(Non-)specificity and Case in Gorwaa[1]
The *-oo/-(h)ee* suffix

Elisabeth J. Kerr

This paper presents results of a corpus study on the South-Cushitic language Gorwaa which investigated the 'enigmatic' *-oo/-(h)ee* suffix (Mous & Qorro 2010:47, Harvey 2018). Various contexts in which this nominal suffix occurs are identified, including negation, polar questions, universal quantification, adverbials, the object of comparison, and locatives. I characterise these as non-specific contexts and frame-setting topics. I compare these contexts to those in which the augment (nominal pre-prefix) is dropped in Bantu languages and, based on the empirical similarities, I discuss whether analyses of the Bantu augment can account for the Gorwaa cases. One analysis proposes that the suffix marks (non-)specificity, which I show is not fully satisfactory. Instead, I propose that what truly conditions the appearance of the suffix is the syntactic position of the nominal with respect to the verb phrase.

1. Introduction

South-Cushitic languages are a branch of Cushitic (Afroasiatic) languages spoken in East Africa (Tosco 2000). A recent corpus by Harvey (2017) compiles years of conversation and elicitation sessions with Gorwaa speakers in Tanzania, presenting a rich linguistic and cultural resource. In this paper, I investigate one suffix, *-oo/-(h)ee*, that has been previously labelled as TOP (topic) and background (Mous 1993), although the terms have been described as 'not particularly satisfactory', with the suffix occurring in 'several, seemingly disparate morphosyntactic environments' (Harvey 2018:179). I use the Gorwaa corpus to investigate the distribution of the *-oo/-(h)ee* suffix in Gorwaa, based primarily on the work by Mous & Qorro (2010) on the cognate suffix *-o/-(h)oo* in Iraqw, a closely related South-Cushitic language. I consider semantic properties that unify the contexts in which the suffix appears, and find that there are two fundamentally different context types: non-specific contexts, and frame-setting topics. I discuss how these con-

---

[1] In the interests of academic integrity, the author (who is also an editor of these proceedings) was not involved in the editing of this paper and was not given access to editorial files and correspondence related to this submission.

texts parallel those of augment drop in Bantu, and therefore consider analyses of augment drop and their application to South Cushitic. I argue that the primary purpose of the suffix is in fact syntactic, namely that it licenses nominals. In section §2 I lay out some background on the Gorwaa language, the corpus, and South-Cushitic morphosyntax; §3 presents the contexts in which the suffix was found; section §4 considers these contexts, compares them to Bantu augment drop, discusses an anaysis in terms of non-specificity and how topicality challenges this, and instead proposes an analysis in terms of nominal licensing; section §5 discusses some implications and directions for further work, and section §6 concludes.

2. Background
2.1. Gorwaa

Gorwaa (ISO 639-3: gow) is an endangered Afroasiatic language spoken in Tanzania (Harvey 2018, 2019). It is closely related to Iraqw, Alagwa, and Burunge; I use the term 'South-Cushitic' to refer to these four languages, following Hetzron (1980) and Tosco (2000). Before Harvey (2018)'s ELDP Gorwaa corpus, there was little information about the Gorwaa language (Tosco 2000:113). This means that there are still significant unknowns about various aspects of Gorwaa grammar, which I will not be able to solve in this single paper.

2.2. Methodology

The data from this paper come from a corpus collected by Andrew Harvey and deposited in the ELAR archive (Harvey 2017). The corpus study was conducted using a FLEx file dated to February 2018. Changes that have been made in later versions of the corpus are additional glossing/interlinearisation and the addition of new material collected by researchers in Tanzania.

A few conventions of the corpus should be laid out here. Firstly, the symbol ∼ is used to express morphemes that are not segmentable, such as the level pitch accent (LPA). I use the orthography from the corpus, which is the one used by the Gorwaa Language Committee. Two characters to note are </>, which represents the pharyngeal fricative [ʕ], and <'>, which represents the glottal stop [ʔ].

