The conjunctive coordinator NA in Xhosa.
Its categorial status and map of polyfunctionality

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The present paper provides a cognitive-grammaticalization analysis of the morpheme NA in Xhosa, discussing the categorial status of NA as a conjunctive coordinator (CC) and its range of polysemy and/or polyfunctionality. First, the study demonstrates that, when used in a coordinating function, NA approximates the CC prototype to a significant extent, as it complies with most of the features associated with CCs cross-linguistically. Second, the analysis of polysemy/polyfunctionality shows that NA spans large parts of the typological map posited for CC constructions. The conceptual and diachronic center of the map of NA corresponds to a prepositional comitative sense from which the other values (e.g. 'carry', possessive, temporal, modality, 'even', concessive, 'also, as well' and 'illness') and functions (e.g. predicative and adverbial) have emerged through a series of semantic extensions connected via family resemblance. In this map, the uses of NA as a nominal coordinator, comitative preposition, possessive predicator, and focal-adverbial 'also, as well' are the most prototypical. The results of the research contribute to the typological theory of CCs and their semantic-map modeling.*

KEYWORDS: Bantu, Xhosa, conjunctive coordination, cognitive linguistics, grammaticalization, semantic maps, typology

1. Introduction

The multiple variants of the coordinating element *na(-)* – henceforth referred to as NA – have been extensively researched in Bantu scholarship. Diachronic-comparative (Meeussen 1981; Nurse 2008), typological (Heine 1997a; Heine & Kuteva 2002; Nurse 2008), or language-specific descriptions and analyses are abundant.[1] For example, to a greater or lesser extent, the properties of NA have been studied in Basaá (Hyman 2003), Chathu (Mous & Mreta 2002), Kituba (Andrason *forthcoming* a), Lega (Botne 2002), Swahili (Marten 2000, 2013; Riedel

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& De Vos 2017), Sesotho (De Vos & Mitchley 2012; Mitchley 2015), and Zulu (Bosch 1985). In Xhosa – the language of interest in the present study – the use of NA has been described by Voeltz (1971), Du Plessis (1978, 1997, 1999), Sivundla (1987), Du Plessis & Visser (1992, 1993, 1998), Sineke (1997), Mitchley (2015), and Oosthuysen (2016). The bulk of the studies on NA in Xhosa – as well as on other coordinators and (dynamically) related categories in Bantu languages – have been developed within the perspective of generative grammar and related frameworks (Marten 2000, 2005, 2013; De Vos & Mitchley 2012; Mitchley 2015; Riedel & De Vos 2017).

The present paper aims to contribute to the discussion of NA by analyzing this element in Xhosa from the perspective of an alternative framework – cognitive linguistics. Specifically, I will describe and explain the semantic, syntactic, and pragmatic behavior of NA in Xhosa, drawing on the cognitive approach to categorization and meaning, and its fundamental concepts of prototypes, family resemblance, radial categories, and dynamic (grammaticalization-driven) maps (Haspelmath 2003, 2004; Croft 2003; Zwart 2010; Narrog & Van der Auwera 2011; Janda 2015; Andrason 2016a, 2016b). First, I will determine the proximity of NA to the prototype of a conjunctive coordinator (CC) and its position in the categorial network of CC constructions. Second, I will map the entire functional potential of NA as a network of cognitively related components, thus ensuring the semantic coherence of this form. The results of the study of NA will, in turn, contribute to the cross-linguistic understanding of CC constructions and their relationships to other grammatical categories. Consequently, the scope of this paper expands beyond the study of NA as a coordinator. The article deals with the entire semantic and/or functional potential of NA, explaining it as a motivated, grammaticalization-driven polysemy pattern.[2]

In order to achieve this objective, the article will be structured in the following manner. In section 2, I will familiarize the reader with the theoretical framework underlying my study. In section 3, I will introduce evidence related to the various uses and functions of NA in Xhosa. In section 4, I will discuss this evidence within the adopted framework, additionally showing how the results of my analysis contribute to the broader linguistic theory of CCs. Lastly, in section 5, the main conclusions will be drawn and potential areas of future research will be proposed.

2. Theoretical framework[3]

In the present analysis of conjunctive coordination in Xhosa, I will employ a cognitive approach to categorization and form-meaning pair-

ing. This approach, commonly used in linguistic typology, draws on two principal ideas. On the one hand, a cross-linguistic category constitutes a radial network. This network is organized around an ideal prototype and contains both central (canonical) and peripheral (less canonical and non-canonical) members or instantiations – all of them connected via family-resemblance. On the other hand, a language-specific form is polysemous and/or polyfunctional, being linked to a number of prototypes and categorial networks. This polysemy/polyfunctionality is modeled by means of a semantic map that has a dynamic, grammaticalization-based, dimension at a synchronic level of analysis.

The category of CC is organized around its prototype – a mental idea constructed by linguists given the regularity and saliency of certain features that distinguish CCs in the languages of the world. According to such cross-linguistic studies, the prototype of CC can be characterized by eighteen phonological, semantic, morphological, syntactic, and pragmatic features (see List 1 below; cf. Johannessen 1993; Yuasa & Sadock 2002; Haspelmath 2004, 2007, 2011): All these properties will be explained in detail when the Xhosa evidence is presented (section 3.1).

(F-1)   The construction unites two (or more) entities in a manner that corresponds to the operator $\wedge$ in first degree Classical logic or to $\cap$ in Set theory, implying that all the coordinated items satisfy a given proposition;[4]

(F-2)   No coordinand is more salient than the other; all exert an identical degree of control on the action or activity ('semantic symmetry'; Haspelmath 2004);

(F-3)   All coordinands exhibit an identical status of topicality – if one constitutes the topic of the clause, the other should also do so ('pragmatic symmetry'; Haspelmath 2004: 16);

(F-4)   The order of the coordinands can be reversed with no implications for the truth conditions of the sentence ('syntactic symmetry'; Yuasa & Sadock 2002; Haspelmath 2004: 35);

(F-5)   All the coordinands should be marked by the same grammatical case ('morphological symmetry'; Yuasa & Sadock 2002).

(F-6)   Coordinated categories belong to the same lexical class and to the same syntactic type that is also the type of the whole construction ('morphosyntactic symmetry'; Haspelmath 2004: 34);

(F-7)   Two clauses that are coordinated exhibit intonational phrasing, being separated by an intonation break (Haspelmath 2004);

(F-8)   Equal control over the action by all the coordinands does not imply that this action is performed simultaneously, neither temporally nor spatially (Haspelmath 2004: 15-16);

(F-9)   Independent pronouns are used, rather than clitics or affixes (Haspelmath 2004);

(F-10) Coordination requires number agreement on the verb, and thus its plu-

ral form (Haspelmath 2004: 18-19);

(F-11) Coordinators can be employed with categories other than N(oun) P(hrase)s (Haspelmath 2004: 19);

(F-12) Individual (non-clausal) coordinators cannot be extracted and focused. Coordinators cannot be left behind and no coordinand can be moved outside of its position or its hosting conjunct. They cannot be questioned separately ('Coordinate Structure Constraint'; Haspelmath 2004: 19, 28, 35; see also Ross 1967 [and 1986]; Lakoff 1986; Kehler 1996, 2002);[5]

(F-13) Coordinating constructions do not allow for backward anaphora, whereby a pronoun in the first clause would be co-indexed with a full NP in the subsequent clause (Haspelmath 2004: 35);

(F-14) Coordinators link multiple conjuncts and, thus, tolerate multiple NPs (Haspelmath 2004: 17);

(F-15) If a coordinating construction includes more than two coordinands, a coordinator can be omitted with the exception of the last one (Haspelmath 2004: 35 [see however Haspelmath 2007: 12]);

(F-16) Coordinating constructions can be used bi-syndetically (Haspelmath 2004: 17);

(F-17) In SVO languages, coordinating conjunctions precede the verb (Haspelmath 2004: 16);

[(F-18) The construction allows for ellipsis phenomena (Haspelmath 2007: 34-41)].

List 1. Features of the CC prototype (reproduced from Andrason 2016d)[6]

My recent cross-linguistic analysis involving more than twenty languages (Andrason 2016c) suggests that the prototype of CC should exhibit four further characteristics. Among such additional features, F-20, F-21 and F-22 are related to the phenomenon of generalization (i.e. a spread to all possible contexts and an inverse elimination of constraints), which shows the increase in grammaticalization (Hopper & Traugott 2003).

(F-19) A coordinating construction is case-insensitive – it fails to assign the case to a declensional class, the case being imposed by the syntax (or semantics) of the clause;

(F-20) CC can join all lexical and/or syntactic classes. The tolerance of lexical classes is structured into a hierarchy: Noun Phrases > Prepositional Phrases > Adverbial Phrases > Verb Phrases > Complementizer Phrases (see also Payne 1985: 5 and Haspelmath 2004: 12);[7]

(F-21) CC can join all types of nominals, irrespective of semantic features such as being animate/human or inanimate/abstract, and proper or common;

(F-22)   CC can connect both subjects that are distinct and those that are identical.[8]

List 2. Additional features of the CC prototype (based on Andrason 2016c)

The CC prototype defined by a set of features is important for structuring the category because it constitutes this category's idealized conceptual center. However, the prototype cannot be equaled with the category, nor is the category, in its totality, defined by the prototype. Rather, the category is understood as a radial network – it is organized around the prototype from which it emanates. That is, the above-mentioned features postulated for the prototype can be used as criteria to diagnose the categorial status of members of the CC category in terms of their proximity or remoteness from the CC prototype. Canonical members comply with the prototype entirely or to a large extent – they occupy central positions in the network. In contrast, non-canonical members approximate the prototype only to a certain extent – their position in the network is therefore more peripheral. However, both canonical and non-canonical members belong to the category, as they are all connected via family resemblance – each member sharing some features with its neighbor(s). Importantly, even though all the members exhibit some similarity with the prototype, the members that are non-canonical, or that are peripheral, may fail to have any property in common among themselves. Overall, the membership of the category is not determined in terms of a binary logic of belonging or non-belonging, but is rather approached through the lens of gradual resemblance to the prototype. As a result, the category becomes flexible and fuzzy, partially overlapping with other categories and their radial networks (Janda 2015; Dąbrowska & Divjak 2015; Hamawand 2016).

The radial network described above constitutes a way of approaching a cross-linguistic category as a whole. However, it cannot be used to adequately represent a language-specific form that instantiates that category, being mapped as a central or peripheral point in the categorial network. This stems from the fact that language-specific forms are usually polyfunctional or, at least, polysemous. That is, a language-specific construction regularly exhibits properties that relate it to more than one prototype and category. This is especially evident in the case of CC constructions. According to cross-linguistic studies, CC constructions are highly polysemous and polyfunctional, being used for a variety of grammatical purposes of which CC is only one (Haspelmath 2004: 19, 2005; Malchukov 2004; Andrason 2016d, *forthcoming* b). For instance,

CCs may be used as adpositions expressing comitative, manner, instrument, agent, comparison, and various temporal nuances; as (predicative) expressions of existence and possession; as focal adverbs conveying senses similar to 'also, too' and 'even'; as contrastive-adversative particles (adverbs or conjunctions similar to 'but'); as discourse particles (e.g. 'so, well'); as complementizers (e.g. 'that'); as components of verbal tenses; and as 'empty' clause- or sentence-initial markers (Haspelmath 2004, 2005; Malchukov 2004; Andrason 2016d, *forthcoming* b).

The range of polyfunctionality of CC constructions mentioned above is not accidental. It is a product of the diachronic expansion of forms that at some stage (have) functioned as CCs, to new contexts. In this process, each function is cognitively motivated being conceptually and historically derived from another usage. The most efficient manner of representing this polyfunctionality is a map. Given the typological commonness of certain groups of functions associated with CC constructions, given the cognitive motivation linking certain pairs of extensions, and given direct diachronic evidence showing how language-specific forms have evolved over time, the map of polyfunctionality of CC constructions can tentatively be designed as in Figure 1, below. In this map, two main inputs of CC constructions are proposed: focal adverbs 'also, too, as well' and comitative adpositions (Haspelmath 2004: 24; Malchukov 2004: 186; Andrason 2016d).[9]
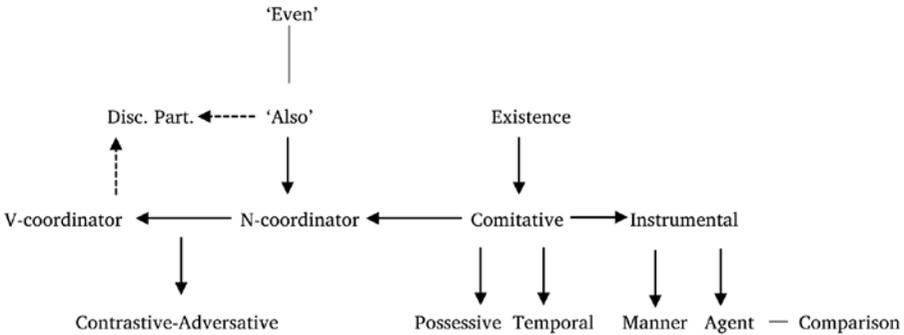

Figure 1. Map of the polyfunctionality of CC (adapted from Andrason 2016d, and *forthcoming* b following Haspelmath 2004: 21, 24 and Malchukov 2004: 178)[10]

The map in Figure 1 makes it possible to structure, compare, and explain the meaning of CC forms found in specific languages. This includes constructions that resist an easy classification and/or compari-

son due to their polysemy and/or polyfunctionality. The advantage of this model is that it allows for a macro-synthetic-holistic perspective and for a micro-analytic-atomistic analysis at the same time. It preserves both the coherence (conceptual unity) and complexity (variability) of the form (Janda 2016: 137). However, the conceptual coherence of a form does not reside in that this form has an invariant meaning present in all its uses. It rather lies in the diachronic, cognitively based process that connects various functions – namely, in their family resemblance. As was the case with the categorial radial network discussed above, two adjacent functions on a semantic map share certain properties – they are conceptually and historically connected as one was derived from the other by means of cognitive mechanisms. However, functions that are separated by a chain of *x* reiterations of this extension procedure (being thus located far away from each other in the map) need not have a single shred of meaning in common. It is that reiteration of cognitive mechanisms between one function or meaning and its immediate successor that warrants the functional and/or semantic unity of the form (Janda 2015; Andrason 2016a, 2016b; on grammaticalization-driven maps see Narrog & Van Der Auwera 2011).[11]

3. Evidence

The present section describes the various properties of NA in Xhosa. First, NA will be tested for the criteria that define the prototype of CC (section 3.1). This will make it possible to determine the canonicity of NA when used as a conjunctive coordinator in further parts of the paper. Second, the uses of NA expanding beyond its CC function will be presented (section 3.2). This will enable me to design the semantic map of NA, projecting its various uses and functions onto the typologically plotted map presented in Figure 1. Such a structure of the present section reflects the two types of methodology used in the study: the view of a category in terms of a prototype-driven radial-network (i.e. how does a form map onto the radial network of a given cross-linguistic category *x*?); besides, the view of the total meaning of a form in terms of a grammaticalization-driven map of senses and functions that are connected through family resemblance (i.e. how does the entire polysemy of a form map onto a network of various categories that are conceptually and diachronically related?). Although both issues are connected – being equally relevant for the analysis of a given language-specific form – they emerge from two different methodological perspectives and respond to two distinct questions.

Most examples quoted in this section draw from the author's database compiled during his field-work in Western Cape in 2016. Others have been extracted from the studies previously published on the topic of NA in Xhosa, especially Du Plessis (1978), Sivundla (1987), Sineke (1997), and Du Plessis & Visser (1992, 1993). A few examples are extracted from dictionaries, e.g. Mini (2003).

It should be noted that in Xhosa, NA is a bound morpheme that is regularly joined to the initial vowel or consonant of the hosting element: na*bantwana* (*na-* + *abantwana* 'children'). NA exhibits three allomorphs depending on the vowel of the word to which it is agglutinated: *ne-* (< *na-* + *-i*), *no-* (< *na-* + *-u/oo*), and *na-* in the remaining cases. If the initial vowel of a hosting element is long (e.g. *iidonki* 'donkeys' or *ooLandile* 'Landile and others'), the vowel of NA is also long (nee*donki* and noo*Landile*).

3.1. NA as a conjunctive coordinator

NA is the most typical item in Xhosa that can relate two elements in a manner that approximates the operators ∧ and ∩ in first order (propositional and predicate) classical logic and Set Theory, respectively (see criterion F-1 in List 1). That is, when joining two or more coordinands, NA often implies that all of them satisfy a given proposition, as illustrated by examples (1a-c) below (compare a similar definition of NA by Mini 2003: 416). In (1a), both the doctor and (∧) the nurses satisfy the proposition of going to town. In (1b), the subject knows a set of people that comprises Sipho and (∧) Landile. The sentence in (1c) affirms the presence of tea and (∧) coffee.

(1) a. *Ugqirha*   na-*bongikazi*   *ba-ya*   *edolophini*.
         1a.doctor   NA-2a.nurse   SA.2-go   LOC.9.town.LOC[12]
         'The doctor and the nurses are going to town'.

    b. *Nd-azi*   *uSipho*   no-*Landile*.
         SA.1stSG-know   1a.Sipho   NA-1a.Landile
         'I know Sipho and Landile'.

    c. *Ku-kho*   *iti*   ne-*kofu*.
         SA.15-there[13]   9.tea   NA-9.coffee
         'There is tea and coffee'.

However, it is also possible to find cases where one of the elements connected by NA does not satisfy the proposition even though the verb exhibits a plural agreement marker (see further below in this section). In such instances, coordination seems to resolve into a broadly understood

idea of coupling, togetherness, or company. It is likely that such cases constitute intermediate states between the prototypical coordinate-hood and the domain associated with comitative senses, which also characterizes the item NA (see section 3.2 below). For instance, in (2), it is only the woman who collected firewood; while the dog merely accompanied her, even though the verb *ya* 'go' exhibits a plural agreement suffix *ba*.

(2)   *Umfazi*   ne-*nja*   *ba-ya*   *ku-theza*   *iinkuni.*
        1.woman   NA-9.dog   SA.2.PAST-go 15-collect   10.firewood
        'The woman and the dog went to collect firewood'. (Sineke 1997: 59)

Frequently, all the coordinands exhibit the same degree of saliency and relevancy (see criterion F-2). That is to say, all the elements connected by NA exert a comparable degree of control over the action, or can be affected by an activity to a similar extent. In (3a), the policeman (*ipolisa*) is equally beating the thief (*isela*) and the drunkard (*inxila*) – neither of the affected persons is given prominence. In (3b), bread (*izonka*) and fruit (*iziqhamo*) are similarly rotten.

