

Conjunctive and disjunctive verb forms in Siswati

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1 Introduction

In this paper I present an analysis of the conjunctive and disjunctive verb forms in Siswati, a Bantu language belonging to the Nguni group and which is spoken in Swaziland and Southafrica.

In section 2 I will present a brief sketch of the basic clause structure in Siswati. In section 3 I then introduce the notions of conjunctive and disjunctive verb forms as they were used in Creissels (1996). In section 4 I will present the data and generalisations from Siswati, and in section 5 I will present a sign-based analysis of the conjunctive/disjunctive distinction. Section 6 concludes.

2 Siswati

In this section I will present the way in which the arguments of intransitive, transitive and ditransitive predicates are encoded in basic clauses. The formal means by which the semantic relation between an argument and a predicate is encoded in Siswati are the class-prefixes on the verb stem and the position of the noun phrases expressing the arguments in the clause. The first observation is that the linearly first class-prefix of the verb depends on a particular noun phrase, which is referred to as the privileged NP (this is what others refer to as the subject, but for the reasons discussed at the beginning of this section I have decided to use an alternative notion).¹ The other NPs will be referred to as complement NPs. The second observation is

¹The notion of the privileged NP should not be confused with the semantic notion “inherently prominent argument” which I introduced in section ??.

that in basic clauses the complement NPs and the verb form a verb phrase which cannot be separated by adverbs. Thirdly, complement NPs occur in a certain default order. Fourthly, the occurrence of the privileged NP is not obligatory. Neither is the occurrence of complement NPs. In other words, both privileged NPs and complement NPs can be omitted.² If a complement NP is omitted, then a second class-prefix depending on (or matching) the class of the omitted NP is obligatory. Fifthly, verbs in Siswati cannot have more than two class-prefixes. Sixthly, verb phrase internal complement NPs are in complementary distribution with corresponding second class-prefixes.

The prefix of the intransitive verb **fik-e** (arrived) in the following sentences depends on the person, number and class features of the noun phrase. If the noun phrase is **mine** (I), then the prefix of the verb must be **ngi**, if the noun phrase is **tsine** (we), then the prefix of the verb must be **si**, and if the noun phrase is **silima**, then the verb prefix must be **si**.

- (1) a. **Mine ngi-fik-e lamuhla.**
1st.SG 1st.SG-arrive-IP today
I arrived today.
- b. ***Mine si-fik-e lamuhla.**
1st.SG 1st.PL-arrive-IP today
Int.: I arrived today.
- (2) a. **Tsine si-fik-e lamuhla.**
1st.PL 1st.PL-arrive-IP today
We arrived today.
- b. ***Tsine ngi-fik-e lamuhla.**
1st.PL 1st.SG-arrive-IP today
Int.: We arrived today.
- (3) a. **Silima si-fik-e lamuhla.**
4SG.fool 4SG-arrive-IP today
The fool arrived today.
- b. ***Silima li-fik-e lamuhla.**
4SG.fool 3SG-arrive-IP today
Int.: The fool arrived today.

²Talking about the omission of an NP is justified if one describes, as I do, the relation between a **given** thought and the ways in which this thought may be expressed. From this perspective there is no problem in saying that a certain argument has not been expressed, or equivalently that the expression of an argument (e.g. a certain NP) has been omitted. It is only when one starts from a given string and discusses the possible meanings that one should not talk of omission of NPs.

In order to distinguish the verb prefixes which depend on the person, number and/or class features of a noun phrase from other verb prefixes which depend on other features (e.g. tense and aspect prefixes), I shall refer to the verb prefixes which depend on person, number and/or class features of noun phrases as **class-prefixes** of a verb.

The dependence of a verb prefix on the person, number and/or class of a noun phrase is **analysed** by attributing to the verb prefix the features of the noun or pronoun on which it depends. This is expressed by glossing the verb prefix the same way as the noun class prefix. So in (3), the dependence of the first verb prefix on the class of *silima* is analysed by assigning the first prefix *si* of the verb the same class as the noun phrase. As it happens, in (3) the class-prefix of the noun is identical with the class-prefix of the verb. Note, however, that the class-prefixes of verbs are not always identical to the class-prefixes of nouns or pronouns. For example, the class-prefix of the noun *emanti* (water) is *ema*, but the corresponding class-prefix on the verb is *a*.

The class-prefix of the verb is obligatory:

- (4) a. **Mine fik-e lamuhla.*
 I arrive-IP today
 Int.: I arrived today.
- b. **Tsine fik-e lamuhla.*
 1st.PL arrive-IP today
 Int.: We arrived today.
- c. **Silima fik-e lamuhla.*
 4SG.fool arrive-IP today
 Int.: The fool arrived today.

In monotransitive and ditransitive basic clauses the verbal class prefix must have the same class as a particular NP of the clause. For example, the verbal class-prefix in (5) cannot be *a*, which is the verbal class-prefix for *emanti* (water), but must be *si*, which is the verbal class-prefix for *silima* (fool).

- (5) a. *Silima si-nats-e emanti itolo.*
 4SG.fool 4SG-drink-IP 3PL.water yesterday
 The fool drank water yesterday.
- b. **Silima a-nats-e emanti itolo.*
 4SG.fool 3PL-drink-IP 3PL.water yesterday
 Int.: The fool drank water yesterday.
- (6) a. *Silima si-nik-e bafana kudla itolo.*
 4SG.fool 4SG-give-IP 1PL.boy 8.food yesterday
 The fool gave the boys food yesterday.

