throughout the text, but the difficulty lies in trying to determine their unique purpose within discourse. Nevertheless, I have been able to make some initial conclusions about these two strategies. Zero anaphora occurs only in the subject position. It usually occurs in non-initial clauses, but as illustrated in (S15), it can also occur in sentence-initial clauses. It also only occurs in sentences where the preceding clause or the following clause contains the overtly marked subject. Demonstrative pronouns, however, are used when a character, who has already been introduced in the story, is referred to in a sentence and he or she needs to be distinguished from another character who is also mentioned in the same sentence. A full noun phrase is unnecessary to make this distinction and zero anaphora cannot make the distinction. This is the function of pronouns within Torwali discourse.

The last two groupings address the spatial characteristics of Torwali demonstrative pronouns. Typically, they are used to mark the distance between a referent and the speaker. Torwali makes a three-way distinction with these: near (NEAR), a little far but still visible (FAR) and out of sight (ABSent). In discourse, they serve another purpose in addition to marking physical distance. When used as modifiers, as in *se ç^{h}i* 'that woman', the most distant deictics are used primarily to restage participants following a temporal shift even if he or she were the focus in previous sentences. When a temporal shift takes place, for example *te dia bat* 'after that day', participants are most often referred to with an ABS demonstrative pronoun, as in *se deo* 'that giant' in the same sentence.

Once participants have been staged, they can be given even higher status by being brought center-stage and made the focus during that specific part of the story by using a noun phrase consisting of a noun and a proximal deictic modifier, such as *mi ç*^{h}*i* 'this woman.'

What is interesting in this text is that the giant, unlike the woman who is marked with proximal deictics almost immediately, is not brought center-stage until the beginning of the second episode. Before this, he has already made several appearances to her, and they have had one recorded conversation. The beginning of Episode 2 starts when the giant brings the leg of a human to the woman—his first real action of the story. At this point, his deictic referent changes from ABS to NEAR.

Table 7.6 shows the reference forms used for the participants and some of the props. The purpose of this table is not to show an ordered list of references as they occur in the narrative, but to illustrate how the different reference forms are used to refer to the characters and props in the story. For example, participants are first introduced in the context of a noun phrase containing the indefinite particle *e*. In contrast, some props are first mentioned in a simple noun form with no additional modifiers. Participants are tracked using zero anaphora ($\varnothing$) and a variety of pronouns. Those used in direct quotations are bracketed (as in <<*t*^{h}*æ*>>). When participants are restaged, they are usually referred to by a noun phrase containing a distal pronoun. When they are given focus on center-stage, they are also referred to by a noun phrase, but this time with a proximal pronoun. Arranging references in a table like this allows us to see patterns more easily which enables us to draw conclusions based on the patterns we have observed.

Table 7.6. Participant reference

	Village	Woman	Giant	Spring	House	Amulet
First mention	*e gam* 'a village'	*e çʰi* 'a woman'	*e deo* 'a giant' (in Stage) *gən e šey* 'big a thing' (in Episode 1)	*oso* 'spring.OBL'	*šir* 'house.OBL'	*e teyis* 'an amulet'
Routine tracking		∅ *ti* ABS.ERG *ti* ABS.OBL *he* NEAR.NOM *i* NEAR.ERG *isi* FAR.GEN *tisi* ABS.GEN *tes* ABS.ACC <<*tʰæ*>> 2SG.ACC <<*tʰe*>> 2SG.OBL	∅ *es* NEAR.OBL *ti* ABS.ERG <<*tu*>> 2SG.NOM <<*a*>> 1SG.NOM <<*mæ*>> 1SG.ERG <<*tæ*>> 2SG.ERG	*oso* 'spring.OBL' *æ oso* NEAR.NOM 'spring'	*te šir* ABS.OBL 'house' *tisi šir* ABS.GEN 'house'	*te teyis* ABS.ACC 'amulet'
Restaging		*se çʰi* ABS.NOM 'woman' *ti çʰi* ABS.ERG 'woman'	*deo (ye)* giant (to) *ti deo* ABS.ERG 'giant' *se deo* ABS.NOM 'giant'		*šir* 'house.OBL' *te šir* ABS.OBL 'house'	
Center-stage focus		*he çʰi* NEAR.ACC 'woman' *me çʰi* NEAR.ACC 'woman' *mi çʰi* NEAR.ERG 'woman'	*mi deo* NEAR.ERG *æ deo* NEAR 'giant'			