(3) a. *Isela*   ne-*nxila*   *ba-bethwa*   *lipolisa.*
         5.thief   NA-5.drunkard   SA.2-beat   COP.5.policeman
         'The thief and the drunkard are being beaten by the policeman'.

     b. *Izonka*   ne-*ziqhamo*   *zi-bol-ile.*
         8.loaf   NA-8.fruit   SA.8-rot-PERF
         'Loaves of bread and fruit are rotten'. (Sivundla 1987: 31)

Nevertheless, there are various examples where one of the coordinands seems to be more relevant for the action, being the principal actor that controls it. This is especially visible if human and animate Noun Phrases are coordinated, and if the verb agrees with the singular human noun instead of exhibiting plural agreement (4a-b). In such cases, the animate coordinand is dependent (*inja* 'dog' in (4a) and *ihashe* 'horse' in (4b)), while the human coordinand is dominant (*USipho* in (4a) and *umfana* 'young man' in (4b); Sineke 1997: 58). In fact, the presence of the singular subject agreement on the verb usually indicates that one of the coordinands is singled out or receives special emphasis (Sivundla 1987: 27-28). This also applies to plural agreement if it only concords with the class of one of the coordinands (see further below). In other words, the plural noun with which the verb agrees constitutes the point of focus of the clause, being, to an extent, more salient than the other coordinand. For instance, in (4c), the main attention is given to *amapolisa* 'policemen' who, in that discourse,

oversee the situation, whereas *umgewu* 'the criminal' has practically no control over the course of affairs (Sineke 1997: 52). This phenomenon – where the verb exhibits agreement only with one coordinand – has commonly been viewed as an avoidance strategy for the use of NA (and other coordinators) with distinct noun classes, especially if semantically heterogeneous referents (e.g. human versus non-human or inanimate) are involved (cf. Schadeberg 1992; Voeltz 1971; Mitchley 2015; see further below in this section).

(4) a. *USipho*   ne-*nja*   *ya-khe*   *u-khangela*   *amahashe.*
       1a.Sipho   NA-9.dog   POSS.9-PC.1(a)   SA.1(a)-guard   6.horse
       'Sipho and his dog are (lit. is) guarding the horses'.

    b. *Umfana*   ne-*hashe*   *u-fik-ile.*
       1.young.man   NA-5.horse   SA.1-arrive-PERF
       'The young man and the horse have (lit. has) arrived'. (Sineke 1997: 57)

    c. *Amapolisa*   no-*mgewu*   *a-fik-ile.*
       6.policeman   NA-1.criminal   SA.6-arrive-PERF
       'The policemen and the criminal have arrived'. (Sineke 1997: 52)

This inequality with respect to saliency, relevancy, and control is most evident in broadly understood comitative uses where NA acts as a preposition. In such cases, it is only one of the coordinands that controls the activity (e.g. *Ndi-* 'I' in (5) below), the other being under control (e.g. *inja* 'dog'; for a detailed discussion of the comitative uses of NA see section 3.2).

(5)   *Ndi-hamba*   ne-*nja.*
     SA.1stSG-walk   NA-9.dog
     'I am walking with the dog'.

When connected by NA, all coordinands may exhibit an identical status of topicality and hence be pragmatically symmetrical (see criterion F-3). This is clear in left dislocated constructions such as that in (6a). If one conjunct is left dislocated (*indoda* 'man') and used to re-introduce a discourse active referent that, albeit identifiable, entertains a low degree of cognitive accessibility (Andrason, Westbury & van der Merwe 2016), the other conjunct (*umfazi* 'woman') exhibits the same discourse-pragmatic properties. This also means that, as illustrated by (6b), if one coordinand constitutes the topic of the clause (*ixhego* 'old man'), it is likely that the other (*ixhegwazana* 'old woman') also does the same. This is, however, not compulsory and cases of an unequal status of topicality are also found

– especially if the semantic features of the referents (e.g. animate or human) are different and their degree of control over the action is dissimilar. Overall, the more comitative-like a NA construction is, the less consistently criterion F-3 is respected.

(6) a. *Indoda*   no-*mfazi,*   *ndi-ya-b-azi.*
         9.man   NA-1.woman   SA.1stSG-FOC-OA2-know
         'As for the man and the woman, I know them'.

    b. *Kudaladala*   *kwa-kukho*   *ixhego*   ne-*xhegwazana.*
        long.ago   SA.15.PAST-be_there 3.old_man NA-3.old_woman
        Babe-hlala   *kurontawule…*
        SA.2.CONT.PAST-liveLOC.1a.hut
        'Once upon a time there was an old man and an old woman. They lived in a hut…'.

The order of the coordinands usually has no implications for the truth conditions of the proposition (see criterion F-4). Accordingly, the sequence of coordinands can be reversed without altering the meaning of the clause. For instance, (7a) and (7b) mean the same even though the order of conjuncts is opposite.

(7) a. *Umfazi*   no-*mfana* *ba-fik-ile.*
         1.woman   NA-1.man   SA.2-arrive-PERF
         'The woman and the young man have arrived'.

    b. *Umfana*   no-*mfazi*   *ba-fik-ile.*
        1.man   NA-1.woman SA.2-arrive-PERF
        'The young man and the woman have arrived'.

However, the order of the coordinands may be significant for other properties exhibited by NA in coordinating constructions. The most evident of properties affected by word order is subject and object agreement, which is sometimes determined by the class of the first coordinand in the series (Sivundla 1987: 28; on issues related to agreement, see further below in this section). Since agreement is also related to saliency, relevancy and control (see criterion F-2), the change of word order may, in turn, alter a part of the meaning of the entire construction.[14]

The feature related to morphological-case marking (see criterion F-5) cannot be adequately diagnosed since there is no morphological case in Xhosa. In Xhosa, the subject, various types of internal arguments (direct and indirect objects) as well as nominal adjuncts are all marked in the same manner. Morphology sometimes enables one to distinguish only between adjuncts and arguments, be they subjects or objects. The former are typically introduced by prepositions or cir-

cumpositions agglutinated to the noun, whereas the latter are not. This rule, however, is not universal, failing to apply to the so-called locative objects of applicative verbs. Even though considered to be verbal arguments equivalent to indirect objects, such locative applied objects exhibit adpositional marking typical of adjuncts (Du Plessis & Visser 1992, 1998).[15]

NA tends to comply with the criterion of morphosyntactic symmetry, according to which coordinands linked by CCs belong to the same word/lexical class (see criterion F-6). Coordinands linked by NA respect this criterion and typically belong to the same lexical class, e.g. a nominal (noun, pronoun, and any type of nominalized or pronominalized constructions; see *utata* 'father' and *umama* 'mother' in (8a)), an infinitive (see *ukutya* 'to eat' and *ukusela* 'to drink' in (8b)), or a locative introduced by adpositions or circumpositions (see *eKapa* 'to Cape Town' and *eGoli* 'to Johannesburg' in (8c)). Inversely, it is usually not possible to join different lexical classes.

(8) a. *Utata*   no-*mama*   *ba-ya-goduka.*
         1a.father   NA-1a.mother   SA.2-FOC-go_home
         'Father and mother are going home'.

     b. *Ndi-thanda*   *ukutya*   no-*kusela.*
         SA.1st SG-like   15.eat   NA-15.drink
         'I like eating and drinking'.

     c. *Umhlobo*   *wa-m*   *u-y-e*   *eKapa*
         1.friend   POSS.1-PC.1st SG SA.1-go-PERF   LOC.5.Cape_Town
         na-*s-eGoli.*
         NA-BF-LOC.5.Johannesburg
         'My friend went to Cape Town and (to) Johannesburg'.

The same holds true if a coordinand is headed by other types of prepositions, such as the comitative *na-* (cf. *nomama* 'with mother' and *notata* 'with father' in (9a)), by the copulative which marks the agent in passive constructions (cf. *ngumama* 'by mother' and *ngutata* 'by father' in (9b)), or by a conjunction (cf. *xa batyayo* 'while they are eating' and *xa badlalayo* 'while they are playing' in (9c)). In all these cases – i.e. if the first coordinand is headed by a preposition, a copulative marker, or a conjunction – the other coordinand must also be linked to a preposition, copulative, or conjunction, respectively (Sivundla 1987: 36). It should be noted that two consecutive NA elements (as in (9a)) may exhibit haplology – the first of the two similar (sometimes identical) syllables is often omitted.

(9) a. *Ndi-dib-en-e*   *no-mama*   (na)-*no-tata.*
   SA.1stSG-meet-REC-PERF with-1a.mother (NA)-with-1a.father
   'I met with mother and (with) father'.

  b. *Ndi-nced-w-e*   *ngumama* na-*ngutata.*
   SA.1stSG-help-PASS-PERF COP.1a.mother NA-COP.1a.father
   'I was helped by mother and father'.

  c. *Ndi-ya-ba-bukela*   *abantwana* *xa* *ba-tya-yo*
   SA.1stSG-FOC-OA.2-watch 2.child   when SA.2-eat-REL
   na-*xa* *ba-dlala-yo.*
   NA-when SA.2-play-REL
   'I watch the children while they are eating and while they are playing'. (Sivundla 1987: 36)

The symmetry also applies to syntactic classes. Cross-linguistically, coordinands tend to belong to the same syntactic type – e.g. subject, object (be it direct or indirect), or adjunct – which is also the type of the whole construction. Inversely, it is not possible to join different syntactic categories.

In Xhosa the category of subject is principally defined by word order and subject agreement. In the 'unmarked' type of word order, in which the predicate is in focus, subjects occupy a preverbal position and regularly trigger subject agreement on the verb (Du Plessis & Visser 1992, 1998; concerning grammatical subjects in Xhosa consult Mletshe 1995). If NA joins a subject coordinand to another coordinand, the other must also be a subject. This is typical not only of the canonical subject position before the verb (see *umfazi* 'woman' and *umfana* 'young man' in (10a)) but also appears if, for focal purposes, the subject occupies a postverbal position and the verb exhibits the existential (expletive) prefix *ku-* of class 15/17 (see again *umfazi* 'woman' and *umfana* 'young man' in (10b)).[16] However, in cases such as in (4a-b), where the coordinands differ in their control over the action or affectedness (e.g. one of the coordinands is human while the other is animate) and where the verb exhibits singular agreement, the syntactic status of the coordinand headed by NA is fuzzy. In some aspects (e.g. word order), it behaves as a subject, while in others (e.g. lack of agreement), it approximates adjuncts, in particular the comitative (see section 3.2 below).

(10) a. *Umfazi* no-*mfana*   *ba-ya-hamba.*
   1.woman NA-1.young_man SA.2-FOC-go
   'The woman and the young man are going'.

  b. *Ku-hamba* *umfazi* no-*mfana.*
   SA.15-go 1.woman NA-1.young_man
   'The woman and the young man are going'.

Analogous behavior is exhibited by objects, be they direct, indirect, or applied, including locative applied objects, which are marked by prepositions and circumpositions. In Xhosa, objects are defined by three properties. First, in unmarked, predicate-focus structures, objects appear in an immediate postverbal position. Second, objects may trigger object agreement on the verb. Third, they can be promoted to subjects in the passive voice (Du Plessis & Visser 1992, 1998). In harmony with the criterion of syntactic symmetry (F-6), if the first coordinand is an object, the second must also be an object. This applies both to objects found in the canonical postverbal position (see *umfazi* 'woman' and *umfana* 'young man' in (11a)) and to objects fronted to the preverbal position (11b). The rule also holds true in passive constructions where objects are promoted to the subject position (see again *umfazi* 'woman' and *umfana* 'young man' in (11c)).

(11) a. *Ndi-b-azi*   *umfazi*   no-*mfana.*
SA.1stSG-OA.2-know 1.woman   NA-1.young_man
'I know (them) the woman and the young man'.

   b. *Umfazi*   no-*mfana,*   *ndi-ya-b-azi.*
1.woman   NA-1.young_man   SA.1stSG-FOC-OA.2-know
'I know the woman and the young man'.

   c. *Umfazi*   no-*mfana*   *ba-y-az-iwa*   *ndim.*
1.woman   NA-1.young_man   SA.2-FOC-know-PASS COP.1stSG
'The woman and the young man are known by me'.

The same rule applies to adjuncts. If one coordinand is an adjunct (e.g. *eKapa* 'to Cape Town' in (12) below), the other (*eStellenbosch* 'to Stellenbosch') must necessarily be an adjunct as well. In such cases, the entire CC construction functions as an adjunct.

(12)   *Ndi-ya*   *eKapa*   na-*s-eStellenbosch.*
SA.1stSG-go LOC.5.Cape_Town   NA-BF-LOC.9.Stellenbosch
'I am going to Cape Town and Stellenbosch'.

As will be explained below, NA usually fails to join finite verbs and (verbal) clauses. However, there are a few instances where clauses can be coordinated by means of NA. In cases where this is possible, the coordinands tend to exhibit intonational phrasing (see criterion F-7). Bantu languages differ with respect to the requirement of a phrase break at the phrase boundaries (Downing *et al.* 2004; Downing 2011; Downing & Mtenje 2011; Downing & Rialland 2017). In Xhosa, the phonological phrase boundary showing the right edge of the phonological phrase can

be deduced from two main features: the lengthening of the penultimate vowel and a tonological change (Jokweni 1995; Zerbian 2004: 72-74; another possible feature could be declination reset; cf. Couper-Kuhlen 1996, 2001). Moreover, in certain circumstances, the use of a pause (whether longer or shorter) is grammatical and common. Clear examples of the phonological phrase boundary are found in left dislocation: the penultimate vowel of the dislocate surfaces as long, the word-final high-tone is preserved, and the pause can (at least sometimes) be observed (Zerbian 2004: 74, 77; Andrason & Visser 2016). The typical boundary features are also present in clauses connected by NA. In example (13), *ongumfundi* exhibits the expected penultimate-vowel lengthening, high-tone preservation, and an optional 'comma' intonation break (cf. Zerbian 2004; Andrason & Visser 2016), even though pauses are not the typi-cal markers of intonation breaks in Bantu (Downing 2011; Downing & Rialland 2017; see also Downing *et al.* 2004, Downing & Mtenje 2011).

(13) *Nd-azi*   *umfana*   *o-ngumfundi*
SA.1ˢᵗSG-know 1.young_man   SA.1.REL-COP.student
[pause]   n-*o-kwa-ngumbhali.*
[pause]   NA-SA.1.REL-also-COP.1writer
'I know a young man who is a student and (who is) also a writer'.

The use of NA as a CC often implies temporal simultaneity and/or spatial co-occurrence (see criterion F-8). Therefore, two coordinated infinitives typically have the same temporal-aspectual interpretation (it should also be noted that in Bantu, e.g. in Swahili, a coordinated infinitive is typically associated with the tense value of the first verb; Schadeberg 2010; Riedel & De Vos 2017). Albeit common, the feature of temporal and spatial identity is, however, not obligatory. In fact, even in cases where all the coordinands exhibit a relatively equal con-trol over the action, the action need not be performed at the same time and in the same place. For instance, in (14), the event during which the speaker was seen by Sipho and Landile occurred in two different places (*eKapa* 'in Cape Town' and *eBhayi* 'in Port Elizabeth') and in two dis-tinct time periods (*ngo 2010* 'in 2010' and *ngo 2015* 'in 2015').

(14) *uSipho*   no-*Landile*   *ba-ndi-bon-ile.*
1a.Sipho   NA-1a.Landile   SA.2-OA.1ˢᵗSG-see-PERF
USipho   *u-ndi-bon-ile*   *eKapa*   *ngo2010.*
1a.Sipho   SA.1-OA.1ˢᵗSG-see-PERF   LOC.5.Cape_Town   in.2010
ULandile   *u-ndi-bon-ile*   *eBhayi*   *ngo2015.*
1a.Landile SA.1-OA.1ˢᵗSG-see-PERF   LOC.5.Port_Elizabeth   in.2015
'Sipho and Landile saw me. Sipho saw me in Cape Town in 2010. Landile saw me in Port Elizabeth in 2015'.

With respect to the use of pronouns in CC constructions with NA (see criterion F-9), the following should be noted. The first coordinand regularly appears as an independent, so-called absolute or emphatic, pronoun, e.g. *mna* 'I' in (15a) and *yena* 'he' in (15b).[17] In contrast, when the second (or further) coordinand needs to be pronominalized, pronominal clitic affixes are used, being agglutinated to NA, e.g. *nawe* 'and you' (< *na-* + *-we*) in (15a) and *nabo* 'and they' (*na-* + *-bo*) (15b). Such coalesced forms can also be used individually (i.e. only one pronoun is used) with an emphatic or focal meaning, e.g. 'you too' and 'them too' (see section 3.2).[18] Overall, the agglutinative use of NA with pronominal affixes constitutes a common feature of Bantu languages.

(15) a. *Mna*   na-*we*   *si-din-iw-e.*
     ABS.1stSG   NA-PC.2ndSG SA.1stPL-be_tired-PASS-PERF
     'You and I are tired'.

   b. *Yena*   na-*bo*   *ba-din-iw-e.*
     ABS.1   NA-PC.2   SA.2-be_tired-PASS-PERF
     'He and them are tired'.

The use of pronominal objects is analogous: the first coordinand is an absolute pronoun (cf. *mna* 'me' in (16a) and *wena* 'you' in (16b)), whereas the subsequent coordinands exhibit a clitic form attached to NA (cf. *nawe* 'and you' in (16a) and *nabo* 'and them' in (16b)):

(16) a. *USipho*   *u-thanda*   *mna*   na-*we.*
     1a.Sipho   SA.1-like   ABS.1stSG   NA-PC.2ndSG
     'Sipho likes me and you'.

   b. *USipho*   *u-thanda*   *wena*   na-*bo.*
     1a.Sipho   SA.1-like   ABS.2ndSG   NA-PC.2
     'Sipho likes you and them'.