- b. **Silima ba-nik-e bafana kudla itolo.*
 4SG.fool 1PL-give-IP 1PL.boy 8.food yesterday
 Int.: The fool gave the boys food yesterday.
- c. **Silima ku-nik-e bafana kudla itolo.*
 4SG.fool 8-give-IP 1PL.boy 8.food yesterday
 Int.: The fool gave the boys food yesterday.

The particular NP on which the first class-prefix of the verb depends will be referred to as the **privileged** NP. Despite its occasional use as a technical term (see Foley and Valin (1985)), I shall use this notion simply as a label for the NP on which the first class-prefix of the verb depends. This label should not be confused with the notion of **subject**, which is a theoretical term and will be discussed in section ??.

So the privileged NP in (5) is *silima*, i.e. the person drinking as opposed to the thing drunk, while the privileged NP in (6) is the NP referring to the person giving, as opposed to the thing given or the person receiving. The NPs other than the privileged NP shall be referred to as complement NPs.

In the sentences (5a) and (6a) neither the privileged noun phrase nor the adjunct *itolo* (yesterday) can intervene between the verb and the following noun phrase(s), as shown by the ungrammatical sentences below.

- (7) a. **Si-nats-e silima emanti.*
 4SG-drink-IP 4SG.fool 3PL.water
 Int.: The fool drank water.
- b. **Silima si-nats-e itolo emanti.*
 4SG.fool 4SG-drink-IP yesterday 3PL.water
 Int.: The fool drank water yesterday.
- (8) a. **Si-nik-e silima bafana kudla.*
 4SG-give-IP 4SG.fool 1PL.boy 8.food
 Int.: The fool gave the boys food.
- b. **Si-nik-e bafana silima kudla.*
 4SG-give-IP 1PL.boy 4SG.fool 8.food
 Int.: The fool gave the boys food.
- c. **Silima si-nik-e itolo bafana kudla.*
 4SG.fool 4SG-give-IP yesterday 1PL.boy 8.food
 Int.: The fool gave the boys food yesterday.
- d. **Silima si-nik-e bafana itolo kudla.*
 4SG.fool 4SG-give-IP 1PL.boy yesterday 8.food
 Int.: The fool gave the boys food yesterday.

These observations can be analysed by hypothesising that the verb and the following noun phrases in (5a) and (6a) constitute a verb phrase. According to my usage of the notion of verb phrase, the temporal adjunct *itolo* is not considered to be part of the verb phrase.

The default order of noun phrases inside the verb phrase in (6a) is *bafana* (boys) before *kudla* (food), that is the NP referring the argument receiving (recipient NP for short) occurs before the NP referring the thing given (theme NP). However, in Siswati it is possible to emphasise (focus) a noun phrase by placing it at the end of the sentence. Thus the recipient NP can follow the theme NP, but only if it is at the end of the sentence. This is illustrated by the grammaticality of (9a) and the ungrammaticality of (9b).

- (9) a. **Silima si-nik-e kudla BAFANA.**
 4SG.fool 4SG-give-IP 8.food 1PL.boy
 The fool gave THE BOYS food.
- b. ***Silima si-nik-e kudla BAFANA itolo.**
 4SG.fool 4SG-give-IP 8.food 1PL.boy yesterday
 Int.: The fool gave THE BOYS food yesterday.

The capitals in (9) indicate that *bafana* (boys) is emphasised.

The privileged noun phrase in (10a-i), (10b-i) and (10c-i), can be omitted, as shown in (10a-ii), (10b-ii) and (10c-ii) respectively:³

- (10) a. i. **Mine ngi-fik-e lamuhla.**
 1st.SG 1st.SG-arrive-IP today
 I arrived today.
- ii. **Ngi-fik-e lamuhla.**
 1st.SG-arrive-IP today
 I arrived today.
- b. i. **Silima si-nats-e emanti itolo.**
 4SG.fool 4SG-drink-IP 3PL.water yesterday
 The fool drank water yesterday.
- ii. **Si-nats-e emanti itolo.**
 4SG-drink-IP 3PL.water yesterday
 He (the fool) drank water yesterday.
- c. i. **Silima si-nik-e bafana kudla itolo.**
 4SG.fool 4SG-give-IP 1PL.boy 8.food yesterday

³This is the well-known phenomenon which others refer to as subject pro-drop. Languages displaying this phenomenon vary in which properties of the omitted NP the verb displays (e.g. person, number, class), as well as in the means by which these properties are displayed on the verb (e.g. inflection, affixes).

- The fool gave the boys food yesterday.
- ii. **Si-nik-e bafana kudla itolo.**
 4SG-give-IP 1PL.boy 8.food yesterday
 He (the fool) gave the boys food yesterday.

Note that when the privileged NP is omitted, the English translation of these sentences contains a pronoun. For example (10c-ii) denotes the proposition that **he** gave the boys food yesterday, where the pronoun refers to an individual which would be expressed by an NP with the same class features as the prefix **si**.

If the privileged noun phrase can simply be omitted, then the question arises whether the complement noun phrases can be omitted too. The answer is no, since the omission of the noun phrases **bafana** or **kudla** in (10c-i) leads to ungrammaticality.

- (11) a. **Silima si-nik-e bafana kudla itolo.**
 4SG.fool 4SG-give-IP 1PL.boy 8.food yesterday
 The fool gave the boys food yesterday.
- b. ***Silima si-nik-e kudla itolo.**
 4SG.fool 4SG-give-IP 8.food yesterday
 Int.: The fool gave them (the boys) food yesterday.
- c. ***Silima si-nik-e bafana itolo.**
 4SG.fool 4SG-give-IP 1PL.boy yesterday
 Int.: The fool gave it (the food) to the boys yesterday.

