The Great siSwati Locative Shift[*]

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In siSwati the accumulation of a number of changes in the morphology and syntax of locative phrases has led to a more fundamental shift of restructuring of the underlying grammatical system – the great siSwati locative shift – so that locatives in siSwati are no longer, as in Proto-Bantu and most other present-day Bantu languages, part of the noun class system, but are prepositional. This shift explains aspects of changes in the siSwati locative system which are not otherwise independently motivated, including the degrammaticalization of a historic noun class marker into a preposition and distinct relative clause marking of locatives, and provides an example of a complex, systematic historical change of a sub-system of the grammar.

1 Introduction

Bantu languages provide a rich empirical base for the study of language change. Against a background of fairly high typological similarity among the family overall, especially south-eastern Bantu languages exhibit a high degree of morphosyntactic microvaration (Marten, Kula & Thwala 2007), which provides the basis for detailed case studies of different aspects of language change. In this paper, I present one such case study, namely the development of the locative system of siSwati, a Bantu language of the Nguni group spoken in Swaziland and South Africa. I will show that the system is historically related to Proto-Bantu (PB) locative noun classes, but that in present-day siSwati the locative system is prepositional, and no longer part of the noun class system. Most of the changes which

characterize the development in siSwati are also found in other Bantu languages, and can often be individually motivated, for example as loss of morphological markers, instances of grammaticalization or language contact. However, it is only in siSwati and closely related languages that the accumulation of a number of individual changes in the morphosyntax of locative phrases has led to the more fundamental shift of restructuring of the underlying grammatical system – the great siSwati locative shift, during which locative morphology was lost and innovated, locative noun class markers were reanalysed as prepositions, and locative phrases, historically noun phrases, were reanalysed as prepositional phrases. This shift explains aspects of changes in the siSwati locative system which are not independently motivated, such as the unusual case of the degrammaticalization of a historic noun class marker into a preposition. The siSwati locative shift, as an example of a complex, systematic change of a sub-system of the grammar, is thus of interest from a comparative Bantu perspective as well as for the study of language change more generally.[1]

In the following sections I will provide a brief outline of the PB locative system and then show in detail how the siSwati system differs from it. The perspective adopted is historical-comparative, and I will provide a number of examples from other Bantu languages to show how the siSwati system relates to the wider Bantu situation. After describing the system in some detail, I will summarize the changes and show how they can best be explained by assuming a change in the underlying morphosyntax of siSwati locatives, which has not occurred in most other Bantu languages. Finally I will briefly address the question whether the locative shift can be explained as resulting from the accumulation of a number of independent changes, or whether in addition language-external factors, such as language contact, could have played a role as well.

2 The Bantu locative system

Before discussing the siSwati locative system in more detail, I will provide in this section a brief outline of a 'typical' Bantu locative system, that is, aspects of the grammar of locatives which are highly frequent in comparative Bantu and/or have been reconstructed for Proto-Bantu.

Locative marking in Bantu is typically part of the noun class system. Three different locative noun classes can be reconstructed confidently and are found very frequently in present-day Bantu languages. These are

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[1] I take siSwati here as a representative of a wider group of southern Bantu languages. Changes similar, or in some cases identical, to the changes found in siSwati are also found in Zulu and other Nguni languages, and in other southern Bantu languages outside of Nguni, and possibly also in northwestern Bantu languages; cf. Gregoire (1975) for a general overview, and Creissels (2009) for Tswana. However, more empirical, especially syntactic data are needed to ascertain how wide-spread the locative shift is.

conventionally labelled classes 16, 17, and 18. The relevant noun class prefixes and associated semantics are class 16 *pà-*, referring to proximate or specific location, class 17 *kù-*, referring to distal or non-specific location, class 18 *mù-*, referring to interiority. Locative morphology is found both in the nominal and the verbal domain. All three locative classes can be used to mark nouns as locative, and there are three locative subject and object markers (e.g. Meinhof 1910, 1948, Meeussen 1967, Maho 1999). A typical system is found in Bemba, illustrated below:[2]

(1) Pà-ngándá   pà-lì   àbà-nà.   [Bemba]
     16-9.house   SM16-be   2-children
     'There are children at home.'

(2) Kú-ngándá   kwà-lí-ìs-à   áb-ènì.
     17-9.house   SM17-RecPast-come-FV   2-guests
     'Visitors have come to the house.'

(3) Mù-ngándá   mù-lé-ímb-á   àbà-nà.
     18-9.house   SM18-PROGR-sing-FV   2-children
     'The children are singing in the house.'

The examples show that three locative noun class prefixes *pa-*, *ku-* and *mu-* are distinguished, and that the verb agrees with the relevant noun class of the locative subject. Similarly, class 16-18 locative agreement affixes typically exist to express other agreement relations usually expressed by noun class morphology, such as adjective, demonstrative or possessive agreement.