Some additional data was collected by Andrew Harvey in 2019 specifically for the investigation of the *-oo/-(h)ee* suffix, which I discuss in this paper. Alongside each example I provide the form uid (unique identifier), which is given in [YYYYMMDD id] format, e.g. [20151021 249.1] is line id 249.1, recorded on the 21st October 2015. This form id allows the reader to look up the form in the ELDP corpus (which is available open-access),[2] and also to trace the utterance back to the original audio/video file, if desired.

2.3. South-Cushitic morphosyntax and the -oo/-(h)ee suffix

Following Harvey (2018)'s work in the nominal domain of Gorwaa, I will investigate a particular nominal suffix, namely the *-oo/-(h)ee* suffix (which I will refer to in short as 'the suffix'). This suffix, and its Iraqw cognate *-o/-(h)oo*, has been the subject of debate in previous litera-

---

ture on South-Cushitic. It has been proposed that it is a background marker (Mous 1993), topic marker (Harvey 2018), and scope marker (Mous & Qorro 2010), although Harvey notes that none of these descriptions is 'particularly satisfactory', with the suffix 'occur[ring] in several, seemingly disparate morphosyntactic environments' (Harvey 2018:179). While Mous & Qorro (2010) give a detailed account of the contexts in which the Iraqw suffix appears and propose a syntactic analysis that is compatible with the analysis I will develop in this paper, the Gorwaa suffix is less well-described than its Iraqw counterpart, and Mous & Qorro (2010) do not formalise their notion of scope marking. This paper therefore investigates how the Gorwaa data compare with the Iraqw data, showing a great deal of empirical overlap, and then turns to a formal analysis, ultimately showing how the semantic and syntactic facts captured in Mous & Qorro (2010)'s analysis can be seen from a different theoretical perspective by comparing the empirical distribution of the suffix to that of augment drop in Bantu.

Before delving into the data, it is worth giving a brief overview of Gorwaa syntax, although the reader is referred to Harvey (2018) for more detail. I use the glossing abbreviations and translations from the Gorwaa corpus; the abbreviations are detailed at the end of this paper.

South-Cushitic languages have been described as verb-final (Mous 2005), although Gorwaa has also been termed nonconfigurational (Harvey 2018). There is little discussion in the literature as to whether South-Cushitic languages have abstract Case, with previous discussion focussed on morphological case, which is marked on nominals in East Cushitic but not South Cushitic (Sasse 1984; Tosco 2000).

There is a verbal form called the selector which is core to each clause (Mous 2005). The selector is considered by Harvey (2018:139) to be an auxiliary to which various affixes cliticise; if there are no affixes it is glossed as AUX and pronounced as *a*. Selectors in Cushitic have also been described as preverbal clitic clusters; they are syntactically independent from the verb as adverbials and objects may intervene (Kießling 2000). Mood, aspect, voice, argument alignment and adverbial case can all be marked on the Gorwaa selector (Harvey 2018). For instance, the examples below (from Harvey 2018:88) show different selector forms for the argument *garmá* 'boy' as the 3rd person agent of a transitive clause (glossed as A) and the sole argument of an intransitive clause (glossed as S). In these examples the selector also encodes the female patient of the transitive clause (glossed P.F) and the imperfective aspect of the intransitive verb (IMPRF).

(1) garma baahaa **ngina** taáhh   [20160921i.1]
     garmá   baahaár   **ng-a-∅-na**   taáhh
     boy.L.MO hyaena.L.FR A.3-P.F-AUX-IMPRF hit.M.PST
     'The boy hit the hyaena.'

(2) garma   **ina**   /akuút   [20160921i.23]
     garmá   **i-∅-na**   /akuút
     boy.L.MO S.3-AUX-IMPRF jump.M.PST
     'The boy jumped.'

The following example shows that the selector is syntactically independent from the verb, as a constituent (here, a direct object) may intervene.

(3) aní **a sleér** diíf   [201609271222-228.26]
     aní   ∅-∅   **sleér**   diíf
     PRO.1SG S.P-AUX cow.L.FR hit.1SG
     'I hit the cow.'

<div align="center">

3.   Contexts

</div>

I will first present an overview of the contexts in which the *-oo/-(h)ee* suffix was found in the Gorwaa corpus, before discussing how these contexts can be unified. The suffix has two allomorphs, *-oo* and *-(h)ee*. Although these come from different sources historically, synchronically the choice between the two is purely determined by phonological factors (Harvey 2018).