However, either of these noun phrases **can** be omitted, if the verb is prefixed with an additional morpheme which depends on the class of the omitted noun phrase.⁴

If the complement noun phrase **bafana** is omitted, then the verb has to be prefixed with the second morpheme **ba**, as shown by (12b). If, however, the complement noun phrase **kudla** is omitted, then the verb must be prefixed with a second prefix **ku**, as shown in (12c).

- (12) a. **Silima si-nik-e bafana kudla itolo.**
 4SG.fool 4SG-give-IP 1PL.boy 8.food yesterday
 The fool gave the boys food yesterday.

⁴Remember from the presentation of the noun class system that the class of a noun cannot always be determined on the basis of what the noun means. If this were the case, then it would not be necessary to say that the class-prefixes depend on the noun class of the omitted NP, but it would be sufficient to say that the class-prefix depends (or matches) the class of the unexpressed semantic argument. Since this is not the case, it is necessary to refer in this generalisation to the class of the omitted noun phrase.

- b. i. **Silima si-ba-nik-e kudla itolo.**
 4SG.fool 4SG-1PL-give-IP 8.food yesterday
 The fool gave them (the boys) food yesterday.
- ii. ***Silima si-ku-nik-e kudla itolo.**
 4SG.fool 4SG-8-give-IP 8.food yesterday
 Int.: The fool gave them (the boys) food yesterday.
- c. i. **Silima si-ku-nik-e bafana itolo.**
 4SG.fool 4SG-8-give-IP 1PL.boy yesterday
 The fool gave it (the food) to the boys yesterday.
- ii. ***Silima si-ba-nik-e bafana itolo.**
 4SG.fool 4SG-1PL-give-IP 1PL.boy yesterday
 Int.: The fool gave it (the food) to the boys yesterday.

Thus, the second prefixes in (12b-i) and (12c-i) respectively depend on the class of the omitted noun phrases. This dependence is analysed by assigning the second prefixes the same class as the omitted noun phrase.

If either of the two noun phrases **bafana** and **kudla** can be omitted in the presence of a class marker dependent on the omitted NP, then the question arises whether the two NPs can be omitted simultaneously. This would require three class-prefixes on the verb, which is not possible in Siswati, as shown by the ungrammaticality of (13a) and (13b).

- (13) a. ***Silima si-ba-ku-nik-e itolo.**
 4SG.fool 4SG-1PL-8-give-IP yesterday
 Int.: The fool gave it (the food) to them (the boys) yesterday.
- b. ***Silima si-ku-ba-nik-e itolo.**
 4SG.fool 4SG-8-1PL-give-IP yesterday
 Int.: The fool gave it (the food) to them (the boys) yesterday.

Similar sentences, however, are grammatical in Kinyarwanda and other languages.

If a verb of a basic clause has two class-prefixes, then the first of them (for short the 1st CP) depends on the class of the privileged NP, while the second verbal class-prefix (2nd CP) depends on another NP related to the verb. Thus the sentence (14) can only mean that the speaker beat them (the boys), not that they (the boys) beat the speaker.

- (14) **Ngi-ba-shay-e itolo.**
 1st.SG-1PL-beat-IP yesterday
 Only: I beat them (the boys).
 Not: The boys beat me.

Person	Class	Number	Pronoun	Noun	1st VCP	2nd VCP	ADJ-P	POSS-P
1		sg	mi-ne		ngi-	ngi-	ngi-	ngi-
		pl	tsi-ne		si-	si-	si-	si-
2		sg	we-na		u-	ku-	u-	u-
		pl	ni-ne		ni-	ni-	ni-	ni-
3	1	sg	ye-na	um(u)-	u-	mu-	mu-	ba-
		pl	bo-na	ba-	ba-	ba-	ba-	ba-
	1a	sg	ye-na	∅-	u-	mu-	mu-	w-
		pl	bo-na	bo-	ba-	ba-	ba-	ba-
	2	sg	wo-na	um(u)	u-	wu-	mu-	w-
		pl	yo-na	imi	i-	yi-	mi-	y-
	3	sg	lo-na	li-	li-	li-	li-	li-
		pl	wo-na	ema-	a-	wa-	ma-	a-
	4	sg	so-na	si-	si-	si-	si-	si-
		pl	to-na	tin-	ti-	ti-	tiN-	ti-
	5	sg	yo-na	in-	i-	yi-	iN-	y-
		pl	to-na	tin-	ti-	ti-	tiN-	ti-
	6	sg	lo-na	lu	lu-	lu-	lu-	lu-
		pl	to-na	tim	ti-	ti-	tiN-	ti-
	7		bo-na	bu-	bu-	bu-	bu-	bu-
	8		ko-na	ku-	ku-	ku-	ku-	ku-

Table 1: Nominal, verbal, adjectival and possessive class prefixes. Source: Thwala (1995, 13f)

The second class-prefix on the verb is not always identical to the noun class prefix. For example, the class-prefix of the noun *emanti* (water) is *ema*, while the second verbal class-prefix necessary if the noun *emanti* is omitted is *wa*:

- (15) a. *Silima si-nats-e emanti itolo.*
 4SG.fool 4SG-drink-IP 3PL.water yesterday
 The fool drank water yesterday.
- b. *Silima si-wa-nats-e itolo.*
 4SG.fool 4SG-3PL-drink-IP yesterday
 The fool drank it yesterday.