(4) mù-ngándá   mw-à-bá-kàfúndíshà   ù-mú-súmà
     18-9.house   18-POSS-2-teacher   AUG-18-beautiful
     'in the beautiful house of the teachers'

Syntactically, locative nouns behave in most respects like other nouns, and can function as subjects and objects of verbs. For example, in (1), the locative noun *pàngándá* 'at home' functions as the subject of the copula *-lì* 'be'. The locative nouns in (1) to (3) are grammatical subjects in so-called locative inversion constructions, in which a locative phrase is coded as grammatical subject and the logical or thematic subject is placed in immediately post-verbal position (see Bresnan & Kanerva 1989, Marten 2006). The availability of locative inversion constructions is related to the

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[2] The following less widely used abbreviations are used in the glosses: 1, 2, 3 … = Noun class number, 1, 2, 3 when directly followed by SG/PL = person, AUG = Augment or pre-prefix, FV = Final vowel, OM = Object marker, SM = subject marker.

functionality of the locative system, a point I will return to in relation to siSwati below.

In addition to classes 16-18, a fourth locative prefix is often assumed to have existed in PB, class 24 *ì-. Reflexes of this prefix are limited, and only a few Bantu languages show class 24 agreement patterns in addition to the nominal noun class marker. However, the siSwati locative marker *e-* might be related to this PB form (Gregoire 1975: 94, Maho 1999: 205/6). I will briefly return to this point below, but in the main will concentrate on the development of classes 16-18 for which better comparative material is available.

Although typical Bantu locative systems as illustrated from Bemba above are part of the noun class system, there are nevertheless some differences between the locative classes 16, 17 and 18 and other, non-locative noun classes. First, while typical noun classes have basic members, that is words which are found only in that particular class or class-pairing, locative classes typically have no basic members at all, or only one member such as the word for place. Thus, for example, in Bemba, *ùmùntù* 'person', *úmwàná* 'child', *ùmwènì* 'visitor' among many others are class 1 nouns (with corresponding plurals in class 2). In contrast, the locative classes are only used with one nominal root: *úkùntù* 'to a place', *ápàntù* 'at a place' and *úmùntù* 'in a place', all based on the nominal root *-ntù*, 'entity' which is also found in *ùmùntù* 'person' with the human class 1 prefix. The vast majority of locative nouns are derived from nouns from other classes, so that locative noun class prefixes are prefixed not to nominal stems as normal class prefixes are, but to forms which already contain a prefix. Thus, *ímì-tí* 'trees' consists of the class 4 prefix *ímì-* and the nominal stem *-tí* 'tree', and can be used as a locative noun as for example in *kú-mì-tí* 'on the tree' or *mú-mì-tí* 'in the tree'. In contrast to the basic form *ímìtí*, the locative forms contain two class prefixes, the locative class prefix and the original class 4 prefix. In this respect the locative classes can be seen as part of the derivational use of the noun class system, where nouns are assigned to secondary classes, often with a clear semantic effect (cf. Schadeberg 2003).

Bantu locative marking is thus part of the Bantu noun class system, and locative nouns are essentially like other nouns in terms of morphology, agreement and syntactic behaviour. However, the locative noun classes are peripheral members of the noun class system as they have no or a very restricted set of basic members, and are mainly used derivationally, a fact which is reflected in the common presence of two noun class prefixes in locative nouns.

In many present-day Bantu languages, the locative system has changed in different ways. For example, Swahili has lost the original nominal locative morphology appearing on nouns, and locative nouns are marked with a newly developed locative suffix. However, the three-way distinction between the three locative noun classes in the agreement system has been retained, so that, for example, three different locative subject markers are

still part of the grammar. In contrast, Lozi has maintained the three locative noun class prefixes for nouns, but has lost two of the three agreement prefixes, so that class 16, 17 and 18 nouns in Lozi all have a class 17 subject agreement marker (cf. Marten et al. 2007). However, in most Bantu languages the locative system is still part of the noun class system, even if some morphological markers have been lost. In contrast, I will show below that the locative system of siSwati – and probably also that of related southern Bantu languages – has been restructured to such an extent that locatives are no longer coded as nouns, and thus not as part of the noun class system, but as prepositional phrases. The results of the restructuring process can be seen in both the morphology and the syntax of locatives in siSwati, as I will show in more detail below. What is of particular interest in this restructuring process is that many aspects of the new system are also found in other Bantu languages, and that it is rather the totality of the changes which has led to the underlying more fundamental change of the complete system.

3 The restructuring of the siSwati locative system

Locative marking in siSwati shows clear traces of the PB locative system. In both nominal and verbal morphology, the class 17 locative marker *ku-* is still found, even though, as I will show below, with innovated morphology, syntax and semantics. Traces of class 16 and 18 are also found, although only in lexicalised forms. Furthermore, the locative prefix *e-* is probably a reflex of PB class 24. However, the innovations outnumber the retentions. For example, as in Swahili, a new suffix is used for locative marking. Furthermore, syntactically, a number of typical Bantu locative characteristics are not found in siSwati. In fact, the number of innovations amounts to a systematic change whereby locative marking has ceased to be part of the noun class system, and is now better analysed as a prepositional system.

