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Language Impairment in Zulu*

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1. Language Acquisition and Bantu Languages

The acquisition of southern Bantu languages has been relatively well studied, with dissertations on the acquisition of the Sotho languages Sesotho (Connelly 1984, Demuth 1984) and Setswana (Tsonope 1987), and the Nguni languages Siswati (Kunene 1979) and Zulu (Suzman 1991), as well as a number of other articles on Sesotho and Zulu acquisition. Many of these studies have investigated the acquisition of the noun class prefixes and the nominal/verbal agreement system, but there have also been studies on the acquisition of constructions such as passives, relative clauses, wh-questions and the tonal system (cf. Demuth 1992 for review). Thus, although there is much we do not know about how and when certain grammatical phenomena are acquired in southern Bantu languages, we do know that children learning these languages appear to be relatively precocious when compared with their English-speaking peers. In particular, children learning southern Bantu languages have mastered the noun class and agreement system before the age of 3, and the competence with complex grammatical constructions and the grammatical tone system is well underway. Early 'errors' in noun class and agreement morphology tend to be omission and/or language-specific errors, e.g. overgeneralization amongst *i*-commencing prefixes in Zulu, and use of 'shadow vowels' rather than full CV prefixes in Sesotho (Demuth 1992, Suzman 1996).

The productive nature of Bantu morphological and agreement systems and its early and error free acquisition in normally developing children poses an interesting arena for exploring the nature of language learning disorders. This is especially true given reports of difficulties with inflectional morphology for children with Specific Language Impairment (henceforth SLI). That these difficulties appear crosslinguistically, even in morphologically rich languages such as Italian (cf. Leonard 1992), makes the study of language delayed children learning Bantu languages all the more critical for understanding the nature of language impairment in children with SLI. This paper provides a preliminary report of recent findings from one Zulu-speaking child, exploring phonological, morphological and syntactic deficits in his linguistic system.

The paper is organized as follows: After an introduction to the Zulu noun class and agreement system and a discussion of normal development we present preliminary findings on the impaired speech of a 2;7-year-old Zulu-speaking boy. We conclude with a discussion of the implications of this study and outline areas for further research.

2. The Grammatical Structure of Zulu

As shown in the examples in (1) and (2), basic word order in Zulu is SVO. Zulu is a head-initial head marking language - that is, nominal and verbal modifiers follow the noun and verb respectively, and grammatical morphology is prefixed to both nouns and verbs. (Glosses are: Poss = possessive, Num = numeral, Pres = present tense, Prf = perfect aspect, NC = noun class prefix, SM = subject agreement marker, OM = object marker, SM1s = 1st person singular subject marker, and 2, 8 etc. = the number of the noun class).

- (1) Aba-ntwana ba-mi aba-bili ba-ya-hamba
 NC2-children Poss2-my Num2-two SM2-Pres-go
 'My two children are going'
- (2) Izi-cathulo za-mi ezi-bili zi-lahlek-ile
 NC8-shoes Poss8-my Num8-two SM8-lose-Prf
 'My two shoes are lost'

Nominal modifiers such as Possessives, Numerals, and Adjectives, as well as the verb itself, all 'agree' with the noun class of the head noun - noun class 2 in (1), and noun class 8 in (2). The entire noun class and agreement system for Zulu is presented below in Table 1, where classes represent different singular/plural pairs, e.g. 1/2 *umu-ntu/aba-ntu* = person/people.

Noun Class	NC Prefix	Poss	Rel/Adj	SM	OM	Dem PN
1	u(m(u))-	wa-	o-	u-	m-	lo
2	aba-	ba-	aba-	ba-	ba-	laba
1a	u:-	same as 1		
2a	o:-	same as 2		
3		wa-	o-	(w)u-	wu-	lo
4	imi-	ya-	e-	(y)i-	wu-	le
5	i:-	la-	eli-	li-	li-	leli
6	ama-	a-	a-	a-	wa-	la
7	isi-	sa-	esi-	si-	si-	lesi
8	izi-	za-	ezi-	zi-	zi-	lezi
9	i(N)-	ya-	e-	(y)i-	yi-	le
10	izi(N)-	za-	ezi-	zi-	zi-	lezi
11	u:-	lwa-	olu-	lu-	lu-	lolu
14	ubu-	ba-	obu-	bu-	bu-	lobu
15	uku-	kwa-	oku-	ku-	ku-	lokhu

