

Raising out of finite CP in Nguni: the case of *fanele*

Jochen Zeller

Department of Linguistics, School of Language, Literature and Linguistics, University of KwaZulu-Natal, Durban 4041, South Africa
e-mail: zeller@ukzn.ac.za

Abstract: The Nguni modal verb *fanele* can select a finite clause in the subjunctive mood as its complement. Typically, the thematic subject of this clausal complement remains in the embedded subject position, in which case the matrix verb *fanele* is prefixed with the expletive marker *ku-*. However, in another possible construction with *fanele*, the thematic subject of the embedded subjunctive clause is realised in the matrix subject position and agrees with both *fanele* and the embedded verb. In this paper, I provide empirical evidence that the matrix subject in the latter construction originates in the embedded clause but has undergone raising (A-movement) to the matrix subject position. I then offer a theoretical discussion of this type of raising out of finite CPs based on the concept of ‘defectiveness’ and the theory of phases which underlie the analysis of raising constructions advocated in the Minimalist Program (Chomsky, 2000; 2001; 2005).

Introduction

In this article I suggest that in some varieties of the Nguni languages (Southern Bantu, S 40), the modal verb *fanele*, ‘ought; should; to be fitting, vital, necessary’, has developed into a raising verb that triggers A-movement of the subject of its finite clausal complement into the matrix subject position. Consider (1):¹

- (1) Ku-fanele ukuthi abantwana ba-fund-e.
Loc-ought that child2 SM2-study-SUBJ
‘It is necessary that the children study.’ (van der Spuy, 2001: 244)

The verb *fanele* in the Zulu example in (1) selects a CP-complement introduced by the complementiser *ukuthi*. The embedded verb is in the subjunctive mood and exhibits noun class agreement with the subject DP *abantwana*, ‘children’, which is located in the embedded subject position. The matrix verb *fanele* does not show agreement with this DP; instead, it is prefixed with the indefinite locative prefix *ku-*.

Interestingly, many (though not all) speakers also accept constructions such as (2) alongside (1):

- (2) Abantwana ba-fanele ukuthi ba-fund-e.
child2 SM2-ought that SM2-study-SUBJ
‘The children must study.’ (van der Spuy, 2001: 245)

In (2), the DP *abantwana* appears in the matrix subject position and agrees with both the matrix and the embedded verb. In this article, I argue that the matrix subject in examples such as (2) has undergone raising from the embedded to the matrix subject position.

In section two, I discuss the properties of constructions involving the verb *fanele*, and I present a number of data which illustrate that constructions such as (2) are attested both in written and spoken Nguni. On the basis of empirical evidence from the interpretation of idioms, long passivisation, and scope, I show in section three that the matrix subject in examples such as (2) is an

argument of the subjunctive verb and has moved from the embedded to the matrix subject position. In section four, I discuss theoretical aspects of raising out of finite CPs from the perspective of the Minimalist Program, focusing in particular on the minimalist assumption that T in raising complements is *defective* (Chomsky, 2000; 2001; 2005). Finally, section five offers a hypothesis about the historical development of raising constructions with *fanele* which may explain why this construction is not accepted by all Nguni speakers. I suggest that A-movement constructions such as (2) are derived via the *reanalysis* of A-bar-movement constructions in which the embedded subject of an expletive construction such as (1) has been left-dislocated to a sentence-initial position.

The *fanele*-construction

The Nguni verb *fanele* used in the constructions in (1) and (2) typically expresses deontic rather than epistemic modality. Morphologically, *fanele* is the perfect form of the verb *fanela*, ‘fit, suit’, but it has present tense reference. In this respect, *fanele* is similar to so-called stative verbs in Nguni:

- (3a) Umfana u-lamb-ile.
 boy1 SM1-become.hungry-PERF
 ‘The boy is hungry.’
- (3b) Ngi-kath-ele.
 1stSG-tire-PERF
 ‘I’m tired.’

However, whereas stative verbs such as those in (3) cannot be combined with the future tense marker *-zo-*, (4), *fanele* allows for regular future tense formation, (5), which suggests that *fanele* is synchronically a non-stative verb form:

- (4a) *Umfana u-zo-lamb-ile
 boy1 SM1-FUT-become.hungry-PERF
 ‘The boy will be hungry.’
- (4b) *Ngi-zo-kath-ele.
 1stSG-FUT-tire-PERF
 ‘I’ll be tired.’
- (5a) Ku-zo-fanele ukuthi uJabu a-yek-e.
 Loc-FUT-ought that Jabu1a SM1a-resign-SUBJ
 ‘Jabu will have to resign.’
- (5b) Abafundi ba-zo-fanele ukuthi ba-fund-e kakhulu.
 student2 SM2-FUT-ought that SM2-study-SUBJ hard
 ‘The students will have to study hard.’

The standard use of *fanele* is illustrated by the examples in (5a) and (6)–(9), in which *fanele* is prefixed with the indefinite locative marker *ku-* and selects a CP-complement in the subjunctive mood. This CP is (optionally) introduced by a complementiser:²

- (6) Ku-fanele ukuthi uMdu a-khulum-e isiZulu na-mi.
 Loc-ought that Mdu1a SM1a-speak-SUBJ Zulu7 with-Pc1stSG
 ‘Mdu should speak Zulu with me.’
- (7) Ku-fanele ukuthi amadoda a-hamb-e manje.
 Loc-ought that man6 SM6-leave-SUBJ now
 ‘The men ought to leave now.’

- (8) Ku-fanele ukuthi ngi-yi-fund-e le ncwadi.
Loc-ought that 1stSG-OM9-read-SUBJ DEM9 book9
'I must read this book.'
- (9) Ku-fanele ukuba abantwana ba-fund-e.
Loc-ought that child2 SM2-study-SUBJ
'The children must study.' (Xhosa; Du Plessis, 1989: 46)

I assume that the prefix *ku-* signals the presence of an expletive subject in the matrix clause. More specifically, I follow van der Spuy (1997) and Sabel and Zeller (2006) and assume that Nguni has an expletive pro-subject which triggers the occurrence of *ku-* on the verb.³ I therefore refer to constructions such as those in (6)–(9) henceforth as the 'expletive-variant' of *fanele*.

The expletive-variant of *fanele* is generally accepted as the default construction by all speakers. In contrast, there is less agreement about the acceptability of examples such as those in (10)–(13):

- (10) UMdu u-fanele ukuthi a-khulum-e isiZulu na-mi.
Mdu1a SM1a-ought that SM1a-speak-SUBJ Zulu7 with-Pc1stSg
'Mdu should speak Zulu with me.'
- (11) Amadoda a-fanele ukuthi a-hamb-e manje.
man6 SM6-ought that SM6-leave-SUBJ now
'The men ought to leave now.'
- (12) Ngi-fanele ukuthi ngi-yi-fund-e le ncwadi.
1stSG-ought that 1stSG-OM9-read-SUBJ DEM9 book9
'I must read this book.'
- (13) Abantwana ba-fanele ukuba ba-fund-e
child2 SM2-ought that SM2-study-SUBJ
'The children must study.' (Xhosa; Du Plessis, 1989: 46)

Examples (10)–(13) correspond to the examples in (6)–(9) and basically express the same meaning, but their syntax is different. Importantly, the DP which functions as the subject of the embedded subjunctive verb in each of the examples in (6)–(9) now appears in the matrix subject position in (10)–(13), as is illustrated by the fact that *fanele* agrees with this DP.⁴ Given this important difference between the expletive-variant and the examples in (10)–(13), I will for now use the neutral term 'matrix subject-variant' for the latter type of construction.

Although examples of the matrix subject-variant of *fanele* can be found in the literature (see for example, Du Plessis, 1989 and van der Spuy, 2001), not all Nguni speakers consider this construction well-formed. Although some of my informants accepted data such as those in (10)–(13) without problems, others found them rather marked or altogether ungrammatical. Some speakers rejected only some instances of this type of construction and accepted others. Although the omission of the complementiser sometimes seemed to improve these speakers' judgments, I have generally not been able to establish whether the mixed responses were due to any syntactic differences between the accepted and the rejected examples of the matrix subject-variant.