The specific aspects of the locative system relevant to the discussion include both morphological and syntactic facts. In the following sections, I will discuss in more detail the development of new nominal locative morphology, the loss of the locative subject markers *pa-* and *mu-* and the reanalysis of the locative subject marker *ku-* as expletive subject marker, the reanalysis of historical locative noun class prefixes as locative prepositions, the loss of locative subject and object marking, and finally the loss of relative agreement except in locative relatives.

3.1 Development of new locative morphology

Although traces of the three typical members of PB locative class morphology are found in siSwati, locatives are formed productively in

siSwati only with class 17 *ku-*, or by using different morphemes, namely the prefix *e-* and the suffix *-ini*, sometimes in combination with each other (examples from Taljaard, Khumalo & Bosch 1991: 43-46).[3]

(5)   bafana 'boys' > ku-bafana 'to/at the boys'

(6)   sitolo 'shop' > e-sitolo 'at the shop'

(7)   indlu 'house' > e-ndl-ini 'at the house'

The use of *e-* ... *ini* as in (7) is the most productive locative strategy, while *e-* is used with place names and localities, as well as with some lexical exceptions (6), and *ku-* is most commonly found with nouns of class 1 and 2, which include animate nouns, personifications and some loan-words (5), as well as with demonstratives, further discussed below (cf. e.g. Ziervogel & Mabuza 1976: 34-37, Taljaard et al. 1991: 43-46). The locative suffix *-ini* has been argued to result from a grammaticalization process with the lexical form *-ini* 'liver' as starting point, involving semantic, metaphorical extension to interiority (comparable to metaphorical uses of English *heart*) and then further extension to denote other locative relations (Samsom & Schadeberg 1994). According to Samsom & Schadeberg (1994), the grammaticalization process originated in East African Bantu languages, and the formative then spread to other languages in the east and south of the Bantu area, replacing to a greater or lesser extent the historically older locative morphology involving all three locative noun classes (see Gregoire 1975: 185-204, Güldemann 1999 for further discussion of *-ini*). Further evidence for the previous existence of class 16 and 18 in siSwati comes from fact that class 16 and class 18 locative noun class morphology is found in lexicalised expressions such as adverbials and demonstratives (examples from Ziervogel & Mabuza 1976: 27-28):

(8)   phandle 'outside'

(9)   phansi   'underneath'

(10)   lapha   'here'

(11)   mshiya loyi   'this side'

(12)   mshiya lowa   'that side'

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[3] SiSwati data are given without tone marking, following usage in most sources, and due to the absence of a satisfactory analysis of siSwati tone.

The forms in (8) to (10) involve the class 16 formative *pha-*, while (11) and (12) appear to include grammaticalized forms of the class 18 prefix *m(u)-*. The existence of these forms shows that PB locative class morphology was used in an older stage of the language, but that productive locative marking became associated with only class 17 or the affixes *e-* and *-ini*.

This development in nominal morphology is mirrored in verbal agreement morphology. As in the nominal domain, class 16 and class 18 agreement morphology has been lost, and there is no agreement morphology associated with siSwati *e-*. While class 17 *ku-* is still used as a subject marker, its function and syntax have changed, and it is now used as a marker for expletive, impersonal or default subjects:

(13) Ku-ya-bandza.
SM17-PRES-be.cold
'It is cold.'

(14) Ku-mnandzi.
SM17-be.nice
'It is nice.'

(15) Ku-ne-kudla   e-dladla-ini.
SM17-POSS.COP-food   LOC-kitchen-LOC
'There is food in the kitchen.'

(16) Ku-ya-dl-iwa.
SM17-PRES-eat-PASS
'There is being eaten.' (idiomatic, 'There is a feast.')

(17) Kw-ent-e   njani?   Ku-buta   unina.
SM17-happen-PERF   what?   SM17-ask   mother.his
'What happened?, asked his mother.'

(18) Ku-ya-bonakala   kutsi   u-ya-gula.
SM17-PRES-evident   that   SM3SG-PRES-be.ill
'It is evident that he is ill.'

(19) Tim-buti,   li-hhashi   ne-ma-tfole   ku-ya-baleka.
10-goat   5-horse   CONJ-6-calf   SM17-PRES-run
'The goats, horses and calves run away.'

Examples (13) and (14) show expletive *ku-* used as a subject marker with the weather verb *-bandza* 'be cold' and the stative verb *-mnadzi* 'be nice'. In (15) and (16) *ku-* serves as subject marker in existential constructions: in (15) with the possessive copula *-ne*, and in (16) with an intransitive passive. In (17), *ku-* is found both as an expletive subject marker with *-enta*, 'happen'

and as subject marker in a quotative construction with inverted subject, while in (18), *ku-* functions as the expletive subject marker of a propositional attitude verb. Finally, in (19) *ku-* is used as the subject marker of a conjoined subject with conjuncts of different noun classes. In these examples *ku-* is used in contexts where the grammatical subject does not correspond to the logical or thematic subject, where a thematic subject is not encoded at all, or where agreement between the noun class of the grammatical subject and the subject marker is not possible. The function of *ku-* in these examples is as a default, indefinite or expletive subject marker, showing that *ku-* has lost its locative semantics and can be used to encode more abstract semantic functions. For simplicity, I will refer to all these functions as 'expletive' in the following discussion.