Table 1. Noun Class and Agreement Morphology in Zulu

As shown in Table 1, agreement morphology in Bantu languages is generally morpho-phonologically 'transparent', possibly facilitating the relatively early and error-free acquisition of Bantu noun class and agreement

systems as compared with the more morpho-phonologically ‘opaque’ systems of languages like Icelandic or even German. We might therefore expect language impaired children to learn these systems without difficulty. Alternatively, if SLI children have problems with constructing productive morphological systems, we might expect the acquisition of Bantu noun class and agreement systems to be difficult.

3. Normal Development of Grammatical Morphology and Syntax

As mentioned in the introduction, there have been many studies of the acquisition of grammatical morphology in Bantu languages. Although the overall patterns of acquisition are very similar, the details differ slightly from language to language. This is partly due to differences in the morphological and phonological structure of Sotho (Sesotho and Setswana) and Nguni (Zulu and Siswati) languages.

Noun class prefixes in Sotho languages are monosyllabic forms composed of a consonant and a vowel (CV-), and the languages permit sequences of vowels. In contrast, noun class prefixes in Nguni languages consist of a pre-prefix and a prefix. The pre-prefix is identical to the prefix vowel: Compare the word ‘school’ *i-si+kolo* vs. *se+kolo* in Zulu and Sesotho respectively. The Zulu pre-prefix results in a variety of noun class prefix forms, surfacing as V:, VCV, or VNasal, as shown in Table 1.

In addition, vowel sequences are generally reduced in spoken Zulu, the first of two consecutive vowels being deleted, often across a word or morpheme boundary. This means that any VCV- noun class prefix may be shortened to VC- before a vowel-initial noun stem, and that the final vowel of a verb stem will be omitted when followed by an infinitival or nominal complement with a VCV- prefix. This is shown in (3), where ‘deleted’ vowels are indicated with an apostrophe in the line in parentheses, representing actual fluent speech.

- (3) Ba-thanda uku-phuza u-bisi
(Ba-thand' uku-phuz' u-bisi)
SM2-like NC15-drink NC11-milk
'They like to drink milk'

The result of this surface level phonological restructuring is that CV syllable structures are maintained throughout the utterance. As will be shown below, an understanding of these issues is necessary for evaluating the nature of both normal and impaired children’s acquisition of Zulu grammatical morphology. Stages in the development of noun class prefixes in both Sotho and Zulu are given in Table 2 (cf. Suzman 1991, Demuth 1992). The normal development of the syntactic system has also been well documented; this is outlined in Table 3 (see Demuth 1992).

In sum, there exists enough literature on the normal development of noun class prefixes in southern Bantu languages in general and sufficient investigation of several major syntactic constructions in both Sesotho and Zulu to provide the beginnings of a baseline for investigating language impairment.

Noun Class Prefixes	2 yrs.	2;6 yrs.	3 yrs.
Zulu V(C)V	∅, V	V(N) ~ VCV	V:, V(N), VCV
Sotho CV	∅, N, V	V ~ N ~ V	CV

Table 2. Normal Development of Noun Class Prefixes

2 yrs.	Simple SVO Sentences Simple Questions
2;8 yrs.	Nouns - representation from several noun classes Increased use of Nominal Modifiers Questions of all types - subject, object, oblique Some use of Passives Some use of Relative Clauses & Cleft Constructions Some use of Expletives/Impersonal Constructions

Table 3. Normal Development Sesotho/Zulu Syntactic Constructions

We turn now to a description of the language and health situation for children growing up in Soweto, and the impact this may have on assessing different types of language learning disorders.

