# Left dislocation in Zulu\*

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#### 1. Introduction

This paper examines left dislocation constructions in Zulu, a Southern Bantu language belonging to the Nguni group (Zone S 40). In Zulu left dislocation configurations, a topic phrase in the beginning of the sentence is linked to a resumptive element within the associated clause. Typically, the resumptive element is an incorporated pronoun (cf. Bresnan & Mchombo 1987), as illustrated by the examples in (1) and (2). In these examples, the object pronoun (in italics) is part of the verbal morphology and agrees with the noun class (gender) of the dislocate. This situation is schematically illustrated in (3), where co-indexation represents agreement:<sup>1</sup>

(1) Ushukela abantwana ba-ya-wu-thand-a.

sugar3 child2 SP2-FOC-OC3-like-FV
'Sugar, the children like (it).' (Cope 1984: 41)

(2) *Incwadi* ngi-cabanga ukuthi umfana u-ya-yi-fund-a.

book9 1<sup>st</sup>SG-think that boy1 SP1-FOC-OC9-read-FV 'The book, I think the boy is reading (it).' (van der Spuy 1993: 342)

(3)  $[Topic_i [(...) pronoun_i (...)]]$ 

Left dislocation in Bantu has frequently been discussed in the literature (see e.g. Givón 1976; Morolong & Hyman 1977; Wald 1979; Hendrikse & Poulos 1980; Hyman & Duranti 1982; Allan

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In Bantu languages, each noun belongs to a particular noun/gender class. Class membership determines agreement with nominal modifiers, verbs, adjectives, pronominal clitics etc. In the glosses, I mark the noun classes and agreement through numbers, according to Meinhof's (1906) numbering system of Proto-Bantu. Morphemes are glossed as follows:

ABS = absolute pronoun; ACC = accusative; APL = applicative; COP = copula; DEM = demonstrative pronoun; FOC = focus; FV = final vowel; INF = infinitive marker; LOC = locative; NEG = negative marker, OC = object clitic; PC = pronominal clitic; POSS = possessive marker; PL = plural; RC = relative concord; REC= reciprocal marker; REFL = reflexive marker; RS = relativising suffix; SG = singular; SP = subject prefix; TNS = Tense.

1983; Bresnan & Mchombo 1987; Demuth & Johnson 1989, Demuth 1989; van der Spuy 1993; Baker 2003), albeit often from a discourse-functional perspective. Less attention has been paid to the structural properties of this construction and to the syntactic relation between the left-dislocated topic and the resumptive element in the associated sentence. My aim in this paper is to contribute to the study of Southern Bantu languages by providing a thorough discussion of the syntax of left dislocation in Zulu within the framework of the Principles & Parameters theory (Chomsky 1981 and subsequent work). This discussion will be informed by various theories and analyses that have been proposed for left dislocation phenomena in non-Bantu languages.

In section 2 of this paper I introduce the different types of Zulu left dislocation and compare them to left dislocation constructions that are attested in languages such as English and Romance. In section 3 I examine some of the most basic syntactic properties of Zulu left dislocation. I show that in Zulu, topics may be left-dislocated in non-root clauses, that Zulu left dislocation is recursive, and that both DPs and non-DPs may be dislocated. In section 4 I demonstrate that certain types of Zulu left dislocation exhibit connectivity effects, and I claim on the basis of this observation that these types of left dislocation are derived by syntactic movement. I implement this claim theoretically by adopting a proposal put forward in Cecchetto (1999, 2001), according to which the topic phrase in left dislocation constructions is merged into the sentence structure as the specifier of a DP whose head is the resumptive element. I then discuss two potential problems for the movement analysis: the absence of weak crossover effects in Zulu left dislocation (section 5) and the striking fact that Zulu left dislocation is not sensitive to island constraints (section 6). Section 7 concludes the paper with some remarks on how my proposal relates to the analysis of (Chichewa) left dislocation proposed in Bresnan & Mchombo (1987).

# 2. Types of left dislocation

In Zulu, three types of left dislocation can be distinguished:

- (4) *Le ndoda* ngi-ya-*yi*-thand-a.

  DEM9 man9 1<sup>st</sup>SG-FOC-OC9-like-FV

  'This man, I like (him).'
- (5) Le ndoda ngi-thand-a yona.

  DEM9 man9 1<sup>st</sup>SG-like-FV ABS9

  'This man, I like (him).'

- (6) *UJohn*, ngi-yi-thand-a ngempela *leyo ndoda*.

  John1a 1<sup>st</sup>SG-OC9-like-Fv really DEM9 man9

  'John, I really like that man.'
- (4) is a standard case of left dislocation in Zulu where the resumptive element is an incorporated pronoun (see (1) and (2) above). Incorporated pronouns in Bantu are occasionally referred to as *clitics* in the literature (see e.g. Visser 1989; van der Spuy 1993; Baker 2003), a term which I adopt in this paper.<sup>2</sup>
- (5) shows that, in contrast to what has been observed by Bresnan & Mchombo (1987) for Chichewa, left dislocation constructions in which the topic is resumed by a full pronoun are possible in Zulu. The dislocated DP in (5) is linked to a so-called *absolute pronoun*, which expresses an emphatic or contrastive function (cf. Doke 1954; Kunene 1975). This additional contrastive aspect contributed by the absolute pronoun is probably one of the reasons why in some contexts, the corresponding construction with a clitic is slightly preferred (see Morolong & Hyman (1977) for a similar observation concerning the use of absolute pronouns in Sotho). However, this does not affect the general acceptability of examples such as (5).
- As (6) illustrates, left dislocation is also possible with *epithets* in Zulu. The epithet in a left dislocation construction usually occurs with a demonstrative of the so-called position 2 (which corresponds to English *that* and *those*), and is preferably extraposed/right dislocated (the epithet in (6) occurs to the right of the VP-adverb *ngempela*). Notice that extraposition, like left dislocation, triggers the occurrence of a clitic attached to the verb stem; this clitic agrees with the epithet.

Left dislocation constructions such as those in (4)-(6) can in principle be analysed in two ways. One could assume that the dislocate is *base-generated* in its sentence-initial position. According to this view, the resumptive elements in the Zulu examples in (4)-(6) are the true objects of the verbs, and the left-dislocated phrases are merely "Hanging Topics". Alternatively, it could be argued that left dislocation involves syntactic *movement* of the topic from a base position inside the associated sentence to a landing site in the left periphery. Obviously, such an analysis raises questions about the relation between the moved dislocate and the resumptive element in the associated sentence.

stated in terms of a "null" D<sup>0</sup>-head which is linked to an object agreement marker.

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<sup>&</sup>lt;sup>2</sup> Incorporated clitic pronouns in examples such as (4) have also been treated as object agreement markers whose obligatory appearance in dislocation constructions is then linked to the occurrence of "null" pronominal arguments. These "null" pronouns fulfill the role of the resumptive element (cf. Baker 2003). As far as I can see, the proposal that I present below, according to which the Zulu object clitics are D<sup>0</sup>-heads which incorporate into the verb, can also be re-

Numerous studies of left dislocation have established that many languages in fact exhibit both types of left dislocation.<sup>3</sup> In English, for example, *Topicalisation* constructions such as (7) have been analysed as being derived by movement. Notice that, in contrast to the examples in (4)-(6), there is no resumptive element in (7), which strongly suggests that the left-dislocated topic originates in the associated sentence and forms a chain with its trace (unpronounced copy) in its base position. However, English also has left dislocation constructions with full pronouns and epithets, (8). Constructions such as these are regarded as instances of so-called (Hanging Topic) Left Dislocation (HTLD), in which the topic is assumed to be base-generated in the left periphery (see Chomsky 1977; Baltin 1982; Rodman 1974/1997; Lasnik & Saito 1992; Culicover 1997; Grohmann 2000):<sup>4</sup>

- **(7)** John, Mary likes.
- a. John, Mary likes him. (8)
  - b. John, Mary likes that man.

The Romance languages, Greek, and Lebanese Arabic have left dislocation constructions in which the resumptive element is a "weak" pronoun, i.e. a clitic, and which therefore resemble the Zulu construction in (4):

(9) A Juan lo conozco. Juan-ACC him know-1<sup>st</sup>SG 'Juan, I know (him).' (Spanish; Escobar 1997: 233)

(10) Ton Janni den ton ksero.

the John NEG him know-1stSG

'John, I don't know (him)'

(Greek; Anagnostopoulou 1997: 152)

<sup>&</sup>lt;sup>3</sup> It is impossible to provide an exhaustive list of the literature on left dislocation here. References include Cinque 1977, 1983/1997, 1990; Rizzi 1997; Cecchetto 1999, 2001 for Italian; Anagnostopoulou 1997 for Greek; Rivero 1980, Escobar 1997, Zubizaretta 1998, Ordóñez & Treviño 1999 for Spanish; Villalba 2000 for Catalan; Hirschbuehler 1983/1997 for French; Altmann 1981, Grohmann 2000, Grewendorf 2002 for German; Vat 1981/1997 for Dutch; Ross 1967, Chomsky 1977, Baltin 1982, Rodman 1974/1997, Guéron 1984 for English; Baker 1996 for Mohawk (and many others); Aoun & Benmamoun 1998, Aoun, Choueiri & Hornstein 2001 for Lebanese Arabic; Bresnan & Mchombo 1987 for Chichewa; Demuth & Johnson 1989 for Setawana; Demuth 1989 for Tswana. I discuss and refer to many of these studies in various places in this paper.

<sup>&</sup>lt;sup>4</sup> Chomsky (1977) argues that what is moved in Topicalisation constructions is not the topic, but an empty operator associated with the topic; the relation between the topic and the pronoun in HTLD-constructions is analysed in terms of predication. See Baltin (1982), Cinque (1983/1997), and Lasnik & Saito (1992) for some discussion.

(11) Naadya seef-a Kariim mbeeris.

Nadia saw-her Karim yesterday

'Nadia, Karim saw (her) yesterday'

(Lebanese Arabic; Aoun & Benmamoun 1998: 570)

(12) Gianni io lo odio.

Gianni I him hate

'Gianni, I hate (him)'

(Italian; Cecchetto 1999: 40)

(13) El llibre el vam comprar a Barcelona. the book him TNS-1<sup>st</sup>PL buy in Barcelona 'The book, we bought (it) in Barcelona.'