Locative marked nouns can be used with the expletive subject maker, but show no class agreement (20):

(20) E-ndl-ini   ku-ya-shisa.
      LOC-house-LOC   SM17-PRES-be.hot
      'In the house it's hot.'

(21) Phandle   ku-ya-bandza.
      16.outside   SM17-PRES-be.cold
      'Outside it is cold.'

Based on similar evidence, Buell (2007) proposes for Zulu that when locative NPs precede the expletive subject markers, the locative NP is in topic position, rather than in subject position, a point to which I return in Section 3.3. below.

The changes in class morphology in siSwati are also found in a number of other Bantu languages. As mentioned above, both Swahili and Lozi have lost part of the three-way distinction of the historical locative morphology. Furthermore, the new locative suffix *-ini* is also found in Swahili and a number of other southern and eastern Bantu languages. The use of the class 17 locative marker *ku-* as an expletive marker is similarly not restricted to siSwati, and is found, for example, in Swahili and Bemba:

(22) Ku-na   m-vua.   [Swahili]
      SM17-COP   9-rain
      'It is raining.'

(23) Ku-na   nini?
      SM17-COP   what
      'What is happening?'

(24) Nàà-kù-tálálá.   [Bemba]
      PRES-SM17-be.cold
      'It is cold.'

Neither the change in morphological marking nor the change in function of *ku-* is thus only found in siSwati, and it is not particularly exceptional from a cross-Bantu perspective. However, the siSwati situation is unusual in that expletive use seems to be the only, or at least predominant function associated with the class 17 subject marker. If the development of expletive function from previous locative semantics is seen as a grammaticalization path (cf. Heine & Kuteva 2002: 203), then in siSwati this development appears to have proceeded further than in most other Bantu languages. A similar situation can also be found in the internal structure of locative phrases discussed below.

3.2 Reanalysis of historical locative noun class prefixes as locative prepositions

A second type of evidence relevant for the understanding of the siSwati locative system comes from modified locative phrases. Both in terms of agreement within complex locative phrases, and in terms of morpheme order, modified locatives show that locative phrases in siSwati are not DPs, but behave like prepositional phrases.

Agreement of dependent nominals with locative phrases provides useful evidence about the internal structure of the locative phrase. As was mentioned above, locative morphology is typically added onto original noun class morphology, and so the question arises of whether dependent nominals such as adjectives or possessives can show agreement with the original noun class, the locative noun class, or both. In siSwati, only the first possibility is realized: dependent nominals agree with the original class, not with the locative:

(25) ba-fana ba-mi
      2-boys   2-my
      'my boys'

(26) ku-ba-fana   ba-mi
      LOC-2-boys   2-my
      'at my boys'

The agreement facts show that irrespective of locative marking, the possessive pronoun shows class agreement with the class 2 noun *bafana* 'boys'. In other words, the locative morphology in siSwati cannot function as the head of the locative phrase for agreement purposes. In terms of internal structure of the locative phrase, the agreement facts thus indicate that locatives in siSwati are not locative noun phrases, but rather locative prepositional phrases. Under the assumption that dependent nominals can agree with nominal heads within DPs, but not with prepositional heads, which take DP complements, this would explain the absence of agreement with the locative.

Further support for this analysis comes from locatives with pre-nominal demonstratives. Demonstratives can be placed before the noun in siSwati, and both full forms (27) and short forms (28) are possible. Full demonstratives are phonologically independent forms, while the short forms are phonological clitics, which can function like a definite article rather than a proximate demonstrative. However, both forms can also follow the noun they modify. Given the relative positional freedom of demonstratives, it is not expected that they could intervene between two prefixes, or a prefix and a stem. However, this is what occurs in locative phrases. When nouns modified by a demonstrative are combined with the locative marker *ku-*, the locative marker is attached before the demonstrative (29, 30) (cf. Ziervogel & Mabuza 1976: 199/200):

(27)   leyo   n-dvodza   /   n-dvodza   leyo
       DEM9   9-man   9-man   DEM9
       'this man'

(28)   le-n-dvodza   /   n-dvodza-le
       DEM-9-man   9-man-DEM
       'this man/the man'

(29)   ku-leyo   n-dvodza   /   ku-n-dvodza   leyo
       17-DEM9   9-man   17-9-man   DEM9
       'to this man'

(30)   ku-le-n-dvodza   /   ku-n-dvodza-le
       17-DEM-9-man   17-9-man-DEM
       'to this man'

The locative marker *ku-* behaves in this respect like other preposition-like elements in siSwati, for example *nga-* 'with' which also precedes pre-nominal demonstratives (cf. Thwala 2006: 213-14):