4. The Study

Before assessing the possibility that a child may have SLI many issues need to be addressed, and some of these are specific to South Africa. First, the medical history of the child must be checked to determine if there have been medical problems such as a stroke, otitis media, mental retardation, or other cognitive difficulties that might affect language. Fortunately medical records in South Africa are available for many children under the age of five. Second is the issue of the linguistic environment in which the child is being raised. In urban areas like Soweto, where people have immigrated from many parts of southern Africa, and where a child's parents may be speakers of different languages, the linguistic input a child hears may be a combination of several languages on a given day - including Sesotho, Setswana, Zulu, Venda, English, or Afrikaans. Alternatively, a child may hear a single language if he lives with his grandmother at her employers' house, as is the case with the child described in this study. There is therefore a great need to document the sociolinguistic situation in multilingual urban settings in the South African context, and the possible effects this might have on children learning language. An indication of the importance this may have comes from a preliminary investigation of several Zulu-, Xhosa-, and Sesotho-speaking children with reported language impairment where lexical items from more than one language were found in

each child's speech. This raises serious questions about the type of linguistic system these children are developing. Finally, there are few Speech-Language Pathologists who are native speakers of any of these languages, and there are few appropriate assessment materials that incorporate measures of developmental norms.

In order to control for some of these factors we have therefore restricted the present study to one child (Sipho) with normal health records who is being raised by his Zulu-speaking grandmother. Data were collected from spontaneous interactions with his grandmother and an older child.

Sipho was 2;7 years old at the onset of the study. His grandmother had referred him to clinicians for what she perceived as 'delayed' speech. Professional diagnosis by the Speech & Hearing Department of the University of the Witwatersrand found that he had normal hearing and no exceptional medical history. However, he used short, unelaborated utterances which were considered abnormal for his age.

In this study we compare Sipho's speech patterns with those of another normally developing child Thulani at the age of both 2 and 2;7 years (reported on in Suzman 1991). We find that Sipho's speech is qualitatively different from Thulani's at both ages despite the fact that Thulani also used shorter and less elaborated utterances than other children his age.

Data collection procedures were the same for both children: The second author collected audio recordings of spontaneous interactions with family members in play situations with toys, balls, miniature people, animals, etc. Sipho's primary interlocutors included his grandmother and older children, whereas Thulani's included his mother and older children (Suzman 1991). The sample size for Sipho is small (150 utterances): For comparative purposes the same number of utterances has been randomly selected from Thulani's corpus at 2 and 2;7 years. Both children use short, unelaborated sentences, however, Sipho seems conversationally restricted. He doesn't initiate conversations, doesn't maintain conversational topics, and doesn't answer questions. Rather, he tends to repeat what has been said before.

5. Language Impairment in Zulu

The following tables show the productivity of the nominal and verbal morphology used by the children. When Thulani is 2;7 yrs. he is using several noun class prefixes, and several more subject markers, as well as some possessive and relative/adjective agreement morphemes, an object morpheme, and demonstrative pronouns from several classes (see Table 4). Importantly, he seems to have productive use of both nominal and verbal morphology for the 'human' classes 1/2 and the high frequency classes 9/10, as well as some productivity in the frequent 'default' classes 5/6. That is, Thulani at 2;7 yrs. shows both depth and breadth in the use of grammatical morphology.

In contrast, Sipho at the same age has a much reduced morphological system (see Table 5). He only uses noun class prefixes (NCs) and subject markers (SMs) (and an object marker (OM) once): no other nominal agreement forms or pronouns are used. Second, only classes 1 *u-* and 9 *i-* are productive:

noun class prefix 6 *ama-* is only used with the lexical item *amanzi* ‘water’, and does not appear to be productive. Furthermore, unlike Thulani at 2;7 years, Siphon overgeneralizes noun class prefix *i-* and SM *i-* to several *i-*-commencing prefix classes. Siphon seems to be using the most frequently occurring morphemes and overgeneralizing them to nouns and SMs in general. Thulani’s and Siphon’s morphological systems at 2;7 years are given in Tables 4 and 5.

Noun Class	NC Prefix	Poss	Rel/Adj	SM	OM	Dem PN
1	u-			u-	m-	lo
2	aba-			ba-		laba
3						
4						
5	i-		eli-	li-		
6				a-		
7				si-		
8						
9	i(N)-	ya-		i-		le
10				zi-		lezi
11						
14						
15						

Table 4.
Noun Class & Agreement Morphology (Thulani 2;7 yrs.)