I compare these contexts to those from Mous & Qorro (2010)'s study of Iraqw, finding a large degree of overlap. We will see that the suffix appears in Gorwaa in the contexts summarised in Table 1 below.

Context	Example
Constituent negation	(4), (6)
Polar questions	(9), (10), (11)
After universal quantification	(12), (13), (14)
Adverbials derived from nouns	(16), (17)
Locatives	(20), (21)
Verbal nouns	(25), (26)
Object of comparison	(27), (28), (29)

<div align="center">

Table 1: Empirical overview of the Gorwaa *-oo/-(hee) suffix*

</div>

One thing to note is that the suffix is not obligatory in all of these contexts — I will return to this point when developing an analysis of the suffix in section §4. First, I will turn to the empirical overview.

<div align="center">

3.1.   Negation

</div>

The *-oo/-(h)ee* suffix (glossed as X in this paper) appears on constituent negation of nominals. For instance, in (4) below, the consultants are performing a picture-naming task, where one consultant has a picture of a type of animal, and the other asks questions to determine which animal it is. Example (5) shows a parallel example in Iraqw, showing that the *-o* suffix (glossed by the authors as PRED for predication) behaves like the *-oo/-(h)ee* suffix in Gorwaa.

(4)   niingaheeká sleeme   [20151021 249.1]

    niingá-ó-**hee-eká**   sleeme
    species.of.bird-L.MO-**X-NEG**   also

    '[...] though it is not a niingá [type of bird].'

(5)   inós   a   garmaa-w-**o-ká**   Iraqw (Mous & Qorro 2010:48)
    3SG COP boy-M-**PRED-NEG**

    'He is not a boy.'

Another example is given below. *tsir/oo* was unglossed in the version of the corpus I used, but based on other examples I suggest that the root for 'bird' is *tsir/i*, the *-oo* is the suffix, followed by the negation marker *-ká*.

(6)   a tsir/ooká garí   [20151021 354.1]

 ∅   tsir/i-r′-**oo-ká**   ga-r′-í
 AUX   bird-L.FR-**X-NEG**   thing-L.FR-DEM1

 'This is not a bird.'

We can compare this negative example with the affirmative counterpart in (7). This shows that the *-oo/-(h)ee* suffix does not appear for affirmative copular clauses.

(7)   garí a tsir/i ge i iwít a gawá xa'an'i sihhít   [20151021 419.1]

 ga-r′-í   ∅   tsir/i-r′   ge   i-∅   iwít-∅   ∅   gawá xa'anó-ó
 thing-L.FR-DEM1 AUX   bird-L.FR EMPH S.3-AUX sit.F-PRES AUX   on   tree-L.MO

  i-∅   sihhít-∅
  S.3-AUX stand.F-PRES

 'This is a bird, it is sitting on the tree.'

Finally, we can note that the order of the suffixes is linker-*oo/-(h)ee*-NEG.

3.2.   Polar questions

The *-oo/-(h)ee* suffix appears on polar questions (marked by a pitch accent), both in neutral (9, 10) and biased (11) contexts.[3]

(9)   a /Orundiyee?   [20150726 58.1]

 ∅   /Orundi-**ee**-~ˆ~
 AUX   /Orundi-**X**~**Q**

 'Is it /Orundi?'

(10) ar pembetaturoô?   [20150817 279.1]

 ar   pembetatuúr-**oo**-~ˆ~
 ANA.F triangle-**X**~**Q**

 'Is it a triangle?'

(11) a tiyekee?   [20151021 416.1 (+ 495.1)]

 ∅   tí=eká=**ee**-~ˆ~
 AUX   DEM.F=NEG=**X**~**Q**

 'Is it not this?'

Example (11) above is also interesting in having a demonstrative but no noun, showing that a demonstrative can stand alone in Gorwaa. For example (10), there is no linker glossed, but I

---

[3] Although *noun-linker-suffix-negation*~Q pattern in example (11) seems to be the most common pattern, there is one example of multiple *-oo/-(h)ee* suffixes for a similarly biased polar question, again from the picture naming task. I do not have an account of why there are multiple suffixes here.