(Catalan; Villalba 2000: 46)

Examples such as (9)-(13) have been analysed as instances of *Clitic Left Dislocation* (CLLD), an operation which has been extensively studied in the literature. Importantly, these studies demonstrate that the syntactic properties of CLLD resemble those of English Topicalisation constructions in many respects. Although there are considerable differences between the technical details of the various analyses of CLLD (in particular concerning the status and function of the clitic), it has been shown that the relation between the left-dislocated topic and the clitic in CLLD is characterised by the rules and conditions of sentence grammar. CLLD has therefore frequently been analysed in terms of movement (see e.g Cinque 1977, 1983/1997; Escobar 1997; Aoun & Benmamoun 1998; Cecchetto 1999, 2001; Villalba 2000).<sup>5</sup>

Languages with CLLD usually also have left dislocation constructions with epithets and full pronouns, as the following examples from Catalan illustrate:

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<sup>&</sup>lt;sup>5</sup> A prominent non-movement approach to CLLD is proposed in Cinque (1990), who captures the relation between the topic and the associated clause in Italian CLLD in terms of Binding chains. Importantly, however, in Cinque's analysis, CLLD is still a phenomenon of sentence grammar; the Binding chain established by CLLD in many respects is similar to an A-bar chain derived by movement. Cinque's analysis therefore still distinguishes CLLD from HTLD, which falls in the domain of discourse grammar (cf. Cinque 1983/1997). The differences between Cinque's Binding chains-approach and a movement analysis are quite subtle, and most of Cinque's arguments for an analysis of Italian CLLD in terms of the former are based on syntactic properties of Italian which are not attested in Zulu and therefore cannot be replicated. For example, parasitic gaps, which in Italian are licensed by A-bar movement, but not by CLLD, do not exist in Zulu. It therefore seems difficult to identify an empirical argument which would distinguish between Cinque's analysis and a movement analysis for left dislocation in Zulu, and it may well be possible that the movement analysis which I propose below can be re-stated in terms of an approach more similar to Cinque's.

- (14) (Tothom diu meravelles de la Carme, ...)
  'Everybody says wonderful things about Carme, ...'
  - a. ...la Maria, en canvi, tothom parla malament d'ella. the Maria in change everybody talks badly of her 'Maria, instead, everybody talks badly of her.'
  - b. ... la Maria, en canvi, tothom parla malament d'aquella mala peça.
     the Maria in change everybody talks badly of-that bad piece
     'Maria, instead, everybody talks badly of that bad egg'

(Catalan; Villalba 2000: 90f.)

In languages such as Romance and Greek, sentences like (14a) and (14b) are usually analysed on a par with the English examples in (8), i.e. as HTLD-constructions with base-generated topics. However, there also seem to be languages in which the occurrence of an epithet or a full tonic pronoun is compatible with a movement analysis (see, for example, Aoun, Choueiri & Hornstein (2001) on Lebanese Arabic).

In the following sections I explore the properties of Zulu left dislocation constructions in the light of the various analyses that have been proposed for Topicalisation, CLLD and HTLD. It is my aim to establish whether Zulu left dislocation can also be characterised in terms of the movement vs. base generation-dichotomy, i.e. whether left dislocation with clitics in Zulu behaves like CLLD in Romance, Greek etc. and whether left dislocation with absolute pronouns and epithets is HTLD. (To avoid terminological confusion, I use the full term "clitic left dislocation" in the following to refer to any left dislocation construction which involves a clitic as the resumptive element, while I reserve the use of the acronym for those contexts in which I specifically have a movement analysis of clitic left dislocation in mind.) I therefore discuss the syntactic properties of Zulu left dislocation in some detail in the following sections, thereby focusing on those which have been noted to be characteristic properties of CLLD and English Topicalisation. Since the latter construction is uncontroversially derived by movement, a comparison between Zulu left dislocation and English Topicalisation might be particularly telling and provides important clues for an evaluation of the Zulu data.

## 3. Properties of Zulu left dislocation

Cinque (1983/1997, 1990) argues that the following three syntactic properties (among others) distinguish CLLD-constructions from HTLD in Italian ((15a-c) are adopted with minor modifications from Cinque (1983/1997: 96)):

- (15) a. The dislocate in CLLD can occur to the left of root and non-root clauses, but the dislocate in HTLD occurs typically to the left of a root clause.
  - b. There is no (theoretical) limit to the number of dislocates in CLLD, but there may be at most one dislocate in HTLD.
  - c. The dislocate in CLLD can be of any syntactic category X, whereas the dislocate in HTLD can be a DP only.

The same criteria have been noted to characterise the difference between CLLD and HTLD in other languages (cf. Villalba 2000; Grohmann 2000), and also to distinguish Topicalisation and HTLD in English. For example, (16) demonstrates that Topicalisation, but not HTLD, is possible in non-root contexts in English (cf. Chomsky 1977; Baltin 1982; Lasnik & Saito 1992; Maki, Kaiser & Ochi 1999):

- (16) a. I believe that this book, you should read.
  - b. \*I believe that *this book*, you should read *it*.

(Lasnik & Saito 1992: 76f.)

(17b) shows that two instances of HTLD in one sentence are impossible in English (Rodman 1974/1997; Baltin 1982; Lasnik & Saito 1992; Grohmann 2000):

- (17) a. John, Mary, he likes.
  - b. \**John*, *Mary*, *he* likes *her*.

(Lasnik & Saito 1992: 78f.)

And finally, (18) illustrates that non-DPs in English can be topicalised, but cannot appear as Hanging Topics (Cullicover 1997, Villalba 2000):

- (18) a. With Juan, I have already spoken.
  - b. \*With Juan, I have already spoken with him. (Villalba 2000: 83)

In the remainder of this section I examine Zulu left dislocation with respect to the properties in (15).

#### 3.1 Root vs. non-root clauses

The examples in (19) show that in Zulu, a phrase may be left-dislocated inside a non-root clause, where it appears to the right of the complementiser (see Bresnan & Mchombo 1987, who demonstrate the same for Chichewa):

- (19) a. UThemba u-cabang-a ukuthi *incwadi* umfana kumele a-*yi*-fund-e.

  Themba1a SP1a-think-FV that book9 boy1 must SP1-Oc9-read-FV

  'Themba thinks that the book, the boy must read (it).'
  - b. U-cabang-a ukuthi *umama* abantwana ba-*m*-nik-e incwadi. 2<sup>nd</sup>SG-think-Fv that mother1a child2 SP2-OC1a-give-TNS book9 'You think that mother, the children gave (her) a book.'
  - c. UMlungisi u-zw-e ukuthi *imoto* uNomathemba u-*yi*-theng-ile. Mlungisi la SP1a-hear-TNS that car9 N.themba1a SP1a-Oc9-buy-TNS 'Mlungisi heard that a car, Nomathemba bought (it).'

With respect to (15a), clitic left dislocation in Zulu hence seems to pattern with CLLD in Romance and Topicalisation in English. Importantly, however, dislocation in embedded clauses is also possible in Zulu if the resumptive element is an absolute pronoun or an epithet:

- (20) a. U-cabang-a ukuthi *abantwana ba-kaThandi* uJohn a-ka-thand-i *bona*  $2^{nd}$ SG-think-Fv that child2 Poss2-of.Thandi1a John1a NEG-SP1a-like-NEG ABS2 'You think that Thandi's children, John doesn't like (them).'
  - b. U-cabang-a ukuthi *abantwana ba-kaThandi* uJohn 2<sup>nd</sup>SG-think-Fv that child2 Poss2-of.Thandi1a John1a

a-ka-zi-thand-i lezo zingane.

NEG-SP1a-OC10-like-NEG DEM10 child10

'You think that Thandi's children, John doesn't like these kids.'

As was noted in section 2, left dislocation with pronouns and epithets is analysed as HTLD in Romance and English and should not be possible in non-root contexts, according to (15a) (see (16b)). (20) therefore constitutes a first interesting contrast between Romance and English on the one hand, and Zulu on the other.

#### 3.2 The number of dislocates

(21b-c) show that Zulu allows for more than one topic to be left-dislocated:

- (21) a. UThemba u-cabang-a ukuthi abafana ba-fund-a incwadi.

  Themba1a SP1a-think-FV that boy2 SP2-read-FV book9

  'Themba thinks that the boys are reading the book.'
  - b. *Abafana incwadi* uThemba u-cabang-a ukuthi (*pro*) ba-ya-*yi*-fund-a. boy2 book9 Themba1a SP1a-think-FV that SP2-FOC-OC9-read-FV 'The boys, the book, Themba thinks that they are reading (it).'
  - c. *Incwadi abafana* uThemba u-cabang-a ukuthi (*pro*) ba-ya-*yi*-fund-a. book9 boy2 Themba1a SP1a-think-FV that SP2-Foc-Oc9-read-FV 'The book, the boys, Themba thinks that they are reading (it).'

In (21b-c), both the subject and the object of the embedded sentence have been dislocated.<sup>6</sup> If (15b) holds in Zulu, then it follows that at most one of the two dislocated DPs in (21b) and (21c) can be a Hanging Topic.

However, examples comparable to (21b-c) can also be constructed with absolute pronouns or epithets:

- (22) a. *UJohn abantwana ba-kaThandi* u-cabang-a ukuthi *yena* a-ka-thand-i *bona*.

  John1a child2 Poss2-of.Thandi1a 2<sup>nd</sup>SG-think-Fv that ABs1a NEG-SP1a-like-NEG ABs2

  'John, Thandi's children, you think that he doesn't like (them).'
  - b. *UJohn abantwana ba-kaThandi* u-cabang-a ukuthi
     John1a child2 Poss2-of.Thandi1a 2<sup>nd</sup>SG-think-Fv that
     leyo ndoda a-yi-zi-thand-i lezo zingane.
     DEM9 man9 NEG-SP9-Oc10-like-NEG DEM10 child10
     'John, Thandi's children, you think that that guy doesn't like these kids.'
- (22) shows that a Zulu sentence can contain two dislocated phrases, even if both dislocates are linked to absolute pronouns or epithets. This is a second interesting contrast between Zulu and

<sup>6</sup> I assume, following Cinque (1990) and others, that in subject-CLLD, the role of the clitic is fulfilled by pro (see section 4.5).

languages such as Romance or English, where constructions corresponding to e.g. (22a) are impossible (see (17b)).