Noun Class	NC Prefix	Poss	Rel/Adj	SM	OM	Dem PN
1	u-			u-	m-	
2						
3						
4						
5	i-			i-		
6	ama-					
7	i-			i-		
8						
9	i(N)-			i-		
10						
11						
14						
15						

Table 5.
Noun Class & Agreement Morphology (Siphon 2;7 yrs.)

Sipho also uses an overgeneralized/formulaic form of the SM+Tense *iya*, which seems to be used with all subjects (4). This form is used with both first (4a) and third person (4b,c) subjects, and with copula constructions (4d,e). Sipho's overgeneralization of the *i-* subject marker and *ya-* tense marker indicate that he does not have productive control of these morphemes. Sipho seems to have a morphological system along the lines of that in Table 6, a system that is qualitatively different from that of Thulani and other normally developing Zulu-speaking children of his age (Suzman 1991). Demuth (1992) does report the use of reduced vowel SM+Tense morphemes in normally developing Sesotho-speaking children until around this age, though person distinctions are made tonally, indicating children's awareness of person despite lack of morphological control. It is not clear, however, that this is the case for Sipho.

(4) Sipho's overgeneralization of *iya*+Verb to the following contexts

	<i>Child</i>	<i>Adult</i>	<i>Morphemes</i>	<i>English</i>
a.	<i>iya-sula</i>	Ngi-yasula	SM1s-Pres-wipe	I wipe
b.	<i>iya-phuza</i>	I-ya-phuza	SM9-Pres-drink	It drinks
c.	<i>iya-phuza</i>	U-ya-phuza	SM1-Pres-drink	He drinks
d.	<i>iya-baba</i>	Ngu-baba	Cop-Father	It's Father
e.	<i>iya-Sipho</i>	Ngi-ngu-Sipho	SM1s-Cop-Sipho	I'm Sipho

If Sipho were merely 'delayed' in his language development we might expect his morphological system to resemble that of normally developing younger children. However, this does not appear to be the case. Compare delayed and normal morphology in Table 6 (Sipho at 2;7) with Table 7 (Thulani at 2 years). Due to Sipho's restricted use of only NC and SM, there is no specific evidence of use of adult noun class 9 as found with Thulani at a younger age (Table 7). That is, Sipho's morphology appears to consist of an 'incipient' or child *i*-class which collapses 5/7/9 without being identified with any particular class. This contrasts with Thulani's morphological system at 2 years. Thulani uses primarily class 9 morphology but shows productivity with noun class prefixes, SMs, possessives, and OMs, as well as some productivity with classes 1, 5 and 15. That is, although Thulani's vocabulary is largely made up of class 9 nouns, he demonstrates use of grammatical morphology in several distinct parts of the system. This contrasts with Sipho's overextension of an *i-* class prefix and SM to other classes, and his restricted use morphology in only these domains. In fact, he does not use possessive or demonstratives at all, as shown in Table 8.

Noun Class	NC Prefix	SM
1	u-	u-
5/7/9	i-	i-

Table 6.
Sipho's Noun Class & Agreement System

Noun Class	NC Prefix	Poss	Rel/Adj	SM	OM	Dem PN
1	u-			u-		
2						
3						
4						
5		la-		l-		
6						
7						
8						
9	i(N)-	ya-		i-	i-	
10						
11						
14						
15	ku					

Table 7.
Noun Class & Agreement Morphology (Thulani 2 yrs.)

Grammatical Construction	Sipho (2;7 yrs.)	Thulani (2 yrs.)	Thulani (2;7 yrs.)
NPs	N	N N Poss	N N Poss (Adj) N Poss N
VPs	SM-Tns-(OM)-V	(SM)-(Tns)-V (NP)	(SM)-Tns-V (SM)-V NP
Declaratives	Affirmative	Affirmative Negative	Affirmative Negative
Interrogatives	who/what	what-(doing)	who/what what-doing where whose

Table 8. Use of Grammatical Constructions

We suggest that Sipho's restricted use of grammatical morphology is in part a reflection of his restricted use of syntactic constructions. This is illustrated by his tendency to repeat preceding utterances and reluctance to answer questions. Repeated attempts to elicit answers to verbal and possessive questions failed, raising questions about Sipho's ability to use both verbal and nominal modifier

constructions. Although the majority of Sipho's utterances contained verbs, most of them were bare verbs (V) and not full VPs (V+ NP). Half of Thulani's nominals at 2;7 yrs. are possessive pronouns, whereas Sipho has none (Table 9). Sipho uses nouns from several noun classes, classes 1 and 9 being the most frequent. Like Thulani at 2 yrs., some noun class prefixes are omitted, and this is more common in citation or subject position than in post-verbal position. However, Sipho omits noun class prefixes twice as often as Thulani (Table 10).