(31)   nga-le-moto
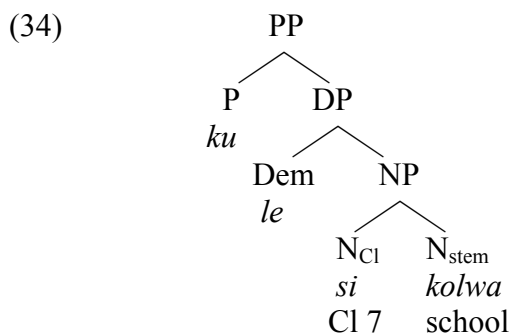   with-DEM-9.car
       'with this car'

(32)   ku-le-si-kolwa
       17-DEM-7-school
       'at the school'

These examples show that the locative marker *ku-* does not behave morphologically like a noun class marker, but behaves like a preposition taking a complex nominal complement. In descriptive grammars of siSwati (e.g. Ziervogel & Mabuza 1976, Taljaard et al. 1991) both *ku-* and *nga-* are

analysed as prefixes. However, unlike noun class prefixes, they precede a range of hosts, and crucially precede pre-verbal demonstrative clitics, and might thus better analysed as (phonological) clitics.[4] The relevant difference is that *ku-* patterns with *nga-* in preceding *le-*, unlike other noun class prefixes, which follow *le-* as the example of the class 7 noun class prefix *si-* in (32) shows.

Evidence from the interaction of locative marking with modified nouns, both with respect to agreement and with respect to morpheme order, thus shows that the locative marker *ku-* behaves like a preposition rather than as a noun class marker, and that a locative phrase such as (33) can be analysed as a PP as shown in (34):[5]

(33) ku-le-si-kolwa
      LOC-DEM-7-school
      'in these houses'

(34)

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\begin{array}{c}
\text{PP} \\
\swarrow \quad \searrow \\
\text{P} \qquad \text{DP} \\
ku \qquad \swarrow \quad \searrow \\
\quad \text{Dem} \qquad \text{NP} \\
\quad le \qquad \swarrow \searrow \\
\qquad \text{N}_{\text{Cl}} \quad \text{N}_{\text{stem}} \\
\qquad si \qquad kolwa \\
\qquad \text{Cl 7} \quad \text{school}
\end{array}
$$

From a comparative perspective, the situation in siSwati is unusual. To my knowledge no other (at least non-southern) Bantu language allows a demonstrative or other modifier to intervene between the locative marker and the noun stem. While it is possible that further empirical study will show other cases like this, it still appears to be very rare. From the perspective of the analysis proposed here, it is this fact which provides the strongest indication that a systematic reanalysis of the locative system has taken place, and that locative markers have been reanalysed as prepositions. Cross-linguistically, this reanalysis is remarkable as it constitutes an instance of degrammaticalization, that is, an exception to the unidirectionality of grammaticalization paths, often claimed to be universal, from less morphologically bound forms – like prepositions – to more morphologically bound forms, like noun class prefixes (e.g. Heine, Claudi

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[4] Further prosodic evidence may shed more light on the phonological status of morphemes like *nga-* and *ku-*. For further discussion of potential mismatches between the phonological and morpho-syntactic status of Bantu noun-class prefixes, see e.g. Bresnan & Mchombo 1995, Carstens 1991, 1997, Myers 1987).

[5] The internal structure of the siSwati NP is likely to be more complex than shown here; the point of (34) is to show the function of *ku-* as prepositional head.

& Hünnemeyer 1991: 212-15, Hopper & Traugott 1993: 94-129). The context in which this process takes place in siSwati may explain it. The accumulation of the individually innocuous changes discussed so far has led in siSwati to a more far-reaching change of the underlying system of locative marking – from being part of the noun class system to becoming a prepositional system. Rather than occurring in isolation, the locative marker *ku-* has lost the morphosyntax associated with noun class markers because of its part in this overall reanalysis of the locative system. While a shift from noun class marker to preposition is in itself unusual, it is clearly motivated in the context in which the relevant (locative) system is no longer seen as part of the noun class system. I will return below to the question how this larger, systematic shift can be explained.

With respect to agreement with dependent nominals, the situation in siSwati is comparable to the situation of the interpretation of the expletive marker *ku-* discussed above. That is, from a comparative perspective, the possibility of agreeing with the original noun, rather than with the locative is, although probably not typical, not unusual either. For example, while in Swahili, dependent nominals can only agree with the locative, in Luganda agreement with either the locative or the original noun is possible (Ashton et al. 1954, Gregoire 1975: 82).

(35) m-oyo   w-angu   [Swahili]
      3-heart 3-my
      'my heart'

(36) m-oyo-ni   mw-angu / *w-angu
      3-heart-LOC 18-my / 3-my
      'in my heart'

(37) ku-bbalaza   kw-ange   [Luganda]
      17-9.terrace   18-my
      'on my terrace'

(38) ku-ky-alo   ky-ange
      17-7-village   7-my
      'in my village'

In Swahili, even though locative nouns are not marked with a noun class prefix, but with the locative suffix *-ni*, dependent nominals still show class 18 locative agreement. In contrast, Luganda allows both agreement with the locative class and agreement with the original class, where the two options are exploited for expressing pragmatic information by placing different emphasis on the locative relation (37) and the possessive relation (38) (see Ashton et al. 1954: 253). However, as shown above, in siSwati only agreement with the original class is possible. This is expected under an

analysis in which *ku-* in siSwati functions as a preposition, taking a DP complement, as the agreement relation obtains between different constituents of the DP.