## 3.3 The category of the dislocate

As (23)-(25) show, Zulu allows the left dislocation of adjunct PPs, finite clauses and infinitives: <sup>7</sup>

- (23) a. *Ukuthi umfana kumele a-fund-e incwadi* uThemba u-(*ku*)-khohliw-e. that boy1 must SP1-read-FV book Themba1a SP1a-Oc15-forget-TNS 'That the boy must read a book, Themba forgot (it).'
  - b. *Ukuthi uThandi u-thand-a indoda e-hlal-a*that Thandi1a SP1a-like-Fv man9 Rc9-live-Fv

    e-Goli a-ngi-(ku)-cabang-i.

Loc-Johannesburg NEG-1<sup>st</sup>SG-Oc15-believe-NEG

'That Thandi likes a man who lives in Johannesburg I don't believe (it).'

- (24) a. *Ng-amageja a-wo* amadoda a-ya-lim-a. with-plough6 Poss-Pc6 man6 Sp6-Foc-plough-Fv 'With their ploughs, the men are ploughing.'
  - b. ?Ne-ngane izintombi zi-ya-dlal-a.with-child9 girl10 SP10-Foc-play-Fv'With the child, the girls are playing.'
- (25) *Uku-gqok-a kakuhle ng-ehlobo* intombi i-ya-*ku*-thand-a. INF15-dress-FV nicely in-summer5 girl9 SP2-FOC-OC15-like-FV 'To dress nicely in the summer, a girl likes (it).'

Notice that there are no clitic pronouns in Zulu that would correspond to the PPs in (24), but left dislocation in these constructions is possible even without a clitic. Furthermore, for many speakers, the object clitic -*ku*- of noun class 15, which is used with the dislocated CPs in (23), can also be omitted. As noted by e.g. Cinque (1990), Rizzi (1997) and Cecchetto (2001), the clitic is optional in Italian CLLD-constructions for categories other than DP and is therefore not required if no clitic

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<sup>&</sup>lt;sup>7</sup> Infinitives in Zulu are formed by means of the prefix for noun class 15 and are therefore sometimes also analysed as DPs. However, the presence of the adverb *kakuhle*, 'nicely', rules out this possibility for the dislocated topic in (25) (cf. Visser 1989). I leave it open whether the dislocated infinitive in (25) is a VP, a TP or a CP.

form exists for a particular category. With respect to these properties, Zulu clitic left dislocation again seems to pattern with CLLD.

However, (26) shows that non-DPs can also be dislocated in Zulu if the resumptive element is not a clitic:

(26) Ukuthi uThandi u-thand-a indoda e-hlal-a e-Goli
that Thandi1a SP1a-like-Fv man9 Rc9-live-Fv Loc-Johannesburg
a-ngi-cabang-i kona.
NEG-1<sup>st</sup>SG-think-NEG ABS15
'That Thandi loves a man who lives in Johannesburg, I don't believe (it).'

(26) is an example of a dislocated CP which is linked to a full pronoun in the associated sentence. In contrast to Zulu, constructions such as (26) are not possible in Romance and English, according to (15c).

The data demonstrate that, with respect to properties (15a-c), Zulu left dislocation with clitics, absolute pronouns and epithets behaves like CLLD in Romance and Topicalisation in English. One conclusion that would be consistent with this observation would be to assume that all types of left dislocation in Zulu are derived by movement. This would place Zulu in the same class of languages as Lebanese Arabic, where left dislocation constructions with full pronouns and epithets also show the characteristic properties of movement (see Aoun, Choueiri & Hornstein 2001).

However, I doubt that the data discussed above can be interpreted as *conclusive* evidence for a movement analysis of Zulu left dislocation. Note that there is no theory-independent reason for *why* the properties discussed in this section should only be attested if the topic in a left dislocation construction has undergone movement. For example, there is no intrinsic syntactic property of basegenerated Hanging Topics which would disallow them in non-root contexts or prevent them from being iterated.

Furthermore, note that the data from English and Romance do not consistently support Cinque's classificational criteria in (15). A closer look at the literature reveals that the predicted differences between the two types of left dislocation are not as clear as the characterisation in (15) and the initial illustration may lead one to believe. For example, Emonds (1976) treats *both* HTLD and Topicalisation in English as root phenomena (1976: 31), and Haegeman (2003: 642) claims that only adjuncts, but not arguments, can be topicalised to a non-root position in English. Ross (1967: 234) argues that *both* HTLD and Topicalisation are impossible in subordinate subject clauses, but

he shows that *both* are possible in certain subordinate object clauses. The acceptability of HTLD in subordinate clauses is also acknowledged by Lasnik & Saito (1992) (albeit only in a footnote (p. 193, note 7)). Interestingly, Escobar (1997: 248) argues that left dislocation in embedded clauses in Spanish is possible only *with* HTLD, but *not with* CLLD. Furthermore, Escobar takes recursiveness to be a property of HTLD (1997: 245), in contrast to what has been noted for English and Italian. Finally, the fact that certain (non-selected) PPs may occur in HTLD constructions in Italian has been pointed out by Cinque (1983/1997: 113f., note 5). In the light of these qualifications, it seems premature to draw any conclusions about the nature of left dislocation constructions in Zulu only on the basis of the data above. Rather, other syntactic properties of Zulu left dislocation have to be examined. I therefore now take a closer look at the binding relations established by this construction.

## 4. Connectivity and Binding

The term "connectivity" refers to a situation in which a moved phrase behaves as if it was in its base position with respect to principles of binding and scope. Connectivity has therefore been used as an important test to establish whether or not a particular construction is derived by movement. As expected, CLLD and Topicalisation show connectivity effects (cf. e.g. Guéron 1984 (for English); Cinque 1977; 1983/1997, 1990; Cecchetto 2001 (for Italian); Villalba 2001 (for Catalan), Escobar 1997 (for Spanish); Anagnostopoulou 1997 (for Greek); Aoun & Benmaoun 1998; Aoun, Choueiri & Hornstein 2001 (for Lebanese Arabic); see also Baker 1996 (for Mohawk)). In sections 4.1 - 4.4 I show that the same holds for left dislocation constructions with clitics and absolute pronouns in Zulu, and I conclude that these instances of Zulu left dislocation must therefore be analysed in terms of movement. Based on this conclusion, I propose a syntactic analysis of Zulu left dislocation in section 4.5.

#### 4.1 Condition A

It is well-known that an anaphor contained in an A-bar-moved constituent can be coreferential with a phrase which does not c-command it:

- (27) a. Which picture of himself<sub>i</sub> did Bill<sub>i</sub> put t on the wall?
  - b. Which stories about each other, did the students, tell t?

Both the reflexive pronoun in (27a) and the reciprocal in (27b) can take the subjects of their respective sentences as their antecedents. In each sentence, the moved wh-phrase containing the anaphor behaves as if it was in the position of its trace t at LF, the level of syntax where the Binding Conditions apply (see Chomsky 1995; Fox 1999). The grammaticality of (27) hence suggests that A-bar movement can be undone at LF and that the moved constituent is reconstructed into its base position.

Chomsky's (1995) copy theory of movement explains reconstruction effects in terms of the idea that a moved constituent leaves behind an identical copy which is not pronounced at PF, but "visible" for Binding Theory at LF (cf. Heycock 1995; Fox 1999; Safir 1999). Therefore, the sentence in (27a) roughly corresponds to the LF in (28):

(28) [Which picture of himself] did Bill buy [which picture of himself]?

Since the anaphor in the lower copy of the A-bar-chain is bound by the subject DP at LF, (27a) is grammatical.

Topicalisation also shows connectivity effects with respect to Condition A:

- (29) a. These pictures of himself, Bill took t at his wedding.
  - b. *These stories about each other*, my friends usually tell t at parties.

The grammaticality of the examples in (29) follows directly from the assumption that Topicalisation is an instance of A-bar movement which leaves a copy of the dislocate inside the associated sentence at LF.

In the light of the above, consider the following clitic left dislocation data from Zulu:<sup>8</sup>

(30) a. Umakhelwane wa-mi<sub>i</sub> u-zam-a uku-zi<sub>i</sub>-panish-a neighbour1 POSS1-1<sup>st</sup>SG SP1-try-FV INF15-REFL-punish-FV

ng-oku-nga-dl-i lutho izinsuku ezi-ningi.

with-INF15-NEG-eat-NEG nothing day10 Rc10-many

'My neighbour tries to punish himself by not eating anything for many days.'

13

<sup>&</sup>lt;sup>8</sup> For some speakers, the (b)-examples are slightly marked, but improve if the subject is extraposed, as in (i):

<sup>(</sup>i) *Uku-cul-el-an*<sub>i</sub>-a ba-ya-*ku*-thembis-ile abafazi<sub>i</sub>. INF15-sing-APL-REC-FV SP2-FOC-OC15-promise-TNS woman2

<sup>&#</sup>x27;To sing to each other, they promised (it), the women.'

- b. *Uku-zi*<sub>i</sub>-panish-a ng-oku-nga-dl-i lutho izinsuku

  INF15-REFL-punish-Fv with-INF15-NEG-eat-NEG nothing day10

  eziningi umakhelwane wa-mi<sub>i</sub> u-ya-ku-zam-a.

  RC10-many neighbour1 POSS1-1<sup>st</sup>SG SP1-FOC-OC15-try-Fv

  'To punish himself by not eating anything for many days, my neighbour tries (it).'
- (31) a. Abafazi<sub>i</sub> ba-thembis-e uku-cul-el-an<sub>i</sub>-a.
  woman2 SP2-promise-TNS INF15-sing-APPL-REC-FV
  'The women promised to sing to each other.'
  b. *Uku-cul-el-an<sub>i</sub>-a*, abafazi<sub>i</sub> ba-ya-*ku*-thembis-ile.
  INF15-sing-APL-REC-FV woman2 SP2-FOC-OC15-promise-TNS
  'To sing to each other, the women promised (it).'

Reflexive pronouns and reciprocals in Zulu and other Bantu languages are affixes and part of the verbal morphology (cf. Mchombo 1993 on Chichewa). Since there are no DP-reflexives, it is impossible to construct examples which correspond exactly to the data in (29). However, it was shown in section 3.3 that Zulu also allows for the left dislocation of infinitives, and infinitives can include anaphoric affixes. Importantly, the examples in (30b) and (31b) show that an anaphor contained in a dislocated infinitive can take its antecedent in the associated clause. As with the English examples above, this situation can be explained by the copy theory of movement. If the dislocates in (30b) and (31b) are represented by identical copies in the object position of their associated clauses, then the anaphors contained in these copies are bound at LF, and Condition A is obeyed. The grammaticality of the Zulu data in (30b) and (31b) hence strongly suggests that these constructions are derived by movement of the topic and that therefore, Zulu left dislocation with resumptive clitics is CLLD.