Another way to observe features of the participant reference system is to track individual participant(s) through the text, noting the strategies used along the way. Therefore, over the next few pages, we will first track the references used for the woman, and then the giant.

After being introduced, the narrator refers to the woman with distal deictics while providing some initial background information about her.

(S5) ti   me   qisa tunu æ~   de   kiji.
      ABS.SG.ERG   NEAR.SG.ACC   story own   mouth with has.done.PRES.PFV
      'She has told this story with her own mouth.'

(S6) e   deo ti   zed məyən hušu.
      one giant **ABS**.SG.OBL   on   love   had.become.PAST.PFV
      'A giant had loved her.'

When the audience is finally informed of an activity she used to do which is relevant to the eventline, the author shifts to a proximal deictic. See (S7).

(S7) æ   cʰi yə zəwan æši   da   he   u
      NEAR.NOM   woman ?? young was.PAST.FSG SUBMKR   **NEAR**.NOM water

      anu   ye oso   ye bəĭudud.
      to.bring.INF for spring to   used.to.go.IMPFV
      'When this woman was young, she used to go to the spring for bringing water.'

From this point until right before the peak, the narrator refers to the woman using a proximal deictic with only a couple of exceptions. One is during the dialogue with the giant in (S18), at which time she becomes the addressee and is referred to by the second person pronoun. The other is in (S19) when the narrator pauses from the story and provides some additional background information about the woman, which is relevant at that point in the story. It seems reasonable to conclude the reason for the shift from proximal to distant is due to the fact that this sentence provides background information about something that happened before the story began. Since it is outside of the events of this story, the character is 'removed' from the story and thus marked using a distal marker.

The last sentence before peak (S26) contains a temporal shift, *ẓada...* 'the next morning...' as does the first sentence of the peak (S27) *bi te dəwi di ye...* 'And then, on another day....'' As a result the woman is

restaged to a new time period using the distal forms *se* and *tisi*, ABS.NOM and ABS.SG.GEN respectively. In (S28) and (S29), the woman has once again taken center-stage and is referenced with proximal deictics.

(S28b) ...me   çʰi   qohiqaf si kʰəna ye rəwan hu.
NEAR.SG.ACC woman Qohiqaf of mtns. to move became.SP.MSG
'When the giant became aware of this, that spirit having come again in the night <u>moved this woman to the mountains of Qohiqaf</u>.'

(S29) he   ər pən ge əwow   da   mi   çʰi
NEAR.NOM half way to   to.arrive.INF SUBMKR **NEAR**.SG.ERGwoman

es   ke čer minət.zæri   ki.
NEAR.SG.OBL to much much.insistence did.SP
'When they arrived half way, this woman really pleaded with him (to take her back home).'

At this point in the story, the giant gives in and takes her back to her house. However, he confines her there and does not allow her any visitors. From this point onward, she is referenced using the more distant deictic. There are a couple of possible explanations for this. One is that as the tension begins to subside and the story begins to wind up, this character's role is less important so she is moved from center-stage to the periphery. Another alternative might be that this is emphasizing the powerlessness of the woman. After the giant returns her to her home, her freedom is significantly curtailed.