The following section presents further evidence for this view from the syntax of locative phrases and verbal agreement in siSwati.

3.3 Loss of locative verbal agreement marking

In addition to morphological criteria, the syntactic behaviour of locatives in siSwati shows that locatives are prepositional adjuncts rather than nominal complements, as has been argued by Thwala (2006), and as often seems to be assumed in descriptive grammars which class locatives as 'adverbials' (e.g. Ziervogel & Mabuza 1976: 129). Relevant evidence comes from the absence of locative object markers as well as from the restriction of the historically locative subject marker *ku-* to expletive contexts, already noted above.

Subject and object agreement are often taken as tests for the argument status of DPs in Bantu (though see e.g. Schadeberg 1995, Marten & Kula 2008 for some problems with this). In siSwati, verbs show agreement with their subjects in most syntactic contexts, while objects are marked typically when they are dislocated. In addition, both subject and object DPs can remain unexpressed, and only be indexed by subject and object markers. However, agreement differs between locative and other phrases, and both object marking and subject marking in siSwati show that locative constituents are not arguments like DPs of other noun classes.

With respect to object marking, (39) and (40) illustrate the difference between a DP object such as *inja* 'dog', which can be expressed by an object marker, and a locative constituent for which no object marker exists, and which therefore cannot be expressed by an object marker irrespective of whether the lexical locative is present or omitted.[6]

(39) Ng-a-yi-bon-a   kahle   (in-ja).
     SM1SG-PAST-OM10-see-FV   well   10-dog
     'I saw it well, the dog.'

(40) *Ngi-ku-bon-e   (e-Thekw-ini).
     SM1SG-OM17-see-PAST   LOC-Durban-LOC
     Intended: 'I saw it/there (Durban).'

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[6] Example (40) is perfectly acceptable if the object marker is interpreted as the homophonous 2nd person singular object marker *ku-*, resulting in the reading 'I saw you in Durban'. However, the point at hand is that it cannot be interpreted as locative.

(41)　Ku-Lilongwe　n-a-ku-ziw-a.　　　　　　　　[Nsenga]
　　　　17-Lilongwe　SM1SG-PRES-OM17-know-FV
　　　　'Lilongwe, I know it/there.'

As (40) shows, locative object marking is not possible in siSwati. This contrasts with typical Bantu systems of object agreement, in which locative object markers are included, as illustrated by the Nsenga example in (41). However, there are a number of Bantu languages which like siSwati do not have locative object markers, including Lozi and the Tanzanian Bantu languages Ciruri and Chasu (Marten et al. 2007).

The role of locative subject agreement markers has already been noted above, when discussing the development of the historically locative subject marker *ku-* as an expletive subject marker. Further relevant evidence comes from locative inversion constructions. In Bantu locative inversion constructions, a locative phrase is coded as grammatical subject and the logical subject follows the verb, as seen in the Bemba examples (1-3) above, and illustrated in (42) from Herero (Marten 2006).

(42)　M-òn-djúwó　mw-á　　　hìtí　é-rùngà.　　[Herero]
　　　　18-9-house　SM18-PAST　enter　5-thief
　　　　'The thief entered the house.' ('Into the house entered a/the thief.')

In contrast, in siSwati, locatives do not appear to function as subjects. A locative phrase preceding the verb behaves like an adjunct, since there is a strong tendency to use a resumptive locative demonstrative like *khona* in (43) with pre-verbal locatives, unlike with true subjects in siSwati, or locative subjects in locative inversion constructions, where resumptive pronouns are marginal (cf. Buell 2007). The subject marker in (43) thus appears to be the invariable expletive subject marker, discussed above, rather than an agreeing subject marker as it is in Herero.

(43)　Ku-le-ti-ndlu　　　　　ku-hlala　(khona)　ba-ntfu
　　　　LOC-DEM-10-houses　17-stay　　there　　2-people
　　　　la-ba-dzala.
　　　　REL-2-old
　　　　'In these houses (there) live elderly people.'

Alternatively, locative inversion is expressed with a non-locative marked subject functioning as subject, where the subject marker agrees with the (non-locative) class of the subject (Thwala 2006: 213), a difference termed formal as opposed to semantic locative inversion by Buell (2007):

(44) Le-si-kolwe   si-to-fundza   ba-ntfa-ba-in-khosi.
     DEM-7-school   SM7-FUT-read   2-chidren-POSS-9-king
     'The king's children will study at the new school.'

(45) Le-ti   tin-dlu   ti-hlala   ba-ntfu   la-ba-dzala.
     DEM-10   10-houses   10-stay   2-people   REL-2-old
     'Elderly people live in these houses.'