Lexical Item	Sipho (2;7 yrs.)	Thulani (2 yrs.)	Thulani (2;7 yrs.)
Ns	20/41%	9/27%	9/22%
Poss PNs	-	-	8/20%
VPs	29/59%	24/73%	24/58%
Total Utterances	49	33	41

Table 9. Use of Major Lexical Items

Noun Class Prefixes Omitted	Sipho (2;7 yrs.)	Thulani (2 yrs.)
Citation/Subjects	12/55%	2/25%
Total Nouns	22	8
Postverbal	3/23%	-
Total Nouns	13	4

Table 10. Omission of Noun Class Prefixes in Different Grammatical Positions

Sipho's use of language seems impaired not only in the morphological, syntactic, and lexical domains, but in the area of prosodic phonology as well. Many of Sipho's words (especially those that are imitated (novel?) or are part of a larger phonological word) are oddly truncated, with CVCV words often surfacing only with the first syllable, and closed CVC-shaped syllables surfacing in longer words. This is all the more surprising as CVCV words tend to be common in children's early words, both crosslinguistically as well as in closely related languages like Sesotho (cf. Demuth 1996). Examples of both children's utterances are presented below, where the full adult form is given in parentheses in (5) and (7).

(5) Sipho Adult Target - Casual Speech
 U-fu-phu-naman U-fun'uku-phuz'amanzi
 (U-funa uku-phuza ama-nzi) 'Do you want to drink water?'
 SM2s-want NC15-drink NC5-water

(6) Sipho 2;7 yrs. G=grandmother

G Faka phakathi 'Put (it) inside'
 S Fak phathi
 G Yisho: e-sebenzi-ni 'Say it: at work'
 S Sebsi-m
 G Yisho: e-sebenzi-n' umama 'Say it: at work Mama'
 S U-sebzi-m' umama

(7) Thulani 2 yrs. S=mother

S Na-ng'-bab' ya-dubula 'Here is father. He is shooting'
 T U-phi 'Where is he?'
 S W-enza-ni? 'What is he doing?'
 T A-d'bula 'Shooting'
 (u-ya-dubula)
 S U-dubula-ni? 'What does he shoot?'
 T I--oni 'Bird'
 S In-yoni 'Bird' (gives full form)
 T In-yoni 'Bird' (repeated)
 S U-dubul' i-nyon' u-baba 'He shoots the bird, Father does'
 T A-dada 'He shoots'
 (u-ya-dubula)
 S W-enza-ni? 'What is he doing?'
 T A-dubul' noni 'He shoots bird'
 (u-dubul'in-yoni)
 S Oh, u-dubul' i-nyoni 'Oh, he shoots the bird'

Although both children show reduction of target forms, the type of reduction differs: Siphon frequently uses monosyllabic roots and coda consonants, whereas Thulani uses disyllabic roots, optional 'shadow' vowel nominal and verbal prefixes, but only occasional coda consonants.

6. Conclusion

In this preliminary report of one Zulu-speaking child's delayed speech at 2;7 yrs. we find that aspects of the phonological, morphological, and syntactic systems are not only underdeveloped, but also show characteristics that are not typical of younger normally developing Zulu-speaking children. In particular, the morphological system is notable for the overgeneralization of *i-* forms that are used for most noun class prefixes and subject agreement markers. Although this overgeneralization may still reflect the beginnings of a productive morphological system, the restricted nature of the system seems to be the effect of impoverished syntax, as demonstrated by Siphon's lack of nominal modifiers and verbal complements. Siphon's resulting morphological system is still 'productive' (two distinct *u-* and *i-* 'classes' are represented) but limited, lacking in the breadth and depth found in normally developing children at an earlier age. This reduced type of morphological system may have consequences for the language learner, impeding the acquisition of the fuller adult system. If this is the case, it should have implications for clinical intervention, where both the syntactic and the morphological systems would be candidates for therapy. Interestingly, Siphon's phonology also seems to be impaired, with disyllabic lexical stems showing a tendency for syllable loss and syllables frequently surfacing with coda consonants in a way that is uncharacteristic of normally developing children. That is, Siphon's impairment seems to effect all parts of the grammar, not simply the morphological system, and not only the verbal system. It seems that this child's linguistic system may actually be qualitatively different from normally developing Zulu-speaking children, and not simply delayed as is often suggested in the case of children diagnosed as having Specific Language Impairment (cf. Leonard 1992). We hope that future research, on both Siphon's longitudinal development, and other language disordered children learning Bantu languages, will shed more light on this issue.