If, however, we take a moment and consider the role of the giant at this point in the narrative, we see that he is right in center-stage when he confines her to her home and does not allow anyone to visit her. After that, he too takes a ABS deictic. In fact, as the peak ends and the narrator sums up everything in this final portion of the text that Longacre calls *closure*, both main participants are off-stage. The only thing that is highlighted with a proximal deictic is in (S35), one of the last sentences of the narrative where the focus shifts to '**this** story,' as she brings the story to an end.

(S35) æ   qisa aš   ma čəw biš kale   muš si čʰi.
NEAR.NOM story today from four twenty years.OBL before of is.PRES.FSG
'This story is from eighty years ago today.'

As attention turns now to the different forms used to track the giant, remember from an earlier discussion that the giant is introduced to the audience as an entity that existed during the stage. Then during Episode 1, he is introduced to the woman with a combination generic noun and modifier *gən e šey* 'one big thing.' He inter-

acts with the woman during the first episode, but does not take center-stage until the second episode in (S21).

(S21) he   e   di   əmən sed bəyel æši   da
       NEAR.NOM one day oneself with sitting was.PAST.FSG   SUBMKR

       mi   deo es   te   insan si ǰan ginde   ap.
       NEAR.SG.ERG giant NEAR.SG.OBL   to   human of leg having.taken.CP came.SP.MSG
       'One day, when she was sitting by herself, the spirit having taking a leg of a human came (to her).'

Aside from the dialogue between him and the woman in the second half of this episode where he is addressed by the woman using the second-person ergative pronoun, the giant remains center-stage for almost the whole episode. Only in the final sentence (S25) is he referred to with the distal deictic *ti*, and in this instance, I cannot offer any plausible explanation for the shift, unless the message is to say that after he shot her and left and in doing so became distant and detached from her.

(S25) ti   tunu čin æni   si   noke   de   me   çʰi
       ABS.SG.ERG   own   small finger of fingernail.OBL with NEAR.SG.ACC woman

       si   məndəl si dak   dit   a~   bi   wapəs   ga.
       of   thigh   of shot gave.SP and again back   went.SP.MSG
       'He shot the thigh of this woman with the fingernail of his small finger (his pinky), and went back (to where he came from).'

The peak begins in (S28) with the giant moving from being restaged at the start of the new scene in a new temporal location to becoming center-stage very quickly. The narrator uses the common noun *deo* 'giant' to begin the subordinate clause of the sentence. The second subordinate clause of the sentence consists of a noun combined with a distal deictic, *ti deo* ABS.SG.ERG 'giant'. The main clause completes the sentence with zero anaphora in the subject position. In the next sentence, he is referenced in the subordinate clause with the proximal deictic *he* NEAR.NOM. In (S30) because another temporal shift occurs, the giant is referred to by an NP consisting of an ABS deictic and a noun, and in (S31) he performs his final act on center-stage. He does not allow anyone to visit the woman anymore. He is then demoted to the periphery referenced by a noun phrase with a distal pronoun for the remainder of the story.

The patterns associated with the props are much shorter and much simpler. Therefore additional commentary pertaining to the methods used to track them through the discourse than what is presented in

Table 7.6 is not necessary.

Based on the discussion so far, we can generalize some basic principles of the participant reference system in Torwali. The subsequent outline illustrates how participants are introduced, tracked, restaged and brought to center-stage in narrative discourse based on the analysis of this folktale.

First-mention

1. Central participant

    a. Noun phrase consisting of an indefinite particle and an optional modifier (S4, S6, S11)

    b. Typically introduced in the subject position of an intransitive or stative/existential clause (S4, S11)

2. An important prop

    a. Noun phrase consisting of an indefinite particle (S38)

    b. Introduced in the direct object position (S38)[11]

3. Other props

    a. Noun phrase with no deictic or modifier (S7, S15)

    b. Tends to be introduced in the object slot (S7, S15, S27)

Routine tracking

1. Demonstrative pronouns: used when a character, who has already been introduced, is referred to in a sentence and he/she needs to be distinguished from another character also mentioned in the same sentence (S22, S30)

    a. Demonstrative pronouns marking distance (ABS) are used to track participants or props which have been at least temporarily moved off center-stage (S16, S30)

    b. Demonstrative pronouns marking proximity (NEAR) track participants or props which have recently shifted from new to given, or from off-center-stage to center-stage (S21, S22, S29)

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[11]This is the only example found in the text, which makes it hard to state a generalization. Treat this is a hypothesis that will need testing in the field. It may be that we will find that the language does not distinguish between important props and other props. A lot more data will need to be analyzed to know for sure.