The assessment of the feature related to agreement (see criterion F-10) is complicated, as both the subject and the object agreement of coordinands is a complex matter in Xhosa (Sivundla 1987; Sineke 1997; Mitchley 2015) and Bantu (Givón 1970, Bokamba 1985, Johannessen 1998: 25, 33, Marten 2000, 2003, 2005, 2011, and De Vos & Mitchley 2012; Mitchley 2015). In Bantu languages, several agreement strategies are distinguished, e.g. 'full' or morphological agreement, partial agreement (Marten 2000), semantic resolution (Corbett & Mtenje 1987), phonological resolution (Voeltz 1971), proximity agreement (De Vos & Mitchley 2012; Mitchley 2015), and several avoidance strategies,

especially via comitative (cf. Schadeberg 1992, Marten 2000). In the discussion of agreement, I will study not only the issue of number (i.e. whether the coordination of two singular coordinands resolves in plural agreement) but also the question of noun-class – the pervasive characteristic of Xhosa and other Bantu languages (Visser 2005).

With respect to subjects, the plurality criterion is satisfied in many examples where singular human coordinands are conjoined ((17a); see Marten 2000 for Swahili and Zeller 2008: 232-233 for Zulu). In such cases, several options are available. On the one hand, the plural prefix *ba-* characteristic of class 2(a) (see *bafikile* 'they have arrived' in (17a)) is always possible, as this marker typically implies human referents (cf. the so-called "morphological agreement" in Marten 2000; Sineke 1997: 51; Zeller 2008). On the other hand, other types of plural agreement prefixes are also admissible, e.g. *zi-* (cf. *zifikile* 'they have arrived' in (17b)) or *a-* (cf. *afikile* 'they have arrived' in (17c)). These alternative agreement prefixes appear in cases where one of the Noun Phrases (necessarily of classes 6/7 or 5/6) constitutes a point of focus, controls the action, or is in the plural itself (Sineke 1997: 52). This means, in turn, that the plural agreement may be conditioned by semantics and pragmatics of the coordinands and the entire CC construction (Sineke 1997: 53; regarding the relationship between agreement and discourse functions, see Demuth & Johnson 1989).

However, one may also argue that syntax plays a decisive role here. In all the examples that show plural agreement with animates other than those of class 2, the agreement is with the first coordinand (see again (17b-c)).[19] Therefore, the agreement pattern would be ultimately determined by an asymmetric syntactic relation between the two coordinands, as is postulated in most generative works on coordination (e.g. Johannessen 1998). Alternatively, semantic and pragmatic notions such as focus or salience would determine the agreement by being mapped onto word order.

(17) a. *Umfazi*   ne-*ndoda*   *ba-fik-ile.*
      1.woman   NA-9.man SA.2-arrive-PERF
      'The woman and the man have arrived'.

   b. *Isi-/iziqhwala*   no-*mgewu*   *zi-fik-ile.*
      7/8.cripple   NA-1.criminal   SA.8-arrive-PERF
      'The cripple (cripples) and the criminal have arrived'. (adapted from Sineke 1997: 52)

   c. *Amapolisa*   no-*mgewu*   *a-fik-ile.*
      6.policeman   NA-1.criminal   SA.6-arrive-PERF
      'The policemen and the criminal have arrived'. (Sineke 1997: 52)

In a similar vein, if pronominal human subjects of the first and second persons are involved, they typically resolve in plural-person agreement, *si-* (cf. *sihamba* 'we are going' in (18a)) and *ni-* (cf. *nihamba* 'you are going' in (18b)) respectively (Sivundla 1987: 26):

(18) a. *Mna*   no-*mhlobo*   *wa-m*   *si-hamba*   *ngoku.*
        ABS.1[st]SG NA-1.friend   POSS.1-PC.1[st]SG SA.1[st]PL-go now
        'My friend and I (lit. I and my friend) are going now'.

     b. *Wena*   no-*mhlobo*   *wa-kho*   *ni-hamba*   *ngoku.*
        ABS.2[nd]SG NA-1.friend   POSS.1-PC.2[nd]SG SA.2[nd]PL-go   now
        'You and your friend are going now'.

The coordination of singular animate non-human subjects may also trigger plural agreement on the verb. The exact form of the plural prefix usually corresponds to the plural of the class of one of the coordinands. The plural prefixes *zi-* (see *ziyatya* 'they are eating' in (19a)) and *a-* (see *ayatya* 'they are eating' in (19b)) may be considered as the most common options (Sineke 1997: 54).[20] It should however be noted that, for these types of referents, the morphological agreement is somewhat less prominent than was the case with human subjects of classes 1 and 1a (cf. Young 2005: 5-7; Zeller 2008: 233). If one component is in plural while the other is in singular (cf. *amahashe* 'horses' versus *idonki* 'donkey' in (19c)), the plural concord tends to agree with the class of the plural coordinand (cf. *ayatya* 'they are eating'; Sineke 1997: 55). If both coordinands are in plural, the subject prefix usually agrees with the first coordinand (Sineke 1997: 55) – thus, syntax would again play a crucial role in determining the form of the agreement marker. For instance, in (19d), the plural agreement prefix *a-* in *ayatya* 'they are eating' agrees with the first conjunct *amahashe* 'horses', not with the second conjunct *iidonki* 'donkeys'.

(19) a. *Inyoka*   ne-*sele*   *zi-ya-tya.*
        9.snake   NA-5.frog   10-FOC-eat
        'The snake and the frog are eating'.

     b. *Inyoka*   ne-*sele*   *a-ya-tya.*
        9.snake   NA-5.frog   SA.6-FOC-eat
        'The snake and the frog are eating'.

     c. *Amahashe*   ne-*donki*   *a-ya-tya.*
        6.horse   NA-9.donkey   SA.6-FOC-eat
        'The horses and the donkey are eating'.

     d. *Amahashe*   nee-*donki*   *a-ya-tya.*
        6.horse   NA-10.donkey   SA.6-FOC-eat
        'The horses and the donkeys are eating'.

In cases where one of the singular animate coordinands (whether human or non-human) is viewed as more relevant, thus triggering the singular agreement on the verb, the other coordinand tends to be placed in a postverbal position, and the CC construction is restructured into a comitative structure (see section 3.2). Alternatively, the use of comitative structures instead of coordination constitutes a common avoidance strategy for cases of conflicting agreement that need not be explained in terms of focus (cf. Schadeberg 1992: 22 for Swahili; and Voeltz 1971 and Mitchley 2015: 119 for Xhosa). In other words, where conjuncts exhibit conflicting features, such a conflict can be mitigated by avoiding coordination and using, instead, a comitative pattern (Johannessen 1998: 25; cf. Givón 1970).

Similar to human and animate nouns, the coordination of singular inanimate coordinands often requires plural agreement on the verb. The form of the subject prefix tends to be *zi-*, the agreement prefix of classes 8 and 10, which typically include non-living things (see *zidalwe* 'they are created' in (20a)). Nevertheless, singular agreement is also possible, being in fact more common than was the case with human referents of class 1(a) (see Bosch 1985 and Young 2005: 5 on Xhosa, Zeller 2008: 233-235 on Zulu and other Nguni/Bantu languages, and Marten 2000 on Swahili). If one of the elements is already plural (cf. *imikhonto* 'spears' in (20b)), the subject agreement tends to correspond to the class of that noun (cf. *iphethwe* 'are carried'; Sineke 1997: 56-57). Contrary to Zulu, the coordination of inanimate conjuncts from different noun classes does not license the *ku-*agreement of impersonal class 15/17 (cf. Bosch 1985).

(20) a. *Umhlaba*   ne-*sibhakabhaka*   *zi-dal-w-e*   *nguThixo*.
       3.earth   NA-7.heaven   SA.10-create-PASS-PERF   COP.1a.God
       'The earth and heaven are created by God'. (Sineke 1997: 56)

    b. *Imikhonto* ne-*gqudu*   *i-pheth-w-e*   *ngababulali*.
       4.spears   NA-5.knobkierie   SA.4-carry-PASS-PERF   COP.2.killer
       'The spears and the knobkierie are carried by the killers'. (Sineke 1997: 57)

The most complex rules concern cases where human and animate coordinands are conjoined. In many cases where these two types of subjects coincide, human NP is dominant while the animate NP is dependent – the former controls the action whereas the latter merely participates in it (Sineke 1997: 58). Due to this semantic imbalance, the agreement tends to resolve in singular, the verb being co-indexed with the human referent. For instance, in (21a), the verb *ufikile* 'he has arrived' agrees with the noun *umfana* 'young man'. The same applies to elements that are in their

plural forms. In a similar vein, if both coordinands are plural, the concord usually derives from the human coordinand (Sineke 1997: 59). Therefore, in (21b), the verb exhibits the prefix *b(a)-* (cf. *bemi* 'they are standing'), agreeing with the human referent *abahambi* 'visitors'. However, in less common cases where the singular participants are involved in the action to an equal extent, or have an equal status, the coordination of human and animate conjuncts may trigger plural agreement on the verb (see example (21c) where *umfuyi* 'farmer' and *inja* 'dog' are apparently equally involved in the action of searching for the sheep). Usually, the form of the verbal agreement prefix will correspond to class 2(a) *ba-* (cf. *bakhangela* 'they are looking for' in (21c)), which, as already explained, is typical of human referents. Nevertheless, if the focus is on the animate non-human coordinand, the plural agreement may also derive from that noun (cf. (21d) where the verb *ibuyela* 'they are returning' agrees with the noun *imihlambi yeenkomo* 'herds of cattle', rather than with the human referents *amakhwenkwe* 'boys'). Often (as in (21d)), the coordinand with which the subject agreement prefix concords appears as the first in the series. This again suggests the syntactic motivation underlying the selection of an agreement marker on the verb.

(21) a. *Umfana*   ne-*hashe*   *u-fik-ile.*
      1.young_man NA-5.horse   SA.1-arrive-PERF
      'The young man and the horse have (lit. has) arrived'. (Sineke 1997: 57)

    b. *Abahambi*   na-*mahashe*   *a-bo*   *b-emi*   *nga-s-ebuhlanti.*
      2.visitor   NA-6.horse   POSS.6-PC.2 SA.2-stand by-BF-LOC.14.cattle_kraal
      'The visitors and their horses are standing by the cattle kraal'. (Sineke 1997: 59)

    c. *Umfuyi*   ne-*nja*   *ba-khangela*   *igusha.*
      1.farmer   NA-9.dog SA.2-look_for   9.sheep
      'The farmer and the dog are looking for the sheep'. (Sineke 1997: 58)

    d. *Imihlambi*   *yeenkomo*   na-*makhwenkwe*   *i-buyela*   *emakhaya.*
      4.herd   POSS.4.10.cattle NA-6.boy   SA.4-return LOC.6.home
      'The herds of cattle and the boys are returning home'. (Sineke 1997: 59)

The coordination of multiple human and animate coordinands exhibits the behavior that is fully analogous to that where two elements are conjoined. This means that human subjects (e.g. *amadoda* 'men' and *amakhwenkwe* 'boys' in (22)) are usually dominant and the agreement (either singular or plural) is derived from them (cf. the verbal form *bayakuzingela* 'they are going hunting' containing the subject agreement prefix of class 2 typical of humans). Human subjects also tend to appear as the first coordinands in such multi-coordinated sequences.[21]

(22)   *Amadoda* na-*makhwenkwe*   *ne-zinja*   *ba-ya*   *ku-zingela.*
        6.man   NA-6.boys   NA-10.dogs   SA.2-go   15-hunt
        'The men and the boys and the dogs are going to hunt'. (Sineke 1997: 61)

The agreement in Xhosa concerns not only the subject but also various types of objects. Therefore, the plurality criterion postulated for the prototype of CC should be satisfied by object coordinands apart from being fulfilled by coordinands functioning as subjects.

The coordination of singular human objects may yield both singular and plural agreement on the verb (cf. Bosch 1985 for Zulu). The former type frequently surfaces as *ba-* of class 2(a) (see *liba*bambile 'he has arrested them' in (23a)) associated with human referents (e.g. *umgewu nenxila* 'the criminal and the drunkard' in (23a)). Other plural prefixes are likewise possible. However, even though the cases of plural agreement are found, the presence of singular agreement seems to be more typical (Sineke 1997: 64). In such instances, the object agreement affix is co-indexed with the Noun Phrase that is closest to the verb (see, for example, *-m-* 'him' in *liya*m*funa*, which refers to *umfundisi* 'minister' (23b)). Thus, the proximity of the nominal object to the verb (and hence syntax) plays an important role in the selection of an object agreement marker (Sineke 1997: 65).

(23) a. *Ipolisa*   *li-ba-bamb-ile,*   *umgewu*   *ne-nxila.*
         5.police   SA.5-OA.2-arrest-PERF   3.criminal   NA-5.drunkard
         'The policeman has arrested the criminal and the drunkard'. (adapted from Sineke 1997: 64)

     b. *Ibandla*   *li-ya-m-funa*   *umfundisi*   *ne-gosa.*
         5.congregation   SA.5-FOC-OA.1-need   1.minister   NA-5.steward
         'The congregation needs a minister and a steward'. (Sineke 1997: 64)

If the coordinands are animate (but not human), the tendency is to use a singular object agreement marker, for instance *-l-* 'it' in *bay-aloyika* 'they fear it' in (24a) and *-s-* 'it' in *bayosoyika* 'they fear it' in (24b). In contrast, plural agreement is usually ungrammatical. As was the case with human objects, the principle of proximity is crucial in the object agreement of animate referents. That is, the specific type of the agreement marker usually corresponds to the class of the Noun Phrase located closest to the verb (Sineke 1997: 67). Therefore, in (24a), the object agreement marker is co-indexed with *ilulwane* 'the bat', while in (24b) it concords with the class of *isigcawu* 'spider'.

From the perspective of more formal approaches, e.g. generative grammar, one could argue that it is not the linear relation of proximity,

but rather the structural position of conjuncts which determines agreement. That is, when the coordinated objects appear post-verbally, the closest NP happens to be the first conjunct. The relevance of the structural position of conjuncts (not their linearity) can be demonstrated by left-dislocated constructions. In such constructions, the preferred object agreement is with the left-dislocated conjunct, even though this first conjunct is not the one closest to the verb (consult Marten 2005 for a discussion of the cross-linguistic tendency of partial agreement to be expressed as first-conjunct agreement with post-verbal material).[22] Accordingly, subject and object agreement would exhibit the same tendency – agreement, either singular (typical of objects) or plural (typical of subjects), tends to draw from the first coordinand (i.e. the first in structural terms).

(24) a. *Abantwana*   *ba-ya-l-oyika*   *ilulwane*   *ne-sigcawu.*
       2.child   SA.2-FOC-OA.5-be_afraid 5.bat   NA-7.spider
       'Children are afraid of the bat and the spider'. (Sineke 1997: 65)

    b. *Abantwana*   *ba-ya-s-oyika*   *isigcawu*   *ne-lulwane.*
       2.child   SA.2-FOC-OA.7-be_afraid 7.spider   NA-5.bat
       'Children are afraid of the spider and the bat'. (Sineke 1997: 67)

If the coordinands are inanimate, the singular object agreement affix is preferred by far. Again, its form typically agrees with the class of the noun that is (structurally) closest to the verb (Sineke 1997: 68-69) – *ubisi* 'milk' in (25a) and *imbiza* 'pot' in (25b).

(25) a. *Ndi-li-theng-ile*   *ubisi*   ne-*swekile.*
       SA.1stSG-OA.11-buy-PERF   11.milk   NA-9.sugar
       'I have bought the milk and sugar'.

    b. *Ummelwane*   *u-yi-bolek-ile*   *imbiza*   ne-*sitya.*
       1.neighbor   SA.1-OA.9-borrow-PERF   9.pot   NA-7.dish
       'The neighbor has borrowed a pot and a dish'. (Sineke 1997: 68)

In cases where human and animate singular coordinands are conjoined, the singular concord is typically employed (Sivundla 1987: 32; Sineke 1997: 70), e.g. *m-* in *imleqe* 'it has chased him' in (26a) and *-yi-* in *iyileqe* 'it has chased it' in (26b). Often, the pronominal affix agrees with human objects (Du Plessis & Visser 1992) – *umfuyi* 'farmer' in (26a). This stems from that, as already mentioned, human referents tend to be more relevant for the action than non-human referents (Sineke 1997: 69). In most such cases, the human NP is also (structurally) closest to the verb (cf. the noun *umfuyi* 'farmer' in (26a)), appearing as the first conjunct in the series. Therefore, if an animate object precedes a human object, it is the animate NP that triggers the singu-

lar concord (cf. *inja* 'dog' in (26b); Sineke 1997: 71). Thus, the principle of (structural) proximity seems to play a more decisive role than the semantic properties of objects (i.e. being human or animate; Sineke 1997).

(26) a. *Ingonyama*   *i-m-leq-e*   *umfuyi*   *ne-nja.*
      9.lion   SA.9-OA.1-chase-PERF   1.farmer   NA-9.dog
      'The lion has chased the farmer and the dog'. (Sineke 1997: 70)

    b. *Ingonyama*   *i-yi-leq-e*   *inja*   *no-mfuyi.*
      9.lion   SA.9-OA.9-chase-PERF   9.dog   NA-1.farmer
      'The lion has chased the dog and the farmer'. (Sineke 1997: 71)

The following concludes the discussion regarding agreement. With subject coordinands, plural agreement predominates, although singular agreement is also common, especially with non-human and inanimate referents. With object coordinands, the situation is inverse. Singular agreement is more frequent, while plural agreement, albeit attested to, is less typical. In various cases, the type of agreement marker used on the verb is determined by the properties of the first conjunct (i.e. the first as far as the structural representation is concerned).

Concerning the compatibility with lexical classes (see criteria F-11 and F-20), the following can be observed. Even though the coordinator NA is most commonly employed with nouns and pronouns (see the various examples provided thus far), it is also used with categories other than broadly understood nominals (see F-11). However, NA cannot be used with all lexical and syntactic classes. Crucially, the usage of NA is commonly ungrammatical if inflected verbs or sentences need to be coordinated (see F-20). This behavior of NA in Xhosa agrees with the situation found in many other Bantu languages (cf. Creissels *et al.* 2008: 140, 150; Marten 2013).

Apart from being extensively used with nominals, NA can link a wide range of prepositional phrases (Jordan 1966: 36, 38; Bryant 2007: 80). First, NA connects locatives that are marked by the prefix *e-* and, in certain cases, the affix *-Vni* (e.g. *eKapa* 'to Cape Town' and *eStellenbosch* 'to Stellenbosch' in (27a)). Second, NA can join nouns headed by the preposition *ku-* 'to, at' (e.g. *kutata* 'to father' and *kumama* 'to mother' in (27b)). Third, NA coordinates prepositional phrases built around the comitative preposition *na-* 'with' (e.g. *nomfazi* 'with a woman' and *nomntwana* 'with a child' in (27c); Sivundla 1987: 34-35; regarding the prepositional senses of NA see section 3.2). Four, NA can also connect nouns headed by the copulative. This is common in passives where copulatives introduce the agent (e.g. *ngutata* 'by father' and *ngumama* 'by mother' in (27d)).