Endnotes

* The authors are listed in alphabetical order. We thank Ms. Maggie Tshule (Department of Speech and Hearing Therapy, University of the Witwatersrand) for referring Siphon to us, and Siphon and his grandmother for their assistance in this research.

References

- Connelly, M. (1984) *Basotho children's acquisition of noun morphology*, PhD dissertation, University of Essex.
- Demuth, K. (1984) *Aspects of Sesotho language acquisition*. Indiana University Linguistics Club, Bloomington.
- Demuth, K. (1992) "Acquisition of Sesotho", in D. Slobin (ed.), *The Cross-Linguistic Study of Language Acquisition*, vol 3: 557-638. Hillsdale, N.J., Lawrence Erlbaum Associates.
- Demuth, K. (1996) "The Prosodic Structure of Early Words", in J. Morgan & K. Demuth (eds.), *Signal to Syntax: Bootstrapping from Speech to Grammar in Early Acquisition*, Mahwah, N.J., Lawrence Erlbaum Associates, pp. 171-184.
- Kunene, E. (1979) *The acquisition of Siswati as a first language: A morphological study with special reference to noun prefixes, noun classes and some agreement markers*, PhD dissertation, UCLA.
- Leonard, L. (1992) "Specific language impairment in three languages: Some cross-linguistic evidence", in P. Fletcher & D. Hall (eds.), *Specific Speech and Language Disorders in Children: Correlates, Characteristics and Outcomes*, London, Whurr Publishers Ltd., pp. 118-127.
- Suzman, S. (1991) *Language acquisition in Zulu*, PhD dissertation, University of the Witwatersrand.
- Suzman, S. (1996) "Acquisition of noun class systems in related Bantu languages", in C. E. Johnson & J. H. V. Gilbert (eds.), *Children's Language*, vol 9: 87-104, Mahwah, N.J., Lawrence Erlbaum Associates.
- Tsonope, J. (1987) *The acquisition of Setswana noun class and agreement morphology, with special reference to demonstratives and possessives*, PhD dissertation, SUNY Buffalo.

A sample of Thulani's and Siphos 'conversations' at 2;7 years are given below:

(3) Thulani (2;7 yrs.) (T = Thulani, S = Sophie, his mother)

Thulani points to a piece of coal:

T	Ma-lahle (Ama-lahle) NC6-coal	'Coal'
S	Ma-lahle. A-ph' ama-lahle? NC6-coal SM6-where NC6-coal	'Coal. Where's the coal?'
T	Na-wa Here-6	'Here it is'
S	U-ya-basa SM1-PRES-light.fire	'You light the fire'
T	Ma-lahle a-se-motwe-ni NC6-coal SM6-in-car-LOC	'The coal is in the car'

(4) Siphos (2;7 yrs) (S = Siphos, G = Grandmother,
R = Rose, an 11-year old
child)

Siphos picks up the toy broom and sweeps the floor:

S	I-ya-m-sula (ngi-ya-yi-sula) SM1sg-Pres-OM9-wipe	'I am wiping'
	I-fun' ama-nzi (ngi-fun'ama-nzi) SM1sg-want NC6-water	'I want water'
R	Faka phakathi put outside	'Put (water) inside'

S	Fak'phathi (faka phakathi) put outside	'Put inside'
R	W-enza-n' u-gogo? SM2sg-do-what NC1a-grandmother	'What is Granny doing?'
	U-ya-pheka? SM2sg-PRES-cook	'Is she cooking?'
S	Na-yi here-9	'Here it is'
R	Na-y' in-komo here-9 NC9-cow	'Here is the cow'
S	Na-y' in-komo Here-9 NC9-cow	'Here is the cow'

'Moving to Verb forms, here are Thulani's verbs at 2.