2. Zero anaphora: only occurs in the subject position, usually occurring in non-initial clauses, and only in sentences where the subject is overtly marked in an adjacent clause (S11, S14, S20)

Restaging (from a previous time period to the present one)

1. Noun phrase with distal deictic (S20, S26, S30)

2. Proper name (not in *The Giant*, but documented in other texts)

Center-stage focus

1. Noun phrase with proximal deictic (S10, S14, S20)

Different forms of participant reference are used in Torwali: noun phrases with or without deictics, pronouns and zero anaphora. Which form is used depends on the rank of the participant or prop within the story and the function it serves at a particular point in the discourse. From this outline, it is evident that the ranking of participants and props is more important for first-mentions. (Hwang makes a similar claim for English (1997:307).) For tracking, restaging and purposes of focus, the reference system does not follow any ranking scheme to distinguish these, so one set of rules can be established for both participants and props.

7.5 Summary

This short text, *The Giant*, has provided an insight into some of the discourse features of Torwali narratives. We have discussed issues relating to profile and peak, spectrum and participant reference and shown how these issues interrelate. By analyzing a text's profile and chunking it into several logically-related sections, researchers can more easily observe patterns and draw conclusions regarding the spectrum features of a language. By considering the profile of a text, he or she can better understand why the characteristics of the spectrum and the participant reference system do not seem to follow their own rules as the story progresses forward from the first sentence to the last, particularly at the peak. Longacre describes the process of analyzing the peak of a narrative as presenting "analytic difficulty". Yet, when we note the features at peak, because the rules governing that area are obviously different from the remainder of the text, the researcher can often deduce more accurately what the primary rules are that govern the spectrum and participant reference systems .

8. CONCLUSION

This paper has attempted to present information which has not been documented before, namely a phonological sketch and a presentation of narrative discourse features. Even the details in the middle, discussion of the basic facts of Torwali syntax, provides many more details than previous researchers have. As all of these features have been discussed, I have included sample data ranging from vernacular words to sentences to an entire text attached in the appendix of this paper. As much as possible, these examples came from naturally occurring data.

The paper began with a look at the Torwali people: their geographical location and their sociolinguistic situation. They have a great pride for their language and heritage. It can be heard in the local marketplaces and in the homes, and many Torwali people from various walks of life are actively involved in preserving and developing the language.

An analysis of the phonological system was then presented. Thirty-four consonants and seven vowels have been posited as phonemes in the language. Half of the consonants are either dental or retroflex phonemes, and vowels are split between oral and nasalized. One of the most significant phonological processes observed in the language is weakening which occurs intervocalically causing plosives to become more continuant resulting in intervocalic fricatives and sometimes even approximates. Word-finally, particularly in utterance-final positions, we also noted a another form of weakening—a devoicing of plosives.

Tone was introduced as a very important feature of the language used to mark not only lexical distinctions, but also to mark a number of grammatical functions. Some unusual features of tone were also presented. First of all, it was noted that some Torwali words have breathiness on their vowels, and that this breathiness is associated with low pitch. Not all words having L and LH tone patterns have breathy voice, but breathiness is an optional feature of these tones. It was also noted that HL tone behaves differently from the others. Instead of having its tonal segments H and L assigned to the syllables of the word in question, H is assigned to this word and L applies to the first syllable of the following word.