Zulu reference grammars mention a third syntactic construction which is possible with *fanele*. The example of the matrix subject-variant in (14) is from Nyembezi (1970: 322), but Nyembezi (1970: 211) also lists the examples in (15) in which *fanele* combines with an *infinitive* (see also van der Spuy, 1997):

- (14) Ni-fanele ukuba ni-m-azi-s-e umama wenu [...]
 2ndPL-ought that 2ndPL-OM1stSG-know-CAUS-SUBJ mother1a Abs2ndPL
 ‘You ought to hold your mother in high regard.’
- (15a) Wena u-fanele uku-m-tshel-a uma into u-nga-yi-thand-i [...].
 Abs2ndSG 2ndSG-ought INF-OM3rdSG-tell-Fv if thing9 2ndSG-NEG-OM9-like-NEG
 ‘You ought to tell him if you do not like a thing.’
- (15b) [A]bantwana ba-fanele uku-fundis-w-a kakhulu.
 child2 SM2-ought INF-teach-PASS-Fv well
 ‘Children ought to be well educated.’

In (15a and b), *fanele* agrees with a sentence-initial subject DP in the matrix clause, but in contrast to the matrix subject-variant in (14), it does not combine with a subjunctive, but an infinitival clause.

Ziervogel *et al.* (1985) also claim that *fanele* can take both infinitival and subjunctive complements:⁵

- (16a) Ni-fanele uku-lalel-a lokho engi-ni-tshen-a khona.
 2ndPL-ought INF-listen-Fv DEM14 Rc1stSG-OM2ndPL-tell-Fv Abs14
 ‘You ought to listen to what I tell you.’
- (16b) Ni-fanele ni-lalel-e lokho engi-ni-tshen-a khona.
 2ndPL-ought 2ndPL-listen-SUBJ DEM14 Rc1stSG-OM2ndPL-tell-Fv Abs14
 ‘You ought to listen to what I tell you.’ (Ziervogel *et al.*, 1985: 211)

Interestingly, though, not all speakers find the infinitive with *fanele* acceptable. Particularly younger speakers find the *fanele* + infinitive construction questionable, independently of whether the respective speaker accepted or rejected the matrix subject-variant. In addition, the use of the infinitive seems to imply a change of meaning. According to one of my informants, in combination with the infinitive, *fanele* in (18) is better translated as ‘to suit’, a meaning which seems more closely related to the use of the basic verb *fanela* (compare (19) and (20)):

- (17) UMdu u-fanele ukuthi a-theng-e ubisi.
 Mdu1a SM1a-ought that SM1a-buy-SUBJ milk11
 ‘Mdu must buy milk.’
- (18) UMdu u-fanele uku-theng-a ubisi.
 Mdu1 SM1a-fit INF-buy-Fv milk11
 ‘It suits Mdu to buy milk.’
- (19) Iwashi la-kho li-ya-ku-fanel-a.
 watch5 Poss5-2ndSG SM5-Foc-OM2ndSG-suit-Fv
 ‘Your watch suits you.’
- (20) Le lokhwe i-ndi-fanele.
 DEM9 dress9 SM9-1stSG-fits
 ‘This dress fits me.’ (Xhosa; Du Plessis, 1989: 46)

Due to the controversial status of the matrix subject- and the infinitival variants of the *fanele*-construction, I sought some insight into the possible uses of *fanele* by looking at web documents written in the Nguni languages. A random online search for occurrences of *fanele* in web-based texts revealed that (i) the matrix subject-variant is frequently used in all Nguni varieties and that (ii) constructions with *fanele* plus infinitive (cf. (25)) are rare in comparison:⁶

- (21a) Isikole si-fanele si-ku-siz-e [...].
school7 1stPL-ought 1stPL-OM2ndSG-help-SUBJ
'The school must help you.'
- (21b) Ngi-fanele ukuthi ng-enze-ni uma ingane ya-mi i-nge-mukel-w-anga
1stSG-ought that 1stSG-do-what if child9 Poss9-1stSG SM9-NEG-accept-PASS-NEG
esikoleni?
at.school
'What must I do if my child has not been accepted at a school?' (Zulu)⁷
- (22) U-fanele ukuthi u-theng-e ela-kho ithanga eli-khulu [...]
2ndSG-ought that 2ndSG-buy-SUBJ Poss5-2ndSG pumpkin5 Rc5-big
'You must buy your own big pumpkin.' (Zulu)⁸
- (23a) Indoda i-fanele i-m-thand-e umfazi wa-yo njengokuba i-zi-thand-a.
man9 SM9-ought SM9-OM3rdSG-love-SUBJ woman1 Poss1-Pc9 as SM9-REFL-love-Fv
'A man must love his wife/woman as he loves himself.'
- (23b) Abazali ba-fanele ba-chith-e ixesha na-bantwana ba-bo.
parent2 SM2-ought SM2-spend-SUBJ time5 with-child2 Poss2-Pc2
'Parents must spend time with their children.' (Xhosa)⁹
- (24) Yonke into si-fanele ukuthi si-shintsh-e i-be in-tja yonke
every9 thing9 1stPL-ought that 1stPL-change-SUBJ SM9-be SM9-new all9
'We must change everything to be new.' (Swati)¹⁰
- (25) Ngi-fanele uku-hamb-a edolobheni ngoba ngi-fun-a uku-thenga-a izinto [...]
1stSG-ought INF-go-Fv to.town because 1stSG-want-Fv INF-buy-Fv thing8
'I must go to town because I want to buy things.' (Ndebele)¹¹

Despite its marked status, I interpret the fact that many (official and non-official) documents written in the Nguni languages contain occurrences of the matrix subject-variant of *fanele* as evidence that this construction is not merely a colloquial form of spoken Nguni, but a relatively productive variant which is accepted as an unmarked construction by many speakers.

The matrix subject-variant as a raising construction

In this section I propose that the matrix subject-variant of *fanele* is an instance of subject-to-subject raising. Obviously, since the complement of *fanele* in the matrix subject-variant is a finite subjunctive clause, this analysis contradicts the standard assumption that raising is only possible out of non-finite clauses.¹² I therefore show below that in various languages, subjunctive clauses behave like infinitive constructions in English in that they license both raising and control. I then provide empirical arguments for why, in the relevant Nguni examples with *fanele* discussed above, we are indeed dealing with raising out of finite CPs.

Raising, control, and null subjects of finite clauses

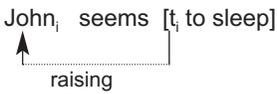
Compare (26) and (27):

- (26) John tries to sleep.
- (27) John seems to sleep.

At least since Rosenbaum (1967) it has been recognised that examples (26) and (27) involve two syntactically different types of infinitive constructions. Example (26) is a so-called *control* infinitive,

while (27) is a *raising* infinitive. Control and raising constructions differ with respect to the thematic properties of their matrix verbs and the type of (null) subject that appears in the infinitive. Whereas control verbs such as *try* in (26) usually select external arguments, raising verbs like *seems* in (27) are unaccusative and do not select their subjects. Instead, the subject of a raising verb is an argument of the embedded verb; it originates inside the infinitive and ‘raises’ to the matrix subject position ([Spec, T]). This means that the subject position of a raising infinitive is occupied by the (unpronounced) trace/copy of the moved subject. In contrast, the subject position of the infinitive in control structures is occupied by PRO, a null subject DP which is ‘controlled’ by an antecedent DP inside the matrix clause and which is therefore obligatorily interpreted as coreferential with this controller. Thus in (26), the matrix subject DP *John* is an argument of *try* and controls PRO, whereas in (27), *John* is an argument of *sleep* and has moved from the infinitive to the matrix clause.¹³ (28) and (29) illustrate these differences between raising and control schematically (‘t’ stands for the phonetically null trace/copy of the moved phrase):

- (28) John_i tries [PRO_i to sleep]

 control
- (29) John_i seems [t_i to sleep]

 raising

It is sometimes suggested that raising and control are only possible with embedded infinitives (see for example, Martin, 2001) and that the subject position of a finite clause cannot be PRO or DP-trace. In fact, if a finite clause does not have a phonetically realised subject, then typically it is assumed that the subject position is occupied by a third type of null subject: *pro*, the null pronoun which is found in the subject position of finite clauses in pro-drop languages such as Italian:

- (30) Maria_i dic-e [che (pro_i) abit-a in riva al mare].
 Maria say-3rdSG that live-3rdSG on edge of sea
 ‘Maria says that s(he) lives by the sea.’