Table 1 illustrates the first and second verbal class prefixes. For convenience, I have added also the corresponding noun prefixes, pronouns, adjectival and possessive class-prefixes.

So far I have illustrated that complement NPs can occur adjacent to the verb (i.e. within a verb phrase), or they can be omitted, in which case

a second verbal class-prefix dependent on the class of the omitted NP is necessary. Complement NPs can also occur outside the verb phrase. If they occur outside the verb phrase, then the verb must contain a second class-prefix dependent on the class of the verb phrase external complement NP. The occurrence of a complement NP outside the verb phrase is usually associated with an intonation break between the verb phrase and the subsequent NP, much as with postposed privileged NPs.

The sentences in (16) show that if the complement NP *emanti* occurs outside the verb phrase, then a second class-prefix *wa* dependent on the class of *emanti* is obligatory.

- (16) a. *Silima si-nats-e emanti itolo.*
 4SG.fool 4SG-drink-IP 3PL.water yesterday
 The fool drank water yesterday.
- b. *Emanti silima si-*(wa-)nats-e itolo.*
 3PL.water 4SG.fool 4SG-3PL-drink-IP yesterday
 Water, the fool drank (it) yesterday.
- c. *Silima si-*(wa-)nats-e itolo emanti.*
 4SG.fool 4SG-3PL-drink-IP yesterday 3PL.water
 The fool drank it yesterday the water.

The same holds for ditransitive clauses. If the NP *bafana* expressing the recipient is outside the verb phrase, the verb must contain a second class prefix dependent on the class of the NP *bafana*, as shown in (17b). If the NP *kudla* expressing the theme is outside the VP, then the verb must contain a second class-prefix dependent on (or matching) the class of the NP *kudla*, as shown in (17c).

- (17) a. *Silima si-nik-e bafana kudla itolo.*
 4SG.fool 4SG-give-IP 1PL.boy 8.food yesterday
 The fool gave the boys food yesterday.
- b. *Bafana silima si-*(ba-)nik-e kudla itolo.*
 1PL.boy 4SG.fool 4SG-1PL-give-IP 8.food yesterday
 The boys, the fool gave (them) food yesterday.
- c. *Silima si-*(ku-)nik-e bafana itolo kudla.*
 4SG.fool 4SG-8-give-IP 1PL.boy yesterday 8.food
 The fool gave it to the boys yesterday, the food.

If one of two complement NPs of a ditransitive verb occurs outside the VP, then the other complement NP cannot also occur outside the verb phrase, as shown by the ungrammaticality of the sentences (18), where the adjunct

itolo (yesterday) occurs right-adjacent to the verb, and thus forces the other complement NP to also occur outside the verb phrase.

- (18) a. **Bafana silima si-ba-nik-e itolo kudla.*
 1PL.boy 4SG.fool 4SG-1PL-give-IP yesterday 8.food
 Int.: The boys, the fool gave (them) food yesterday.
- b. **Silima si-ku-nik-e itolo bafana kudla.*
 4SG.fool 4SG-8-give-IP yesterday 1PL.boy 8.food
 Int.: The fool gave it to the boys yesterday, the food.

I have now shown that if a complement NP of a verb in a basic clause occurs outside the verb phrase, then a second class prefix dependent on this complement NP must be attached to the verb. The sentences in (19) show that if a complement NP occurs within the verb phrase, then a second class-prefix dependent on the complement NP cannot be attached to the verb.

- (19) a. *Silima si-(*wa-)nats-a emanti.*
 4SG.fool 4SG-3PL-drink-FV 3PL.water
 The fool drinks water.
- b. *Silima si-(*ba-)nik-e bafana kudla itolo.*
 4SG.fool 4SG-1PL-give-IP 1PL.boy 8.food yesterday
 The fool gave the boys food yesterday.

The grammaticality of (20a) does not show that a VP-internal complement NP can co-occur with a second class-prefix which depends on this NP. The reason for the grammaticality of (20a) is that the complement *kudla* in (20a) is **not** within the verb phrase, as demonstrated by the grammaticality of (20b) where the adjunct *itolo* occurs before the complement NP *kudla*.

- (20) a. *Silima si-ku-nik-e bafana kudla itolo.*
 4SG.fool 4SG-8-give-IP 1PL.boy 8.food yesterday
 The fool gave it to the boys, the food, yesterday.
- b. *Silima si-ku-nik-e bafana itolo kudla.*
 4SG.fool 4SG-8-give-IP 1PL.boy yesterday 8.food
 The fool gave it to the boys yesterday, the food.

The generalisation established so far is that the presence/absence of a complement NP in/from the verb phrase correlates with the absence/presence of a second class-prefix which depends on the class of the NP. This correlation will be one of the main reasons for hypothesising that the second class-prefix acts as a regular pronoun.

3 Conjunctive and disjunctive verb forms

TODO

4 The conjunctive/disjunctive distinction in Siswati

This section contains the presentation of the distinction between the conjunctive and disjunctive verb forms in Siswati, a phenomenon which has received comparatively little attention in the literature.

The present tense is not marked morphologically.

- (21) **La-ba-fana ba-nats-a tjwala.**
 DET-1PL-boy 1PL-drink-FV 7.alcohol
 The boys drink alcohol.
 Or: The boys are drinking alcohol.

The suffix *-a* is the final vowel of the verb stem which also occurs with other tenses, for example the immediate future, as shown in (22).