Thus while siSwati has constructions similar to canonical locative inversion constructions, syntactically, these either involve a locative adjunct, or a non-locative subject. The same facts are true for Zulu (Buell 2007), but it is not clear how wide-spread they are beyond southern Bantu. In so far as data are available, locative inversion is common in Bantu and has been reconstructed for PB (Meeussen 1967: 120), while inversion constructions such as in (44) and (45) have been documented less frequently. It is interesting to note in passing that the siSwati facts show that the availability of (locative) inversion constructions appears to be independent of the existence of locative noun classes. While in siSwati the locative system has been restructured and is no longer part of the noun class system, inversion constructions are still found, even though without explicit locative marking.

In summary, then, syntactic evidence thus shows that locative phrases in siSwati do not function as either subject or object, which further supports an analysis of locative phrases in siSwati as prepositional phrases rather than as noun (or determiner) phrases.

3.4 Loss of relative agreement except in locative relatives

A final set of relevant data comes from relative clause marking. Relativized arguments in siSwati are marked by a relative marker *la-* prefixed to the verb and a co-referential subject or object maker (46, 47). However, this strategy is not available for relativized locative phrases (48). These require the use of a special locative relative agreement marker *-pho*, historically related to the noun class 16 marker *pa-*, to which the relative marker *la-* is prefixed. Furthermore, instead of a co-referential agreement marker in the verb form, locative relatives show a resumptive demonstrative in the relative clause, such as *khona* in (48).[7]

(46) Ng-ba-fana$_i$ la-ba$_i$-to-natsa   tjwala.
     FOC-2-boys   REL-SM2-FUT-drink   14.alcohol
     'It is boys who will drink alcohol.'

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[7] The use of *khona* in (48) further supports the analysis of the locative in (43) as an adjunct rather than as a subject: in both cases, the locative is outside of the core clause.

(47) Tjwala$_i$,   ba-fana   la-ba-to-bu$_i$-natsa.
FOC.14.acohol 2-boys   REL-SM2-FUT-OM14-drink
'It is alcohol which the boys will drink.'

(48) Ku-se-khaya$_i$ la-pho$_i$ ba-fana ba-to-natsa
FOC.17-7-home REL-LOC 2-boys SM2-FUT-drink
tjwala   khona$_i$.
14.alcohol there
'It is at home where the boys will drink alcohol.'

In contrast to siSwati, Bantu languages with more typical locative systems allow the same relative strategy to be used for both non-locative and locative phrases, as illustrated below from Swahili.

(49) Ni   wa-vulana$_i$ amba-o$_i$ wa$_i$-ta-nunua   pombe   [Swahili]
COP 2-boys   REL-2 SM2-FUT-buy 9.beer
hapa.
LOC16
'It is boys who will buy beer here.'

(50) Ni   pombe$_i$ amba-yo$_i$ wa-vulana wa-ta-(i$_i$)-nunua
COP 9.beer REL-9   2-boys   SM2-FUT-(OM9)-buy
hapa.
LOC16
'It is beer which the boys will buy here.'

(51) Ni   ha-pa$_i$ amba-po$_i$ wa-vulana
COP DEM-16 REL-16   2-boys
wa-ta-(pa$_i$)-nunua   pombe.
SM2-FUT-(OM16)-buy 9.beer
'It is here that the boys will buy beer.'

As the examples in (49) to (51) show, in Swahili relative clauses can be formed with a relative marker *amba-*, to which an anaphoric element agreeing in class with the head noun is suffixed. This strategy is used for both locative and non-locative relatives, and in both a co-referential agreement marker is found in the verb form, obligatorily for subjects and optionally for non-locative objects and locatives.

Historically, siSwati relative marking is likely to be an innovation, through generalization of the relative marker *la-*, based on a demonstrative form, to be used in all relative contexts, without specific agreement morphology. In contrast, relativized locatives retain a more conservative pattern in which the relative marker agrees with the head noun. The change of relative clause marking is thus likely to have occurred after the

restructuring of the locative system, as at the time of the change in relative marking, locatives had already been reanalysed as prepositional phrases.

4 Accumulation of changes and the restructuring of the locative system

The preceding sections have provided a detailed description of locative phrases in siSwati. Taken together, the particular morphosyntactic structures of the siSwati locative system show many differences to the original historical starting point of the PB locative system. The changes which distinguish the modern system are summarized below:

- loss of class 16 and 18 in both nominal and verbal morphology
- use of new nominal locative morphology
- development of locative subject marker *ku-* as expletive subject marker
- demonstratives intervene between the locative marker *ku-* and the nominal stem
- in modified locative phrases, agreement is only possible with the original noun
- no locative object marker
- no (formal) locative inversion: locatives are not used as subject
- special relative marking strategy for locatives

The majority of these changes can be found in other Bantu languages, although this does not seem to be true for the possibility of a demonstrative intervening between the locative marker *ku-* and the nominal stem, or possibly either the absence of formal locative inversion. However, it appears that no other Bantu language exhibits *all* these changes. Furthermore, as briefly discussed above, the effect of all the changes taken together amounts to a systematic change in the underlying system of locative morphosyntax in siSwati. The locative system started out as part of the noun class system, so that locative phrases were syntactically noun phrases, while the siSwati locative system is independent of the noun class system, and locative phrases are syntactically prepositional phrases.