However, it has been shown that raising and control constructions are not only found with infinitives. For example, in Balkan languages such as Greek, Romanian and Bulgarian, embedded subjunctive clauses allow for PRO-subjects and have been analysed in terms of control (see Terzi, 1997; the contributions in Rivero & Ralli, 2001; Landau, 2004):

- (31) I Maria_i prospathi [(PRO_i) na elegksi tin oreksi tis].
 Mary try-3rdSG SUBJ control-3rdSG the appetite her
 ‘Mary tries to control her appetite.’ (Greek; Terzi, 1997: 336)
- (32) Ivan_i uspjia [(PRO_i) da ostane pri nego].
 Ivan managed-3rdSG SUBJ stay-3rdSG with him
 ‘Ivan managed to stay with him.’ (Bulgarian; Krapova & Petkov, 1999, example (3b))

Note that in constructions such as (31) and (32), the embedded null subject cannot be replaced by a lexical subject and must be interpreted as being coreferential with the matrix subject (as indicated by the subscripts). These properties clearly show that the null subject of the subjunctives in (31) and (32) must be PRO. It cannot be analysed as *pro* since *pro*’s reference is usually not restricted by that of a DP in the matrix clause (compare the subscripts in (30)), and it can freely alternate with lexical subjects:

- (33) Maria dic-e [che *Francesco* abit-a in riva al mare].
 Maria say-3rdSG that *Francesco* live-3rdSG on edge of sea
 'Maria says that *Francesco* lives by the sea.'

Obligatory coreference of the embedded and matrix subjects in (31) and (32) of course follows if it is assumed that the null subject of the respective complement clause is PRO, which is controlled by the subject of the matrix clause. As Landau (2004) notes, infinitive constructions are rare in the Balkan languages and have been mostly replaced by subjunctive complementation. It is therefore not surprising that a syntactic phenomenon like control, which is typical of infinitive constructions in languages such as English, occurs with subjunctives in the Balkan languages.

It has also been shown that various languages exhibit raising of DPs out of finite complements. Perez (1985) observes that in the Bantu languages Shona (Zimbabwe), Kikuyu (Kenya), and Kiruundi (Burundi), embedded subjects can undergo A-movement from a finite clause into the matrix clause:¹⁴

- (34) Inzovu_i z-aa-menyeekean-ye [ko (t_{i/rj}) z-iish-e baa-baantu].
 elephant10 SM10-PAST-be.known-PERF that SM10-kill-PERF DEM2-people2
 'Elephants are renowned for having killed those people.' (Kiruundi; Perez, 1985: 2)

- (35) Mbavha_i i-no-fungir-w-a [kuti (t_{i/rj}) y-aka-vand-a mubako].
 thief9 SM9-PRES-suspect-PASS-FV that SM9-PAST-hide-FV in.cave
 'The thief is suspected to be hidden in the cave.' (Shona; Perez, 1985: 21)

Perez (1985) shows that the matrix verbs in (34) and (35) do not select external arguments (note that the matrix verb in (35) is a passive) and that the null subject in the embedded clause is obligatorily construed as coreferential with the matrix subject. On the basis of these observations, Perez concludes that the examples involve subject-to-subject raising.

Raising out of finite complements has also been shown to be possible in non-Bantu languages. As argued by Alexiadou and Anagnostopoulou (1999), Greek exhibits subject-to-subject raising with subjunctive complements in examples such as (36):

- (36) Ta pedhia_i arxisan [na (t_{i/rj}) trexoun].
 the children-NOM started-3rdPL SUBJ run-3rdPL
 'The children started to run.'
 (Greek; Alexiadou & Anagnostopoulou, 1999, example (11))

Uchibori (2000; 2001) also provides evidence that raising out of subjunctive complements has taken place in Japanese examples such as (37):

- (37) John-ga_i saikin [(t_{i/rj}) motto benkyoosu-ru-yooni] nat-ta
 John-NOM recently more study-NONPAST- SUBJ happen-PAST
 (lit.) 'It recently happened as a natural result that John studied harder.'
 (Japanese; Uchibori, 2001: 146)

Since the Nguni languages are pro-drop languages, the examples presented in section 2 in which *fanele* agrees with a subject in the matrix clause are, in principle, compatible with the following three possible analyses:

- (i) The subject of the embedded subjunctive is pro:
 → the subjunctive complement CP is an independent clause; the matrix subject is an argument of the matrix verb *fanele*, and the embedded subject can be interpreted as a free pronoun.

- (ii) The subject of the embedded subjunctive is PRO:
 → *fanele* is a control verb; the matrix subject in the relevant examples is an argument of *fanele* which controls (and determines the reference of) the embedded subject.
- (iii) The subject of the embedded subjunctive is a trace/copy of the matrix subject:
 → *fanele* is a raising verb; the matrix subject is an argument of the embedded verb and has raised to the matrix subject position.

In the next section I provide evidence in favour of analysis (iii).

Fanele as a raising verb

An initial observation which is relevant to my claim that the matrix subject-variant of the *fanele*-construction is an instance of subject-to-subject raising concerns the interpretation of the null subject in the subjunctive complement clause of *fanele*. As Du Plessis (1989) notes, this subject is obligatorily coreferential with the matrix subject. Example (38) shows that disjoint reference of the matrix and the null subject is not possible (even in contexts which would favour such an interpretation) and lexical subjects are excluded in the embedded subject position (if a lexical DP appears in the matrix clause), (39):

- (38) Umphathi u-fanele ukuthi a-sebenz-e.
 boss 1 SM1-ought that SM1-work-SUBJ
 'The boss must work.'
not: 'It is vital for the boss that he (someone else) works.'
- (39) *Umphathi u-fanele ukuthi abantwana ba-sebenz-e.
 boss1 SM1-ought that child2 SM2-work-SUBJ
 intended: 'It is vital for the boss that the children work.'

Therefore, the data in (38) and (39) show that the subject of a subjunctive embedded under *fanele* in examples with the matrix subject-variant cannot be *pro*.¹⁵ What remains to be shown is that it also cannot be *PRO*. In the following, I present four arguments supporting the claim that *fanele* is indeed a raising verb and not a control verb.

The first argument is provided by the existence of the expletive-variant of the *fanele*-construction. In Zulu and other Nguni languages, the locative prefix *ku-* is prefixed to the verb if the subject is an expletive *pro* (see van der Spuy, 1997 and Sabel & Zeller, 2006 for Nguni; Zerbian, 2005 on the locative prefix *go-* in Northern Sotho; see also note 3). As first observed in Rosenbaum (1967), control verbs differ from raising verbs in that only the latter allow for an expletive in the subject position of the matrix sentence. This follows from the fact that raising verbs are unaccusative and do not select external arguments. In contrast, the subject of a control verb is an external argument of that verb, and control verbs therefore do not license expletive subjects. The fact that the matrix subject-variant of the *fanele*-construction alternates with a construction in which *fanele* is prefixed with *ku-* shows that *fanele* is unaccusative and that the subject position of a *fanele*-clause is a non- θ -position. This in turn implies that the subject DP in the matrix subject-variant of the *fanele*-construction is not an argument of *fanele*. The expletive-variant therefore provides strong support for a raising analysis of the matrix subject-variant of the *fanele*-construction.

The second argument derives from the interpretation of idioms and proverbial expressions in the *fanele*-construction. Consider the following Zulu expression:

- (40) Izandla zi-ya-gez-an-a.
 hand8 SM8-FOC-wash-REC-Fv
 (lit.) 'The hands wash each other.'
 (→ two people do something for each other, implying benefits for cooperation)

It is a standard assumption that the idiomatic meaning of a phrase or sentence requires all parts of the idioms to form a constituent at one level of syntax. This explains why the idiomatic meaning of the expression in (40) is absent from the control construction in (41):

- (41) Izandla zi-thembisa-a uku-gez-an-a
 hand8 SM8-promise-Fv INF-wash-REC-Fv
 ‘The hands promise to wash one another.’
 → not idiomatic: the hands would have to be capable of giving a promise.

Since the subject position of the control verb *thembisa*, ‘promise’, is a θ -position, the DP *izandla*, ‘hands’, in (40) is interpreted as an argument of this verb and can therefore not be interpreted as part of the embedded clause.