(27) a. *Ndi-ya*   *eKapa*   na-*s-eStellenbosch*.
        SA.1ˢᵗSG-go   LOC.5.Cape_Town   NA-BF-LOC.9.Stellenbosch
        'I am going to Cape Town and Stellenbosch'.

    b. *Ndi-ya*   *kutata*   na-*kumama*.
        SA.1ˢᵗSG-go   to.1a.father   NA-to.1a.mother
        'I am going to father and to mother'.

    c. *Ndi-dib-en-e*   *no-mfazi*   na-*no-mntwana*.
        SA.1ˢᵗSG-meet-REC-PERF   with-1.woman   NA-with-1.child
        'I met (with) a woman and (with) a child'. (Sivundla 1987: 34)

    d. *Ba-nced-w-e*   *ngutata*   na-*ngumama*.
        SA.2-help-PASS-PERF COP.1a.father   NA-COP.1a.mother
        'They have been helped by father and by mother'. (Sivundla 1987: 35)

The coordinator NA can also connect adverbial phrases (e.g. *kam-nandi* 'nicely' and *kakuhle* 'well' in (28)), which in Xhosa are usually marked by the prefix *ka-* – the so-called adverbial morpheme (Du Plessis & Visser 1992: 142).

(28)   *Ndi-bhal-e*   *iimviwo*   *kamnandi*   na-*kakuhle*.
      SA.1ˢᵗSG-write-PERF   10.exam   nicely   NA-well
      'I wrote exams nicely and well'.

Furthermore, the coordinator NA frequently conjoins infinitives (see example (29) below in which two infinitives – *ukutya* 'to eat' and *ukusela* 'to drink' – are coordinated). This is consistent with the uses of NA to connect nominals, since in Xhosa (and in Bantu), infinitives are regarded as nouns belonging to class 15 (Nurse 2008).[23]

(29)   *Ubawo*   *u-thanda*   *ukutya*   *no-kusela*.
      1a.father   SA.1-like   15.eat   NA-15.drink
      'Father likes eating and drinking'.

In contrast, the use of NA as a clausal and sentential connector is limited. In most cases, this usage is ungrammatical. To begin with, NA cannot link clauses that contain finite verb forms in the indicative, imperative, hortative, subjunctive, consecutive, and situative moods (on the different moods in Xhosa consult Visser 2015). Therefore, sentences like that in (30a), where a finite verb (*ndiyatya* 'I eat') is coordinated with another finite verb (*ndibukela iTV* 'I watch TV'), are ungrammatical. If such verbal clauses are to be conjoined, they are linked asyndetically and the verb appears in the indicative mood (Du Plessis & Visser 1993: 75), e.g. *ziyatheza ziyabasa* 'they make fire [and] cook' in (30b). If the nuance

of sequentiality needs to be expressed, the subjunctive mood or the consecutive mood is usually employed in the second (or further) clause (Du Plessis & Visser 1992, 1993), as illustrated by (30c): *ndivuka… ndixibe* 'I wake up [and then] I dress up'. The use of the subjunctive and the consecutive depends on the temporal reference: the subjunctive is employed within a non-past time frame, while the consecutive appears within a past time frame (Du Plessis & Visser 1992, 1993). Alternatively, one employs genuine verbal coordinators such as *kwa-* and *kwaye* as illustrated by *hlala… kwaye uthethe* 'sit… and talk!' in (30d) (Sivundla 1987; Du Plessis & Visser 1993).

(30) a. *Ndi-ya-tya*   **na-*ndi-bukela*   *iTV.*
      SA.1stSG-FOC-eat NA-SA.1stSG-watch 9.TV
      Intended meaning: 'I eat and watch TV'.

    b. *Ezi*   *ntombi*   *zi-ya-theza*   *zi-ya-basa*
      DEM.10   10.girl   SA.10-FOC-gather_wood SA.10-FOC-make_fire
      zi-ya-pheka.
      SA.10-FOC-cook
      'These girls gather wood, make fire [and] cook'. (Du Plessis & Visser 1993: 75)

    c. *Ndi-vuka*   *ekuseni*   *ndi-xib-e*   *impahla*
      SA.1stSG-wake_up   early   SA.1stSG-put-SUBJ 9.clothes
      ya-m.
      POSS.9-PC.1stSG
      'I wake up early, and (then) I put my clothes on'.

    d. *Hlala*   *phantsi*   *kwaye*   *u-theth-e.*
      sit   down   and   SA.2ndSG-talk-SUBJ
      'Sit down and talk!'. (Du Plessis & Visser 1993: 80)

NA is also unable to link clauses introduced by conjunctions (31a). The only exceptions seem to be clauses headed by the conjunction *xa* 'when', in which the verb appears in the situative (and the relative) mood (Sivundla 1987: 36). For instance in (31b), NA links the situative verb introduced by *xa* (*xa bedlala* 'while they are playing') to another verb headed by *xa* (*xa bexhentsa* 'while they are dancing'; see also example (9c)).[24] It is noteworthy that the conjunction *xa* 'when' has a nominal origin, deriving from the noun *ixesha* 'time' (Du Plessis & Visser 1992: 183). This may explain its compatibility with NA – the exemplary nominal coordinator. Although NA can connect temporal (situative) clauses introduced by *xa,* it cannot link clauses headed by other temporal conjunctions, e.g. *phambi kokuba* 'before', *emva kokuba* 'after', *xeshikweni* 'whilst' (Du Plessis & Visser 1992: 183).

(31) a. *Ekubeni*   *e-ba-nik-e*   *imali*   **na-*wa-ba-nika*
        although   SA.1.SIT-OA.2-give-PERF   9.money   NA-SA.1.CONS-OA.2-give
        nempahla   *ba-m-bel-e*   *ifowuni.*
        with.9.cloths SA.2-OA.1-steal-PERF 9.phone
        Intended meaning: 'Although he gave them money and gave them clothes, they stole his phone'.

    b. *Ndi-ya-ba-bukela*   *abantwana*   *xa*   *be-dlala*   na-*xa*
        SA.1[st]SG-FOC-OA.2-watch 2.child   when SA.2.SIT-eat NA-when
        be-xhentsa.
        SA.2.SIT-dance
        'I watch the children while they are playing and (while they are) dancing'. (compare Sivundla 1987: 36)

The item NA may conjoin copulatives, found either in indicative or relative constructions, as in example (32a), where *engunovenkile* 'who is a shopkeeper' is coordinated with *engumfama* 'who is [a] farmer'. However, such clauses are not entirely verbal (or fientive), as they fail to contain genuine verbs (or verbal bases).[25] This non-verbal character may motivate the grammaticality of NA. Observe that in true verbal/fientive relative clauses similar to (32a), NA is not used (32b).

However, sentences like that in (32b) can contain NA, if the two verbal forms, e.g. *abasebenzayo* 'those who study' and *abavuka* 'those who wake up', refer to two different subjects. In such cases, NA allows for the coordination of fientive verbal clauses – to be exact, relative clauses. See also example (32e) where *abafundi* 'students' and *ootishala* 'teachers' are coordinated. This probably stems from the fact that the subject prefixes of the relative mood are built around the pre-prefix *a* (e.g. class 1 *o*- < *a + u*) originally a demonstrative element 'that (who/ which)', which would be additionally qualified by a verbal clause (Visser 2015; Oosthuysen 2016: 218). This would thus be consistent with the use of NA as a nominal coordinator. However, as the grammaticalization of the relative mood has advanced, and the original analytical structure has become synthetic, first agglutinated and later fused, it is doubtful that NA is a nominal coordinator when linking relative-mood clauses – despite the original usage where it coordinated two pronouns. Overall, verbs in the relative mood are the only inflected verbal forms that are coordinated, relatively regularly, by means of NA in Xhosa.

(32) a. *Ndi-thanda*   *indoda*   *e-ngunovenkile*
        SA.1[st]SG-love   5.man   SA.5.REL-COP.1.shopkeeper
        n-*e-ngumfama.*
        NA-SA.5.REL-COP.1.farmer
        'I love a man who is a shopkeeper and who is a farmer'. (Sivundla 1987: 38)

b. *Abafundi*   *aba-sebenza-yo*   *aba-vuka*   *ngentseni*
    2.student   SA.2.REL-work-REL   SA.2.REL-wake_up early
    ba-za   *kuphumelela*.
    SA.2-come 15.succeed
    'Students who work (and) wake up early will pass'.

c. *Aba-sebenza-yo*   na-*ba-vuka*   *ngentseni*
    SA.2.REL-work-REL   NA-SA.2.REL-wake_up   early
    ba-za   *kuphumelela*.
    SA.2-come 15.succeed
    'Those who work and those who wake up early will pass'.

d. *Abafundi*   *aba-sebenza-yo*   noo-*tishala*
    2.student   SA.2.REL-work-REL   NA-2.b.teacher
    aba-ba-fundisa-yo   *ba-ya-vana*.
    SA.2.REL-OA.2-teach-REL SA.2-FOC-agree
    'The students who work and the teachers who teach them get along'.

The coordinator NA cannot link indicative associative semi-verbal constructions, in which the subject prefix heads the element *na-* 'with' and its complement, yielding the meaning 'have' (see section 3.2 further below). For example, in (33a), the two possessive constructions *unemoto* 'he has [a] car' and *unesithuthuthu* 'he has (a) motorbike' are rather coordinated asyndetically with the second conjunct optionally exhibiting the adverb/particle *-kwa-* 'also'. NA also fails to connect clauses (be they verbal or nominal) introduced by complementizers. Again, asyndetic constructions (as in (33b) – *uyagula usesibhedlele* 'he is sick, he is in hospital') or coordinators/adverbs *kwa-* and *kwaye* are used instead (for details consult Du Plessis & Visser 1993).

(33) a. *Lo*   *mntu*   *u-*ne-*moto*   *u-kwa-*ne-*sithuthuthu*.
          DEM.1   1.person   SA.1-NA-9.car   SA.1-also-NA-7.motorbike
           'This person has a car and also has a motorbike'. (compare Sivundla 1987: 51)

b. *Si-y-azi*   *ukuba*   *u-ya-gula*   *u-s-esibhedlele*.
    SA.1stPL-FOC-know   that   SA.1-FOC-be_sick SA.1-BF-LOC.7.hospital
    'We know that he is sick and (that) he is in hospital'. (Du Plessis & Visser 1993: 75)

In harmony with the extraction criterion (see F-12), the second coordinand and the coordinator NA (i.e. the structure [co B]) cannot be extracted (34a). It is also ungrammatical to extract the second coordinand from the scope of the coordinator NA and, thus, leave the coordinator behind without any resumptive element (34b). It should however be noted that, in Xhosa, A-bar extraction, for instance in left dislocation, is only possible with resumptive pronouns. Accordingly, (34b) is ungrammatical even with no movement from a coordinate structure involved. Furthermore,

respecting the extraction criterion, the coordinands cannot be questioned separately. Therefore, questions like that in (34c) are ungrammatical. Again, Xhosa generally disallows wh-movement of the type shown in (34c). As a result, this example is ungrammatical even without extraction out of an island (i.e. ***Bani uthetha kuhle*)

(34) a. ***[No-Sipho]*_I *ndi(-m/ba-)bon-e*   *uLandile*   _
        NA-1a.Sipho   SA.1stSG(-OA.1/2-)see-PERF 1a.Landile   _
        '**And Sipho I saw Landile _'.

   b. ***[USipho]*_I   *ndi(-m/ba-)bon-e*   *uLandile*   na_
      1a.Sipho   SA.1stSG(-OA.1/2-)see-PERF   1a.Landile   NA_
      '**Sipho I saw Landile and_'.

   c. **Bani   *u-thanda*   _ *no-Sipho?*
      who   SA.2ndSG-love   _NA-1a.Sipho
      '**Whom do you love and Sipho?'

However, in certain cases where the coordinands function as objects, the extraction and focusing of the first coordinand (e.g. *yena* in (35a)) is grammatical. It is also possible to extract the first coordinand with NA, which in such cases usually expresses the focal ideas of 'also, too, as well' ((35b); for these uses see section 3.2). In both cases, the extraction necessitates the use of object agreement affixes[26] and the presence of NA in front of the second coordinand. Otherwise, the extraction is ungrammatical. All such 'extracted' uses allow for comitative interpretations (see examples (35a-b)). Observe that structures like that in (35a) are common in left dislocated constructions (e.g. *USipho, yena ndambona no Landile* 'As for Sipho, him I saw with Landile'), where the pronoun (e.g. *yena*) functions as a resumptive pronoun in a preverbal position.

(35) a. *Yena*   *nda-m-bona*   _ *no-Landile.*
        ABS.1   SA.1stSG.PAST-OA.1-see _NA-1a.Landile
        '(lit.) He, I saw with/and Landile'.

   b. *No-Sipho*   *nda-m-bona*   _ *no-Landile.*
      NA-1a.Sipho SA.1stSG.PAST-OA.1-see _   NA-1a.Landile
      'Also Sipho, I saw him with/and Landile'.

It should be noted that if the first coordinand functions as the subject (e.g. *umama* 'mother' in (26)), it can be separated from the NA phrase (*nonyana* 'and/with her son'), which appears in the adjunct position. In such a case, the verb must appear in the singular form (*uze* 'she came') and NA has invariably a prepositional value, usually exhibiting a comitative sense. Such examples are therefore not genuine cases of

extraction, but rather attest to comitative structures (for details regarding the comitative use, see section 3.2).

(36)　　*Umama*　　　*u-z-e*　　　　　(***ba-z-e*)　　　*no-nyana*
　　　　1a.mother　SA.1-come-PERF　(SA.2-come-PERF)　NA-1.son
　　　　wa-khe.
　　　　POSS.1-PC.1
　　　　'Mother came with her son'.

　　　As NA coordinates clauses in very limited instances, there are only a few contexts in which coordinating constructions with NA can be tested for the criterion of backward anaphora (see F-13). In cases where such tests can be performed, backward anaphoric constructions are ungrammatical. Thus, a pronoun in the first clause (*lakhe* 'his') cannot be co-indexed with a full Noun Phrase in the subsequent clause (*uSipho* 'Sipho'):

(37)　　*Ndi-bukela*　　　*abantwana*　　*xa*　　*be-si-tya*　　　*ekhayeni*
　　　　SA.1stSG-watch　2.child　　　when　SA.2.SIT-SI-eat　LOC.5.home.LOC
　　　　***la-khe*　　*na-xa*　　*be-dlala*　　　*no-Sipho.*
　　　　POSS.5-PC.1　NA-when　SA.2.SIT-play　with-1a.Sipho
　　　　'**I watch the children while they are eating at his$_i$ house and while they are playing with Sipho$_i$'. (adapted from Sivundla 1987: 36)

　　　Similarly, the sameness or distinctiveness of subjects (F-22) cannot be fully assessed since NA is usually not used as a clausal connector, neither of the type [*x does a and does b*] nor of the type [*x does a and y does b*]. The widespread use of NA to coordinate infinitives, which necessitates subjects to be identical, may however suggest a relationship of NA with the idea of subjects' sameness. Nevertheless, in instances where clause coordination is possible, NA may join both subjects that are identical (see *abantwana* in (31b) and *indoda* 'man' in (32a) above) and those that are distinct (see *abantwana* 'children' and *amantombazana* 'girls' in (38a); or *inkosikazi* 'woman' and *indoda* 'man' in (38b)). One should note that although, in examples (38a-b), the coordinands function as subjects of the *xa* clause or the copulative clause, they are in fact objects of the main clauses, in which such *xa* or copulative clauses are embedded. However, the coordination of distinct subjects that are not embedded in the main clause (where they function as objects) is also attested, as illustrated by *abafundi* 'students' and *ootishala* 'teachers' in (32d).

(38) a.　*Ndi-ya-ba-bukela*　　　　　*abantwana*　*xa*　　*be-dlala*
　　　　　SA.1stSG-FOC-OA.2-watch　2.child　　when　SA.2.SIT-play

na-*matombazana*   *xa*   *e-xhentsa.*
NA-6.girl   when   SA.6.ST-dance
'I (do) watch the children while they are playing and girls while they are dancing'.

b. *Ndi-thanda*   *inkosikazi*   *e-ngunovenkile*
     SA.1stSG-love   5.woman   SA.5.REL-COP.1.shopkeeper
     ne-*ndoda*   *e-ngumfama.*
     NA-5.man.   SA.5.REL-COP.1.farmer
     'I love a woman who is a shopkeeper and a man who is a farmer'.

The coordinator NA may link multiple conjuncts and easily tolerates multiple Noun Phrases (see criterion F-14):

(39) *Ndi-bon-e*   *uSipho*   no-*Mandla*   no-*Landile*   no-*Alex.*
     SA.1stSG-see-PERF   1a.Sipho   NA-1a.Mandla   NA-1a.Landile   NA-1a.Alex
     'I saw Sipho, Mandla, Landile and Alex'.

If a coordinating construction includes more than two coordinands, as in example (39) above, the coordinators may be omitted with the exception of the last one (e.g. *noLandile* in (40a)), which must always be used. This means that – as required by criterion F-15 – sentences similar to (40b), where only the last NA morpheme is omitted (*uAlex*), are ungrammatical.

(40) a. *Ndi-bon-e*   *uSipho*   *uMandla*   no-*Landile.*
       SA.1stSG-see-PERF 1a.Sipho   1a.Mandla   NA-1a.Landile
       'I saw Sipho, Mandla, and Landile'.

b. *Ndi-bon-e*   *uSipho*   no-*Mandla*   no-*Landile*   ***uAlex.*
       SA.1stSG-see-PERF 1a.Sipho NA-1a.Mandla   NA-1a.Landile   1a.Alex
       'I saw Sipho, and Mandla, and Landile, **Alex'.

Cross-linguistically, it is common that coordinators allow for bi-syndetic patterns, heading (or appearing on) the two conjuncts/coordinands, not only one of them. Sometimes, such structures convey the meaning of 'emphatic conjunction', i.e. 'both' (Haspelmath 2004: 17, 2007: 31). In Xhosa, in its coordinating function, NA cannot be used bi-syndetically (criterion F-16). Therefore, structures such as *noSipho noLandile* '(both) Sipho and Landile' in (41a) and *notata nomama* '(both) father and mother' in (41b) are ungrammatical. The use of two NA items in a single clause is possible only if the element NA that heads the first coordinand functions as a focal adverb 'also, too', while the subsequent NA has a comitative value. See (41c) where *noSipho* has a focal value 'also Sipho / Sipho as well' while *noLandile* attests to a comitative sense of NA 'with Landile' (see also example (35b) above). Overall, such structures do not constitute cases of bi-syndetic coordination.