- (22) **Bafana ba-to-nats-a tjwala.**
 boy.1PL 1PL-FUT-drink-FV 7.alcohol
 The boys will drink alcohol.

The sentence (21) can mean that the boys are drinking alcohol at the moment in which the sentence is uttered. Therefore, no morphological affix is necessary to express a progressive reading.

Consider next the following pair of sentences.

- (23) a. ***Nhlanhla u-dlal-a.**
 Nhlanhla 1SG-play-FV
 Int.: Nhlanhla plays.
 b. **Nhlanhla u-dlal-a kahle.**
 Nhlanhla 1SG-play-FV well
 Nhlanhla plays well.

These examples show that the present tense verb *udlala* cannot occur at the end of a sentence. In order to occur at the end of a sentence, a present tense verb must be marked with the affix *ya*, glossed as a disjunctive marker (DISJ).

- (24) a. ***Nhlanhla u-dlal-a.**
 Nhlanhla 1SG-play-FV
 Int.: Nhlanhla plays.

- b. Nhlanhla u-ya-dlal-a.
 Nhlanhla 1SG-DISJ-play-FV
 Nhlanhla plays.

In fact, a present tense verb must be marked with *ya* not only when it occurs at the end of a sentence, but more generally when it occurs pre-pausally, in both cases indicating the completion of an intonation phrase. The intonation break is indicated by # and is glossed with IB.

- (25) a. *Labafana ba-yi-gez-a # imoto.
 DET.1PL.boy 1PL-5SG-wash-FV IB 5SG.car
 Int.: The boys wash it, the car.
- b. Labafana ba-ya-yi-gez-a # imoto.
 DET.1PL.boy 1PL-DISJ-5SG-wash-FV IB 5SG.car
 The boys wash it, the car.

The second class-prefix *yi* in the sentence (26b) is necessary, when the verb is marked with *ya*.

- (26) a. *Labafana ba-ya-gez-a # imoto.
 DET.1PL.boy 1PL-DISJ-wash-FV IB 5SG.car
 Int.: The boys wash it, the car.
- b. Labafana ba-ya-yi-gez-a # imoto.
 DET.1PL.boy 1PL-DISJ-5SG-wash-FV IB 5SG.car
 The boys wash it, the car.

When a transitive (or ditransitive) present tense verb is not marked with *ya*, then the object marker is not necessary.

- (27) Labafana ba-gez-a imoto.
 1PL.boy 1PL-wash-FV 5SG.car
 The boys wash the car.

If, however, the disjunctive marker does not occur on the main verb but on a preceding (ad)verb, as in (28), then the second class-prefix on the main verb is not obligatory.

- (28) Ngi-ya-phindz-a ngi-dlal-a ibhola.
 1st.SG-DISJ-again-FV 1st.SG-play-FV 5SG.ball
 I am again playing ball.

If a ditransitive verb *nik* (give) is marked with *ya*, then the verb must contain a second class-prefix which depends on the NP expressing the recipient argument.

- (29) a. Kudla bafana ba-ya-*(si-)nik-a (silima).
8.food 1PL.boy 1PL-DISJ-4SG-give-FV (4SG.fool)
The food the boys give to him (the fool).
- b. *Kudla bafana ba-ya-ku-nik-a silima.
8.food 1PL.boy 1PL-DISJ-8-give-FV 4SG.fool
Int.: The food the boys give it to the fool.

It is worth repeating at this point that Siswati cannot have more than two class-prefixes on the verb, and thus the verb in (29a) cannot also contain a prefix depending on the VP-external NP *kudla*.

Creissels (1996) used the terminology of conjunctive and disjunctive verb forms in order to analyse similar data in Setswana. If a present tense verb is not marked with *ya*, I shall follow Creissels in saying that it has conjunctive form, since it must conjoin with the phrase which follows to build a prosodic unit of some kind. If, however, the present tense verb is marked with *ya*, then I shall say that it is in disjunctive form.

Verbs in the immediate past tense are similar to present tense verbs lacking the prefix *ya* in that they cannot occur at the end of a sentence, as shown in (30).

- (30) a. *Nhlanhla u-dlal-e.
Nhlanhla 1SG-play-IP
Int.: Nhlanhla played.
- b. Nhlanhla u-dlal-e kahle.
Nhlanhla 1SG-play-IP well
Nhlanhla played well.

More generally, a verb marked with the immediate past tense suffix *e* cannot occur pre-pausally.

- (31) *Labafana ba-yi-gez-e # imoto.
DET.1PL.boy 1PL-5SG-wash-IP IB 5SG.car
Int.: The boys washed it, the car.

Verbs in the subjunctive form are also suffixed with *e*. However, unlike verbs suffixed with the immediate past suffix *e*, verbs ending with the subjunctive suffix *e* can occur at the end of a sentence.

- (32) Silima si-phindz-a si-nats-e.
4SG.fool 4SG-repeat-FV 4SG-drink-SBJV.
The fool drinks again.

The sentence (32) also shows that the first class-prefix can occur on words other than the main verb, in particular on auxiliaries and adverbs. This phenomenon is described in detail and analysed in Thwala (1995, 155f).

A main verb which is suffixed with the morpheme *ile* is similar to a present tense verb prefixed with *ya*, in that it can occur pre-pausally.