In contrast to (41), the idiomatic reading of the expression in (40) is preserved if the DP *izandla* is realised as the subject of the verb *fanele*, as in (42b):

- (42a) Ku-fanele ukuthi izandla zi-gez-an-e.
 Loc-ought that hand8 SM8-wash-REC-SUBJ
 (42b) Izandla zi-fanele ukuthi zi-gez-an-e.
 hand8 SM8-ought that SM8-wash-REC-SUBJ
 ‘It’s vital that one hand washes another.’
 → both with idiomatic reading.

The interpretation of (42b) follows from the fact that the DP in the subject position of *fanele* is not an argument of the matrix verb and thematically linked to the embedded predicate via the chain created by raising.

Passivisation of the embedded predicate provides the third argument for my claim that *fanele* is a raising predicate. As was first observed by Rosenbaum (1967), when the embedded predicate of a raising verb is passivised, and the arguments of the construction are ‘flipped’, such that the object of the embedded active construction is now realised as the matrix subject, the truth conditions of the original sentence are preserved. The same does not hold, however, when the arguments of a control construction are flipped:

- (43) John seems to visit Mary. means the same as
 Mary seems to be visited by John.
 (44) John wants to visit Mary. does not mean the same as
 Mary wants to be visited by John.

Flipping the arguments in a construction involving *fanele* preserves the truth conditions; (45) means the same as (46):

- (45) Udokotela u-fanele ukuthi a-bhek-e isiguli.
 doctor1a SM1a-ought that SM1a-examine-SUBJ patient7
 ‘The doctor must examine the patient.’
 (46) Isiguli si-fanele ukuthi si-bhek-w-e ng-udokotela
 patient7 SM7-ought that SM7-examine-PASS-SUBJ by-doctor1a
 ‘The patient must be examined by the doctor.’

In contrast, flipping the arguments in a control construction in Zulu changes the meaning, ((47) & (48)):

- (47) Udokotela u-fun-a uku-bhek-a isiguli
 doctor1a SM1a-want-Fv INF-examine-Fv patient7
 'The doctor wants to examine the patient.'
- (48) Isiguli si-funa uku-bhek-w-a ng-udokotela.
 patient7 SM7-want INF-examine-PASS-Fv by-doctor1a
 'The patient wants to be examined by the doctor.'

Whereas the DP *isiguli*, 'patient', is the internal argument of the verb *bheka*, 'examine', in (47), it is the external argument of the control verb *funa*, 'want', in (48). Therefore, (47) and (48) are not synonymous. In contrast, the synonymy of (45) and (46) is again due to the fact that the DP *isiguli* is the internal argument of *bheka* in both examples; it has raised to the matrix subject position in (46), which is an instance of long passivisation. If *fanele* was a control verb which selected its subject as an external argument, then we would expect to observe a semantic difference between (45) and (46) similar to that between (47) and (48).

My fourth and final argument in favour of a raising analysis is based on Wurmbrand (1999), who shows that in languages like German, an embedded object can take scope over the matrix subject in raising constructions, but not in control constructions. She suggests that this difference is because quantifier raising (QR) cannot cross a sentence boundary (no long QR). Thus, there is no way that an embedded object can raise to a position above the matrix subject position at LF. Since the matrix subject in control constructions originates in the matrix clause, an embedded object can never have wide scope. However, since the matrix subject in a raising construction originates in the lower clause, an embedded object can take scope over the matrix subject by undergoing QR to a position above the (copy of the) subject in the embedded clause.

In the following example with *fanele*, the embedded object can have wide scope with respect to the matrix subject:

- (49) Othisha aba-bili ba-fanele ukuthi ba-bhek-e wonke umfundi.
 teacher2a Rc2a-two SM2a-ought that SM2a-supervise-SUBJ every1 student1
 'Two teachers must supervise every student.'

Example (49) allows for both the wide and the narrow scope reading of *wonke umfundi*, 'every student'. It can mean that there are two specific teachers who must supervise every student (narrow scope), but it can also mean that it is necessary that every student is supervised by (any) two teachers (wide scope). In contrast, (50) only allows for the narrow scope reading of *wonke umfundi*:

- (50) Othisha aba-bili ba-thembis-a ukuthi ba-zo-bhek-a wonke umfundi.
 teacher2a Rc2a-two SM2a-promise-Fv that SM2a-FUT-supervise-Fv every1
 student1
 'Two teachers promised that they will supervise every student.'

(50) cannot mean that every student had two arbitrary teachers who promised her that they would supervise her. The only reading available in (50) is the narrow scope reading of the universal quantifier; the promise to supervise every student was made by two specific teachers. The unavailability of the wide scope reading in (50) follows because the matrix subject is an argument of the matrix predicate; the fact that (49) allows this reading supports the view that *fanele* is a raising verb.¹⁶

What these data show is that *fanele* is unaccusative and behaves in important respects like raising verbs in other languages. The main difference between the raising (= matrix subject)-variant of *fanele* and verbs like *seem* in English is of course that the subject DP of the former has raised out of a finite subjunctive complement, whereas raising verbs like *seem* take infinitival complements. I address the theoretical implications of this difference in the following section.

Raising out of finite CP

Having shown that *fanele* triggers raising of the subject of its subjunctive complement, I will now provide some theoretical discussion of this observation in light of the standard analysis of raising constructions proposed in the Minimalist Program (MP) (Chomsky, 2000; 2001; 2005). My account of raising in Nguni is based on the proposals presented for Greek and Japanese by Alexiadou and Anagnostopoulou (1999) and Uchibori (2000; 2001) (discussed in the next section), but I depart from these proposals with respect to the analysis of the feature specification of T in raising subjunctives. In the last subsection I return to the expletive-variant of *fanele*.

Defective T and the phase-status of CP

There are two aspects of raising constructions that any theory of A-movement must address. First, it should explain why raising out of an embedded clause is *necessary*, and second, why it is *possible*. The standard account of raising out of infinitives postulated in the MP explains both aspects through the same stipulation: raising infinitives, in contrast to finite complements and control infinitives, are TPs (and not CPs).¹⁷ According to Chomsky (2001; 2005), the absence of a C-layer has important consequences for the feature specification of T. If C is present, the set of ϕ -features associated with the T-position in a clause is complete, and agreement between T and a subject DP can value and delete the case feature of this DP, making it inactive for further operations. However, without a selecting C-head, T's feature specification is *defective* (its set of ϕ -features is incomplete).¹⁸ Agreement between T and a subject DP is no longer possible, and the case feature of the DP cannot be valued.¹⁹ Consequently, the subject must enter a long-distance agreement relation with a higher (non-defective) T-head; if no expletive is part of the numeration, the EPP-feature associated with this higher T-head forces the embedded subject DP to move to the matrix subject position. This explains the first aspect of raising, i.e. why DP-movement of the embedded subject is necessary.

The second question (why raising is possible at all) is also answered by the assumption that raising infinitives are represented as bare TP-complements of the main verbs. In the MP, CPs are typically analysed as *strong phases* (Chomsky, 2001; 2005); the presence of a CP prevents any constituent within the c-command-domain of C from moving out of CP (the *Phase-Impenetrability Condition PIC*). However, since raising infinitives are TPs, there is no strong phase that intervenes between the matrix and the embedded [Spec, T], and subject-to-subject movement is possible.²⁰

I will now return to the *fanele*-construction in Nguni. As was shown above, the base position of the raised subject is inside a finite subjunctive clause which can even be introduced by an overt complementiser. Therefore, the complement of *fanele* must be a CP. Furthermore, the subjunctive verb shows full noun class agreement with the raised subject, which suggests that embedded T has a complete set of ϕ -features. Consequently, the standard minimalist account of raising, which is based on the idea that raising complements are TPs and that T has an incomplete set of ϕ -features, cannot be adopted for this construction.

However, an analysis of raising out of subjunctives is not incompatible with the basic idea behind the minimalist analysis outlined above, according to which raising occurs because a defective T-head cannot value the case feature of the subject DP. Suppose that the defectiveness of T in subjunctive raising complements is not due to the absence of agreement, but to some other deficient feature specification of T. If it can be shown that this deficiency is also responsible for T's inability to license nominative case, then the idea that subject-to-subject raising of a DP is caused by a defective T-head can be retained even if the ϕ -features of this defective T head are complete and agree with those of the raised subject.