(41) a. **No-*Sipho*   no-*Landile*   *ba-fik-ile.*
          NA-1a.Sipho   NA-1a.Landile   SA.2-arrive-PERF
          'And Sipho and Landile have arrived'.

  b. *Ndi-bon-e*   **no-*tata*   no-*mama.*
      SA.1ˢᵗSG-see-PERF   NA-1a.father   NA-1a.mother
      'I saw **and father and mother'.

  c. No-*Sipho*   *u-fik-e*   no-*Landile.*
      NA-1a.Sipho   SA.2-arrive-PERF   NA-1a.Landile
      'Also Sipho has arrived with Landile'.

Since Xhosa is an SVO language, the coordinating conjunction NA should precede the verb if it is used to conjoin clauses (see criterion F-17). Even though this usage is scarce in Xhosa, in cases where NA coordinates clauses, it regularly appears clause-initially (see examples (31) and (32a), and especially (32c-d) introduced previously).

As NA usually fails to connect non-relative verbal clauses, it cannot be tested for the most typical rule of ellipsis characterizing CCs. This rule allows for the 'omission' of a verb in the second clause, yielding sentences such as *Joan wrote a novel, and Marvin did* [-]*, too* or *Robert cooked the first course, and Marie* [-] *the dessert* (Haspelmath 2007: 34).

Since Xhosa has no morphological case marking, the criterion of case sensitivity cannot be fully assessed (see feature F-19; compare with the criterion of morphological symmetry F-5).

Lastly, with respect to the semantic types of nominal coordinands (see F-21), NA can join all types of nominals, be they human, animate, or inanimate; concrete or abstract, common or proper (compare, for instance, examples (17a-c), (19a-d), (20a-b) and (21a-d) introduced previously).

3.2. Polyfunctionality of NA

Apart from being used as a conjunctive coordinator, NA is employed for a variety of other grammatical purposes. As will be evident from the subsequent discussion, the degree of polyfunctionality exhibited by NA is high. This is consistent with a polysemous and polyfunctional profile exhibited by the cognates of NA in the Bantu family, and with the behavior of coordinators cross-linguistically, in general.

Among all such different uses, nuances associated with a broadly understood comitative function play a highly relevant role in the semantic potential of NA (Du Plessis 1978) – which is also the case in other Bantu languages (Botne 2003; Heine & Kuteva 2002; Fleisch 2005; Young 2005; Marten 2013; Creissels 2016). On the one hand, NA expresses a wide

range of comitative senses with a high frequency. On the other hand, in Xhosa, the comitative domain is typically encoded by means of NA even though other manners of its expression are also possible. In such comitative uses, NA regularly behaves as a preposition, and together with its complement occupies the postverbal, adjunct position.[27]

Within the comitative domain, NA communicates the idea of doing something together with or in the company of someone; see *sebenza na-* 'work with' in (42a) and *cula na-* 'sing with' in (42b). In this function, NA can appear with the lexemes *kunye* or *ndawonye* 'together' as illustrated by *za kunye na-* 'come together with' in (42c) (Du Plessis 1978: 271). The item NA can also express the idea of doing something in relation to a person or thing. This sense – which will henceforth be referred to as 'relational' – is found with a large set of verbs, such as *dlala* 'play' (42d), *thetha* 'talk' (43e), *lwa* 'fight', *fana* 'be similar', *tshata* 'marry', or *ncokola* 'chat' (Mini 2003: 417).[28] It is also common in the semantic potential of the cognates of NA across the Bantu family (Bostoen, Dom & Segerer 2015: 761-762).

(42) a. *USipho*   *u-sebenza*   no-*Landile.*
         1a.Sipho   SA.1-work   NA-1a.Landile
         'Sipho works with Landile'.

   b. *Ndi-cula*   no-*mhlobo*   *wa-m.*
         SA.1stSG-sing   NA-1.friend   POSS.1-PC.1stSG
         'I am singing with my friend'.

   c. *Ndi-z-e*   *kunye*   no-*Sipho.*
         SA.1stSG-come-PERF   together   NA-1a.Sipho
         'I came together with Sipho'.

   d. *Inkosikazi*   *i-dlala*   ne-*nkwenkwe.*
         9.lady   SA.9-play   NA-9.boy
         'The lady plays with the boy'.

   e. *Indoda*   *i-thetha*   no-*mhlobo.*
         9.man   SA.9-talk   NA-2.friend
         'The man talks with the friend'.

The prepositional use of NA in a comitative or relational sense is characteristic of verbs that are extended by the reciprocal affix -*an*- (Du Plessis 1978: 271; Visser & Du Plessis 1992: 42, 157). In such cases, the NA phrase occupies the adjunct position (e.g. *noNkosiyomzi* 'with Nkosiyomzi' in (43a)) and, if the subject Noun Phrase appears in singular (*uSipho* 'Sipho'), the verb exhibits the singular subject agreement prefix (*udibene* 'he has met'). This entire construction constitutes an

alternative to the use of NA as a conjunctive coordinator, in which the verb may be inflected in plural (see *badibene* 'they have met' in (43b)) and the NA phrase (*noNkosiyomzi* 'and/with Nkosiyomzi') appears in the subject position ((43b); see Du Plessis & Visser 1992: 157).

(43) a. *USipho   u-dib-en-e   no-Nkosiyomzi.*
       Sipho   SA.1-meet-REC-PERF   NA-1a.Nkosiyomzi
       'Sipho has met with Nkosiyomzi'.

  b. *USipho   no-Nkosiyomzi   ba-dib-en-e.*
       Sipho   NA-1a.Nkosiyomzi   SA.2-meet-REC-PERF
       'Sipho and Nkosiyomzi have met'.

If the complement of NA is a concrete, inanimate noun, and NA is used in a context of motion (for instance with verbs expressing the idea of movement, such as *hamba* 'go') the examples that are analogous to the comitative use discussed above frequently communicate the sense of carrying something, e.g. *hamba na-* 'go with, travel with, carry':

(44) a. *U-hamb-e   ne-zembe   e-si-ya   kutheza   iinkuni.*
       SA.1-go-PERF NA-5.axe   SA.1.SIT-SI-go 15.collect 10.wood
       'He went with the axe to collect wood'.

  b. *U-hamba   no-mthwalo   om-khulu.*
       SA.1-go   NA-3.luggage   ADJ.3-big
       'He travels with big luggage'.

The prepositional function of NA may also be detected in two further – albeit infrequent – uses. First, NA is sporadically used as a locative preposition complementing adverbs such as *kufuphi* 'near' (45a), *kude* 'far' (45b), *kufutshane* 'close', or *jongene* 'opposite' (cf. Bryant 2007: 81). Many Bantu languages use the associative in comparable constructions to link a locative adverb to a satellite noun (see locative uses of NA in Swahili discussed by Marten 2013: 52). Of course, in examples such as (45a) and (45b), the locative meaning derives from the context in which NA is used, especially the preceding expression, *kufuphi* 'near' or *kude* 'far'. Therefore, in such instances, NA could alternatively be viewed as a broad (or unspecified) functional preposition.

(45) a. *Ikhaya   la-m   li-kufuphi   ne-Kapa.*
       5.house   POSS.5-PC.1stSG   SA.5-near   NA-5.Cape_Town
       'My home is close to Cape Town'.

  b. *Le   dolophu   i-kude   ne-Bhayi.*
       DEM.9   9.town   SA.9-far   NA-5.Port_Elizabeth
       'This town is far from Port Elizabeth'.

Second, NA forms a few complex structures in which it originally exhibited a temporal value similar to 'in [time expression]', such as na*mhla*(*nje*) 'today', no*nyaka*(*nje*) 'this year', and na*phakade* 'forever, eternity' (Du Plessis 1978: 264; Mini 2003: 417). These constructions have been grammaticalized into almost indissoluble lexemes, currently functioning as adverbs of time.

It should also be noted that, both in Xhosa and, more generally, in Bantu, NA (or its predecessor) has been grammaticalized into the verbal extension -*an*-, which expresses the idea of reciprocity, e.g. *bonana* 'see each other' from *bona* 'see' (Schladt 1998; Schadeberg 2003; Bostoen, Dom & Segerer 2015). It is likely that the origin of this meaning extension lies in a comitative function exhibited by the predecessor of NA (see section 4.3 below).

Apart from being used as a preposition, NA can be headed by subject prefixes that are identical to subject prefixes on verbs. In these predicate-like constructions, NA acts as an element that is equivalent to verbal bases. Alternatively, one could argue that NA is employed with a non-overt copulative verb. This 'verbal' use of NA will henceforth be referred to as 'predicative'.[29] In all such predicative uses, if the activity refers to a present time frame, subject prefixes are directly linked to NA and its complement. In other tenses (e.g. past, future and subjunctive), various forms of the verbal base *ba* 'to be, become' are used (for examples consult Du Plessis 1978: 205 and Du Plessis & Visser 1992: 241-242).[30] When the idea of a general customary present is to be expressed, the present tense form of *ba* may also be employed. This use of NA as a base with subject prefixes or with an existential verb 'be' is highly widespread in the Bantu family (Nurse 2008).

The predicative NA construction can express various senses. First, NA can communicate the idea of being together with someone or being in the company of someone (46a). This use is clearly related to the comitative nuances described previously. Second, the same type of construction can imply that a person has a love affair with someone (46b) or that one has the same opinion and agrees with another person – similar to the relational sub-type of the comitative domain ((44c); see Mini 2003: 416).

(46) a. *Bendi*-na-*bo*   *izolo*.
      SA.1stSG.CONT.PAST-NA-PC.2 yesterday
      'I was with them yesterday'.

   b. *USipho*   *u*-no-*Landile*.
      1a.Sipho   SA.1-NA-1a.Landile
      'Sipho is with Landile (i.e. Sipho is having a love affair with Landile)'.

c. *Ndi*-na-*we*   *ku-le*   *mbono*   *yokuba*
   SA.1stSG-NA-PC.2ndSG KU-DEM.9 9.opinion that
   makohlway-w-e   *lo*   *mntwana.*
   SA.1.HORT-punish-PASS-SUBJ   DEM.1   1.child
   'I am with you (i.e. agree with you) that this child must be punished'. (Mini 2003: 416)

However, in most cases where subject agreement markers are agglutinated to NA, the construction indicates possession, and functions as an equivalent of the verb 'to have'. The use of NA and its cognates in expressions of possession is widely attested in Nguni languages (Du Plessis 1978; Oosthuysen 2016) and in the Bantu family (Mkude 1996; Nurse 2008: 142-143, 250-251, 288; Marten 2013: 52), including Bantu contact varieties (Mufwene 2003).

The complement of the predicative type of NA may be human (*umtwana* 'child' in (47a)), animate, or inanimate – whether concrete (*imoto* 'car' in (47b)) or abstract (*iminyaka* 'years' in (47c)). The possessive relationship itself can be material (47a-b) or more figurative (47c).

(47) a. *UThandi*   *u*-no-*mtwana.*
        1a.Thandi   SA.1-NA-1.child
        'Thandi has a child'.

     b. *Ndi*-ne-*moto.*
        SA.1stSG-NA-9.car
        'I have a car'.

     c. *Inkwenkwe*   *i*-ne-*minyaka*   *elishumi.*
        9.boy   SA.9-NA-4.year 4.ten
        'The boy is ten years old'.

A common variant of the possessive function discussed above is the usage where a similar construction type expresses the idea of being ill or suffering pain. This meaning appears if the complement of NA is a part of the body (e.g. *intloko* 'head' in (48a)) or an internal organ (e.g. *isisu* 'stomach' in (48b)).

(48) a. *Indoda*   *i*-ne-*ntloko.*
        9.man   SA.9-NA-9.head
        'The man has a head(ache)'.

     b. *Ndi*-ne-*sisu.*
        SA.1stSG-NA-7.stomach
        'I have a stomach(ache)'.

The NA possessive construction – often with a body part as its com-

37

plement – gives rise to further, more idiomatic and metaphorical expressions, denoting qualities, for instance *unentloko* 'he is clever' (lit. 'he is with a head'), *unesandla* 'he is an expert in a craft' (lit. 'he is with hand'), or *unolwimi* 'he gossips' (lit. 'he is with a tongue'; Mini 2003: 416-417). This use of NA is well attested in the Bantu family, being for instance found in Lingala and Kituba (Andrason *forthcoming* a).

The meaning 'to contain, have something inside' conveyed sometimes by NA constitutes another extension originating from the idea of possession (Mini 2003: 416). This sense appears if the subject of the predicative NA is inanimate (see *amachibi* 'marshes' in (49) below).

(49) *Amachibi* *a-ba*   na-*manzi*   *nge-xesha*   *le-mvula.*
      6.marshes SA.6-be   NA-6.water   during-5.time   POSS.5-9.rain
      'The marshes have water in them during the rainy season'.

Another use where NA is headed by subject prefixes – which is typical of the possessive uses analyzed above – is found in cases where NA is followed by an infinitive. As explained, in Xhosa, infinitives exhibit nominal properties and belong to noun class 15. The resulting construction communicates modal nuances of capacity, ability, possibility, and permission, as illustrated by -*nokuya* 'can/may go' in (50) (Du Plessis 1978: 206; Du Plessis & Visser 1992: 120; Mini 2003: 416).

(50) *Ewe,* *si-*no-*kuya*   *eStellenbosch.*
      yes   SA.1stPL-NA-15.go   LOC.9.Stellenbosch
      'Yes, we may go to Stellenbosch'.

Apart from the comitative and the possessive groups of uses reviewed thus far, in which NA functions as a preposition or a verbal base, respectively (the latter constituting a reanalysis of its more original prepositional function),[31] NA can express the nuance of inclusion similar to adverbs or additive focus markers 'too, also, as well' (see *noLandile* 'Landile too/as well' in example (51) below). This usage of NA and other coordinators/comitative markers is common in Bantu, being attested for instance in Swahili (Marten 2013), Kinande (Schneider-Zioga 2015), and Tswana (Creissels 2016). In Xhosa, it is also patent in certain pronominal forms such as *nam* 'me too' or *newe* 'you too' (see further below in this section).

(51) No-*Landile*   *u-ya-funa*   *ukuya*   *eKapa.*
     NA-1a.Landile   SA.1-FOC-want   15.go   LOC.5.Cape_Town
     'Landile too wants to go to Cape Town'.

The item NA may also convey the meaning corresponding to the English focus adverb 'even' – another common feature of cognates of NA found across Bantu languages (Schneider-Zioga 2015; Marten 2013; Creissels 2016; Andrason *forthcoming* a). This use is found with Noun Phrases that occupy both the subject (see *nempuku* 'even (a) mouse' in (52a)) and the object position (see *nezona zinzima iisam* 'even the most difficult sums' in (52b)).

(52) a. Ne-*mpuku*   *le*   *i-ya-m-nkwantyisa.*
       NA-9.mouse DEM.9 SA.9-FOC-OA.1-frighten
       'Even a mouse frightens her'. (Mini 2003: 417)

    b. *U-ya-zibala*   ne-*zona*   *zinzima*   *iisam.*
       SA.1-FOC-count NA-ABS.10 COP.10.difficult 10.sum
       'He does even the most difficult sums'. (Mini 2003: 417)

A related usage is found when NA introduces temporal clauses headed by *xa* 'when', yielding a concessive sense similar to 'even when, even though' in English (see example (53) below). The same concessive meaning is conveyed by the conjunctions *nakuba* and *nangona* of which NA constitutes an indissoluble part.

(53)   *Si-za*   *kunduluka*   na-*xa* / no-*xa*
       1stPL-come 15.depart   NA-when (＝even though)
       anga-fik-anga.
       NEG.SA.1-arrive-NEG.PERF
       'We will depart even though he has not arrived'. (Mini 2003: 417)

An equally high degree of grammaticalization of a concessive usage is exhibited by *nokuba* 'whatever, any-', where NA was originally linked to the infinitive *ukuba* 'to be':

(54) a. No-*kuba*   *u-thi-ni,*   *ndi-ya-hamba.*
       NA-15.be   SA.1-say-what SA.1stSG-FOC-go
       'Whatever he says, I will go'. (compare Mini 2003: 417)

    b. No-*kuba*   *yintoni.*
       NA-15.be   COP.9.thing.what
       'Whatever it is'.

The focal, adverbial sense of 'even' may also be found in a negative context, yielding the meaning similar to 'absolutely not, not even', as illustrated by *nesenti* '(not) even a cent' in (55a) and *nalinye* '(not) even one' in (55b).

(55) a. *USipho*   *aka-na-yo*   ne-*senti.*
     1a.Sipho   NEG.SA.1-NA-PC.9   NA-9.cent
     'Sipho has not even a cent'.

  b. *Andi-fun-i*   na-*linye*   *kula*   *mathole.*
     NEG.SA.1stSG-want-NEG   NA-5.one   of.DEM.6   6.calves
     'I don't want a single one of these calves'. (Mini 2003: 417)

Most uses presented thus far offer alternative variants where the complement of NA is a pronoun instead of being a noun. In such cases, NA is prefixed to the pronominal clitics, delivering forms such as *nam* < **na-m* (1st person singular), *nawe* < **na-we* (2nd person singular), *naye* < **na-ye* (3rd person singular, class 1), or *nabo* < **na-bo* (3rd person plural, class 2).[32] In these combinations, NA exhibits all the values discussed previously, functioning as a conjunctive coordinator (*naye* 'and him' in (56a)), comitative preposition (*naye* 'with him' in (56b)), possessive predicator (-*nazo* 'have them' in (56c)), and focal or inclusive adverb (e.g. *nam* 'me too', *nawe* 'you too' and *nabo* 'them too'; for details consult Du Plessis 1978: 205-206).[33]

(56) a. *Mna*   na-*ye*   *si-ya-thetha.*
     ABS.1stSG   NA-PC.1   SA.1stPL-FOC-talk
     'Me and him are talking'.

  b. *Ndi-thetha*   na-*ye.*
     SA.1stSG-talk   NA-PC.1
     'I am talking to him'.

  c. *Ndi*-na-*zo.*
     SA.1stSG-NA-PC.8
     'I have them'.