(8)   a sakarirookee sakarì?   [20151021 435.1]

 ∅   sakari-r′=**oo**=eká=**oo**~ˆ~   sakari-r′ ~'~
 AUX   guineafowl-L.FR=**X**=NEG=**X**~**Q**   guineafowl-L.FR-EMPH

 'Is it not a guinea fowl?'

assume that there is the feminine r-type linker *r'*, while for (9) the lack of linker is likely due to the fact that there is a proper name.

3.3.   *Universal quantification*

The suffix is obligatory after *umó*, translated as the universal quantifier 'every'.

(12)   *Context: 'There was nothing of being a soldier they didn't know'*
 umó garoo Keengereesa iimi kan xuu'   [20151202 68.1]
 umó ga-r'-**oo**   Keengereesa-r' iimi-r' t-ng-a-∅-n
 every thing-L.FR-**X** English-L.FR people-L.FR MP-A.3-P.F-AUX-EXPECT
  xu'úť'+SImprs∼LPA∼
  know-SUBJ
 'Everything - people knew English.'

As shown in (13), the marker =*qó* can cliticise onto the quantifier, which I gloss as EMPH for emphatic marker to draw a parallel with its cognate found in Iraqw (Elders & Mous 1991; Mous & Qorro 2010). I will return to this point in section §4, as it has been taken as evidence against *umó* acting as a universal quantifier.

(13)   baaari umoqó /ayitoo ngin nuunuu   [20131108 9.1]
 baaari-r' **umó**=qó /ayi-tá-**oo** ng-a-∅ nuunuu'-LPA
 bees-L.FR every=EMPH flower-L.FT-**X** A.3-P.F-AUX suck.F-SUBJ
 'Bees suck every flower.'

The affix is also required after the universal quantifier *sleeme* 'all', as expected, although it appears on the quantifier itself.

(14)   imir /umitá wa alé aweerisee e gawá isa sleemeroo [20150818 101.1]
 imir /umi-tá   u-a alé aweerisee e   gawá isa-tá
 from hump(of_cow)-L.FT back-? ? ?   INTERJ on neck-L.FT
  sleeme-r'-textbfoo
  all-L.FR-**X**
 'From the hump down onto all the neck.'

The data also contains instances of *sleeme* which do not have the suffix. These were originally glossed as 'all' but are more accurately translated as 'also', as below.

(15)   nee sleeme ana araán masó   [20131027 94.1]
 nee sleeme ∅-∅-na   ár-aán∼'∼ masó
 and also S.P-AUX-IMPRF see-1.PL-PST matters
 'And also we saw other things.'

3.4.   *Adverbials*

The suffix appears on time and place adverbials, which are typically sentence-initial but can also appear sentence-finally, as in Iraqw (Mous & Qorro 2010). Later, I will argue that these are

adjuncts functioning as frame-setting topics, i.e. topics that limit the domain of the predication to which the main verb applies (Chafe 1976), again as in Iraqw (Mous & Qorro 2010).

Mous & Qorro (2010) show that Iraqw distinguishes the meanings 'the day of today' and the adverbial 'today' by means of the suffix (absent on the former, present on the latter). Although the adverbial use is far more frequent in the Gorwaa corpus data, there is evidence that the same distinction is made in Gorwaa. For example, in the elicited example in (16) and (17) we see that the suffix (and the linker) are obligatory for an adverbial use, and in (18) we see that no suffix is used when the speaker is referring to a particular morning.

(16) matlatlee*(roo) ya ta /a/amiín   [20160927 6.1]
     matlatlee(-r-**oo**)   ya   t-∅   -m-/aá/-ín-ˆ
     morning(-L.FR-**X**) thus MP-AUX EXT-cry-EXT-PST
     'In the morning there was crying.'

(17) xweera*(woo) ya ti doogaán   [20160927 7.1]
     xweera∼′∼-**oo** ya ti   doóg-aán∼′∼
     evening-L.N∅-**X** thus REC meet-1.PL-PST
     'In the evening we are meeting.'