In fact, it is this approach that underlies the analyses put forward by Alexiadou and Anagnostopoulou (1999) and Uchibori (2000; 2001) in their accounts of raising out of subjunctives in Greek and Japanese. Both Alexiadou and Anagnostopoulou and Uchibori suggest that T inside a

raising subjunctive is defective not because of an incomplete set of ϕ -features, but because it lacks a *tense* feature.²¹ Alexiadou and Anagnostopoulou (1999) further argue that nominative case is indeed linked to the tense feature of T. As a consequence, the case of the subject DP in a subjunctive cannot be valued, and raising becomes necessary.

Furthermore, Uchibori (2000) shows that a subjunctive CP which includes a defective T does not count as a strong phase. This explains why raising out of subjunctives is possible. The subject of the embedded clause is accessible to a probe in the higher clause (the ϕ -features of matrix T) despite the fact that it is located inside the domain of C.

I assume that, in principle, these ideas can be employed for an analysis of the Nguni raising construction with *fanele*, albeit with some modifications and adjustments. These are discussed in the next section.

The C/C*-distinction and the nominal character of T

I adopt Uchibori's (2000) proposal and assume that subjunctive CPs which allow raising are *weak phases*. While independent C is the head of a strong phase, the head of a subjunctive CP which allows DP-movement out of its complement TP into the matrix clause is not. Notice that the assumption that a particular functional head sometimes projects a strong phase and sometimes a weak phase is not new in the MP. The light verb phrase v P counts as a strong phase in unergative or transitive constructions, but as a weak phase in passives or unaccusatives. Chomsky (2001; 2005) therefore contrasts v^* (the head of the strong phase) with unaccusative or passive v (the head of the weak phase). We now find a similar situation in the C-domain: whereas the C*-heads of indicative C*Ps, control infinitives and control subjunctives project strong phases, plain CP in raising subjunctives is only a weak phase. Consequently, DP-movement from an embedded to a matrix [Spec, T] is possible out of the latter.²² The view that both C and C* exist has the welcome consequence that it eliminates an asymmetry (noted in Chomsky, 2005: 14) between the phase v P (which can be weak and strong) and C (which Chomsky assumes to have only strong occurrences).

This approach involves the stipulation that certain raising verbs (for example, *fanele*) have the idiosyncratic property of selecting a weak phase (CP) instead of a strong phase (C*P). However, note that this assumption is not more problematic than the stipulation that certain raising verbs select a TP instead of a CP. Both views are effectively theoretical implementations of the insight that the selection of a raising complement is a lexical property of the matrix verb. Whether a (possibly non-finite) complement of V is TP, C*P, or CP is ultimately a consequence of the lexical selectional property of the matrix verb.

I also follow Alexiadou and Anagnostopoulou (1999) and Uchibori (2001) in assuming that T in raising subjunctives is defective. However, there are reasons to doubt that the defectiveness of the subjunctive complement of *fanele* is due to the absence of a tense-feature, as these authors suggest for Greek and Japanese. Alexiadou and Anagnostopoulou (1999) argue that the absence of a tense feature is reflected by the fact that subjunctives in Greek cannot express independent temporal reference. Therefore, according to these authors, it is not possible to modify the subjunctive clause embedded under a raising predicate with an adverb whose temporal reference is incompatible with the tense of the matrix clause (a similar argument is provided by Uchibori (2001) with respect to the lack of tense in raising subjunctives in Japanese):

- (51) *O eaftos tu arxizi na ton anisixi avrio.
 the self his-NOM begin-3rdSG SUBJ PC-ACC worry-3rdSG tomorrow
 'He started being worried about himself tomorrow.'

(Greek; Alexiadou & Anagnostopoulou 1999: example (30b))

The problem with applying this analysis to Nguni is that the complement of *fanele* seems to be

able to have independent temporal reference. First, notice that a deontic modal verb expresses an obligation of someone at the event time expressed by the tense of the modal verb. However, a typical obligation implies reference to some hypothetical event which is in the future with respect to this event time: if I must buy flowers for my wife now, then the event of buying the flowers will be located in the future.²³ Stowell (1982) argues that an embedded clause which expresses an unrealised future event with respect to the matrix tense includes an independent tense operator and therefore is [+tense] (Martin, 2001). However, if we adopt this criterion for the Nguni cases under discussion, then we have to conclude that the raising complement of *fanele* is [+tense].

Second, the following Zulu example suggests that the complement of *fanele* can be marked with a temporal adverb which specifies an event time different from that of the matrix verb:

- (52a) Be-ku-fanele izolo ukuthi uJabu a-hamb-e namhlanje.
Aux-Loc-ought yesterday that Jabu1a SM1a-leave-SUBJ today
- (52b) UJabu u-be-fanele izolo ukuthi a-hamb-e namhlanje
Jabu1a SM1a-Aux-ought yesterday that SM1a-leave-SUBJ today
'It was vital yesterday for Jabu to leave today.'

Thus, it seems that, at least in Zulu, subjunctives embedded under the verb *fanele* show the ability to express an event whose tense specification is different from that of the matrix clause. This means that the defectiveness of raising subjunctives is not due to the lack of tense. But the fact that a raising subjunctive displays agreement between the verb and the subject shows that T's set of ϕ -features is complete. The question then is in what sense subjunctive T in raising constructions in Nguni is defective.

The answer that I would like to suggest is based on the insight that an element's ability to assign case is linked to its categorial status. Verbs and prepositions are [-N] and assign case; adjectives and nouns are [+N] and cannot assign case. I therefore propose that a T-head cannot value the case feature of a DP if it has defective *categorial* features, and I assume that T in Nguni raising subjunctives is not 'verbal' enough to value the case feature of a subject DP.

Carlson (1992) argues that clauses cannot simply be distinguished according to whether they are finite or non-finite. Rather, finiteness is scalar in nature, and Carlson shows that subjunctives are typically located somewhere in the middle on the scale of finiteness. Importantly, Carlson identifies certain features that are responsible for a decrease of finiteness. One of these features is 'nounness'; the more non-finite the clause, the more likely it will show signs of nominalising morphology.

The category T is a verbal functional category. In Grimshaw's (1991) theory of extended projections, T's categorial features are specified as [+V -N F1] — it has the same categorial status as a verb, but a different functional value (F1 instead of F0). Now assume that T in subjunctives also has nominal features. On the basis of Carlson's theory, it can be assumed that a subjunctive clause can vary in finiteness, depending on how strong T's nominal features are, and that T's nominal features in a raising subjunctive are strong enough to prevent T from valuing the case feature of the subject DP.²⁴

In the light of this proposal, it is interesting to note that Chomsky (2000; 2001) mentions another category which, despite its potential to agree with a DP, fails to value its case feature. In *attributive adjectival/participial* constructions (such as *a car old enough to buy/smashed into pieces*), the uninterpretable features of the adjective/participle are valued by the DP, but the DP's case feature cannot be valued by the adjectival predicate (see Chomsky, 2001: 8). Since adjectives and participles are [+N], it is not implausible that the failure of these categories to value the DP's case feature is due to the presence of this nominal feature.²⁵

Support for this reasoning is provided by the fact that subjunctives in Nguni are not negated like verbs in the indicative mood (which take the negative prefix *a-*, as in example (53)), but rather express negation in the same way as attributive adjectives and participles (viz. by means of the negative infix *nga-*, (54)–(56)):

- (53) Mdu *a-ka-lu-theng-i* ubisi. (indicative)
 Mdu1a NEG-SM1a-OM11-buy-NEG milk11
 'Mdu is not buying milk.'
- (54) Abantwana *be-be-nga-dl-i*. (participle)
 child2 Aux-SM2-NEG-play-NEG
 'The children were not playing'.
- (55) uthisha *o-nge-m-dala* (attributive adjective)
 teacher1a RC1a-NEG-BP-old
 'the teacher who is not old'
- (56) Ku-fanele ukuthi uMdu *a-nga-theng-i* imoto le. (subjunctive)
 LOC-ought that Mdu1a SM1a-NEG-buy-NEG car9 DEM9
 'Mdu should not buy this car.'