- (33) a. **Nhlanhla u-dlal-ile.**
 Nhlanhla 1SG-play-DISJ.PRF
 Nhlanhla has played.
- b. **Labafana ba-yi-gez-ile # imoto.**
 DET.1PL.boy 1PL-5SG-wash-DISJ.PRF IB 5SG.car
 The boys have washed it, the car.

If a monotransitive or ditransitive main verb is suffixed with *ile*, then it is similar to present tense verbs marked with *ya*, in that it must contain a second class-prefix. The lack of such a second class-prefix in (33b) leads to ungrammaticality.

- (34) a. ***Labafana ba-gez-ile # imoto.**
 DET.1PL.boy 1PL-wash-DISJ.PRF IB 5SG.car
 Int.: The boys have washed it, the car.
- b. **Labafana ba-yi-gez-ile # imoto.**
 DET.1PL.boy 1PL-DISJ-5SG-wash-DISJ.PRF IB 5SG.car
 The boys have washed it, the car.

Summing up so far, we have seen that present tense verbs which are not marked with *ya* and immediate past tense verbs marked with *e* cannot occur pre-pausally. I shall refer to these forms of the present tense and immediate past tense forms as the conjoint forms. Secondly we have observed that if the present tense verb is marked with *ya*, and if a main verb is suffixed with *ile*, then they can occur pre-pausally. Verbs with these forms will be referred to as having the disjunctive form. Thirdly, we observed that monotransitive or ditransitive verbs in the disjoint form require the presence of a second class-prefix. I have so far refrained from saying which complement NP this class-prefix depends on. This is what I will turn to next.

A monotransitive verb in disjunctive form requires the presence of a second class-prefix which depends on the class of the (only) complement NP of the verb.

- (35) **Labafana ba-ya-*(yi-)gez-a # imoto.**
 DET.1PL.boy 1PL-DISJ-5SG-wash-FV IB 5SG.car
 The boys wash it, the car.

The requirement of the second class-prefix *yi* in (35) will be analysed as follows. (1) The prefix *ya* indicates that the verb is disjoint from the following phrase. (2) The elements of the verb phrase are not separated by intonation breaks. From (1) and (2) it follows that (3) the complement NP *imoto* does not occur within the verb phrase in (35). From (3) it follows that (4) the complement NP *imoto* can either occur outside the verb phrase or be omitted. (5) The presence/absence of a complement NP in/from the verb phrase correlates with the absence/presence of a second class-prefix which depends on the class of the NP. From (4) and (5) it follows that the verb in (35) must contain a second class-prefix which depends on the VP-external NP *imoto*.

When a ditransitive verb is suffixed with the morpheme *ile*, then the verb must also be prefixed with a second class-prefix which depends on the class of the noun phrase which expresses the recipient. The obligatoriness of this second class-prefix is shown by (36a). The second class-prefix cannot depend on the theme, as shown by the ungrammaticality of (36b). Moreover, the verb cannot be prefixed by three class-prefixes (one depending on the class of the privileged NP and the other two depending on the classes of the complement NPs), as shown by (36c).

- (36) a. *Silima si-*(ba-)nik-ile bafana kudla itolo.*
 4SG.fool 4SG-1PL-give-DISJ.PRF 1PL.boy 8.food yesterday
 The fool has given them, the boys, the food yesterday.
- b. **Silima si-ku-nik-ile bafana kudla itolo.*
 4SG.fool 4SG-8-give-DISJ.PRF 1PL.boy 8.food yesterday
 Int.: The fool has given it to the boys yesterday, the food.
- c. **Silima si-ba-ku-nik-ile itolo.*
 4SG.fool 4SG-1PL-8-give-DISJ.PRF yesterday
 Int.: The fool has given it (the food) to them (the boys) yesterday.

Note that both complement NPs *bafana* and *kudla* occur outside the verb phrase in (36a), as shown by the fact that the adjunct *itolo* can occur after the verb, as shown in (37a). Since Siswati allows at most two class markers (one of them depending on the class of the privileged NP), and since the absence of *bafana* from the VP has to correlate with the presence of a dependent class-prefix, the absence of the NP *kudla* from the VP cannot also correlate with the presence of a class-prefix. (37b) shows that the complement NP *kudla* (class 8) can occur topicalised, and thus outside the verb phrase without a class-prefix of class 8 being attached to the verb. This constitutes the only exception to the generalisation that the presence/absence of a com-

plement NP in/from the verb phrase correlates with the absence/presence of a class-prefix which depends on the class of the NP, since *kudla* is absent from the verb phrase, but this absence does not correlate with the presence of a second class-prefix of class 8.

- (37) a. *Silima si-ba-nik-ile itolo bafana*
 4SG.fool 4SG-1PL-give-DISJ.PRF yesterday 1PL.boy
kudla.
 8.food
 The fool has given them, the boys, yesterday food.
- b. *Kudla silima si-ba-nik-ile.*
 8.food 4SG.fool 4SG-1PL-give-DISJ.PRF
 The food, the fool has given (it) them (the boys).

This concludes the presentation of (i) the conjoint properties of present tense verbs which are not marked with *ya* and of immediate past tense verbs marked with *e*, and of (ii) the disjunctive properties of present tense verbs marked with *ya* and of main verbs suffixed with *ile*. Next I will show that (i) *ile* cannot be suffixed to a verb which is already marked for tense, and that (ii) *ile* does not always display the disjoint properties, but only if it occurs on the rightmost verb of a verb compound.

The morpheme *ile* cannot be suffixed to a verb which is also inflected for the immediate future, remote future or remote past tense (irrespective of the presence or absence of the complement NP).