Turning our attention to issues of grammar, we first presented features of Torwali typology. We found that the language is a strong head-final language with verbs occurring clause-finally in pragmatically-neutral clauses, suffixes rather than prefixes and postpositions rather than prepositions. Also documented were head-final noun phrases and head-final postpositional phrases. Main clauses almost always follow subordinate clauses and adjectives always follow the standard when producing comparatives. Confirming Greenberg's universals, as an SOV language, Torwali has many head-final characteristics.

The next issue of grammar discussed in this paper was syntactic categories where a description of nouns, pronouns, adjectives, numerals, verbs and adverbs was presented. Following that presentation, a description of noun and verb inflection was presented. It was noted that nouns do not exhibit a full range of morphological case markers, but pronouns do. A discussion of the Torwali verb tense, aspect and mood followed which included details pertaining to structural characteristics of the verb word, both for finite and non-finite verbs. At the conclusion of the discussion on inflectional morphology, features of derivational morphology were presented, which included discussions about compounding, nominalization and denominalization as well as causative and passive constructions.

We then transitioned up the grammatical hierarchy to address some clause-level features. We discussed complex predicates and explained how they consist of two words (a verb along with either a noun or adjective) and illustrated how each of these components function together to provide the semantic meaning for the clause, but function independently as grammatical constituents within the clause. In addition to looking at these, we also looked at the grammatical relations. Here we found an interesting discovery. We found that Torwali can be classified as a split ergative language with the ergative system operating in clauses with perfective aspect or with *future tense*. This is highly unusual. Typically, languages that have a split make the split between completed and non-completed action, between past and non-past or between completed action before *now* and those that are just potential. Torwali views things differently by distinguishing *current* and *non-current* where current refers not only to present time, but also to a time frame in the past that provides a context for something else to happen. This is at least one function of imperfective aspect: "I was mowing the lawn when it began to rain." If we think of the function of imperfective in this sentence as bringing the reader or listener to that point in time so

that he or she is no longer looking back into time, but has in a sense gone back into time. Because of this shift in time for the reader, that point in time becomes current to him or her in much the same way that present tense is current. If we look at it from this perspective, we can better understand how present tense and imperfective aspect can be grouped together and distinguished from non-current time, perfective aspect and future.

Finally, after describing the structure and distributional characteristics of many different grammatical features, we focused our attention on understanding how they work together as a means of communication by discussing discourse features of a narrative text. We began by chunking the text into smaller units so we could discover the characteristics associated with the rising and falling of tension within the story. This in turn helped us to make some generalizations regarding how tense, aspect, mood and semantic case roles are used to package information within Torwali narratives. Lastly, we looked at how participants and props are introduced in narratives and how they are tracked through the story. The most common strategy is to use deictics. It was shown that these deictic not only express spatial distance between characters, but also 'stage' distance. They restage characters after shifts in temporal location and after long periods of being off-stage. They are also used to focus participants on center-stage. By using proximal deictics, the narrator is able to focus the attention of his or her audience on a particular character in a story. By switching between proximal and distal deictics, the narrator can shift the focus from character to character.

The purpose of this project has been to present an overview of the language data so that some generalizations about the language could be made in order to document some of the grammatical aspects of this language and encourage further study. Many questions have been answered in this paper, and some have not. One of the most crucial areas needing more study is in the area of tonal analysis. It has implications for many different grammatical issues from vowel length to morphological case marking to forming compound words. Also needing more study is the pronominal case system. Some cases have several variant forms. Why do these exist? Are they just phonological variants or do they have some other distributional or function distinction? What about the accusative case system? Does it exist in Torwali or not? In addition, I would like to see more analysis of Torwali discourse features carried out. What other features are used to mark peak? Are there other strategies used to track participants and props? Do discourse features of folktales differ from the features of true historical ac-

counts? How do the features of narrative texts compare with other discourse types like hortatory, behavioral and procedural? These are some of the questions that remain.