Cognates of NA in Bantu are often compatible with the broadly understood instrumental domain (Fleisch 2005: 97; Bostoen, Dom & Segerer 2015: 754). This instrumental domain includes the sense of instrumental proper, as well as the ideas of means and manner (cf. the instrumental uses of *ti* in Kituba; Andrason *forthcoming* a). In Xhosa, genuine instrumental uses of NA are unattested. (However, the meaning of carrying something discussed in (44), is perhaps conceptually related to the instrumental domain).

Furthermore, the item NA may form part of other words. This was observed in a few uses discussed previously, namely in certain temporal expressions (e.g. na*mhlanje* 'today'), in a few concessive conjunctions (e.g. no*xa* 'even when, even if'), and in the word no*kuba* 'whatever, any-'. A comparable usage may be found in cases where

NA is used to derive a set of indefinite adverbs and pronouns such as na*wuphi* 'any' (class 1(a)), na*liphi* 'any' (class 5), na*phi* 'anywhere', na*nini* 'anytime', na*bani* 'anyone', and na*ntoni* 'anything'. This usage may be related to concessive functions and the value of 'even' discussed previously (Mini 2003: 417). In all such cases, even though originally independent, NA has become indissoluble from the hosting element through agglutination and a subsequent advancement in grammaticalization (see also the reciprocal extension *-an-*, which was probably derived from the predecessor of NA).

A subtype of such profoundly grammaticalized uses concerns constructions where NA was originally linked to another fixed element. To be exact, while in the previous examples NA was linked to a variable delivering a broad range of structures NA$+x$ (that sometimes may be reanalyzed as more synthetic forms), NA could also be linked to a relatively constant item. As a result, the underlying pattern is NA$+a(+x)$ or $a+$NA$(+x)$, where a stands for a constant and x for a variable. There are two variants of such NA constructions.

First, NA may accompany the preposition *ku-*. The resulting compound *kuna-* denotes the idea of comparison similar to 'than, rather than' (e.g. *kunoLandile* 'than Landile' in (57a)). This comparative usage is particularly common with infinitives (Du Plessis & Visser 1992: 120) – see *kunokudlala* '(rather) than playing / to play' in (57b).

(57) a. *USipho*   *u-krekrele*   *ku-no-Landile.*
      1a.Sipho   SA.1-be_smart   KU-NA-1a.Landile
      'Sipho is smarter than Landile'.

    b. *U-khetha*   *ukusebenza*   *ku-no-kudlala.*
      SA.1-prefer   15.work   KU-NA-15.play
      'He prefers working to playing'.

Second, NA can be prefixed to the stem *kho*, yielding the form *nakho*. The emerging construction expresses capacity, ability, and/or possibility (Du Plessis 1978: 206; Du Plessis & Visser 1992: 120; Mini 2003: 416):[34]

(58)   *Amadoda*   *a-na-kho*   *ukusela*   *umqombothi.*
      6.man   SA.6-NA-KHO   15.drink   3.traditional_beer
      'The men can drink traditional beer'.

4. Discussion

4.1. NA as a conjunctive coordinator

The evidence provided in section 3.1 indicates that, when employed to coordinate, NA complies with most features postulated for the prototype of coordinate-hood. To be exact, fourteen criteria out of twenty-two are usually met. First, as is required of the CC prototype, the coordinands linked by NA frequently:

– satisfy a given proposition (F-1);
– exhibit the same degree of saliency, relevancy, or control (F-2);
– are characterized by an identical status of topicality (F-3);
– are reversible without altering the truth conditions of the proposition (F-4);
– belong to the same lexical class and syntactic type (F-6);
– exhibit intonational phrasing (F-7);
– and pertain to the same temporal and spatial plane (F-8).

Second, NA:

– is employed with categories other than NPs (F-11);
– disallows the use of backward anaphora (F-13);
– may link multiple conjuncts (F-14);
– can be omitted with the exception of the last conjunct position (F-15);
– comes clause-initially (F-17);
– joins all types of nominals (F-21);
– and connects subjects that can be identical or distinct (F-22).

Albeit commonly met, not all the criteria mentioned above are compulsory. In particular, sometimes:

– one of the coordinands fails to satisfy the proposition (F-1);
– one coordinand is more relevant for the action, controlling it or being affected by it to a higher extent than the other coordinand (F-2);
– the coordinands exhibit a different status of topicality (F-3);
– the change of the order of coordinands alters the properties and meaning of the CC construction (F-4);
– and the coordinated propositions pertain to different temporal and/or spatial planes (F-8).

Moreover, five criteria are only fulfilled to a certain extent, thus exhibiting an intermediate status or a fuzzy profile:

– Even though in most cases extraction is ungrammatical, in certain instances it is acceptable (this occurs, for instance, if the coordinand functions as

an object and/or is the first in the sequence of coordinands; F-12);

– While the first coordinand appears as an absolute emphatic pronoun, the second coordinand is regularly a clitic pronoun (F-9);

– Although with subject coordinands plural agreement is typical, singular agreement may also be found. Furthermore, with object coordinands, singular agreement predominates, while plural agreement is significantly less common (F-10);

– Even though NA can link classes other than nominals – for example, prepositional phrases, adverbs, and infinitives – its use as a clause-connector is highly limited. NA normally cannot link clauses, except for clauses that are non-verbal copulative, those that are introduced by the conjunction *xa* 'when', or, more generally, those that contain a verb in a relative mood (F-20).

Additionally, one criterion is never met:

– If employed in a CC function, NA cannot be used bi-syndetically (F-16).

Lastly, since there is no morphological case marking in Xhosa, the criteria of morphological symmetry (F-5) and case sensitivity (F-19) cannot be fully assessed. The criterion of verbal ellipsis in clauses (F-18) cannot be analyzed either. The criterion of sameness/distinctiveness of subjects (F-22) can be assessed only to a limited extent.

Consequently, the evidence indicates that when NA is used to coordinate, its categorial status is close to the CC prototype. Traits that are or can be met are more numerous (14 traits) than those that are never met (1 trait), with a few traits being fulfilled only partially (4 traits). Given that five of the fourteen features that are met, are not compulsory, and that four features are fulfilled to a certain extent, exhibiting a higher or lower degree of compliance with the behavior postulated for the prototype, NA spans a section of the CC categorial network instead of being mapped as a point. That is, if NA is envisaged holistically in its CC function, it matches a fragment of the categorial network, depending on whether more or fewer criteria are fulfilled in a particular usage. In some contexts, the properties of NA locate it closely to the categorial center – itself being a highly canonical instantiation of the CC category. In other cases, however, NA is more distant from the prototype, exhibiting a slightly less canonical profile. Nevertheless, even in these less canonical uses, NA invariably oscillates in the area relatively adjacent to the CC prototype. Such a less canonical profile is not accidental but reflects the immediate origin of NA (i.e. the comitative preposition 'with') and its further developmental stage (i.e. the adverb 'too'; see sections 4.2 and 4.3 below).

4.2. The map of NA

Although NA is a relatively canonical instantiation of the CC prototype (see section 4.1 above) – being *de facto* the most common conjunctive coordinator in Xhosa – and although this coordinating function is perceived by native speakers as one of the most characteristic uses of NA, the lexeme conveys other functions and senses. As demonstrated in section 3.2, NA is highly polyfunctional and polysemous.

First, NA functions as a preposition. It is extensively used in a broad range of comitative senses, communicating the idea of being together with or in the company of someone, or of doing something in relation to a person or thing (relational senses). When inanimate nouns are headed by NA in a context of motion, the comitative value is usually replaced by the sense 'carry something'. Additionally, NA can be used as a locative preposition complementing locative adverbs of proximity and distance, and as a temporal preposition with a few nouns that have been grammaticalized into temporal adverbs. Second, when headed by subject prefixes, NA appears in a predicate-type construction, functioning as an equivalent of verbal bases. In this usage, NA typically communicates possession. With the same type of prefixes, NA may express various relational nuances (e.g. 'to have a love affair' or 'to agree'), as well as the meanings 'to be ill' or 'contain'. Additionally, the predicative NA allows for other, more idiomatic and metaphorical uses that describe qualities. If the predicative NA is, itself, connected to an infinitive, it expresses a set of modal nuances, such as capacity, ability, possibility, and permission. Third, NA can be employed in certain adverbial functions. It acts as a focal marker comparable to 'too, also, as well' and 'even'. The latter use allows for a range of concessive senses similar to 'even when, even though', 'whatever, any-', and 'absolutely not, not even', if applied to negative contexts.

Among all such uses, the most prototypical values – i.e. the most common, productive, and typically associated with the NA form – are: nominal and prepositional coordinator (in contrast, the uses of NA as a verbal connector are highly constrained); comitative preposition (including the relational sense); (focal) adverbial 'also, as well'; and possessive predicate. Other uses are either rare, unproductive, or restricted to very particular contexts. For example, the use of NA as verbal coordinator is found almost only with verbs inflected in the relative mood.

The array of values exhibited by NA is not accidental. As can be recovered from Figure 2 below, most functions are coherent with

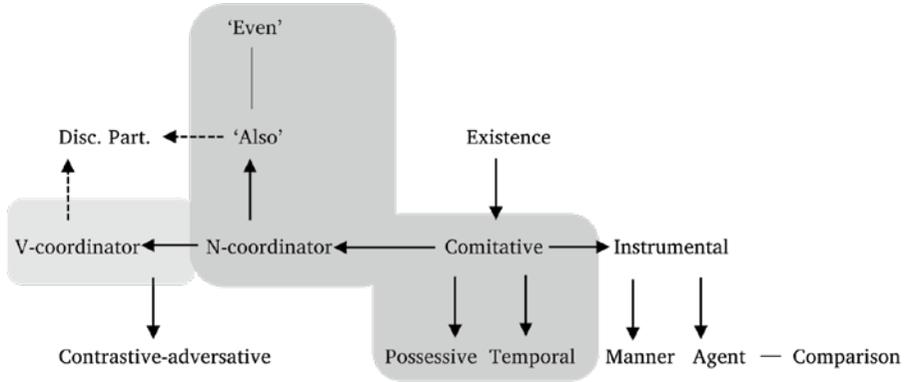the cross-linguistic map of polyfunctionality of CCs introduced in section 2:

Figure 2. Map of the polyfunctionality of NA[35]

Other functions – not included in the cross-linguistic map of CCs (see Figure 1) – can be cognitively related to the stages that have already been posited. First, the nuance of carrying something is equivalent to the possessive, both senses being derived from the comitative. What distinguishes the sense 'carry' from the possessive and the comitative is that it usually concerns human nouns (subjects) and, at the same time, involves contexts of motion. Second, in a similar vein, the various relational senses (including the predicative uses of NA with the value of having a love affair and agreeing) are most likely metaphorical extensions emerging from the comitative value.[36] Third, the use of NA to communicate the nuance of being ill and other qualities most probably originates in the possessive sense, exhibiting a change from a concrete meaning to a more metaphorical one.[37] Fourth, the locative expression of proximity and distance may derive from the relational variant of the comitative.[38] Fifth, the concessive uses 'even when, even though' and 'whatever, any-' probably derive from the (focal) adverbial sense 'even' as certainly does its negative variant 'absolutely not, not even'.[39] Sixth, the modal uses of the predicative NA may have spread from the possessive sense given that, from a cross-linguistic perspective, modality often originates in possessive expressions (Bybee *et al.* 1994, Hopper & Traugott 2003). Therefore, Figure 2 can be reformulated into the following shape, which accommodates all the functions of NA:
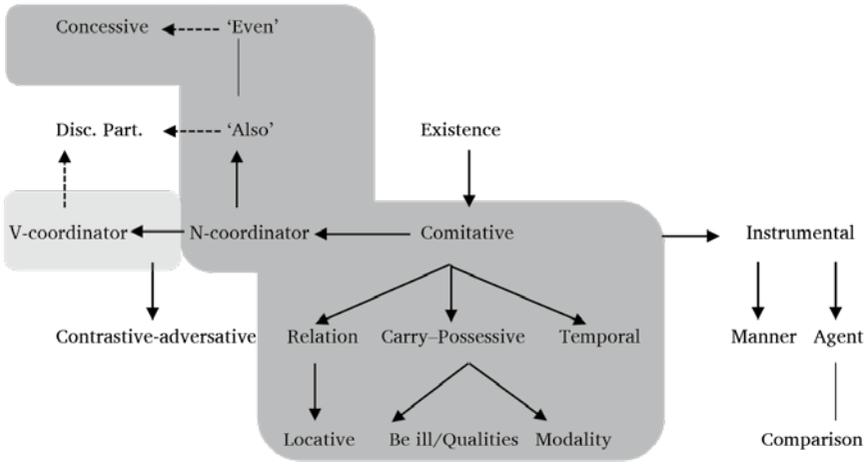
Figure 3. The extended map of polyfunctionality of NA

Additionally, NA can appear as an indissoluble component of other lexemes that have emerged from original complex constructions. First, NA constitutes a part of indefinite adverbs and pronouns. Second, it contributes to prepositions denoting the idea of comparison. Third, it yields a predicative verb-like construction communicating the ideas of modality (capacity, ability, and possibility). In the above-mentioned, highly grammaticalized constructions, NA has arguably lost its independency. That is, even though such uses could be cognitively and diachronically connected to the map of NA, it is doubtful that (at least synchronically) this connection is necessary both for the speakers and the model itself. Most likely, the above-mentioned constructions are presently disconnected from NA, being reanalyzed by speakers as fully independent.

4.3. Diachronic corroboration

The map of NA posited above has been, so far, derived from synchronic data and their correspondence to certain typological templates or tendencies. That is, the array of functions exhibited by NA in Xhosa has been matched with a fragment of a common typological pattern of the polyfunctionality of CCs. Even though highly plausible, this graphic representation of the semantics of NA is a hypothesis if it is not corroborated by diachronic evidence that would show whether the polyfunctionality of NA has actually arisen in the manner portrayed by the map.

Although in the case of NA we do not have access to direct diachronic data demonstrating the history of that form (e.g. ancient texts), certain postulates of comparative Bantu linguistics can be used to validate the hypothesized map.

Given the pervasiveness of the comitative and coordinating functions of NA in the Bantu family (Nurse 2008: 121), linguists reconstruct NA as a bi-valent item at the Proto-Bantu stage, namely both as a comitative preposition 'with' and a conjunctive coordinator 'and' that links nominals including infinitives, which as explained, are verbal nouns in Bantu (Nurse 2008: 54). In fact, the reconstruction of NA as a comitative adposition and a coordinator not only goes back to Proto-Bantu. It has also been posited for Proto-Niger-Congo, as coordinating/comitative reflexes of NA are found across the Niger-Congo family (Nurse 2008). This reconstruction, in turn, suggests that the comitative sense is the conceptual and diachronic center of the polyfunctionality of NA, which corroborates the map posited in this article. This stems from the following facts: (a) as explained in section 2, cross-linguistically, CCs tend to derive from two principal inputs, i.e. adverbs 'also, too' and comitatives 'with' (Haspelmath 2004, 2007), even though other sources are also possible; (b) it is highly unlikely that a single item (such as NA) could have originated in two distinct sources that merged at a more advanced evolutionary stage – therefore monogenesis (i.e. origin from one source) is by far more plausible; (c) the evolution from the CC 'and' into the comitative 'with' is so far unattested, being also cognitively implausible as the comitative is more concrete and 'spatial' than the Boolean conjunction 'and' (note that comitative is located relatively low on the hierarchy of cases); (d) in contrast, the development from a comitative adposition to a coordinator constitute a highly common evolutionary tendency across languages (Heine & Kuteva 2002; Haspelmath 2004, 2007). Therefore, if at the Proto-Bantu stage, NA was used as a CC and a comitative, it is more likely that the latter yielded the former, not *vice versa*. This, in turn, suggests that the development of the adverbial senses such as 'also' and 'even' is secondary. That is, both uses have emerged from the idea of coordinate-hood. The prepositional origin of NA – and thus its comitative source rather than the adverbial – is also suggested by the form of pronouns complementing that lexeme. As explained in section 3.2, contrary to what is postulated for the cross-linguistic prototype of CCs, the pronouns introduced by NA (i.e. those referring to the second coordinand) are pronominal clitics – not absolute pronouns. In this regard, NA behaves as other prepositions in Xhosa, e.g. *nga-* 'through, with' or *ku-* 'to, at'. In general, the evolution from the comitative NA to coordination has been widely recognized in typological and comparative

Bantu studies (Heine & Kuteva 2002: 80-83; Nurse 2008).

Comparative Bantu and Niger-Congo studies also show that the other values of NA are secondary and derive from the comitative nucleus of the map (Nurse 2008: 121). Among all such values, the predicative uses – both possessive and modal, or more generally TAM – are argued to be present at the Proto-Bantu time (at least in their incipient stage of grammaticalization), even though NA is principally reconstructed as a comitative preposition and a conjunctive coordinator. In other words, NA might already have played "a verbal role in Proto-Bantu" (Nurse 2008: 251). Crucially, the evolution from the comitative NA to the idea of possession has been widely recognized, being reconstructed by Heine (1997a, 1997b), Heine & Kuteva (2002), and Nurse (2008: 143, 250-251, 288).

One should note that, while in Xhosa the TAM uses of NA are limited to modality, the range of TAM senses exhibited by NA in other Bantu languages is significantly wider. To be exact, cognates of NA give rise to progressives, imperfectives, presents, futures, not-yet constructions, pasts, and narratives, whether sequential or non-sequential (Nurse 2008: 121, 250). Most likely, these values were prompted by the prepositional (e.g. comitative, relational, and its extensions) and/or possessive use of NA, as was the case of the modal senses attested in Xhosa (see above in this section). Overall, the range of TAM functions exhibited by NA in Xhosa and in Bantu is fully consistent with grammaticalization paths that are related to the comitative use (Heine & Kuteva 2002: 79-90; Nurse 2008: 250), and with grammaticalization paths that operate in verbal systems in general (Bybee *et al.* 1994). To be exact, comitative activates two main paths of development, during which the progressive sense can be reached: (a) from a periphrasis built around a comitative adposition (and its further extensions found in postural and 'busy' constructions) and a verb (including infinitives and gerunds; compare Bertinetto 2000; Bertinetto *et al.* 2000; Ebert 2000); and (b) through the stage of a possessive verb 'have' (Heine 1997a, 1997b; Heine & Kuteva 2002; Nurse 2008: 143). Imperfectives constitute a further evolutionary stage of progressives (Bertinetto 2000; Bertinetto *et al.* 2000), while futures may derive from earlier progressives and imperfectives, as well as from possessives (Bybee *et al.* 1994). In a past-time frame, imperfectives may yield past imperfectives and, later on, simple pasts. Possessive constructions often acquire modal values, developing towards moods (Bybee *et al.* 1994, Hopper & Traugott 2003). Lastly, possessive constructions of the type 'not be with… now' or 'not have… now' may additionally develop a 'not yet' meaning (Nurse 2008: 251).