There is a potential objection to this argument. Reflexive affixes are the equivalents of object clitics (cf. Mchombo 1993), and the presence of an object clitic is a clear indication of the clausal status of an infinitive (see Visser 1989). Therefore, the dislocate constituents in (30b) and (31b) cannot be DPs, but must be clauses (VPs, TPs), or even full CPs. However, if this is the case, then it may be that the dislocated phrases do not only contain the anaphor, but also a possible antecedent, namely PRO, the subject of the infinitive, which is controlled by the subject of the main clause.

Accordingly, the anaphors in (30b) and (31b) would be c-commanded by their antecedents even if the dislocates were base-generated in the left periphery.<sup>9</sup>

However, the above data could still be interpreted as evidence for a movement analysis, since both examples are instances of *obligatory* control, and it is a standard assumption that obligatory control requires c-command (Williams 1980; Koster 1984). Therefore, even if it is assumed that the dislocated constituents in (30) and (31) include a PRO-subject, reconstruction is required in order to create a configuration at LF in which PRO can be controlled. This means that (30b) and (31b) can be interpreted as evidence in favor of a movement approach to clitic left dislocation in Zulu, regardless of the syntactic status of the dislocated infinitive.

#### 4.2 Condition C

In English, Topicalisation constructions such as (32b) exhibit Condition C-effects (see Baker 1996 for similar examples from Romance):<sup>10</sup>

(32) a. \*He<sub>i</sub> likes John<sub>i</sub>'s mother.

b. \*John<sub>i</sub>'s mother he<sub>i</sub> likes. (Guéron 1984: 155)

The R-expression *John* is c-commanded by the coreferential pronoun *he* in (32a), and a Condition C violation occurs. Since the DP *John's mother* has been topicalised in (32b), the R-expression is no longer overtly c-commanded by *he*. However, coreference remains excluded. Again, reconstruction is required to explain the ungrammaticality of (32b). If we assume that a topicalised constituent leaves behind a silent copy, (32b) has the LF-structure in (33):

(33) [DP John's mother] he likes [DP John's mother].

If *John* and *he* are co-indexed, then the LF of (32b) violates Condition C in the same way as (32a) does.

In the light of these assumptions, the following data from Zulu provide further support for a movement approach to clitic left dislocation:

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<sup>&</sup>lt;sup>9</sup> It has been argued that DPs may also contain PRO, which can function as an antecedent for DP-internal anaphors. See Longobardi (2001) and references cited therein.

- (34) a. \*(Yena<sub>i</sub>/pro<sub>i</sub>) u-thand-a imoto kaJohn<sub>i</sub>.

  ABS1a SP1a-like-FV car9 of.John1a

  'He likes John's car.'
  - b. \*Imoto kaJohn<sub>i</sub> (yena<sub>i</sub>/pro<sub>i</sub>) u-ya-yi-thand-a. car9 of.John1a ABS1a SP1a-FOC-OC9-like-FV 'John's car, he likes (it).'
- (35) a. \*(Yena<sub>i</sub>/pro<sub>i</sub>) u-bon-e abantwana ba-kaThandi<sub>i</sub>.

  ABS1a SP1a-see-TNS child2 SP2-of.Thandi
  'She saw Thandi's children.'
  - b. \*Abantwana bakaThandi<sub>i</sub> (yena<sub>i</sub>/pro<sub>i</sub>) u-ba-bon-ile. child2 SP2-of.Thandi ABS1a SP1a-Oc2-see-TNS 'Thandi's children, she saw (them).'

As the (b)-examples show, coreference of a subject pronoun (regardless of whether it is an absolute pronoun or pro) and an R-expression contained in a left-dislocated DP is impossible in Zulu. Since the pronoun does not overtly c-command the R-expression inside the dislocate, an approach according to which the left-dislocated DP would be base-generated in the left periphery of the clause fails to explain this Condition C-effect. In contrast, if it is assumed that left dislocation in Zulu is movement, and that the left-dislocated phrase is linked to an identical copy inside the associated sentence, then the ungrammaticality of (34b) and (35b) follows straightforwardly.

The data in (36) and (37) show that Zulu left dislocation also exhibits a familiar contrast between R-expressions contained in complement clauses and R-expressions contained in adjuncts:

(36) a. \*(Yena<sub>i</sub>/pro<sub>i</sub>) a-ka-wa-kholw-a amahemuhemu okuthi

ABS1a NEG-SP1a-OC3-believe-Fv rumour6 that

uThandi u-thand-a uVusi<sub>i</sub>.

Thandi1a SP1a-love-Fv Vusi1a

'He doesn't believe the rumours that Thandi loves Vusi.'

<sup>&</sup>lt;sup>10</sup> Safir (1999, note 13) claims that coreference in examples such as *John's mother, he adores most* is possible, but he acknowledges that not everybody shares this judgement.

b. ??/\*Amahemuhemu okuthi uThandi u-thand-a uVusii (yenai/proi)
 rumour6 that Thandi1a Sp1a-love-Fv Vusi1a a-ka-wa-kholw-a.
 NEG-Sp1a-Oc3-believe-Fv
 'The rumours that Thandi loves Vusi, he doesn't believe (them).'

- (37) a. \*(Yena<sub>i</sub>/pro<sub>i</sub>) u-qabul-e abafazi uVusi<sub>i</sub> a-ba-thanda-yo.

  ABS1a SP1a-kiss-TNS woman2 Vusi1a Rc1a-Oc2-love-RS

  'He kissed the women whom Vusi loves.'
  - b. *Abafazi uVusi*<sub>i</sub> *a-ba-thanda-yo* (yena<sub>i</sub>/pro<sub>i</sub>) u-*ba*-qabul-ile. woman2 Vusi1a RC1a-OC2-love-Rs ABS1a SP1a-OC2-kiss-TNS 'The women whom Vusi loves, he kissed (them).'

In both (36a) and (37a), coreference of the R-expression and the c-commanding pronoun is excluded. As (36b) shows, left dislocation of the object DP and its complement clause that includes the R-expression does not obliterate the Condition C-effect; for most speakers, coreference of *Vusi* and the subject pronoun (*yena* or pro) remains impossible. This again follows from the copy theory of movement; the R-expression inside the copy of the dislocated DP violates Condition C at LF. However, in contrast to (36b), left dislocation of the object DP in (37b), which is modified with a relative clause containing the proper name, seems to bleed Condition C. All speakers who I have consulted find that coreference is possible in (37b), in striking contrast to their judgements about (36b).

The contrast between examples such as (34-36b) and (37b) has also been reported for Spanish, Italian and Navajo left dislocation constructions (Baker 1996: 268, Cecchetto 1999: 43) and has frequently been noted in the literature on other types of A-bar movement. It is well known that R-expressions show so-called "anti-reconstruction"-effects if they are contained in an adjunct which modifies a moved constituent (cf. Van Riemsdijk & Williams 1981; Freidin 1986; Lebeaux 1988; Chomsky 1995; Heycock 1995; Fox 1999):<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> As indicated by the ?? in the examples in (36b) and (38b), DPs embedded in complement CPs may also fail to show reconstruction effects for some speakers (cf. Van Riemsdijk & Williams 1981: 201), although most speakers detect a systematic difference between reconstruction effects with embedded sentential complements and relative clauses (cf. Freidin 1986: 179). The fact that Condition C reconstruction effects are often less robust in constructions with an Rexpression contained inside a complement clause has been noted elsewhere (cf. Guéron 1984; Safir 1999). This may possibly due to the fact that CPs such as the one in (38b) are in fact not true complements of N, but selected adjuncts, as suggested by Safir (1999, note 1). Whatever the reason for the variation of speakers' judgements regarding the constructions in (36b) and (38b), it is important to note that the contrast between (36b) and (37b) is still quite strong. Whereas the vast majority of speakers noted a Condition C violation in (36b), none of them did so in (37b).

- (38) a. Which argument that John<sub>i</sub> made did he<sub>i</sub> believe?
  - b. ??/\*Which argument that John; is a genius did he; believe?

(Fox 1999: 181)

Chomsky (1995), following a proposal made in Lebeaux (1988), analyses the contrast depicted in (38) as follows. Whereas the complement clause in (38b) must be merged into the structure together with the noun *before* the wh-phrase undergoes A-bar-movement, the relative clause in (38a), being an adjunct, may be inserted into the structure *after* A-bar movement has already taken place. This means that only the copy of the wh-phrase in (38b), but not the one in (38a), includes the CP which contains the R-expression *John*. Therefore, the R-expression in (38a) is outside the scope of the pronoun *he* at LF, and Condition C is not violated. In contrast, since the copy of the wh-phrase in (38b) contains the R-expression *John*, this DP violates Condition C at LF if it is coreferential with the subject pronoun.

The same analysis can now be adopted for the Zulu data in (36) and (37). We can assume that the relative clause in (37b), which containes the R-expression, is only added after the DP *abafazi* has already been moved to sentence-initial position. At LF, the copy of the left-dislocated DP therefore does not include the R-expression, and *Vusi* can be coreferential with the subject of the sentence. However, since the complement clause in (36b) is merged with the object DP before left dislocation applies, the R-expression inside the copy of the dislocate is c-commanded by the pronoun at LF, and coreference yields a Condition C-violation.

#### 4.3 Bound Variables

If the conclusion drawn from the preceding discussion is correct, and Zulu clitic left dislocation involves movement which leaves behind a copy of the dislocate, then it is predicted that a bound variable reading of a pronoun should be possible even if the pronoun is contained in the dislocated phrase. The following data confirm this prediction:<sup>12</sup>

(39) a. Wonke umfundi; u-ncom-a uthisha wa-khe;.

every1 student1 Sp1-commend-Fv teacher1a Poss1a-Pc1

'Every student commends his teacher.'

<sup>&</sup>lt;sup>12</sup> I have marked the (b)-examples as ? in order to represent the fact that for most speakers, the bound variable reading is possible in the (b)-examples, but less prominent than in the (a)-examples.