I suggest that the same feature that forces subjunctives to be negated by means of the affix *-nga-* is responsible for the fact that the case of the subject of a raising subjunctive cannot be valued inside the subjunctive clause.

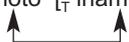
In sum, I propose the following analysis for the raising-variant of *fanele*. The interpretable φ -features of the embedded subject DP value the uninterpretable φ -features of T, which therefore agrees with this DP. Although T also has a tense feature, its nominal feature makes it impossible for T to value the case feature of the subject. Since the embedded CP is not a phase, the subject can act as a goal for the matrix T, which probes and agrees with the embedded subject. The subject then raises to matrix [Spec, T] in order to check the EPP-feature of matrix T.

Agree and feature valuation in the expletive-variant

Finally, I will comment on the analysis of the expletive-variant of *fanele*, illustrated by (57):

- (57) Ku-fanele ukuthi imoto i-hamb-e ng-amasondo.
 LOC-ought that car9 SM9-go-SUBJ with-wheel6
 'A car must have wheels in order to go.'

At first sight, it seems as if the subjunctive complement clause in examples such as (57) can be treated on a par with indicative complements, i.e. as a strong phase: since the thematic subject of the subjunctive is located inside the embedded clause, it could be assumed that embedded T is selected by C* and hence is non-defective, and that it can therefore value the case feature of the subject DP. Consequently, raising is neither necessary nor possible. In order to satisfy the EPP-requirement of matrix T, an expletive is therefore inserted in the *fanele*-clause.

- (58) [_{TP} pro_{Expl} [ku-fanele [_{C*P} ukuthi [_{TP} imoto [_T ihambe ngamasondo]]]]]
- 

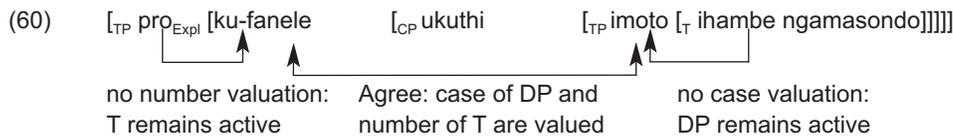
 T agrees with DP, case
 is valued as nominative

The expletive must be able to value the φ -features of matrix T and therefore would have to be analysed as the equivalent of English *it* in constructions such as (59):

- (59) It seems that several problems remain.

However, the discussion of the C/C*-distinction and the nominal character of T suggests an alternative derivation for sentences such as (57). Suppose that the subjunctive CP-complement of *fanele* is always a weak phase, and that T inside a raising subjunctive is always defective (due to its nominal features). This would mean that, although the embedded subject in (57) can value the uninterpretable ϕ -features of the subjunctive T-head (and agree with it), its case feature cannot be valued by the lower T. The embedded subject therefore remains active and a possible goal. Since matrix T is nondefective, it can probe and agree with the embedded subject across the CP-boundary, since this CP is not a strong phase.

In order for matrix T to be able to act as a probe for the embedded subject, it must be active, which means that some of its uninterpretable ϕ -features have not been valued. This is where the properties of the expletive in the matrix clause become important. Notice that the locative marker *ku-*, in contrast to other subject agreement markers, is not specified for number. This means that although expletive *pro* in the matrix subject position deletes the EPP-feature of matrix T, it cannot value the set of ϕ -features of matrix T. Therefore, T remains active and can act as a probe for the embedded subject (see Chomsky, 2001):



According to the analysis in (60), the expletive in Nguni *fanele*-constructions has properties of English *there* in sentences such as (61):

(61) There seem to remain several problems.

Notice that, although the embedded T cannot value the case feature of the embedded subject under agreement, the subject of the subjunctive in the expletive-variant of *fanele* appears in the preverbal position and therefore is in [Spec, T] (and not *in situ* in [Spec, v]).²⁶ This supports the view that T in raising complements and therefore has an EPP-feature (perhaps via inheritance from matrix C, as suggested in Chomsky, 2005) which requires DP to move to [Spec, T], despite T's inability to value the case of this DP. In this respect, (57) contradicts the standard view that 'partial raising of the associate in expletive is generally not possible' (see Bošković, 2002; see also Chomsky, 1995).

According to the analysis presented here, the only difference between the expletive- and the raising-variant of *fanele* is that, due to the lack of an expletive in the numeration of the latter, the EPP-feature of matrix T forces the embedded subject to raise to matrix [Spec, T].

The development of the raising-variant of *fanele*

In this final section, I return to the observation that the raising-variant of *fanele* is considerably more marked than the expletive-variant. In the light of this observation, the following data, also found in various Zulu texts on the internet, are interesting:

- (62a) Isaziso ku-fanele si-shicilel-w-e kw-iphephandaba
notice7 LOC-ought SM7-submit-PASS-SUBJ LOC-newspaper5
'A notice must be submitted to the newspaper.'
- (62b) UMongameli ku-fanele a-wu-hlakaze uMkhandlu kaZwelonke uma [...]
president1 LOC-ought SM1-OM3-dissolve the cabinet if
'The president must dissolve the cabinet if ...' (Zulu)²⁷
- (63) Abesifazane ku-fanele ba-nge-sab-i uku-zam-a.
women2 LOC-ought SM2-NEG-frighten-NEG INF-try-Fv
'Women must not be scared to try.' (Zulu)²⁸

The examples in (62) and (63) seem to be a mixture between the two variants attested with *fanele* that were discussed above. The word order is that of the raising-variant: the thematic subject of the subjunctive predicate appears sentence-initially in (62) and (63). However, in contrast to the raising examples, the fronted subjects do not trigger subject agreement with *fanele*. Instead, *fanele* in (62) and (63) is prefixed with the subject marker *ku-* and hence shares this property with the expletive-variant.

I assume that (62) and (63) are indeed based on the expletive construction with *kufanele*. The fronted DPs are therefore not located in the subject position of the matrix clause, which is occupied by expletive *pro*. Instead, I suggest that these examples exhibit long *left dislocation* of the embedded subject and hence are examples of A-bar movement. The Nguni languages allow for left dislocation of arguments out of embedded clauses, as the following examples illustrate (see Zeller, 2004):

- (64) Incwadi ngi-cabang-a ukuthi umfana u-ya-yi-fund-a.
 book9 1stSG-think-Fv that boy1 SM1-Foc-OM9-read-Fv
 'The book, I think the boy is reading (it).' (van der Spuy, 1993: 342)
- (65) Abafana incwadi uThemba u-cabang-a ukuthi ba-ya-yi-fund-a.
 boy2 book9 Themba1a SM1a-think-Fv that SM2-Foc-OM9-read-Fv
 'The boys, the book, Themba thinks that they are reading it.' (Zeller, 2004: 10)

In (64) and (65), DP-arguments from the embedded clause have undergone topic leftward movement and ended up in the left periphery of the main clause. I assume that the same type of topic movement is responsible for the word order in (62) and (63), and I suggest that the raising-variant of the *fanele*-construction has its origins in these kinds of constructions. With *kufanele* in the matrix clause, all speakers allow left-dislocation of the embedded subject via A-bar movement; this probably happens in order to strengthen the topic-character of this DP. However, some speakers have reanalysed this topicalised DP as the subject of the matrix clause, and have eventually grammaticalised this situation by replacing the indefinite expletive marker *ku-* of *fanele* with a subject marker which expresses agreement with the fronted DP. Since the base position of the moved DP is still inside the embedded sentence, and since the thematic link between the matrix subject position and the embedded clause can still be established, the resulting construction is now an instance of subject-to-subject raising (i.e. an instance of A-movement) in contemporary Nguni:²⁹

- (66a) [ku-fanele [Subj – Verb]]
 → *left dislocation of embedded subject* →
- (66b) [Subj] [ku-fanele [~~Subj~~ – Verb]] (= topicalisation/left-dislocation)
 → *reanalysis: topic >> subject position* →
- (66c) [[Subj] AGR-fanele [~~Subj~~ – Verb]] (= raising)

The step from (66b) (A-bar movement) to (66c) (A-movement) is facilitated by the existence of those constructions in which *fanele* takes an infinitival complement and agrees with a DP in the matrix subject position (see (15), (16a) and (25)). Furthermore, there are regular constructions in the Nguni languages in which a matrix subject agrees with both the main and the embedded subjunctive predicate:

- (67) Ngi-ke ngi-sebenz-e.
 1stSG-sometimes 1stSG-work-SUBJ
 'I sometimes work.'
- (68) UMdu a-ka-zange a-bu-phuz-e utshwala.
 Mdu NEG-SM1a-never SM1a-OM14-drink-SUB beer14
 'Mdu never drinks beer.'