APPENDIX

THE TORWALI NARRATIVE TEXT USED FOR THIS PAPER

The Giant

(S1)
deo　　si　　qisa
giant　　of　　story
'The story of a spirit-like giant'

(S2)
čilas　　me　e　　gam　　tʰu.
Chilaas　　in　1　　village　　is.PRES.MSG
'There is a village in Chilas.'

(S3)
tisi　　　　nam　tʰornala　　tʰu.
ABS.SG.GEN　　name　Thornala　　is.PRES.MSG
'Its name is Thornala.'

(S4)
tʰet　　e　　çʰi　　čʰi.
there　　one　woman　is.PRES.FSG
'There (at that place) is a woman.'

(S5)
ti　　　　　me　　　　　qisa　tunu　æ~　　de　kiǰi.
ABS.SG.ERG　NEAR.SG.ACC　story　own　mouth　with　has.done.PRES.PFV.FSG
'She has told this story with her own mouth.'

(S6)
e　　deo　　　　ti　　　　　zed　　məyən　hušu.
one　giant　　　ABS.SG.OBL　on　　love　　had.become.PAST.PFV.MSG
'A giant had loved her.'

(S7)
æ　　　　çʰi　　yə　zəwan　æši　　　　da　　he　　　　u　　　anu
NEAR.NOM　woman　??　young　was.PAST..FSG　SUBMKR　NEAR.NOM　water　to.bring
ye　oso　　ye　bəǰudud.
to　spring　to　was.going.IMPFV
'When this woman was young, she used to go to the spring for bringing water.'

(S8)
te　　　　　wəx　me　çʰi　　u　　si　anu　　　　si　keǰa　osoa　ye　bəǰudud.
ABS.SG.OBL　time　in　woman　water　of　to.bring　　of　for　spring　to　was.going.IMPFV
'At that time, women were going to the spring for bringing water.'

(S9)
he   e   di   u   anudud.   (æ   oso   e   kʰən
NEAR.NOM one   day   water was.bringing NEAR.NOM spring one   mountains
si   miye   ašu.)
of   inside   was.PAST.MSG
'One day she was bringing water. (This spring was in the mountains)'

(S10)
də   he   çʰi   u   punudud   da   i   pæš
then NEAR.NOM woman   water was.drinking.IMPFV   SUBMKR   NEAR.SG.ERG   backside
ke   budu.
to   looked.SP.3SG
'Then, when this woman was drinking water, she looked back.'

(S11)
e   čæl   zed gən e   šey   (maş) bəyel
one   large.rock.OBL on big one thing man   sitting
tʰu,   a~   me   çʰi   ye həzudud.
is.PRES.MSG and NEAR.SG.OBL   woman   to was.laughing.IMPFV
'A big thing was sitting on a large rock, and laughing at this woman.'

(S12)
he   dæk   bi.
NEAR.NOM few   was.frightened.SP.FSG
'She became a little frightened.'

(S13)
(te   wəx si xələk xas   ni budud.)
ABS.SG.OBL   time of people limit not was.fearing.IMPFV
'People of that time were not fearing anything.'

(S14)
mi   çʰi   tunu beden   ge hat tʰelde   dæ~y   dit.
NEAR.SG.ERG woman own big.water.jug to hand having.poured.CP movement gave.SP
'This woman, having poured (the water) into her own jug by hand, walked (left).'

(S15)
šir   ke awe   da   se   deo   isi
house to arrived.SP.FSG SUBMKR ABS.NOM male.spirit FAR.SG.GEN
gutʰura   (aŋgəti) si kæš   ke bəyel   ašu.
fireplace.OBL fireplace of nearby to sitting was.PAST.MSG
'When she arrived at the house, the giant was sitting at the woman's fireplace.'

(S16)
i   ti   ma   təwəs ki.
NEAR.ERG ABS.SG.OBL from question did.SP
'She asked him a question.'