- b. ?Uthisha wa-khei wonke umfundii u-ya-m-ncom-a.
   teacher1a Poss1a-Pc1 every1 student1 SP1-Foc-Oc1a-commend-Fv
   'His teacher, every student commends (him).'
- (40) a. Yonke indoda<sub>i</sub> i-thand-a imoto ya-yo<sub>i</sub>.

  every9 man9 SP9-like-FV car9 Poss9-Pc9

  'Every man loves his car.'
  - b. ?Imoto ya-yoi yonke indodai i-ya-yi-thand-a.
     car9 Poss9-Pc9 every9 man9 Sp9-Foc-Oc9-like-Fv
     'His car, every man loves (it).'

As the (b)-examples show, a pronoun which is contained in a left-dislocated DP in Zulu can still be bound by a quantifier subject in the associated sentence, although it is not overtly in the scope of the quantifier after left dislocation.<sup>13</sup>

The possibility of bound variable readings of pronouns contained in left-dislocated phrases has also been noted for CLLD in Lebanese Arabic by Aoun & Benmamoun (1999: 580) and Aoun, Choueiri & Hornstein (2001: 392), for Italian by Cinque (1983/1997: 104), and for Spanish by Zubizaretta (1998: 114). If one assumes that this possibility must be due to syntactic reconstruction of the moved constituent (see Fox 1999, among others), then the data in (39) and (40) provide more evidence for my claim that clitic left dislocation constructions in Zulu are derived by movement.<sup>14</sup>

Clark (1992: 5) notes that constructions such as (i) show a three-way ambiguity. First, the pronoun may not be bound by the quantifier at all; second, (i) may mean that all students admire all teachers as a group (the group reading); and third, the pronoun may also be interpreted as a bound variable. Under a bound variable reading, (i) means that each student admires his own teacher without necessarily admiring all teachers (in a world where every student only admires his own teacher, (i) would be true under the bound variable reading, but false under the group reading). I only tested the possible interpretations of the left-dislocation variant of (i) with one Zulu speaker, but he claimed that the bound variable reading is still possible in (ii) (in accordance with the general conclusion drawn in the text):

<sup>&</sup>lt;sup>13</sup> Vat (1981/1997: 70) observes that data judgements concerning the behaviour of bound pronouns in left dislocation structures are 'highly subtle and often murky'. The judgements of some of my informants confirmed this observation. For example, some speakers would accept the bound variable reading only in one of the two examples. My suspicion is that the data in Zulu are complicated by the fact that for some of those speakers, *every*-constructions of the type illustrated in (39) and (40) are already quite marked to begin with. The preferred way of expressing universal statements in Zulu is by means of quantifiers like *all*, as in (i):

<sup>(</sup>i) Bonke abafundi ba-ncom-a othisha ba-bo. all-2 student2 SP2-admire-FV teacher2a POSS2a-PC2 'All students admire their teachers.'

<sup>(</sup>ii) *Othisha babo* bonke abafundi ba-ya-*ba*-ncom-a. teacher2a POSS2a-PC2 all-2 student2 SP2-FOC-OC2-commend-FV

<sup>&#</sup>x27;Their teachers, all students commend (them).'

<sup>&</sup>lt;sup>14</sup> Fox (1999) shows that the bound variable reading of a pronoun contained in a moved constituent must be established by syntactic reconstruction and cannot be the result of a semantic mechanism that would yield this interpretation

### 4.4 Epithets and absolute pronouns revisited

Having shown that there is compelling evidence for analysing left dislocation with clitics in Zulu as CLLD, I now return to left dislocation constructions with epithets and absolute pronouns. In section 3 I showed that these constructions pattern with clitic left dislocation with respect to certain basic syntactic properties concerning the landing site of dislocation, the syntactic category of the dislocate, and recursiveness. I am now in the position to test whether these similarities extend to the domain of connectivity. Consider the following examples:

- (41) a. \*Imoto kaJohn<sub>i</sub> (yena<sub>i</sub>/pro<sub>i</sub>) u-thand-a yona. car9 of.John1a ABS1a SP1a-like-Fv ABS9 'John's car he likes (it).'
  - b. Uthisha wakhei wonke umfundii u-ncom-a yenai.
     teacher1a Poss1a-Pc1 every1 student1 Sp1-commend-Fv ABs1a
     'His teacher, every student commends (him).'
- (42) a. ?Imoto kaJohn<sub>i</sub> (yena<sub>i</sub>/pro<sub>i</sub>) u-ya-si-thand-a ngempela leso sikorokoro.

  car9 of.John1a ABS1a SP1a-Foc-Oc8-like-Fv really DEM8 jalopy8

  'John's car, he really likes that jalopy.'
  - b. ?Imoto kaJohni (yenai/proi) u-thand-a leso sikorokoro.
     car9 of.John1a ABS1a SP1a-like-FV DEM8 jalopy8
     'John's car, he likes that jalopy.'
  - c. \**Uthisha wakhe*i wonke umfundi<sub>i</sub> u-ya-yi-ncom-a *leyo ndoda*. teacher1a Poss1a-Pc1 every1 student1 SP1-Foc-Oc9-commend-Fv DEM9 man9 'His teacher, every student commends that man.'

The data show a clear contrast between left dislocation constructions with epithets and those with absolute pronouns. The examples in (41), in which the dislocate is linked to a full pronoun, pattern with the CLLD-constructions discussed in sections 4.2 and 4.3. (41a) exhibits a Condition C violation, and (41b) shows that a pronoun contained in a dislocated DP can be bound by a quantifier in subject position. This follows from a movement analysis, according to which left dislocation in

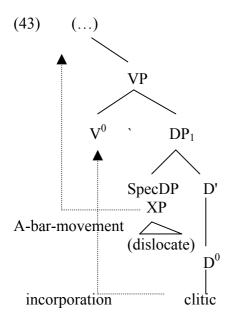
without syntactic reconstruction (as is proposed e.g. in Engdahl 1986; see also Cecchetto 2001). In section 6 I discuss the possibility that semantic mechanisms for reconstruction may exist, but that they are restricted to island contexts in which movement (and hence the creation of a copy) is generally not an option.

(41) has left behind a copy of the dislocate at LF which is accessible for Binding. In contrast, no connectivity effects are observed in (42), where the resumptive element is an epithet. Although the R-expression *kaJohn* in (42a) (where the epithet is extraposed and co-occurs with a clitic) and (42b) (where the epithet is in object position) is coreferential with the subject pronoun, Condition C is not violated. Furthermore, no bound variable reading of the pronoun contained in the dislocate is possible in (42c). These properties follow if it is assumed that the dislocates in (42) are basegenerated in the left periphery, such that no copy is present in the associated sentence at LF. These data hence lead to the conclusion that left dislocation with epithets must be analysed as HTLD. In contrast, left dislocation with absolute pronouns patterns with clitic left dislocation in Zulu in showing the connectivity properties of movement.

## 4.5 The syntax of left dislocation with resumptive pronouns

On the basis of these observations, let me now address the syntax of left dislocation constructions in Zulu in some more detail. My analysis of left dislocation with clitics and absolute pronouns is based essentially on proposals made by Cecchetto (1999, 2001) for Italian and Aoun, Choueiri & Hornstein (2001) for Lebanese Arabic CLLD. According to these proposals, the dislocate is merged as the specifier of a "big" DP whose head is the resumptive pronoun (cf. Uriagereka (1995) for a similar approach to clitic doubling constructions in Romance); agreement between the dislocate and the resumptive element is the result of this specifier-head relation. I assume that in Zulu, both clitics and absolute pronouns can function as heads of a "big" DP and select a topic in their specifier. If the D-head is an object clitic, it undergoes head movement and adjoins to V to be incorporated into the verbal morphology. Absolute pronouns, which are free morphemes, do not incorporate. The topic-XP moves from the specifier of "big" DP to a sentence-initial landing site, which I take to be the specifier of a functional topic projection (SpecTopP) within a recursive C-system, along the lines of Rizzi (1997). (43) illustrates this analysis for CLLD:

<sup>&</sup>lt;sup>15</sup> I assume that inflectional verbal morphology in Zulu is either syntactic (i.e. associated with head positions in the syntactic structure) or post-syntactic (i.e. associated with the verb in the mapping to PF, according to the verb's inflectional specifications; cf. Anderson 1982; Halle & Marantz 1993). The fact that the clitic incorporates into V before further morphology is added explains the observation that in Zulu, as in most Bantu languages, object markers immediately precede the verb stem (cf. Wald 1979; Mchombo 1993; van der Spuy 2001).



A few comments about (43) are in order. The first concerns the left dislocation of non-DPs. As was shown in section 3.3, non-selected PPs and CPs may also be dislocated in Zulu. Since the former are not resumed by clitics, I suggest that these PPs are moved directly from their non-selected position to the left periphery, leaving behind a copy. The same assumption can be made for dislocated CPs if no resumptive element is present in the associated sentence (an option which, as was noted in section 3.3, exists for CP-dislocation). Otherwise, left dislocation with CPs can be analysed on the basis of (43): the CP is merged as the specifier of a DP whose head is the clitic pronoun of class 15; the clitic incorporates into the verb, and the CP undergoes left dislocation.

A second point concerns left dislocation constructions with subjects. Here, the assumption that dislocates move to SpecTopP from the specifier position of "big" DP creates a problem, since extraction from a subject DP constitutes an island violation. Notice that the same problem arises if one adopts Baker's (2003) proposal, according to which thematic subjects in Bantu are not in SpecTP, but adjoined to TP, since adjuncts are also opaque domains for extraction. However, notice that I have assumed so far that Zulu has a "null" pronominal subject (pro) which fulfills the function of the clitic in subject left dislocation (see note 6). This means that pro is the head of "big" DP in subject CLLD. I now assume that, since the dislocate (DP<sub>1</sub>) cannot move out of "big" DP (DP<sub>2</sub>) in subject CLLD-constructions, it is instead the whole "big" DP that moves to the left, pied-piping pro. <sup>16</sup>

. .

<sup>&</sup>lt;sup>16</sup> The idea that the head of "big" DP is pro, and that the corresponding clitic attached to the verb is an agreement marker, could also be adopted for object left dislocation (cf. Baker 2003), possibly without any crucial implications for the theory (see also note 2).

However, there remains a problem with subject left dislocation constructions in which the resumptive element is an absolute pronoun. It cannot be assumed that the "big" DP consisting of the dislocate and the absolute pronoun moves as one constituent, because the topic and the pronoun can be separated by other constituents, as the following example with long left dislocation illustrates ((44) repeats example (22a) from section 3.2):

(44) *UJohn abantwana ba-kaThandi* u-cabang-a ukuthi *yena*John1a child2 POSS2-of.Thandi1a 2<sup>nd</sup>SG-think-FV that ABS1a
a-ka-thand-i *bona*.
NEG-SP1a-like-NEG ABS2
'John, Thandi's children, you think that he doesn't like (them).'