For those speakers who accept the raising-variant with *fanele*, *fanele* is simply treated as a predicate with properties similar to those of the matrix predicates in (67) and (68). However, the grammaticalisation process exhibited in (66) clearly has not manifested itself in all parts of the Nguni-speaking population, which explains why the raising construction is not accepted by all Nguni speakers.

Conclusion

The purpose of this paper was twofold. Firstly, I wanted to provide empirical evidence that the Nguni languages exhibit raising out of finite subjunctive complements. I examined A-movement constructions with the modal verb *fanele*, which in its most common use takes a subjunctive complement. Since the head of this complement can be realised by an overt complementiser in raising constructions, the data that I presented in this paper provide empirical evidence against Landau's (2003: 488) claim that 'raising complements are never introduced by complementizers' (which Landau suspects to be 'a universal generalisation').

Secondly, I discussed raising out of subjunctives from the perspective of the MP in light of the assumption that the T-head of a raising complement is defective and cannot value the case feature of the embedded subject. I showed, essentially following the analyses in Alexiadou and Anagnostopoulou (1999) and Uchibori (2000; 2001), that this view is not incompatible with the presence of a C-layer in the raising clause, as long as the raising CP is not a strong phase.

This latter view raises an interesting point. Since ordinary (finite and non-finite) clauses are CPs, ECM and raising infinitives, which are analysed as TPs in the MP, have an exceptional status and are not treated as phases. However, the empirical properties of languages such as Greek, Japanese, and Nguni show that raising out of finite CPs is also attested. But if the possibility of raising out of finite CP must be accounted for anyway, then perhaps there is no reason to continue to assume that raising infinitives are TPs. If CPs can be weak phases, and if heads of weak phases can select defective T (as suggested by Uchibori, 2000), then the theoretical reason for assuming that raising infinitives must be TPs falls away. The conclusion to be drawn from this is that raising and ECM infinitives are perhaps not TPs, but CPs (see Ormazabal, 1995 and Epstein *et al.*, 2005 for independent evidence in support of this conclusion). The only difference between raising CPs and the CPs corresponding to finite and control complements would be that the former are weak phases, which select defective T, while the latter are strong phases (C*Ps).

Notes

- ¹ The Nguni group of languages spoken in South Africa includes the official languages Zulu, Xhosa, Swati and (Southern) Ndebele. Unless otherwise indicated, all examples provided in this paper are from Zulu. In the glosses, I mark the noun classes and agreement through numbers, according to Meinhof's (1906) numbering system of Proto-Bantu. Where possible, I have adjusted the glosses of examples that I adopted from the literature to my system. Morphemes are glossed as follows: ABS = absolute pronoun; ACC = accusative case; AUX = auxiliary; BP = basic (adjectival) prefix; CAUS = causative; DEM = demonstrative pronoun; FOC = focus; FUT = future tense; FV = final vowel; INF = infinitive marker; LOC = locative marker; NEG = negative marker; NOM = nominative case; NONPAST = non-past tense; OM = object marker; PAST = past tense; PC = pronominal clitic; PERF = perfect tense; PL = plural; POSS = possessive marker; PRES = present tense; RC = relative concord; RS = relativising suffix; SG = singular; SM = subject marker; TNS = Tense.
- ² The subjunctive CP in the Zulu examples in (6)-(8) is introduced by the complementiser *ukuthi*, whereas the complementiser in the Xhosa example (9) is *ukuba*. However, notice that *ukuba* is also acceptable in Zulu constructions with *fanele*; see (14) below.
- ³ I do not rule out the possibility that there is no pro in Nguni, and that (in the absence of an overt subject DP), subject markers (including expletive *ku-*) are the actual subject pronouns, which then incorporate into or cliticise to the verb. Nothing in this article hinges on the choice of analysis for pronominal subjects in Bantu, though, and I therefore adopt the pro-analysis here for ease of exposition.

- ⁴ In examples such as (12), the first person-agreement marker is a reflex of a pro-DP in the matrix subject position (but see the preceding note).
- ⁵ According to my informant, the correct form of the verb 'tell' in (16) would be *-tshela*.
- ⁶ I have corrected a spelling mistake in example (22).
- ⁷ Available at: <http://www.education.gov.za/mainDocument.asp?src=dvie&xsrc=57> [accessed 11 April 2006]
- ⁸ Available at: http://www.dairymail.co.za/acrobat/WEB_JULY_2004/UBISI_MAIL.pdf [accessed 19 April 2006]
- ⁹ Available at: http://www.watchtower.org/languages/xo/library/rq/article_08.htm [accessed 11 April 2006]
- ¹⁰ Available at: <http://www.gautengleg.gov.za/Publish/Legislature%20Documents/Committees%20-%20Standing/Petitions%20&%20Public%20Participation%20Standing%20Committee/TRANSCRIP/First%20Legislature/1996%20Transcripts/1996-09-10-v.006.wpd> [accessed 11 April 2006]
- ¹¹ Available at: <http://www.southafrica.com/forums/showthread.php?p=23425> [accessed 12 April 2006]
- ¹² I assume that non-finiteness presupposes the absence of agreement and tense marking (see Landau, 2004). Since subjunctives exhibit agreement, embedded subjunctive clauses are finite.
- ¹³ See Hornstein (1999) for an argument in favour of analysing both raising and control in terms of movement. Culicover and Jackendoff (2001) and Landau (2003) provide strong arguments against Hornstein's approach.
- ¹⁴ I have omitted the tone marking from the original examples.
- ¹⁵ Despite the obligatory coreference of the embedded and the matrix subject, Du Plessis (1989) argues that the subject of the embedded subjunctive in examples with *fanele* is pro. However, it is not clear how the obligatory coreference of pro and the matrix subject can be derived in his analysis. Van der Spuy (1997) discusses Zulu examples similar to those in (38) which are based on the matrix verb *lungile*, 'to be fine'. Van der Spuy suggests that the subject of the finite subjunctive complement of *lungile* be analysed as pro. As a consequence, he is forced to assume that the matrix subject in the 'raising'-variant originates in a non- θ -position in the matrix clause and obligatorily binds the pro-subject of the embedded clause (a 'traceless raising construction'). Although van der Spuy's analysis is consistent with the data discussed thus far, it fails to account for the scope properties of the raising variant, which show that the matrix subject is represented by a copy in the embedded clause (see discussion below and note 16).
- ¹⁶ According to the analysis presented in van der Spuy (1997) (discussed in the preceding note), the matrix subject *othisha ababili*, 'two teachers', in (49) has not undergone raising out of the subjunctive complement, but has been introduced in the derivation as the matrix subject. However, this analysis fails to explain the wide scope of the embedded object in (49). In contrast, the availability of this interpretation in (49) follows from the raising analysis, which predicts that an identical (but unpronounced) copy of the matrix subject is also present in the embedded clause.
- ¹⁷ ECM-verbs also select TP-complements.
- ¹⁸ In Chomsky (2005), it is assumed that the tense and φ -features of T are *derivative* from C, which makes the presence of C a prerequisite for T to be φ -complete.
- ¹⁹ Chomsky (2005: 10) states that 'when φ -features appear morphologically at [defective] T, they should therefore be regarded as just a morphological effect of agreement, without significance in the syntactic computation.' Chomsky seems to imply that although a defective T-head which is not selected by C cannot enter the syntactic operation Agree to value case on the subject, it may still show a reflex of agreement, which is then purely morphological. However, as I discuss below, a defective T can have a complete set of φ -features, but is defective with respect to some other feature, such that nominative case valuation is impossible even though T agrees with the subject.
- ²⁰ Subject-to-subject raising crosses another phase, namely the matrix vP. However, since raising verbs are unaccusative, the matrix v is not a strong phase either and consequently does not block movement of a DP from within its c-command domain to matrix [Spec, T].