- (38) a. **Lesilima si-to-ku-tseng-ile (kudla).*
 DET.4SG.fool 4SG-FUT-8-buy-DISJ.PRF 8.food
 Int.:The fool will have bought it, the food.
- b. **Lesilima si-yo-ku-tseng-ile (kudla).*
 DET.4SG.fool 4SG-RF-8-buy-DISJ.PRF 8.food
 Int.: The fool will have bought food.
- c. **Lesilima s-a-ku-tseng-ile (kudla).*
 DET.4SG.fool 4SG-RP-8-buy-DISJ.PRF 8.food
 Int.: The fool had bought it, the food.

However, if the tense marker occurs not on the main verb, but for example on a copula preceding the main verb, then *ile* can be suffixed to the main verb.

- (39) a. *Lesilima si-to-be si-ku-tseng-ile*
 DET.4SG.fool 4SG-FUT-COP 4SG-8-buy-DISJ.PRF
(kudla).
 8.food

- The fool will have bought it, the food.
- b. Lesilima si-yo-be si-ku-tseng-ile (kudla).
 DET.4SG.fool 4SG-RF-COP 4SG-8-buy-DISJ.PRF 8.food
 The fool will have bought it, food.
- c. Lesilima s-a-si-ku-tseng-ile (kudla).
 DET.4SG.fool 4SG-RP-4SG-8-buy-DISJ.PRF 8.food
 The fool had bought it, the food.

Omitting the second class-prefix *ku* would lead to ungrammaticality in all three sentences.

- (40) a. *Lesilima si-to-be si-tseng-ile kudla.
 DET.4SG.fool 4SG-FUT-COP 4SG-buy-DISJ.PRF 8.food
 Int.: The fool will have bought food.
- b. *Lesilima si-yo-be si-tseng-ile kudla.
 DET.4SG.fool 4SG-RF-COP 4SG-buy-DISJ.PRF 8.food
 Int.: The fool will have bought food.
- c. *Lesilima s-a-si-tseng-ile kudla.
 DET.4SG.fool 4SG-RP-4SG-buy-DISJ.PRF 8.food
 Int.: The fool had bought food.

Assuming that the remote past tense marker *a* is a verb on its own, we could describe the co-occurrence of *ile* with future and past tense markers by saying that *ile* does not occur on the same verb as the future and past tense markers.

The obligatoriness of the object markers in (39) indicates that *ile* is a disjunctive marker.

The sentences in (41) and (42) show that if possible *ile* has to occur on the left-most element of the verb complex, not on the main verb.

- (41) a. Ngi-phindz-ile nga-dlal-a ibhola.
 1st.SG-again-PRF 1st.SG-play-FV 5SG.ball
 I have again played ball.
- b. *Ngi-phindz-e nga-dlal-ile ibhola.
- (42) a. Jabulani u-cish-ile wa-phindz-e wa-limal-a.
 Jabulani 1SG-almost-PRF 1SG-again-SBJV 1SG-hurt-FV
 Jabulani has almost again hurt himself.
- b. *Jabulani u-cish-e wa-phindz-ile wa-limal-a.
 Jabulani 1SG-almost-SBJV 1SG-again-PRF 1SG-hurt-FV

- c. * Jabulani u-cish-e wa-phindz-e
 Jabulani 1SG-almost-SBJV 1SG-again-SBJV
 wa-limal-ile.
 1SG-hurt-PRF

More research on the occurrence of the affixes *ya* and *ile* is necessary. The following observations and generalisations have been made:

- Verbs in the conjunctive form (i.e. present tense verbs which are not marked with *ya* and immediate past tense verbs marked with *e*) cannot occur before a pause.
- Verbs in the disjunctive form (i.e. present tense verbs marked with *ya* and main verbs suffixed with *ile*) can occur pre-pausally.
- Monotransitive or ditransitive verbs in the disjunctive form must be prefixed with a class morpheme which depends on the class of the complement of the monotransitive verb or the recipient NP in the case of ditransitive verbs.
- *ile* can only be suffixed to a verb, if this verb does not itself inflect for tense. So if a tense marker is on an auxiliary and not on the main verb, then it is possible to suffix *ile* to the main verb.
- *ile* displays disjunctive properties only if it is suffixed to the last verb in the verb compound.
- *ile* is suffixed on the left-most element of a verb complex, unless this element is tense marked, in which case it occurs on the last element.

5 Analysis

5.1 Basic semantic notions

First I will introduce the basic semantic notions. The most basic notion is that of the **speaker's construal of a situation or event**, and in particular the speaker's construal of the entities and individuals which participate (i.e. the participants) in this situation or event. To give an example, the speaker can construe either the individual beating or the individual beaten in a beating situation as the conceptually prominent individual. The participant construed by the speaker in this way will be called the **figure** participant. Linguistic expressions are a means of communicating not just the conditions under which a situation or event is true, but also the speaker's

construal of a situation or event. Depending on the construal of the entities or individuals in a situation, the speaker may choose to use different expressions, so that the meaning of the chosen expression **matches** the construal of the situation. For example, if the person beating is the figure participant, she may choose the active construction **a beats b**, whereas if the person beaten is the figure, then she may choose the passive construction **b was beaten**. This choice is explained by hypothesising that the meaning of the expression **beats** imposes the initial restriction that the placeholder for the person beating be saturated by the figure participant, whereas the meaning of the expression **was beaten** contains the final restriction that the placeholder for the individual beaten be saturated by the figure argument. The idea is that the personal passive construction overrides the initial construal restrictions associated with the placeholders. So the meaning of the expression **beats** is not $\text{BEAT}\{\text{beater:}_-, \text{beaten:}_-\}$ (this encodes only what is truth-conditionally relevant), but $\text{BEAT}\{\text{F:beater:}_-, \text{G:beaten:}_-\}$, where F:beater:_- indicates that the placeholder **beater:_-** can only be saturated by the figure argument, and G:beaten:_- indicates that the placeholder **beaten:_-** can only be saturated by a ground argument.