The majority of the changes in this shift from nominal to prepositional morphosyntax are widely attested and well motivated in themselves, and may have resulted from both external and internal factors, for example resulting from a combination of loss of morphological distinctions, semantic changes of individual locative markers, and the increased use of new locative markers in addition to contact-related factors, such as the adoption of the new locative suffix *-ini* from Eastern Bantu. The exception to this is the degrammaticalization of *ku-* from a noun class marker to a preposition. This indicates an analysis in which a number of independent changes led to

a restructuring of the system, and where subsequently in a second step, as a consequence of this restructuring, the remaining noun class marker *ku-* was reanalysed as a preposition – an unmotivated reanalysis in itself, but highly motivated in the context of the wider structural changes. Since the noun class system was no longer associated with locative morphosyntax, a locative noun class marker would be inconsistent within the system overall, so that the reanalysis as preposition resolved this inconsistency.[8]

In this more wide-ranging restructuring, language contact may well have played a role as well. More comparative and historical work is needed to investigate this question fully, however evidence for influence from Khoisan languages is found on the phonological level by click consonants found in Nguni languages, as well as in the lexicon and in aspects of morphosyntax. Although most South African Khoisan languages, that is, Khoisan languages with which early speakers of Bantu languages in the area are likely to have had extended contact, are extinct, it appears that several relevant languages had prepositions, even though in most other respects structures are head-final (Güldemann 1999: 67; Güldemann & Vossen 2000). The prepositional marking may have served as syntactic blueprint for the development of the prepositional system of siSwati, although more detailed study is needed develop this idea further.

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[8] Three partly alternative analyses might be worth mentioning at this stage. Gregoire (1975) proposes that Southern Bantu languages, including siSwati, have lost reflexes of the class 17 noun class prefix *ku-* almost entirely, except in lexicalized forms, and that forms like the ones discussed in this paper result historically from a construction involving **kúdí* 'où est' ('where is'), found in several other Bantu languages, and which developed into **ku-* through use with an empty copula, with the meaning 'chez' ('at'), in the sense of 'at someone's place'. This explains well the use of *ku-* with animate nouns, bur not so well the use with non-animate class 1/2 nouns, or with demonstratives. Creissels (2009), on the other hand, develops an analysis for locative marking in Tswana, where he points out that what appears to be a locative preposition is in fact historically derived from a locative agreement prefix, not from a noun class prefix. If translated into siSwati, this would explain the use *ku-* with demonstratives, but less successfully the use with class 1/2 nouns. In fact, neither analysis is entirely incompatible with the analysis developed here, although either would imply a more complex historical derivation of present day siSwati *ku-*. However, both analyses are compatible with the claim that the locative system of siSwati (and related southern Bantu languages) has been restructured. On the other hand, Bresnan & Mchombo (1995) and Carstens (1997) analyse Chichewa locative phrases syntactically as nominal – although differing in formal detail from each other – rather than prepositional, and it is interesting to note that this is partly motivated by properties of Chichewa locatives which differ from siSwati (e.g. presence of subject and object marking, no intervening demonstratives between locative markers and a following DP, locative agreement of dependent nominals, formal locative inversion), thus indirectly supporting the present analysis.

5 Conclusions

This paper has presented an analysis of a locative morphosyntax in siSwati. Historically, the siSwati locative system has developed from nominal morphosyntax, where the locative system was part of the Bantu noun class system, to prepositional morphosyntax, where the locative system is no longer part of the noun class system, but constitutes a separate subsystem of the grammar.

The siSwati locative shift presents relevant case studies for further understanding of grammaticalization – and degrammaticalization – processes, and constitutes an example of the interaction between isolated, individually motivated changes and systematic changes of underlying complex sub-systems of the grammar. While most of the changes found in siSwati locative morphosyntax are also found in other Bantu languages, the specific combination of all of them is not. It is thus the accumulation of individual changes which has led to the restructuring of the system, with further attendant changes following this restructuring. The question of whether in addition language contact has played a role in the restructuring process has been raised, but a detailed discussion remains for future research. Similarly, more comparative work is needed to show to what extent the analysis presented here can be extended to other Bantu languages, which share the changes outlined here to a greater or lesser extent, and which may be analysed as presenting intermediate stages of development from the PB locative system to a reanalysed system such as found in siSwati. The restructuring of the siSwati locative system thus also provides relevant evidence for the study of noun class systems in general, and in particular for the question of how noun classes change, and can be lost. Given the central role of the noun class system in Bantu grammar, the study of aspects of the system, and their diachronic developments, is important for further understanding of Bantu grammar and historical-comparative Bantu studies more widely.

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