In order to account for examples such as (44), one has to assume that the topic phrase (*uJohn*) has moved out of the embedded subject DP, stranding the head of this "big" DP, the absolute pronoun (*yena*). The question then is, how can the subject island-character of the "big" DP be circumvented?

My answer to this question relies on the assumption that the "big" DP in examples such as (44) is not in subject position (SpecTP), but instead has moved from SpecVP/vP to the specifier of a focus phrase (FocP) below TP, in order to license the contrastive reading associated with the absolute pronoun (see section 2). Importantly, as is argued in Sabel & Zeller (2004), movement of a phrase from SpecFocP (an A-bar position) to SpecTP (an A-position) is ruled out as a case of improper movement. Therefore, once a "big" DP with an absolute pronoun has moved to SpecFocP, it is "frozen" in place. However, if the subject does not move to SpecTP, the strong [+D]-feature of T (= EPP) remains unchecked. In order to solve this problem, I assume that in this case, the D<sup>0</sup>-head of the "big" DP in SpecFocP – the absolute pronoun – undergoes head movement and adjoins to T<sup>0</sup>. In this configuration, the [+D]-feature of T<sup>0</sup> (and presumably also the Case-features of T<sup>0</sup> and "big" DP) can be checked:

(45) 
$$[TP [T'] T^0 + \mathbf{p_i^0} [FocP [DP [dislocate] t_i]_j [Foc'] (...) t_j (...)]]]$$

Apart from being necessary on grounds of feature checking, movement of  $D^0$  to  $T^0$  has an important consequence: if one follows Baker (1988) and assumes that incorporation of a head into a higher head "opens barriers", then it follows that in a configuration such as (45), the "big" DP in the specifier of FocP does not count as an island, and that extraction of the dislocate is hence possible.

Let me return to object left dislocation. The view that both absolute pronouns and clitics occupy the  $D^0$ -position of "big" DP implies that these two pronouns can only co-occur if the absolute pronoun is not a resumptive element, but occupies the position of the dislocate in SpecDP:

# (46) [DP [DP absolute pronoun] [D [clitic]]]

An interesting prediction arises from this implication. If both an absolute pronoun and a clitic appear in a construction with a left-dislocated DP, then this topic DP must be base-generated in the left periphery, given that the specifier of "big" DP is filled with the absolute pronoun (and can hence not host the copy of a moved dislocate). In other words, whereas a left dislocation construction with *either* an absolute pronoun *or* a clitic is derived by movement, we expect left dislocation with *both* an absolute pronoun *and* a clitic to behave like HTLD. This prediction is indeed borne out:

(47) differs minimally from the example in (41a) in section 4.4 in that the absolute pronoun cooccurs with a clitic. In contrast to (41a), no Condition C-violation is attested in (47). This follows
from the analysis presented here. In (41a), the specifier of "big" DP is occupied by a copy of the
dislocate which includes the R-expression *uJohn*. Therefore, coreference with the pro-subject
violates Condition C. In contrast, the specifier of "big" DP in (47) is occupied by (the copy of) the
absolute pronoun (which has been extraposed/right dislocated). The dislocate in the left periphery
therefore is a base-generated Hanging Topic which consequently does not show connectivity
effects

If we substitute a full DP for the absolute pronoun in (46), we get the basic structure of HTLD constructions with epithets. As noted above, epithets usually co-occur with clitics. This follows from a structure such as (46), in which the epithet is merged as the specifier of the DP headed by the clitic and then right dislocated. If the epithet is not extraposed, and no clitic occurs, it is merged as a normal DP-argument of the verb. I assume that the base-generated Hanging Topic in these constructions is adjoined to CP.

I conclude that Zulu has two ways of generating left dislocation constructions. A movement analysis is possible whenever the dislocate is linked either to a clitic or to an absolute pronoun in

the associated sentence. In both constructions, the resumptive pronoun is the head of a DP whose specifier is represented by a copy of the moved dislocate at LF, which gives rise to the connectivity effects observed in sections 4.1 - 4.4. This type of left dislocation contrasts with HTLD-constructions in Zulu. Here, the dislocate is base-generated in the left periphery and anaphorically linked to an epithet (or an absolute pronoun, if a clitic is also present).

# 5. Weak(est) Crossover

In this section I discuss a potential counter-argument to the movement analysis of clitic left dislocation in Zulu. As is well-known, wh-movement may exhibit so-called weak crossover (WCO) effects (Wasow 1972). (48) cannot have the reading expressed by (49):

- (48) \*Who<sub>i</sub> does his<sub>i</sub> mother like t<sub>i</sub>?
- (49) For which x, x's mother likes x?

The impossibility of (49) is commonly attributed to the fact that the wh-phrase has moved across a co-indexed pronoun which is not c-commanded by the wh-trace/copy. Since copies of A-bar moved phrases are (or contain) variables, wh-movement in (48) creates a configuration at LF in which the wh-operator binds two variables (its trace/copy, and the bound pronoun), which constitutes a violation of the Bijection Principle (Koopman & Sportiche 1982).

Since A-bar bound pronouns are always variables (Koopman & Sportiche 1982), one would expect WCO-effects to be attested whenever A-bar movement crosses a co-indexed pronoun. Therefore, if Zulu left dislocation is indeed A-bar movement, it is predicted to exhibit WCO-effects. However, this prediction is not borne out:

- (50) a. Umama wa-khe<sub>i</sub> u-siz-a uCharlise Theron<sub>i</sub>.

  mother1a POSS1a-PC1a SP1a-help-Fv Charlise Theron1a

  'Her mother helps Charlise Theron.'
  - b. UCharlise Theron<sub>i</sub>, umama wa-khe<sub>i</sub> u-ya-m-siz-a.
     Charlise Theron1a mother1a Poss1a-Pc1a Sp1a-Foc-Oc1a-help-Fv
     ' Charlise Theron, her mother helps (her).'
- (51) a. Uthisha wa-khe<sub>i</sub> u-cabang-a ukuthi le ntombi i-thand-a uJohn<sub>i</sub>. teacher1a POSS1a-PC1a Sp1a-think-FV that DEM9 girl9 Sp9-like-FV John1a 'His teacher thinks that this girl loves John.'

b. *UJohn*<sub>i</sub> uthisha wakhe<sub>i</sub> u-cabang-a ukuthi le ntombi i-ya-*m*-thand-a. John1a teacher1a Poss1a-Pc1a Sp1a-think-Fv that DEM9 girl9 Sp9-Foc-Oc1a-like-Fv 'John, his teacher thinks that this girl loves (him).'

In the (a)-examples, the possessive pronoun and the name can be interpreted as coreferential.<sup>17</sup> (Since neither of the two c-commands the other, this coreference relation probably falls outside Binding Theory; see Clark 1992). When the name is left-dislocated in (50b) and (51b), both the trace/copy of the dislocate and the possessive pronoun are A-bar-bound and should therefore count as variables. Yet, although the (b)-examples are therefore structurally parallel to the example in (48), they do not display WCO-effects.

However, (50b) and (51b) are not necessarily incompatible with a movement analysis of Zulu left dislocation. Lasnik & Stowell (1992) discuss various types of A-bar-movement which are immune to WCO-effects. Importantly, they show that Topicalisation in English is one of these types:

(52) This book<sub>i</sub>, I expect its<sub>i</sub> author to buy t<sub>i</sub>. (Lasnik & Stowell 1992: 691)

Although the trace/copy of the dislocate does not c-command the pronoun, co-indexation is possible in (52); (52) hence patterns with the Zulu CLLD-examples in (50) and (51).

Lasnik & Stowell (1992) refer to the unexpected absence of WCO-effects as "weakest crossover". They suggest that WCO-effects are only brought about by A-bar movement of "true quantifier phrases", i.e. quantifiers, wh-phrases, focus operators etc., since only these create operator-variable chains at LF. Importantly, Lasnik and Stowell argue that the dislocated phrases in Topicalisation constructions are *not* true quantifiers and that therefore, a trace/copy of a topicalised constituent does not count as a variable. This explains the weakest crossover effect in (52).

I assume that Lasnik & Stowell's (1992) account can also be adopted for CLLD-constructions. The absence of WCO-effects in Zulu left dislocation constructions then no longer poses a problem for a movement approach; if we assume that this construction is non-operator A-bar movement, the

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<sup>&</sup>lt;sup>17</sup> Interestingly, one of my consultants did not accept coreference in example (50a), although he could get this reading in (50b). In this respect, note that it has been observed by Kuno (1972), Koopman & Sportiche (1982) and Guéron (1984) that coreference of a name and a possessive pronoun in examples such as (50a) and (51a) is not possible if the name is focused and provides new information:

<sup>(</sup>i) \*His<sub>i</sub> mother likes *JOHN*<sub>i</sub> (Guéron 1984:153)

Since focused constituents are "true quantifiers" (in the sense of Lasnik & Stowell (1992); see below in the text) and therefore undergo operator movement at LF, (i) exhibits a WCO-effect. I suspect that my informant may have

fact that the data in (50) and (51) exhibit "weakest crossover" follows directly. Furthermore, notice that the absence of WCO-effects has also been noted for CLLD in Romance (see e.g. Villalba 2000). This parallel further supports the view that Topicalisation in English, CLLD in Romance and CLLD in Zulu are related phenomena.

#### 6. Islands

So far, the data support the claim that Zulu clitic left dislocation is a movement construction. However, this predicts that clitic left dislocation is sensitive to movement constraints. As is well-known, English Topicalisation is not possible if the topic originates inside an island (Ross 1967; Chomsky 1977; Lasnik & Saito 1992):

- (53) a. \*This book, I accept the argument that John should read.
  - b. \*This book, I wonder who read. (Chomsky 1977: 91)

The island sensitivity of CLLD in Romance has been noted by Cinque (1977, 1983/1997, 1990) and Villalba (2000), among many others. In the light of the parallels between CLLD in Romance and Topicalisation on the one hand and Zulu CLLD on the other, it is surprising that Zulu clitic left dislocation does not seem to be constrained by island conditions (see also Bresnan & Mchombo 1987 for Chichewa):

## Subject island

- (54) a. *Ilayisi* [ukuthi uBev a-*li*-theng-e] ku-si-mangalis-ile rice5 that Bev1a SP1a-OC5-buy-TNS SP15-1<sup>st</sup>PL-surprise-TNS 'Rice, that Bev bought it, surprised us.'
  - b. *Le ndoda* [uku-*yi*-vakashel-a] kwa-methus-a uMary.
     DEM9 man9 INF15-OC9-visit-Fv Sp15+TNS-shock-Fv Mary1a
     'This man, visiting him shocked Mary.'

interpreted (50a) with focus on *Charlise Theron*; since the topic in (50b) is incompatible with such an interpretation, the WCO-effect disappeared.