The suffixation of the passive, causative, applicative and reciprocal morphemes to the verb root will be analysed in terms of unary modes (that is modes which take only one sign as argument), the semantic functions of which may alter both the predicate (by adding or removing a semantic role) as well as its construal (by overriding the construal restrictions on the arguments which can saturate a placeholder). The prefixation of the first and second class-prefixes to the verb stem will be analysed in terms of binary modes of combination, whose semantic functions saturate either the placeholder restricted to figure arguments, or the placeholder restricted to ground arguments respectively.

The semantic functions combining the semantic values of the class-prefixes with the predicate of the verb stem identify the placeholders of the predicate in terms of their construal restrictions, and not in terms of the order in which the placeholders are to be saturated, or in terms of truth-conditionally relevant properties of the semantic roles assigned to the arguments saturating a placeholder. Participants in a situation can be construed as figure, ground or as oblique, and accordingly the placeholders of predicates are restricted either to figure ground or oblique arguments. The applicative, causative, reciprocal and impersonal passive constructions will be analysed in terms of modes of combination which change the predicates to whose form the respective suffixes attach. The “applicative”, “causative” and “impersonal passive” semantic functions change the predicate by adding a new role, whereas the “reciprocal” semantic function changes the predicate by removing a role.

These functions also override some of the construal restrictions on the arguments which can saturate placeholders. In contrast, the semantic function for the personal passive does not change the predicate (by adding or removing a role), but only overrides the construal restrictions on the arguments saturating the placeholders.

Figure and ground arguments are expressed by noun phrases and/or by first and second class-prefixes. Oblique arguments are expressed by prepositional phrases. The first class-prefix of a verb depends on the NP expressing the figure argument (i.e. the argument saturating the placeholder restricted to figure arguments), while the second class-prefixes depend on the NP expressing a ground argument (i.e. an argument saturating a placeholder restricted to ground arguments), provided that in both cases the clause contains such an NP. If the clause contains no NP expressing the figure (or ground) argument, then the class of the first (or second) class-prefix restricts the range of arguments which can saturate the placeholders restricted to figure or ground arguments, so that the argument saturating the placeholder restricted to figure (or ground arguments) should be expressible by an NP whose class is the same as the class of the first (or second) class-prefix.

Given a ditransitive predicate, the two arguments other than the inherently prominent argument display similar encoding properties: they can both be figure arguments in a passive clause, they can both be expressed as VP-internal NPs in an active clause, they can both saturate the meaning of the second class-prefixes. This similarity will be analysed by hypothesising that the placeholders for the two arguments other than the inherently prominent argument are both restricted to arguments construed as ground. Nevertheless, there are some modes which distinguish between these two arguments, and this difference will be analysed by introducing the distinction between **primary ground** arguments G^+ and **secondary ground** arguments G^- . The similar coding properties of e.g. recipient and theme arguments in Siswati are taken as an indication that the speaker construes both of these participants as ground participants. In contrast, the different encoding properties of recipient and theme in Romanian are taken as an indication that the speakers construe the respective participants differently – one as the ground participant and the other as the background participant.

5.2 Conjunctive/disjunctive analysis

The disjunctive marker *ya* will be analysed as changing the value of the attribute *Disj* from \star (meaning unspecified) to $+$ (meaning disjoint). The idea is that the attribute-value pair *DISJ* : $+$ will prevent the saturation of a placeholder restricted to ground arguments with the semantic value of

a complement NP by means of mode f_G , and thus enforces the only other way of saturating this placeholder. This accounts for the fact that disjoint transitive verbs require a second class-prefix on the verb. So the mode f_{DISJ} is:

$$f_{DISJ}\left(\begin{array}{l} \langle e \rangle \\ [CAT : v, 1 : \star, DISJ : \star, Tense : PRES, \dots] \\ PRED \end{array}\right) = \begin{array}{l} \langle yae \rangle \\ [CAT : v, 1 : \star, DISJ : +, \dots] \\ PRED \end{array}$$

The obligatoriness of the disjunctive marker **ya** on a pre-pausal present tense verb can then be enforced by stipulating that the intonation break (analysed as the exponent **#**) can only be attached to the right of the present tense verb exponent if the category of the verb exponent contains $DISJ : +$.

$$f_{\#}\left(\begin{array}{l} \langle e \rangle \\ [CAT : v, DISJ : +, \dots] \\ PRED \end{array}\right) = \begin{array}{l} \langle e_{\#} \rangle \\ [CAT : v, DISJ : +, \dots] \\ PRED \end{array}$$

The disjunctive mode will have to be complicated in order to account for the fact that **ya** does not only combine with main verbs but also with adverbs preceding the main verb. If this is the case, a transitive verb does not **have** to be prefixed by a second class-prefix depending on the ground NP. I shall leave this for future research.⁵

6 Conclusion

TODO

References

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⁵One possible analysis of this observation is to combine the conjunctive verb with the nominal sign first, and then combine the resulting sign with the adverb marked with **ya**.

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