(S17)
tu   met ke kəy   aptu?
2SG.NOM here to why have.come.PRES.PRF.MSG
'Why did you come here?'

(S18)

se	deo	me	cʰi	ye bənədu	a	tʰæ
ABS.NOM	giant	NEAR.SG.ACC	woman	to he.is.saying	1SG.NOM	2SG.ACC

čer	wəx	ma	sarudud	ase	mæ	tʰe	ye	əmən	nə
much	time	from	was.looking.IMPFV	but	1SG.ERG	2SG.OBL	to	oneself	not

pəšadušu.
had.shown.CAUS.PAST.PRF.MSG

'The giant says to the woman, "I was watching you for a long time, but I had not shown myself to you."'

(S19)

se	cʰi	əmən	sed	te	šir	e	howdud.
ABS.NOM	woman	oneself	with	ABS.SG.OBL	house	in	was.becoming.IMPFV

'The woman was living by herself in that house.'

(S20)

te	dia	bat	se	deo	hər	ẓæt	e
that.ABS	day.OBL	after	ABS.NOM	giant	every	night	in

me	cʰi	si	kæš	ke yewsæt,	a~	me	cʰi
NEAR.SG.OBL	woman	of	nearby	to start.to.come.INC	and	NEAR.SG.OBL	woman

zed	betmet	kowsæt.
on	a.lot.of.talking	about.to.do.INC

'After that day, that giant started to come to this woman every night, and started to do a lot of talking with this woman.'

(S21)

he	e	di	əmən	set	bəyel	æši	da
NEAR.NOM	one	day	oneself	with	sitting	was.F.SG	SUBMKR

mi	deo	es	te	insan	si	ǰaŋ	ginde	ap.
3AG.SG.NEAR	giant	NEAR.SG.OBL to	human	of	leg	having.taken.CP	came.SP.MSG

'One day, when she was sitting by herself, the giant having taking a leg of a human came (to her).'

(S22)

ti	ma	æ	cʰi	es	te	qara	gəy.
ABS.SG.OBL	from	NEAR.NOM	woman	NEAR.SG.OBL to	rage	went.SP

'At this, this woman became enraged toward him.'

(S23)

bənəji	tæ	mes	ka	anua?
she.says.PRES.FSG	2SG.ERG	NEAR.SG.ACC	what	bring.SP.MSG.RSMKR

'She said, "What did you bring?"'

(S24)

me	deo	de	qar	ap.
NEAR.SG.ACC	giant	on	rage	came.SP.MSG

'The giant became enraged.(Lit. Rage came upon the giant.)'

(S25)

ti	tunu	čin	æŋi	si	noke	de	me	çʰi
ABS.SG.ERG	own	small	finger	of	fingernail.OBL	with	NEAR.SG.ACC	woman

si	məndəl	si	dak	dit.	a~	bi	wapəs	ga.
of	thigh	of	shot	gave.SP	and	again	back	went.SP.MSG

'He shot the thigh of this woman with the fingernail of his small finger (pinky), and went back (where he came from).'

(S26)

ẓada	se	çʰi	išit	da	tisi	məndəl
tomorrow.morning	ABS.NOM	woman	woke.up.SP	SUBMKR	ABS.SG.GEN	thigh

ma	ǰan	mas	gušu.
from	much	meat	had.gone.PAST.PFV.MSG

'The next morning, when the woman woke up, a lot of meat from her thigh had disappeared.'

(S27)

bi	te	dwi	di	ye	ti	tunu	noseya	ye	me
again	ABS.SG.OBL	other	day	to	ABS.SG.ERG	own	grandsons.OBL	to	NEAR.SG.ACC

ṭol	qisa	ki.
all	story	did.SP

'Then, on another day, she told the whole story to her grandchildren.'