# Adjunct island

(55) a. *UCharlise Theron* abalandeli ba-zo-fik-a ng-ehora lesihlanu Charlise Theron1a follower2 Sp2-TNS-arrive-FV at-hour of five

[ukuze ba-*m*-bon-e] in.order.to SP2-OC1a-see-FV

'Charlise Theron, the fans will arrive at five o'clock in order to see her.'

b. *Le ncwadi* uJohn u-hamb-ile e-nga-*yi*-thenga-nga.
 DEM book9 John1a SP1a-leave-TNS by-NEG-OC9-buy-NEG
 'This book, John left without buying it.'

# Complex NP island

- (56) a. *UJohn* uPeter u-sebenz-a [e-pulazi-ni ela-theng-w-a ngu-ye].

  John 1a Peter 1a SP1a-work-FV Loc-farm5-Loc Rc5+TNs-buy-PASS-FV by-Pc1a

  'John, Peter works on the farm which was bought by him.'
  - b. *Le moto* ngi-thand-a [intombazana e-*yi*-theng-ile-yo].
     DEM9 car9 1<sup>st</sup>SG-love-FV girl9 RC-OC9-buy-TNS-RS
     'This car, I love the girl who bought it.'

### wh-island

- (57) a. *Izincwadi* uPeter u-cabang-a [ukuthi u-zo-*zi*-theng-a nini]? book10 Peter1a SP1a-think-FV that SP2-TNS-Oc10-buy-FV when 'The books, when does Peter think he will buy them?'
  - b. *Umama*, ngi-buz-e [ukuthi y-ini abantwana aba-*m*-nik-e yona]. mother1a 1<sup>st</sup>SG-wonder-TNS that COP-what child2 RC2-OC3-give-TNS ABS9 'Mother, I was wondering what the children gave her.'

## Coordinate structure island

(58) a. *Ubuthi wa-mi* ngi-cabang-a ng-oMary [na-*ye*]. brother1 Poss1-Pc1<sup>st</sup>SG 1<sup>st</sup>SG-think-Fv about-Mary1a and-Pc1 'My brother, I think about Mary and him.'

b. ??Incwadi ya-khe uMary u-ya-phek-a [kodwa uSipho u-ya-yi-fund-a].
book9 POSS9-PC1a Mary1a SP1a-Foc-cook-Fv but Sipho1a SP1a-Foc-Oc9-read-Fv
'His book, Mary is cooking but Sipho is reading it.'

According to the standard view, the fact that left dislocation can violate island constraints is incompatible with a movement analysis. Therefore, in the examples in (54)-(58), the dislocate must be base-generated outside the associated clause which constitutes the island. This means that these examples are instances of HTLD (as is also illustrated by the English translations in (54)-(58)).<sup>18</sup>

If (54)-(58) are HTLD constructions, then we predict that left dislocation constructions with epithets are possible in island contexts as well, given that these are unambiguously HTLD-constructions. Not surprisingly, this prediction is borne out, as the examples in (59)-(61) illustrate:

- (59) *UJohn* [uku-yi-vakashel-a *leyo ndoda*] kwa-methus-a uMary.

  John1a INF15-OC9-visit-FV DEM9 man9 SP15+TNS-shock-Fv Mary1a

  'John, visiting that man shocked Mary.'
- (60) *UCharlise Theron* abalandeli ba-zo-fik-a ng-ehora lesihlanu
  Charlise Theron1a follower2 SP2-TNS-arrive-FV at-hour of.five

  [ukuze ba-m-bon-e *lo nobuhle o-dumile*].

  in.order.to SP2-OC1-see-FV DEM1 actress1 RC1-famous
  'Charlise Theron, the fans will arrive at five o'clock in order to see this famous actress.'
- (61) *UJohn* uPeter u-sebenz-a [e-pulazi-ni ela-theng-w-a John1a Peter1a Sp1a-work-Fv Loc-farm5-Loc Rc5+Tns-buy-Pass-Fv yi-*leyo ndoda*]. by-DEM9 man9
  'John, Peter is working on a farm which was bought by that guy.'

For sake of completeness, note that left dislocation constructions with absolute pronouns also do not violate island constraints:

<sup>&</sup>lt;sup>18</sup> In HTLD-constructions with clitics, the clitic is still generated as the head of a DP which incorporates into the verb. However, in contrast to CLLD, the dislocate is not generated as the specifier of this DP, but is base-generated as an adjunct to CP.

- (62) *Ilayisi* [ukuthi uBev a-theng-e *lona*] ku-si-mangalis-ile. rice5 that Bev1a SP1a-buy-TNS ABS5 SP15-1<sup>st</sup>PL-surprise-TNS 'Rice, that Bev bought it surprised us.'
- (63) *UCharlise Theron* ba-zo-fik-a ng-ehora lesihlanu [ukuze ba-bon-e *yena*]

  Charlise Theron1a Sp2-Tns-arrive-Fv at-hour of five in order to Sp2-see-Fv ABs1a

  'Charlise Theron, they will arrive at five o'clock in order to see her.'

The examples in (54)-(58) and (62)-(63) show that not every left dislocation-construction with a clitic or a full pronoun is an instance of CLLD in Zulu; epithets are hence not the only resumptive elements that are possible in HTLD. This observation by itself is not suprising; the fact that clitics can also be linked to base-generated topics and hence function as resumptive elements in HTLD-constructions has already been demonstrated for other CLLD-languages by Cinque (1977), Rivero (1980), Villalba (2000), and others. However, this immediately raises the following question. If left dislocation with clitics and absolute pronouns can also be an instance of HTLD, why is this option not available in non-island contexts? Recall from section 4 that left dislocation with resumptive pronouns shows Condition C-effects and hence provides evidence that the dislocate is represented through a copy in the associated sentence. However, if clitics and absolute pronouns can also resume base-generated topics, speakers should always be able to construct these examples as instances of HTLD to avoid illicit binding of an R-expression contained inside a dislocate. In other words, we would expect that left dislocation can always bleed Condition C.

I assume that the reason for why this expectation is not fulfilled lies in the *last resort* character of HTLD-constructions with clitics and absolute pronouns. The idea is that the link between a pronoun and its antecedent can in principle be established either by movement or by base generation, but that the movement alternative is generally preferred - in economy terms, movement is a "less costly" operation. Therefore, HTLD-constructions with clitics and absolute pronouns can only be generated if the presence of an island makes left dislocation by movement unavailable. In contrast, since epithets are never possible as resumptive elements with moved dislocates in Zulu, HTLD with these elements is obviously not restricted to island configurations.

The view that the use of resumptive pronouns in islands is a last resort strategy has also been articulated by Shlonsky (1992) for Hebrew and Palestinian Arabic and by Aoun, Choueiri & Hornstein (2001) for Lebanese Arabic. Aoun, Choueiri and Hornstein argue that left dislocation by movement is a "primary resumptive strategy". They show that in Lebanese Arabic, left dislocation

configurations are obligatorily derived via movement in non-island contexts, even if the result produces illicit configurations with respect to Binding. Only if the resumptive element is located inside an island may the dislocate be base-generated in the left periphery.

In this respect, it is interesting to note that Prince (1998) analyses English HTLD in island contexts as "resumptive pronoun Topicalisation". She shows that HTLD in islands contexts does not necessarily have the discourse function that is typically associated with HTLD, but may also be used in a discourse situation which would normally (i.e. in a non-island context) trigger Topicalisation. In contexts where Topicalisation is ruled out for syntactic reasons, English speakers hence use the only available left dislocation strategy to express what would otherwise have been expressed by Topicalisation. This view can be adopted for Zulu with respect to left dislocation with absolute pronouns and clitics. In the same way that "resumptive pronoun Topicalisation" is only possible in islands in English, HTLD constructions with resumptive clitics can only be generated in islands contexts in Zulu.

The claim that all instances of left dislocation which violate island constraints are HTLD constructions makes another important prediction. Reconstruction effects of the sort discussed in section 4 should be absent even with clitics and absolute pronouns whenever these resumptive elements are separated from their dislocates by an island. As shown by Aoun & Benmamoun (1999) and Aoun, Choueiri & Hornstein (2001), this is indeed the situation we find in Lebanese Arabic. For example, the bound variable reading of a pronoun contained in a left-dislocated phrase is only available in this language in non-island contexts, where left dislocation is derived by movement (the \* in (64b) signals the impossibility of the bound pronoun-reading):

- (64) a. Təlmiza-a ffitaan bta\rfo \text{?onno k\text{\text{\text{ell}}} m\restriction \text{?alme } \text{?aa\sasset-\oldge}.} student-her the naughty know2\delta^ndPL that every teacher.F punished.3SGF-him 'Her naughty student, you know that every teacher punished him.'
  - b. \**Təlmiiza-a fitaan* fallayto ?ablma kəll m?allme ?aaşaşət-o. student-her the naughty left2<sup>nd</sup>PL before every teacher.F punished.3SGF-him 'Her naughty student, you left before every teacher punished him.'

(Aoun & Benmamoun 1999: 580)

Unfortunately, the situation in Zulu is not as clear as seems to be the case in Lebanese Arabic. There is considerable variation among speakers' judgements concerning connectivity effects with left dislocation in islands contexts; speakers show a great degree of uncertainty about the data, and

their responses are not always internally consistent. The following examples illustrate this situation for left dislocation with subject islands, but the results are representative of the responses to examples with other islands as well:

- (65) ?/\**Uku-zi-shef-a*, [ukuthi uSipho u-ya-*ku*-fun-a] ku-si-mangalis-ile.