The TAM range of NA in Bantu is also coherent with verbal uses of

its cognates in Niger-Congo. This, however, need not suggest a shared Proto-Niger-Congo heritage. It may rather stem from that fact the above-mentioned types of grammaticalization paths are highly common cross-linguistically (Nurse 2008).

The remaining values present in the map in Figure 3 – which are missing in the semantic potential of NA in Xhosa but are attested in other Bantu languages – have generally been viewed as secondary to the more original comitative function. This concerns the instrumental function (Bostoen *et al.* 2015) and the value of existence (Heine & Kuteva 2002: 84; Güldemann 2003).

In general, all diachronic paths involving NA in Bantu lead to the comitative, suggesting this sense as the diachronic nucleus of the polysemy patterns attested in Xhosa and other Bantu languages. This means, in turn, that comparative Bantu and Niger-Congo evidence corroborates the structure of the map of NA posited in this article.

Additionally, the results of the present study suggest new areas in the map that represents the polyfunctionality of CC constructions in the languages of the world. Such new areas are: a relational subtype of the comitative; the senses 'carry', 'be ill', and other qualities – all related to the possessive; the locative value that is most likely connected to the relational sense; and a class of concessive uses that are derived from the adverbial focal sense 'even'.[40] Furthermore, an important element of the map are several TAM senses that emerge from the possessive usage. The evidence also indicates that the relationship between the idea of coordinate-hood and the adverbial value 'also' is possibly bidirectional. That is, coordinators may derive from inclusive/focal adverbs 'also, as well' and, inversely, evolve into such adverbs. Lastly, the results of this research show that CCs (or their predecessors) may contribute to the formation (or derivation) of other lexical classes and constructions, such as pronouns, adverbs, prepositions, conjunctions, and verbs.

5. Conclusion

The present paper offered a cognitive, grammaticalization-driven, and typologically-based, analysis of the item NA in Xhosa.

First, the study demonstrates that, when used in a coordinating function, NA approximates the CC prototype to a great extent, complying with the majority of its features. However, rather than a point in the CC radial network, NA can be mapped onto a fragment of it. This fragment contains uses that are highly canonical as well as those that are canonical to a somewhat lesser degree.

Second, the analysis of uses that expand beyond coordination shows that NA spans a large part of the map of polyfunctionality of CC constructions. The conceptual and diachronic center of the map corresponds to a prepositional comitative sense. It is from this value that other meanings (e.g. relational, 'carrying', possessive, temporal, locative, modality, 'even', concessive, 'also, as well', 'be ill', and qualitative) and functions (e.g. coordinating, predicative, and focal/adverbial) have emerged through a series of semantic extensions connected via family resemblance. In this polyfunctional network, the functions of a nominal (and prepositional) coordinator, comitative preposition (including relational), possessive predicator, and focal adverbial 'also, as well' are the most prototypical. The functions of NA that are absent in the typologically driven map of the polyfunctionality of CCs formulated in the previous literature, were additionally rationalized by showing their cognitive connection to the other – fully established – components of the map. Even though the proposed representation of the semantics of NA was primarily derived from the synchronic data and their correspondence with cross-linguistic evolutionary templates and tendencies, the map was also validated by indirect diachronic evidence provided by comparative Bantu and Niger-Congo linguistics.

The research also contributed to the typological study of CCs. The proposed map of NA suggests new areas in the network that represents the polyfunctionality of CC constructions in the languages of the world. These new areas are: a concessive sense, ideas such as 'carry' and 'be ill', the expression of qualities, a locative value, and various TAM senses. The structure of the map of NA also indicates that the conceptual and diachronic relationship between the domain of coordination and the focal sense 'also, as well' may be bi-directional. Lastly, the results of this research point to a common use of CCs (or their predecessors) in deriving other lexical classes and constructions, e.g. pronouns, adverbs, prepositions, conjunctions, and verbs. Even though a preliminary comparison with other languages reveals that all such 'novel' semantic and functional domains can be found in the uses of CCs in other linguistic systems (e.g. in Polish, Spanish, Icelandic, and Mandinka), their cross-linguistic validity is thus far tentative and should be studied in more depth in the future.

Abbreviations

ABS = absolute pronoun; BF = buffer; CC = conjunctive coordinator; CONT. PAST = continuous past; COP = copulative; COP.DEM = copulative demon-

strative; F-1…22 = features of the CC prototype (cf. Lists 1 and 2 above); FOC = focus (used as a present marker and a part of object agreement); HORT = hortative mood; KHO = root *kho* '(be) there; exists'; KU = morpheme *ku* in the comparative construction; LOC = locative; NA = morpheme *na*; NEG = negative; OA = object agreement clitic; PASS = passive voice; PAST = past tense; PC = pronominal clitic; PERF = perfect tense; POSS = possessive; REC = reciprocal; REL = relative mood; SA = subject agreement clitic ; SI = situative affix *s(i)-*; SIT = situative mood; SUBJ = subjunctive mood; 1, 2…17 = noun classes (with nouns), classes of pronominals (with pronouns) and classes of agreement clitics (in subject and object positions); * = reconstructed form; ** = ungrammaticality.

Notes

[1]   The development of the cognates of *na* in situations of language-contact has been studied by Mous (2004).

[2]   As will be evident from the subsequent discussion, some components of the semantic potential of NA are conceptually distant from the value of coordination. Nevertheless, all of them are cognitively connected.

[3]   I have used the same framework in the study of coordinators in Polish (Andrason 2016d, *forthcoming* b) and Kituba (Andrason *forthcoming* a). Without being identical, this section exhibits certain similarities with the theoretical sections of those papers.

[4]   See also the intersective function of conjunctive coordination equivalent to the operators ∧ and ∩ argued by Gazdar (1980), Pertee & Rooth (1983), Keenan & Faltz (1985), and Champollion (2016).

[5]   Scholars working within the generative framework discern two subtypes of Coordinate Structure Constraint: Conjunct Constraint (where whole conjuncts are moved) and Element Constraint (where elements that are contained within a conjunct are moved; see Grosu 1973; Pollard & Sag 1994; Kehler 1996).

[6]   The parts in square brackets are absent in Andrason (2016d).

[7]   This feature is related to feature 11. Feature 19 is, however, stronger. That is, the CC prototype not only links lexical and syntactic classes other than nouns and NPs – it links all possible lexical and syntactic classes.

[8]   Additionally, CC can be differentiated by other properties that further structure the category. For instance, some CCs are accompanied by the meaning of sequentiality equivalent to 'and then' (this semantic feature necessarily implies some degree of asymmetry). Mono-syndetic binary CCs can be differentiated by their structure and classified within the following five types: [A] [co B]; [A co] [B]; [A] [B co], [co A] [B], and [A] [co] [B] (Haspelmath 2004, 2007; for other bi-syndetic and/or multiple-coordinand CCs consult Haspelmath 2007). All such features, however, have little bearing on the categorial position of a CC construction within the CC taxon.

[9]   Both sources may be derived from even more basic lexemes. For instance, comitative arguably develops from expressions of existence (Haspelmath 2004). Other sources of conjunctive coordinators have also been reported. For example, in some languages, the idea of coordination is expressed by quantifiers, such as 'two', 'both' or 'all' (Paperno 2012: 12) or by the so-called 'co-ordinative' pronouns (Vydrin

2010). Since, to my knowledge, no attempt has been made to relate these functions to the typological map proposed by Haspelmath (2004), I will not include them in my representation. Consecutive adverbs constitute another source of conjunctive coordination. These constructions arguably feed V-coordinators directly (see Mithun 1988; Malchukov 2004: 186).

[10] The directionality of certain components of the map has not been determined thus far (see the stage of 'even' and that of comparison). Furthermore, in the original map posited by Haspelmath (2004), the link between the N-coordinator and the V-coordinator is bidirectional (see endnote 9). The linkage that is still tentative is marked by dashed arrows. Contrary to the map proposed in Andrason (*forthcoming* b), I do not include the so-called 'empty' use and the sense of 'both' which may possibly constitute extensions from 'also' and/or 'V/N-coordinator' (apart from being an alternative source of the entire map as proposed by Paperno 2012). The exact position of these senses on the map is uncertain and, as will be evident from the subsequent discussion, they are irrelevant for NA. Malchukov (2004) makes a correct distinction between the contrastive and adversative senses, and additionally distinguishes a mirative sense. For the purpose of this study, these distinctions are, however, irrelevant, and a broad term 'contrastive-adversative' will be used.

[11] It is evident that this map makes reference to the grammaticalization process that underlines the form, showing how the conceptual extensions of meaning have actually proceeded (Janda 2015: 137). Because of its cognitive foundation and cross-linguistic pervasiveness, this map can be used even though direct diachronic data related to the grammatical history of a specific CC form are scarce or unavailable (compare Heine 1997b).

[12] When accompanying nouns and pronouns, the numbers indicate noun classes. On verbs, the numbers refer to subject (SA) and/or object (OA) agreement clitics. A complete list explaining all the abbreviations is provided at the end of the paper.

[13] In Xhosa, classes 16, 17, and 18 have lost their productivity and operativeness (Mtoba 1985; Oosthuysen 2016: 46-46). Therefore, with a few exceptions (Carstens & Mletshe 2015), the *ku* agreement is analyzed in a uniform manner in Xhosa scholarship, i.e. as class 15 (Mtoba 1985; Mali 1995; Du Plessis 1997; Visser 1989, 2005, 2015; Du Plessis & Visser 1992). That is, no distinction in class number is made irrespective of whether *ku* is used in existential, expletive, locative (residual), and infinitival functions. In other Bantu languages where locative classes have maintained their use, *ku* agreement may refer to class 15 (infinitive) or 17 (locative/existential/expletive). For instance, in Zulu – a closely related Nguni language – the expletive/existential/sentential uses of *ku* are categorized as class 17, while infinitival agreement reflects class 15 (Preminger 2014; Zeller 2004; other class numbers are used in Baker 2008: 163). Default agreement in Nguni has been discussed in Buell (2012). In this paper, I will follow the convention used in most Xhosa studies, and which is also employed at Stellenbosch University, i.e. consistently glossing the *ku* class as 15.

[14] This imbalance in control is visible in Bantu in the so-called asymmetric coordinating constructions and symmetric coordinating constructions (cf. Botne 2003).

[15] With respect to arguments, scholars sometimes distinguish nominative case and objective case in Xhosa (Du Plessis & Visser 1992, 1998). Nevertheless, this distinction principally draws from syntactic properties such as word order, agreement, and argument alternation (especially passivization). Nominative is understood as the 'case' of subject while objective is the 'case' of all types of objects.

[16] According to the standard generative analysis, the post-verbal position reflects the base position of the subject, from which it can be moved to its canonical pre-verbal position.

[17] Such independent pronouns reflect highly grammaticalized complexes compounded of the demonstrative element *na* (distinct from NA) and pronominal and/or class

affixes, e.g. *m-* (1[st]SG) + *na* 'I' and *ye-* (3[rd]SG / class 1) + *-na* 'he/she'.

[18] This set of pronouns is distinct from pronominal clitics or affixes used on verbs. It is identical to the original pronominal component of the absolute, emphatic pronouns (compare *m-na* 'I, me' with *na-m* 'and I, me too').

[19] As suggested to me by a reviewer, this also applies to the examples with animate nouns in (19), the examples in (20) with singular inanimate nouns, and the examples in (21), which all show first-conjunct agreement (unless agreement is in the default classes 2, 6 or 10), even when the first noun is inanimate and the second noun is human, as in (21d).

[20] For some informants, example (19b) is ungrammatical. According to these speakers, in order to use the form *ayatya*, the noun *isele* must be inflected in the plural, i.e. *amasele* (*Inyoka namasele ayatya*).

[21] The coordination of an animate referent with an inanimate one typically resolves in functions distinct from coordinate-hood, e.g. possession, carrying, etc. (see section 3.2). In such cases, if the animate subject appears in singular, the verb exhibits singular subject agreement.

[22] On left dislocation in Xhosa and Nguni see Van der Spuy (1993) and Andrason & Visser (2016).

[23] Accordingly, infinitives exhibit the prefix *uku-* of class 15 and may trigger the agreement affix *ku-* on the verb (regarding the nominal and verbal properties of infinitives in Xhosa consult Du Plessis & Visser 1992: 87-92).

[24] Structures that involve the relative or the situative mood are considered full-fledged clauses in Xhosa (Du Plessis & Visser 1992: 167).

[25] To be exact, in copulative clauses, the subject prefix – typical of verbs – is linked to a nominal through a copulative morpheme.

[26] This stems from the rule that any movement out of the canonical position usually triggers object agreement in Xhosa.

[27] Different prepositional uses of NA are sometimes referred to as 'associative' (Du Plessis 1978: 101; Du Plessis & Visser 1992: 157).

[28] For a comprehensive list of verbs that take the preposition *na-*, consult Du Plessis (1978: 105, 271). Another possible label is "unspecified co-participation" (Creissels & Nouguier-Voisin 2008: 292).

[29] The predicative type of NA derives from its prepositional sense typical of the comitative (see endnote 31 and section 4).

[30] The various predicative uses of NA and their extensions (see below) are sometimes referred to as copulative verbs with NA (Du Plessis & Visser 1992: 241). For a more exhaustive list of verbs that can be used with NA in tenses other than the Present, see Du Plessis & Visser (1992: 241-242).

[31] This relation is clear in cases where the possession refers to time frames (or moods) other than present (indicative). In such instances, the possessive value derives from the use of a genuine verbal copula base (e.g. *ba* 'be(come)') inflected in an appropriate tense and accompanied by a comitative type of NA, i.e. from the expression 'be with'. This type of development (i.e. from prepositional predication or from the expression 'be with' to the idea of possession) is common cross-linguistically (Heine & Kuteva 2002). It is found in Icelandic, Russian, Arabic, Mandinka, etc.

[32] The genuine pronominal elements used with NA in this construction are also found with prepositions *ku-* and *nga-*. They also appear in absolute emphatic pronouns (see the next endnote).

[33] There are other constructions in Xhosa that look as mirror images of forms such as *nam, nawe* or *nabo*, namely *mna, wena* or *bona*, respectively. These forms are the so-called absolute emphatic pronouns (regarding the use and syntactic properties of absolute pronouns, consult Du Plessis & Visser 1992: 371-374). In this series of pronouns, the element *na-* merged with pronominal affixes identical to those found

in the series of *nam*. That is to say, *mna* 'I, as for me' derives from *m-na, *wena* 'you, as for you' derives from *we-na, and *bona* 'they, as for them' derives from *bo-na. In some Xhosa variants, this usage extends to monosyllabic demonstrative pronouns, e.g. *lena* 'this' (Mini 2003: 417). However, this type of *na* is etymologically distinct from the NA analyzed in the present paper. It rather corresponds to the demonstrative (pronominal) root *na* (Guthrie 1970: 19; Du Plessis & Visser 1992: 281-282). This demonstrative pronominal *na* also appears as an indissoluble part of a series of deictic presentative constructions, the so-called (locative) copulative demonstratives, e.g. *nanku* 'here is' (class 1) or *naba* 'here are' (class 2; see examples (i a-b) below; Mini 2003: 436; Du Plessis & Visser 1992: 282, 292). The copulative demonstrative series probably derive from complex constructions composed of the demonstrative (pronominal) *na, the item *ni, and a clitic pronoun: *na-ni-ɣu > *nanku* and * *na-ni-ba* > *naba (Ziervogel 1959: 48).

(i) a. *Nanku*   *uLandile.*
        COP.DEM.1   1a.Landile
        ˙Here is Landile'.
   b.   *Naba*   *abazali*   *bam.*
        COP.DEM.2   2.parent   my
        ˙Here are my parents'.

[34] There is also the form *khona*, where *na* seems to be suffixed to the root *kho*. *Khona* is commonly used with subject prefixes to express existence or presence, exhibiting the sense similar to 'be present, be there/here, exist' (ii a). It may also be used as an adverb indicating location 'there, in that place' (ii b). This use of NA is only possible in the positive where it is optional (i.e. *kho* may be used alone). In the negative, only *kho* is grammatical. However, as was the case of the relationship between the pronominal series *mna* and *nam*, *nakho* and *khona* seem to be etymologically unrelated. Regarding the use of comitative-additive markers in expressions of existence in Bantu consult Güldemann (2003) and Marten (2013).

(ii) a. *Utata*   *ukho*na.
         1a.father   1.be.present
         'The father is present / is here'.
   b.   *Abantwana*   *badlala*   *kho*na.
         1.child   2.play   there
         'The children are playing there'.

Lastly, there are two other *na* elements in Xhosa: the question marker *ná* and the 'emphatic' clitic *ná* (e.g. *naphi na* 'wherever'; Mini 2003: 417-418). These two items are genetically distinct from NA.

[35] The area dashed in light grey (V-coordinator) represents a semantic domain that is generalized only partially, i.e. with *xa* and with the relative mood. One can note that the direction of the meaning extension linking the N-coordinator and the 'also' and 'even' stages is opposite to that posited in Figure 2. This reflects the fact that diachronically NA most likely derives from a comitative sense.

[36] The plausibility of this development can be supported by analogous meaning extensions found in Polish (*Olek jest z Tomkiem* 'Alex and Tom are together', i.e. they have a love affair/are a couple) and Spanish (*Estoy contigo en que no se debe hacer esto* 'I agree with you, one shouldn't do this'). The emergence of other relational senses from the comitative proper value is also extensively attested across languages. For instance, it is found in Polish where the comitative *z* is widely employed in various relational nuances: *rozmawiać z* 'talk with/to', *kłócić się z* 'argue with', *ożenić się z* 'marry somebody (lit. with)', etc.

[37] The extension from possession to illnesses can be found in various languages, for example in Polish: *Mam korzonki* 'I experience pain in the nerve roots' (lit. 'I have nerve roots'). The use of possessive constructions to express qualities is also well documented cross-linguistically, see Polish expressions such as *Mam głowę do* 'I am smart, skilled in' (lit. 'I have [a] head') or *Mam rękę do* 'I am skilled with, I master something' (lit. 'I have [a] hand').