(S28)

deo	ye	pəta	geṛi	da	ti	deo
giant	to	knowledge	arrived.SP.FSG	SUBMKR	ABS.SG.ERG	giant

bi	ẓæte	yede	me	çʰi	qohiqaf	si
again	in.the.night	having.come.CP	NEAR.SG.ACC	woman	name.of.mtn	of

kʰəna	ye	ginde	rəwan	hu.
mountains	to	having.taken.CP	move	became.SP.MSG

'When the giant became aware of this (that she had told her grandchildren about what had happened), that spirit having come again in the night moved this woman to the mountains of "Qohiqaf".'

(S29)

he	ər	pən	ge	əwow	da	mi	çʰi
NEAR.NOM	half	way	to	to.arrive	SUBMKR	NEAR.SG.ERG	woman

es	ke	čer	minət.zæri	ki.
NEAR.SG.OBL	to	much	much.insistence	did.SP

'When they arrived half way, this woman really pleaded with him.'

(S30)

tela	pæš	ti	deo	tes
from.that.occasion	after	ABS.SG.ERG	giant	ABS.SG.ACC

tisi	šir	te	pədi	ye	æni.
ABS.SG.GEN	house	to	back	to	brought.SP.FSG

'After that, the giant brought her back to her own house.'

(S31)
æ   deo   te   çʰi   zed tisi   šir   mi
NEAR.NOM giant   ABS.SG.OBL woman on ABS.SG.GEN house in
yes   hum nə   čʰowdud.
other.people   also   not   was.leaving.IMPFV
'This giant was not leaving even another person into that woman's house. (i.e. he didn't allow even one person to visit her.)'

(S32)
ti   ma bad ti   çʰi   bi te   deo   ye qar si ki
ABS.SG.OBL   from after ABS.SG.ERG   woman again ABS.SG.OBL giant to rage of any
bat   ni   ki.
words   not   did.SP
'After that, that woman did not say any words of rage to the giant.'

(S33)
se   çʰi   aš   hum te   šir e əmən sed howe.
ABS.NOM   woman today also ABS.SG.OBL house in   oneself with should.become.3SG.JUS
'That woman should be (live) by herself in that house even today.'

(S34)
se   deo mere hum hər ẓæte   te   šir ke yedu.
ABS.NOM codger now   also every in.the.night ABS.SG.OBL house to is.coming.PRES.MSG
'That giant even now comes to that house every night.'

(S35)
æ   qisa aš   ma čəw biš kale muš si čʰi.
NEAR.NOM story today from four twenty years before of is.PRES.FSG
'This story is from eighty years ago today.'

(S36)
mere hum se   çʰi   čʰi   a~ dege   hiji.
now   also ABS.NOM   woman is.PRES.FSG and old.FSG.AP become.PRES.PFV.FSG
'Even now that woman is (alive) and has become old.'

(S37)
aš   hum se deo   te   çʰi   si kæn ge yedu.
today also ABS giant   ABS.SG.OBL woman of near to is.coming.PRES.MSG
'Even today, that giant is coming to that woman.'

(S38)
te   çʰi   si maṛ   me e teyis čʰi   te
ABS.SG.OBL woman of neckline in   one amulet it.is.PRES.FSG   ABS.SG.ACC
teyis yə nigaləji   da   se   deo   te
amulet ?? remove.PRES.FSG   SUBMKR ABS.NOM   giant   ABS.SG.OBL
sat me tisi   kæš ke hazer hodu.
time in   ABS.SG.GEN   nearby to present becomes.PRES.MSG
'When there is an amulet on the neckline of a woman that she removes, at that time, that spirit-like giant becomes present near her.'

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The author received his Master of Arts in Linguistics from The University of Texas at Arlington in December 2001. He was born in St. Marys, Ohio and graduated from Memorial High School in St. Marys. Four years later, in 1989, he graduated from Asbury College, located near Lexington, Kentucky, with a Bachelor of Arts degree. He is married and has two boys.