  INF15-REFL-shave-Fv that Sipho1a SP1a-FOC-OC15-want-Fv SP15-1<sup>st</sup>PL-surprise-TNS

  'Shave himself, that Sipho wants that, surprised us.'
- (66) a. Amahemuhemu okuthi uThandi u-thand-a uVusi<sub>i</sub> [ukuthi (pro<sub>i</sub>)
  rumour6 that Thandi1a SP1a-like-Fv Vusi1a that
  a-ka-wa-kholwa] ku-si-mangalis-ile.
  SP1a-NEG-OC3-believe-Fv SP15-1<sup>st</sup>PL-surprise-TNS
  'The rumours that Thandi loves Vusi, that he doesn't believe them, surprised us.'
  - b. ok/\**Imoto kaJohn*<sub>i</sub>, [ukuthi (pro<sub>i</sub>) u-ya-*yi*-thand-a] ku-si-mangalis-ile. car9 of.John1a that SP1a-FOC-OC9-like-FV SP15-1<sup>st</sup>PL-surprise-TNS 'John's car, that he likes it, surprised us.'
- (67) ??/\*Uthisha wa-khei [ukuthi wonke umfundii u-ya-m-ncom-a]
  teacher1a POSS1a-PC1 that every1 student1 SP1-FOC-OC1a-commend-FV
  ku-si-mangalis-ile.
  SP15-1<sup>st</sup>PL-surprise-TNS
  'His teacher, that every student commends him, surprised us.'

Examples such as (65) received mixed responses. About half of the speakers I consulted did not accept sentences such as (65). This is the expected result; if (65) is an instance of HTLD, the anaphor is unbound, and a Condition A-violation arises. However, for some speakers, binding of the reflexive anaphor by the subject of the subject sentence was possible in (65). With respect to Condition C, judgements seemed to depend on the complexity of the dislocated phrase. Almost all speakers could interpret the R-expression in the complement clause in (66a) as coreferential with the pro-subject of the subject sentence, which follows from the view that the dislocate is basegenerated outside the clause. For some speakers, there was therefore a contrast between examples such as (66a) and the comparable data discussed in section 4.2 above. However, only a minority of my informants found the same contrast between examples with R-expressions used as possessor

DPs. For most speakers, coreference of *uJohn* and pro is excluded in (66b). In section 4.2 I have argued that this Condition C-violation is explained by the presence of a copy of the moved dislocate in the associated clause. However, in (66b), this clause is an island, which makes a copy-movement analysis untenable. Finally, about half of the speakers could establish a bound variable reading in (67), which again is a problem for the assumption that the dislocated phrase containing the pronoun is base-generated in the left periphery.

I admit that I have no straightforward explanation for those judgements which contradict the HTLD-approach to the examples in (54)-(58), but I can offer some speculations about possible solutions. However, notice first that, although the data are not quite as robust as the analysis proposed so far predicts, they still show that Zulu left dislocation is sensitive to island constraints: the fact that speakers' judgements about data such as (65)-(67) vary considerably is itself an indication of a contrast between island and non-island contexts with respect to connectivity effects – in comparison, the judgements about the data discussed in section 4.2 were uncontroversial.

One way of explaining why data judgements are murky when left dislocation separates a dislocate and a resumptive pronoun inside an island would be to assume that for some speakers, movement of topics out of islands is not entirely impossible in Zulu. This assumption is not too farfetched. Notice that all the examples in (65)-(67) involve the left dislocation of arguments; furthermore, the dislocates are Topics which are linked to the preceding discourse. It is well known that movement of D-linked DP-arguments out of islands is substantially less degraded than extraction of non-D-linked arguments or adjuncts. This has been observed in particular for movement out of (weak) wh-islands (see e.g. Cinque 1990; Anagnostopoulou 1997), but acceptable examples of argument extraction from strong islands can also be found in the literature (see e.g. Lasnik & Saito 1992: 43; Culicover 1997: 267; Szabolcsi & den Dikken 2002: 214; Maki, Kaiser & Ochi 1999: 6). The fact that the examples in (65)-(67) exhibit reconstruction effects for some speakers would then imply that for these speakers, the relevant examples are derived by movement. Other speakers may struggle to provide an unequivocal judgement, because in evaluating the data, these speakers may shift back and forth between a representation of the example which involves movement and one which does not. The movement representation may not be entirely acceptable because of the island, whereas the latter representation potentially violates Last Resort (if a movement analysis is marginally possible). 19

<sup>&</sup>lt;sup>19</sup> In Zeller (2003) it is argued (with respect to the ambivalent status of particle verbs) that inconsistent or vague data judgements may be attested whenever a grammatical phenomenon or construction is compatible with two different representations. In contexts where these two representations are not in conflict with respect to semantic interpretation or syntactic constraints, judgements are unambiguous. However, certain contexts may create a situation in which the two

An alternative account would be to maintain that left dislocation in islands contexts can never be movement, but to assume that for those speakers for whom the examples in (65)-(67) exhibit connectivity effects, grammar provides an additional mechanism to establish reconstruction effects, which is not syntactic and hence does not require movement. The idea would be that although reconstruction effects are normally derived on the basis of the copy theory of movement, they may also be established by some alternative means in contexts in which movement is not possible.<sup>20</sup>

A proposal along these lines is put forward in Cecchetto (2001). Cecchetto argues that, in addition to syntactic reconstruction, which can be expressed in terms of the copy theory of movement, there is also a pragmatic rule that captures reconstruction effects between pronouns and potential antecedents in contexts with non-movement dependencies. Importantly, Cecchetto claims that this pragmatic rule is a last resort rule which is *only* available if no movement has occurred. In constructions derived by movement, connectivity effects are established solely on the basis of the copy of the moved element.

Obviously, this approach works well for Zulu left dislocation. In non-island contexts, all reconstruction effects derive from the fact that moved constituents can leave behind copies at LF. However, in left dislocation constructions where the pronoun is separated from the dislocate by an island, the pragmatic rule may step in and establish connectivity non-syntactically. In order to account for the inconsistency of the judgements, one would have to stipulate that the availability of this rule depends on a speaker's dialect or ideolect – not all Zulu speakers may be able to activate this rule in all contexts. However, since the relevant rule is pragmatic in nature, its application may depend on the specific discourse context that a speaker is imagining when providing a data judgement, and therefore, a greater degree of speaker variation is perhaps to be expected.

A comparison and further elaboration of the two possible proposals discussed here would lead me beyond the scope of this paper. However, I believe that in principle, an explanation for the surprising instability of the data concerning connectivity effects with left dislocation constructions in islands should be sought and can be found along the lines of these proposals.

representations have different implications for the interpretation or the acceptability of the construction. In these

contexts, data judgements become inconsistent.

20 Kayne (2000) shows that Condition C reconstruction effects are also attested in English when wh-movement out of an island has been rescued by means of a resumptive pronoun (in italics):

<sup>(</sup>i) What picture of a famous linguist, is his, wife unaware of the fact that it's going to be published in the Times?

<sup>(</sup>ii) \*What picture of a famous linguist, is he, unaware of the fact that it's going to be published in the Times?

The contrast between (i) and (ii) can only be explained if reconstruction of the wh-phrase into the position inside the island is possible.

#### 7. Conclusion

On the basis of a detailed study of the syntactic properties of clitic left dislocation in Zulu, I have shown that this construction shares many properties of CLLD-constructions in non-Bantu languages. The most important aspect of Zulu clitic left dislocation is that it shows connectivity effects, which strongly supports a movement analysis. That left dislocation is possible in non-root contexts, that it can be iterated and that it affects not only DPs, but also CPs and PPs, are further similarities between Zulu and other CLLD-languages such as Romance and Greek.

However, Zulu differs from many languages with respect to left dislocation constructions in which the resumptive element is a full pronoun. Whereas this type of left dislocation is analysed as HTLD in Romance, Greek, and English, left dislocation constructions with full pronouns in Zulu may also be derived by movement. In this respect, Zulu patterns more with Lebanese Arabic, which also allows full pronouns, and even epithets, to occur as resumptive elements in movement constructions. The conclusion that can be drawn from these comparisons is that, although both the movement- and the base-generation-type of left dislocation seem to be attested in most languages of the world, there is also a great degree of variation amongst languages with respect to how these two types of left dislocation are syntactically realised.

Perhaps the most influential study of Bantu left dislocation that I know of is Bresnan & Mchombo's (1987) analysis of Chichewa left (and right) dislocation. Bresnan and Mchombo analyse left-dislocated DPs in Chichewa as extra-sentential, free-floating discourse topics. According to their theory, the clitic to which the dislocate is anaphorically linked is an incorporated pronominal argument. The left-dislocated topic is not a genuine argument of the main predicate, but only connected to the argument structure of the verb through anaphoric binding of the incorporated pronoun.

My analysis of Zulu both contradicts and confirms aspects of Bresnan and Mchombo's analysis, in interesting ways. On the one hand, the connectivity effects observed in section 4 argue against any attempt to adopt Bresnan and Mchombo's analysis of Chichewa for Zulu clitic left dislocation. I have tried to show that in Zulu, a left-dislocated topic in non-island contexts is linked to the associated sentence not merely through anaphoric binding of a pronominal argument, but through a chain established by A-bar movement of the dislocate. In this sense, a left-dislocated phrase in Zulu is certainly not a "free-floating" topic.

On the other hand, I adopted the proposal made in Cecchetto (1999, 2001) in my analysis of Zulu, according to which the dislocate and the clitic are generated inside the same phrase, i.e. as the

specifier and the head of a "big DP". As a  $D^0$ -element, the clitic counts as a pronoun, and I accounted for its position immediately preceding the verb stem by assuming that it syntactically incorporates into the verb. This means that in my analysis, as in Bresnan & Mchombo's, object clitics in left dislocation constructions are incorporated pronouns. It is of course possible that here, my proposal meets the letter rather than the spirit of Bresnan & Mchombo's (1987) analysis. For example, the difference between Bresnan and Mchombo's view and mine is that in their theory, the incorporated pronoun is  $\theta$ -marked by the verb and therefore has the status of a genuine argument. In my analysis, in contrast, the respective  $\theta$ -role of the verb is assigned to the "big" DP, which includes both the pronoun and the dislocate.

I am not sure to what extent Bresnan and Mchombo assume that their theory about Chichewa left dislocation also holds for other Bantu languages, and I do not claim that my conclusions drawn from the discussion of Zulu can straightforwardly been extended to Chichewa. Importantly, however, whereas Bresnan & Mchombo's (1987) analysis, couched in the framework of Lexical Functional Grammar, has provided important insights into the discourse function of Bantu left dislocation, I hope to have shown that examining left dislocation constructions within the Principles-and-Parameters framework may reveal interesting facts about the syntax of left dislocation in Bantu.

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