[38] This can be supported by cross-linguistic evidence. In some languages, original comitative adpositions that are used in broad relational senses may also express proximity similar to the English preposition *from* (e.g. in Kituba *ti*). The first step of this extension may be observed in Polish where certain relational uses of *z* 'with' imply proximity: *Polska graniczy z Niemcami* 'Poland borders with Germany', *Jestem dość blisko z nim* 'I am quite close to (lit. with) him'.

[39] Malchukov (2004) links conjunctive coordinators to a concessive sense 'although' via an adversative sense 'but'. This is correct and, indeed, various adversative lexemes exhibit such a type of polyfunctionality. However, in the case of NA, this type of linking is less plausible, as NA is usually not found in a contrastive-adversative function. The concessive use of NA rather derives from the meaning 'even' (or 'including') as clearly demonstrated by *naxa* or *noxa*. These forms are successors of original analytical compositions: *na* 'even' + *xa* 'when'.

[40] The link of the majority of these senses to the idea of conjunctive coordination is, however, well known in scholarship. This especially holds true for various possessive meaning extensions and relational-comitative senses, which are pervasive in the polyfunctionality of conjunctive coordinators across languages.

Bibliographical References

Andrason, Alexander 2016a. *A Complex System of Complex Predicates: Tense, Taxis, Aspect and Mood in Basse Mandinka from a Grammaticalization and Cognitive Perspective*. Ph.D. dissertation. Stellenbosch University, Stellenbosch.

Andrason, Alexander 2016b. From vectors to waves and streams: An alternative approach to semantic maps. *Stellenbosch Papers in Linguistics* 45. 1-29.

Andrason, Alexander 2016c. Dynamic networks and syntax – The case of a conjunctive coordinator. Paper presented at the Pre-Comparative Germanic Syntax Workshop 31, Stellenbosch University, November 11, 2016.

Andrason, Alexander 2016d. The coordinators *i* and *z* in Polish: A cognitive-typological approach. Part 1. *Lingua Posnaniensis* 58,1. 7-24.

Andrason, Alexander *forthcoming* a. The map of TI in Kituba – testing and expanding the typological model of the polysemy of conjunctive coordinators. *Studies in African Linguistics*.

Andrason, Alexander *forthcoming* b. The coordinators *i* and *z* in Polish: A cognitive-typological approach. Part 2. *Lingua Posnaniensis* 59,2.

Andrason, Alexander & Visser, Marianna 2016. The mosaic evolution of Left Dislocation in Xhosa. *Stellenbosch Papers in Linguistics* 50. 139-158.

Andrason, Alexander; Westbury, Josh & van der Merwe, Christo 2016. Left dislocation: An exploration in linguistic typology. *Stellenbosch Papers in Linguistics* 50. 1-20.

Bertinetto, Pier Marco 2000. The progressive in Romance, as compared with English. In Dahl, Östen (ed.), *Tense and Aspect in the Languages of Europe*. Berlin: De Gruyter. 559-604.

Bertinetto, Pier Marco; De Groot, Casper & Ebert, Karen 2000. The progressive in Europe. In Dahl, Östen (ed.), *Tense and Aspect in the Languages of Europe*. Berlin: De Gruyter. 517-558.

Baker, Marc 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press.

Bokamba, Eyamba 1985. Verbal agreement as a noncyclic rule in Bantu. In Goyvaerts, Didier (ed.), *African Linguistics*. Amsterdam: John Benjamins. 9-54.

Bosch, Sonja 1985. Subject and object agreement in Zulu. M.A. thesis. University of Pretoria.

Bostoen, Koen; Dom, Sebastian & Segerer, Guillaume 2015. The antipassive in Bantu. *Linguistics* 53,4. 731-772.

Botne, Robert 2003. Lega (Beya dialect). In Nurse, Derek & Philippson, Gérard (eds.), *The Bantu languages*. London: Routledge. 422-449.

Bryant, Alexandra 2007. *Xhosa for Second-Language Learners*. South Africa: Alexandra Bryant Publisher.

Buell, Leston 2012. Class 17 as a non-locative noun class in Zulu. *Journal of African Languages and Linguistics* 33,1. 1-35.

Bybee, Joan; Perkins, Revere & Pagliuca, William 1994. *The Evolution of Grammar*. Chicago: The University of Chicago Press.

Carstens, Vicki & Mletshe, Loyiso 2015. Negative concord and nominal licensing in Xhosa and Zulu. *Natural Language & Linguistic Theory* 11. 1-44.

Champollion, Lucas 2016. Ten men and women got married today: Noun coordination and the intersective theory of conjunction. *Journal of Semantics* 33. 561-622.

Corbett, Greville & Mtenje, Alfred 1987. Gender agreement in Chichewa. *Studies in African Linguistics* 18,1. 1-38.

Couper-Kuhlen, Elizabeth 1996. Intonation and clause combining in discourse: the case of *because*. *Pragmatics* 6,3. 389-426.

Couper-Kuhlen, Elizabeth 2001. Intonation and discourse: Current views from within. In Schiffrin, Deborah; Tannen, Deborah & Hamilton, Heidi (eds.), *The Handbook of Discourse Analysis*. Oxford: Blackwell. 13-34.

Creissels, Denis 2016. Additive coordination, comitative adjunction, and associative plural in Tswana. *Linguistique et langues africaines* 2. 11-42.

Creissels, Denis; Dimmendaal, Gerrit J.; Frajzyngier, Zygmunt & König, Christa 2008. Africa as a morphosyntactic area. In Heine, Bernd & Nurse, Derek (eds.), *A linguistic geography of Africa*. Cambridge: Cambridge University Press. 86-150.

Creissels, Denis & Nouguier-Voisin, Sylvie 2008. Valency-changing operations in Wolof and the notion of "co-participation." In König, Ekkehard & Gast, Volker (eds.), *Reciprocals and Reflexives: Theoretical and Typological Explorations*. Berlin: De Gruyter. 289-306.

Croft, William 2003. *Typology and Universals*. Cambridge: Cambridge University Press.

Dąbrowska, Ewa & Divjak, Dagmar (eds.) 2015. *Handbook of Cognitive Linguistics*. Berlin: De Gruyter.

Demuth, Katherine & Johnson, Mark 1989. Interaction between discourse functions and agreement in Setawana. *Journal of African Languages and Linguistics* 11. 21-35.

De Vos, Mark & Mitchley, Hazel 2012. Subject marking and preverbal coordination in Sesotho: a perspective from Optimality Theory. *Southern African Linguistics and Applied Language Studies* 30,2. 155-170.

Du Plessis, Jacobus A. 1978. *IsiXhosa 4*. Goodwood: Oudiovista.

Du Plessis, Jacobus A. 1997. *Morphology of the African Languages. Stellenbosch Communications in African Languages 6*. Stellenbosch: Stellenbosch University.

Du Plessis, Jacobus A. 1999. *Lexical semantics and the African Languages. Stellenbosch Communications in African Languages 8*. Stellenbosch: Stellenbosch University.

Du Plessis, Jacobus A. & Visser, Marianna 1992. *Xhosa Syntax*. Pretoria: Via Afrika.

Du Plessis, Jacobus A. & Visser, Marianna 1993. *Co-ordination and the subjunctive in Xhosa. South African Journal of African Languages* 13. 74-81.

Du Plessis, Jacobus A. & Visser, Marianna 1998. *Isintaksi yesixhosa. Stellenbosch Communications in African Languages 7*. Stellenbosch: Stellenbosch University.

Downing, Laura 2011. The prosody of 'dislocation' in selected Bantu languages. *Lingua* 121. 772-786.

Downing, Laura J. & Rialland, Annie (eds.) 2017. *Intonation in African Tone Languages*. Berlin: De Gruyter.

Downing, Laura J. & Mtenje, Alfred 2011. Prosodic phrasing of Chichewa relative clauses. *Journal of African Languages and Linguistics* 31. 65-112.

Downing, Laura J.; Mtenje, Alfred & Pompino-Marshall, Bernd 2004.

Prosody and information structure in Chichewa. *Zentrum für allgemeine Sprachwissenschaft, Typologie und Universalienforschung* 37. 167-186.

Ebert, Karen 2000. Progressive markers in Germanic languages. In Dahl, Östen (ed.), *Tense and Aspect in the Languages of Europe*. Berlin: De Gruyter. 605-653.

Fleisch, Axel 2005. Agent phrases in Bantu passives. In Voeltz, Erhard (ed.), *Studies in African Linguistic Typology*. Amsterdam: John Benjamins. 93-111.

Gazdar, Gerald 1980. A cross-categorial semantics for coordination. *Linguistics and Philosophy* 3. 407-409.

Givón, Talmy 1970. The resolution of gender conflicts in Bantu conjunctions: when syntax and semantics clash. In Binnick, Robert I. (ed.), *Papers from the 6th Regional Meeting, Chicago Linguistic Society, April 16-18*. Chicago: CLS. 250-261.

Güldemann, Tom 2003. Grammaticalization. In Nurse, Derek & Philippson, Gérard (eds.), *The Bantu languages*. London: Routledge. 182-194.

Guthrie, Malcolm 1970. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages. Vol. 4.* Farnborough: Gregg Press.

Hamawand, Zeki 2016. *Semantics. A cognitive account of linguistic meaning.* Sheffield: Equinox.

Haspelmath, Martin 2003. The geometry of grammatical meaning semantic maps and cross-linguistic comparison. In Tomasello, Michael (ed.), *The New Psychology of Language*. Mahwah: Lawrence Erlbaum Associates. 211-242.

Haspelmath, Martin 2004. Coordinating constructions: An overview. In Haspelmath, Martin (ed.), *Coordinating Constructions*. Amsterdam: John Benjamins. 1-40.

Haspelmath, Martin 2007. Coordination. In Shopen, Timothy (ed.), *Language Typology and Syntactic Description. Vol. II: Complex Constructions*. Cambridge: Cambridge University Press. 1-51.

Haspelmath, Martin 2011. Nominal and verbal conjunction. In Dryer, Matthew S. & Haspelmath, Martin (eds.), *The World Atlas of Language Structures Online*. Munich: Max Planck Digital Library.

Heine, Bernd 1997a. *Possession, Cognitive Sources, Forces, and Grammaticalization.* Cambridge: Cambridge University Press.

Heine, Bernd 1997b. *Cognitive Foundations of Grammar*. Oxford: Oxford University Press.

Heine, Bernd & Kuteva, Tania 2002. *World Lexicon of Grammaticalization.* Cambridge: Cambridge University Press.

Hopper, Paul & Traugott, Elisabeth C. 2003. *Grammaticalization*. Cambridge: Cambridge University Press.

Hyman, Larry M. 2003. Basaá (A 43). In Nurse, Derek & Philippson, Gérrard (eds.), *The Bantu Languages*. New York: Routledge. 257-282.

Janda, Laura 2015. Cognitive linguistics in the Year 2015. *Cognitive Semantics* 1. 131-154.

Johannessen, Janne 1998. *Coordination*. Oxford: Oxford University Press.

Jokweni, Mbulelo W. 1995. *Aspects of Isixhosa Phrasal Phonology*. Ph.D. dissertation. University of Illinois.

Jordan, Archibald Campbell 1966. A Practical Course in Xhosa. Johannesburg: Longmans.

Keenan, Edward & Faltz, Leonard 1985. *Boolean Semantics for Natural Languages*. Dordrecht: Kluwer.

Malchukov, Andrej 2004. Towards a semantic typology of adversative and contrast marking. *Journal of Semantics* 21. 177-198.

Mali, Zoliswa 1995. The existential sentences in Xhosa. M.A. thesis. University of Stellenbosch.

Marten, Lutz 2000. Agreement with conjoined noun phrases in Swahili. *Afrikanistische Arbeitspapiere* 64. 75-96.

Marten, Lutz 2003. Dynamic and pragmatic partial agreement in Luguru. In Zribi-Hertz, Anee & Sauzet, Patrick (eds.), *Typologie des langues d'Afrique et universaux de la grammaire*. Vol. 1. Paris: L'Harmattan. 113-139.

Marten, Lutz 2005. The dynamics of agreement and conjunction. *Lingua* 115. 527-547.

Marten, Lutz 2011. Information structure and agreement: Subjects and subject markers in Swahili and Herero. *Lingua* 121. 787-804.

Marten, Lutz 2013. Structure and interpretation in Swahili existential constructions. *Italian Journal of Linguistics* 25,1. 45-73.

Meeussen, Achille 1981 [1969]. *Bantu lexical reconstructions*. Tervuren: Musée Royal de l'Afrique Centrale.

Mini, Buyiswa M. (ed.) 2003. *The Greater Dictionary of IsiXhosa. Vol 2*. Fort Hare: University of Fort Hare.

Mithun, Marianne 1988. Grammaticalization of coordination. In Haiman, John & Thompson, Sandra (eds.), *Clause Combining in Grammar and Discourse*. Amsterdam: Benjamins. 331-361.

Mitchley, Hazel 2015. Agreement and coordination in Xitsonga Sesotho and isiXhosa: An optimality theoretic perspective. M.A. thesis. Rhodes University.

Mkude, Daniel J. 1996. Prototypicality and the syntax of possession in Swahili. *Journal of Asian and African Studies* 51. 1-14.

Mletshe, Loyiso 1995. The subject in Xhosa. M.A. thesis. University of Stellenbosch.

Mous, Maarten 2004. The grammar of conjunctive and disjunctive coordination in Iraqw. In Haspelmath, Martin (ed.), *Coordinating constructions*. Amsterdam: John Benjamins. 109-122.

Mous, Maarten & Mreta, Abel 2004. The comitative/conjunctive preposition *na* in Chathu (Pare), a Bantu language of Tanzania. *South African Journal of African Languages* 24,4. 219-229.

Mtoba, H. P. 1985. The subjectival concord *ku* in Xhosa. *Stellenbosch Studies in African Languages* 8,1. 68-96.

Mufwene, Salikoko 2003. Contact languages in the Bantu area. In Nurse, Derek & Philippson, Gérard (eds.), *The Bantu languages*. London: Curzon Press. 195-208.

Narrog, Heiko & van der Auwera, Johann 2011. Grammaticalization and semantic maps. In Narrog, Heiko & Heine, Bernd (eds.), *The Oxford Handbook of Grammaticalization*. Oxford: Oxford University Press. 318-327.

Nurse, Derek 2008. *Tense and Aspect in Bantu*. Oxford: Oxford University Press.

Oosthuysen, Jacobus Christiaan (Koos) 2016. *The Grammar of isiXhosa*. Stellenbosch: Sun Media.

Paperno, Denis 2012. *Semantics and Syntax of Non-Standard Coordination*. Los Angeles: University of California.

Partee, Barbara & Rooth, Mats 1983. Generalized conjunction and type ambiguity. In Bäuerle, Rainer; Schwarze, Christoph & von Stechow, Arnim (eds.), *Meaning, Use and Interpretation of Language*. Berlin: De Gruyter. 361-383.

Payne, John 1985. Complex phrases and complex sentences. In Shopen, Timothy (ed.), *Language Typology and Syntactic Description. Vol. 2. Complex Constructions*. Cambridge: Cambridge University Press. 3-41.

Preminger, Omer 2014. *Agreement and Its Failures*. Cambridge, MA: The MIT Press.

Riedel, Kristina & De Vos, Mark 2017. Swahili coordinated infinitives and non-canonical case-marking. *Journal of African Languages and Linguistics* 38,2. 265-288.

Schadeberg, Thilo 1992. *A Sketch of Swahili Morphology*. Cologne: Rüdiger Köppe.

Schadeberg, Thilo 2003. Derivation. In Nurse, Derek & Philippson, Gérard (eds.), *The Bantu Languages*. New York: Routledge. 71-89.

Schadeberg, Thilo 2010. Conjoint infinitive clauses in Swahili. In Floricic, Franck (ed.), *Essais de typologie et de linguistique générale: mélanges offerts à Denis Creissels*. Lyon: ENS. 107-118.

Schladt, Mathias 1998. Reciprocals in Bantu languages. *Afrikanistische Arbeitspapiere* 53. 5-25.

Schneider-Zioga, Patricia 2015. Additive focus in Kinande. In Kramer, Ruth; Zsiga, Elizabeth C. & Boyer, One Tlale (eds.), *Selected Proceedings of the 44th Annual Conference on African Linguistics*. Somerville, MA: Cascadilla Proceedings Project. 254-263.

Sineke, Thembela G. 1997. *Agreement and Concord with Conjoined Noun Phrases in Xhosa*. M.A. thesis. Stellenbosch University, Stellenbosch.

Sivundla, Koleka P. 1987. *Some Observations on Xhosa Coordination*. M.A. thesis. University of Stellenbosch, Stellenbosch.

Van der Spuy, Andrew 1993. Dislocated noun phrases in Nguni. *Lingua* 90. 335-355.

Visser, Marianna W. 1989. The syntax of the infinitive in Xhosa. *South African Journal of African Languages* 9,4. 154-185.

Visser, Marianna W. 2005. Xhosa. In Brown, Keith (ed.), *Encyclopedia of Language and Linguistics*. Oxford: Elsevier. 705-716.

Visser, Marianna W. 2015. Xhosa Syntax. Manuscript, Stellenbosch University.

Voeltz, Erhard 1971. Surface constraints and agreement resolution: Some evidence from Xhosa. *Studies in African Linguistics* 2,1. 37-60.

Vydrin, Valentin 2010. Co-ordinative pronouns in Southern and South-Western Mande: A second compound pronouns area in Africa? In Pozdniakov, Konstantin; Vydrin, Valentin & Zheltov, Alexander (eds.), *Personal Pronouns in Niger-Congo Languages: International Workshop (St. Petersburg, Sept. 13-15, 2010)*. St. Petersburg: St. Petersburg University Press. 164-172.

Young, Robert 2005. Bantu comitative and the E-type pronoun. Manuscript, Cornell University.

Yuasa, Etsuyo & Sadock, Jerry 2002. Pseudo-subordination: a mismatch between syntax and semantics. *Journal of Linguistics* 38,1. 87-111.

Zeller, Jochen 2008. The subject marker in Bantu as an antifocus marker. *Stellenbosch Papers in Linguistics* 38. 221-254.

Zerbian, Sabine 2004. Phonological phrasing in Xhosa. *ZAS Papers in Linguistics* 37. 71-99.

Ziervogel, Dirk 1959. *A Grammar of Northern Transvaal Ndebele*. Pretoria: J. L. Van Schaik.

Zwarts, Joost 2010. Semantic map geometry: Two approaches. *Linguistic Discovery* 8,1. 377-395.