- ²¹ The claim that raising complements have no semantic tense is also found elsewhere (see Stowell, 1982; Martin, 2001). For an opposing view, see Landau (2004).
- ²² It would be interesting to explore whether all subjunctives are weak phases. The answer depends ultimately on the status of control subjunctives of the Balkan-type. On the one hand, control complements are usually assumed to be strong phases, since their T-heads are non-defective and can license null case on PRO. On the other hand, Landau (2004) analyses control in terms of long-distance Agree between a functional head in the matrix clause which licenses the controller, and PRO in the embedded clause. The fact that this Agree relation can be established across a CP boundary might suggest that this CP is not a strong phase. Another open question concerns the possibility that certain indicative CPs are weak phases, for raising out of indicative finite complements seems to exist in some Bantu languages as well (see Perez, 1985).
- ²³ Note in this respect that many languages (for example, English and German) use modal verbs to express future tense.
- ²⁴ An interesting question to explore is whether this 'nominal defectiveness' of T in a raising subjunctive can be linked to the fact that the selecting C does not project a strong phase.
- ²⁵ Chomsky (2001) argues that the failure of an adjectival predicate to value the case feature of its subject is due to its incomplete set of ϕ -features. In order to make this claim compatible with my proposal in the text, one could assume that the nominal properties of adjectives and of T in subjunctives have a negative effect on T's set of ϕ -features. This would mean that, due to their nominal properties, adjectives and T in raising subjunctives only have a partial set of ϕ -features and thus cannot value the case feature of a subject. However, as mentioned in the text, this idea is problematic given the fact that subjunctives in Nguni agree with their subjects in number, person and gender.
- ²⁶ The Nguni languages allow for subjects to remain in [Spec, v]; see Sabel and Zeller (2006). This option also exists in the subjunctive complement of *fanele*:
- (i) Ku-fanele ukuthi ku-hamb-e izimoto ng-amasondo.
 Loc-ought that Loc-go-SUBJ car10 with-wheel6
 'Cars must have wheels in order to go.'
- ²⁷ Available at: <http://www.up.ac.za/academic/libarts/afriLang/webtocorpus.pdf> [accessed 11 April 2006]
- ²⁸ Available at: http://www.bwasa.co.za/docs_images/article%20futhi%20zulu.doc [accessed 13 April 2006]
- ²⁹ Interestingly, I also found some examples with a fronted subject on the internet where *fanele* did not show any inflection on the verb (neither *ku-* nor a subject marker). These data may be interpreted as a reflex of the uncertainty that some Nguni speakers (writers) feel with respect to the syntactic status of this type of construction.

Acknowledgements

I thank Dori Posel for her help with this article and Nhlanhla Thwala and Bev Muller for valuable comments. A special thanks to Mduduzi Ntuli for providing and discussing the Zulu data.

References

- Alexiadou A & Anagnostopoulou E. 1999. Raising without infinitives and the nature of agreement. In: Bird S, Carnie A, Haugen J & Norquest P (eds) *WCCFL 18 Proceedings*: 15–25.
- Bošković Ž. 2002. A-movement and the EPP. *Syntax* 5: 167–218.
- Carlson R. 1992. Narrative, subjunctive and finiteness. *Journal of African Languages and Linguistics* 13: 59–85.
- Chomsky N. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Chomsky N. 2000. Minimalist inquiries: the framework. In: Martin R, Michaels D & Uriagereka J

- (eds) *Step by Step*. Cambridge, Mass.: MIT Press, pp 89–155.
- Chomsky N.** 2001. Derivation by phase. In: Kenstowicz M (ed) *Ken Hale. A Life in Language*. Cambridge: MIT Press, pp 1–52.
- Chomsky N.** 2005. On phases. Manuscript, MIT.
- Culicover P & Jackendoff R.** 2001. Control is not movement. *Linguistic Inquiry* **32/33**: 493–512.
- Du Plessis JA.** 1989. Distribution of the complementizer *ukuba* in Xhosa sentences. *South African Journal of African Languages* **9(2)**: 43–51.
- Epstein SD, Pires A & Seely TD.** 2005. EPP in T: more controversial subjects. *Syntax* **8(1)**: 65–80.
- Grimshaw J.** 1991. Extended projection. Unpublished manuscript, Brandeis University.
- Hornstein N.** 1999. Movement and Control. *Linguistic Inquiry* **30**: 69–96.
- Krapova I & Petkov V.** 1999. Subjunctive complements, null subjects and case checking in Bulgarian. In: Dziwirek, Coats H & Vakareliyska CM (eds) *Proceedings of the 7th Meeting of Formal Approaches to Slavic Linguistics*. Michigan Slavic Publications, University of Michigan, Ann Arbor, pp267–285.
- Landau I.** 2003. Movement out of control. *Linguistic Inquiry* **34(3)**: 471–498.
- Landau I.** 2004. The scale of finiteness and the calculus of control. *Natural Language and Linguistic Theory* **22**: 811–877.
- Martin R.** 2001. Null case and the distribution of PRO. *Linguistic Inquiry* **32(1)**: 141–166.
- Meinhof C.** 1906. *Grundzüge einer vergleichenden Grammatik der Bantusprachen*. Berlin: Dietrich Reimer.
- Nyembezi CLS.** 1970. *Learn More Zulu*. Pietermaritzburg: Shuter & Shooter.
- Ormazabal J.** 1995. *The Syntax of Complementation*. PhD thesis, University of Connecticut, Storrs.
- Perez CH.** 1985. *Aspects of Complementation in Three Bantu Languages*. PhD thesis, University of Wisconsin-Madison.
- Rivero ML & Ralli A.** (eds). 2001. *Comparative Syntax of Balkan Languages*. Oxford Studies in Comparative Syntax. New York: Oxford University Press.
- Rosenbaum P.** 1967. *The Grammar of English Predicate Complement Constructions*. Cambridge, Mass.: MIT Press.
- Sabel J & Zeller J.** 2006. Wh-question formation in Nguni. In: Mugane J, Hutchison J & Worman D (eds) *African Languages and Linguistics in Broad Perspective. Selected Proceedings of the 35th Annual Conference of African Linguistics, Harvard, Cambridge*. Somerville, Massachusetts: Cascadilla Proceedings Press, pp 271–283.
- Stowell T.** 1982. The tense of infinitives. *Linguistic Inquiry* **13**: 561–570.
- Terzi A.** 1997. PRO and null case in finite clauses. *The Linguistic Review* **14**: 335–360.
- Uchibori A.** 2000. *The Syntax of Subjunctive Complements: Evidence from Japanese*. PhD dissertation, University of Connecticut.
- Uchibori A.** 2001. Raising out of CP and C-T relations. In: Cuervo MC, Harbour D, Hiraiwa K & Ishihara S (eds) *Formal Approaches to Japanese Linguistics 3 (FAJL 3): MIT Working Papers in Linguistics, Vol. 41*. Cambridge, Mass.: MIT Working Papers in Linguistics, pp 145–162.
- van der Spuy A.** 1993. Dislocated noun phrases in Nguni. *Lingua* **90**: 335–355.
- van der Spuy A.** 1997. Syntactic traces in Zulu. In: Herbert RK (ed) *African Linguistics at the Crossroads*. Köln: Rüdiger Köppe Verlag, pp 297–309.
- van der Spuy A.** 2001. *Grammatical Structure and Zulu Morphology*. PhD thesis, University of the Witwatersrand, Johannesburg.
- Wurmbrand S.** 1999. Modal verbs must be raising verbs. In: Bird S, Carnie A, Haugen J & Norquest P (eds) *WCCFL 18 Proceedings*. Somerville, MA: Cascadilla Press, pp 599–612.
- Zeller J.** 2004. Left dislocation in Zulu. Manuscript. University of KwaZulu-Natal, Durban, South Africa. Available at <http://www.jzeller.de/pdf/LDZuluSep04.pdf>.

- Zerbian S.** 2005. Impersonal constructions in Northern Sotho. In: Lepota B & Geldenhuys J (eds) *25 Years of Applied Linguistics in Southern Africa: Themes and Trends in Southern African Linguistics*. Pretoria: University of Pretoria, pp 198–212.
- Ziervogel D, Louw JA & Taljaard PC.** 1985. *A Handbook of the Zulu Language*. Pretoria: JL van Schaik.