Present forms

	Adult form	Frequency	Gloss
let'amanzi	leth'amanzi	1	'bring water'
gezi	geza	10	'wash'
vuli	vula	2	'open'
vaya	vala	1	'close'
i-dl'	yi-dla	4	it-eat 'eat it'
keda	qeda	1	'finish'
gijiji	gijima	1	'run'
lalis	lalisa	1	'make sleep'
hamba	hamba	1	'go'
i-ya-hamba SM9-tns-go	i-ya-hamba	1	'it goes'
na-yi here-SM9	na-yi	12	'here it is'
/i-phi ~	i-phi	8 total	it-where
u-phi ~	u-phi	-phi forms	'where is it?'
ku-phi/~ (SMs9~1~15)	ku-phi		

Past
w-ile i-wile 1 'fell'
fall-past

Thulani's 2;7 verbs that I included in the fax.

Present tenses

ya-thela	ngi-ya-thela	'(I) pour'
ya-gcwala	a-ya-gcwala	'(they) are full'
ya-faka	ngi-ya-faka	'(I)- put'
ya-hamba	li-ya-hamba	'(it-horse) runs'

present tns-V - all of them, mostly in response to a question where the topic was mentioned.

Ngi-ya-thatha	same	'I take'
I-tns-take		

Past

Hamb-ile	u-hamb-ile	'(she) left' (Kate)
Phum-ile	u-phum-ile	'(she) went out' (Kate)
V-pst tense	SM1-V-pst tense	

Thol-e-phi?	u-thol-e-phi	'Where did you find (it)?'
find-pst-where		

Future

go-yenz'i-bhedi	ngi-zo-yenz'um-bhede	'(I)-will-make ' the bed'
will-make'NC5-bed	I-will-make'NC3-bed	

There are also a few negatives and a longer utterances.

Ngi-gez'iz-andla	ngi-ya-hamba ekhaya
I-wash'NC8-hands	I-tns-go home

ngi-zo-gez'iz-andla	u-keg-il'ekhaya (adult:ngi-zi-gez-ile)
I-will-wash'NC8-hands	I-wash-pst'home

'I wash my hands, I go home, I will wash my hands, I washed (them) at home'

(Said all at once, it provides almost a complete conjugation in one run-on sentence. Shows he know what he's doing!)

SIPHO

Only his non-imitated utterances are sampled.

I'm not sure if iya is just that or i ya, as below. Given its widespread distribution, I think that it may be unanalyzed, not iyababa.

iya-phuza ???-drink	ngi-ya-phuza I-tns-drink	'(I) drink'
iya-m-sula ???-OM1-wipe	ngi-ya-yi-sula OM9	'(I)-tns-it-wipe' said of sweeping the floor
iya-phansi -down	ngi-phansi	'I am down (sitting down)'
iya-baba	ngu-baba ??	'it's father'

(interpretation unclear. REsponse to 'what is father doing?'. Its use however strengthens the case for it being a coverterm)

i-fun'amanzi SM9-want-water	ngi- fun'amanzi I-want'water	'I want water'
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u-ya-m-shay'buku SM1-tns-OM1-hit'book	ngi-ya-yi-shay'i-buku I-tns-OM9-hit'NC9-book	'I hit the book'
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shay'buku (I)-hit'NC9-book	(ngi)-shay'i-buku	'I hit the book'
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a-yi-kho not-SM9-there	same	'It's not there'
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na-yi 2x here-SM9	same	'Here it is'
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Past

i-pheyi SM9-finished	a-phel-ile SM6-finish-pst	'it's finished' (H20)
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3 versions of -->

u-fu-pu-nama SM1-want-drink-water	u-fun'uku-phuz'ama-nzi	
u-fun-uku-naman SM1-want-to-water	she-want'to-drink'NC6-water	'She wants to drink water'
phu'naman drink'water	'Li-phuz'amanzi' SM5-drink'water	'It (horse) drinks water'