(18) a qo matlatlee hee ...   [20151202 103.1]
     ∅=qo   matlatlee hee-ó   ...
     AUX=EMPH morning person-L.MO ...
     'That very morning the person is taken out of that place.'

3.5. *Locatives*

The suffix can be used on locatives, although there is variation. In the copular example (19) below, there is no suffix, whereas the suffix is found on the noun of the prepositional phrase in (20), where the PP functions as a frame-setting topic.

(19) desi nee garma ta bará qaaymoo   [20160927 19.1]
     desi-r′   nee garma-ó t-∅   bará qaaymoo-r′
     girl-L.FR and boy-L.MO MP-AUX in   field-L.FR
     'The girl and the boy are in the field.'

(20) bará kambirqahee heé uúr a isa'nee isa'   [20151202 36.1]
     bará kambi-r′-qá'-**hee**   hee-ó   úr   ∅   isa'-ó   nee isa'-ó
     in   camp-L.FR-DEM3-**X** person-L.MO big AUX so.and.so-L.MO and so.and.so-L.MO
     'In that camp the big men were so-and-so and so-and-so.'

The following elicited minimal pair shows that the suffix can be used for regions, while a PP without the suffix can be interpreted as people (or also names of towns). This may be to do with a non-specific interpretation of the suffix, if a town can be considered a specific place and the area the general region around it.

(21) bará Gorwaawoo iringeéd i deer   [20191203 1]
      bará Gorwaa-**oo** iringeéd i=∅   deer
      in   Gorwaa-**X**   sin   S.3=AUX   be.present
      'There is sin in Gorwaaland.'

(22) bará Gorwaa iringeéd i deer   [20191203 2]
      bará Gorwaa iringeéd i=∅   deer
      in   Gorwaa sin   S.3=AUX   be.present
      'There is sin in Gorwaa people.'

Mous & Qorro (2010) report that nouns after the preposition *ay* 'to' do not take the *-o* suffix in Iraqw, and the same holds for *ay* in Gorwaa (if it is not followed by a preposition like *bará*). This gives evidence for a difference in grammatical status of these cognate items between prepositions and nouns (note that Mous & Qorro 2010 analyse Iraqw *bara* 'in' as a 'locative noun while Harvey 2018 uses the label 'prepostion' for *bara* 'in' in Gorwaa).

3.6. Conditionals

We may predict that the suffix occurs on conditionals given that it has otherwise been seen in non-veridical, downward-entailing environments. Mous & Qorro (2010) show that conditionals in Iraqw may appear with or without the suffix, arguing that when it appears it strengthens the conditional. What we find for Gorwaa is that the suffix may occur on nouns that follow *abar* 'if', as in (23), but these are not really part of the conditional, and instead can be captured as frame-setting topics.

(23) abar gadiyeedee a harindakáng awu un haris   [20191203.58]
      abar gadiyeéd-ee ∅=∅   harinda=káng   awu   ∅=u=∅=n
      if   work-**X**   S.P=AUX   be.suitable.2.PRES=NEG bull A.P=P.M=AUX=EXPECT
         haris
         bring.1.PRES.SUBJ
      'As for work, if you are not fit, you bring a bull.'

Here, *abar gadiyeedee* 'as for work' sets the frame for the main clause, and hence is a frame-setting topic. Given that adverbials and locatives can also appear sentence-initially as frame-setting topics, that seems to be the determining factor for the presence of the *-oo/-(h)ee* suffix rather than the conditional environment itself. True conditionals are formed in two ways: (i) *bar* 'if' in sentence-initial position, and (ii) *bar* 'if' immediately preceding the selector (which may cliticise onto it; Harvey 2018:157–8). The *-oo/-(h)ee* suffix is not found on the nominals of this type, as shown in the example below, where the noun *firimbi* 'whistle' appears without the suffix.

(24) *Context: 'it was Beo those days, it was Beo, the whistle was blown,'*
      firimbi barka taáhh   [20151202 50.1]
      firimbír   bar-t-ng-a-∅   taáhh
      whistle.L.FR if-MP-A.3-P.F-AUX   beat.PST
      'If the whistle was blown.'

3.7.   *Verbal nouns*

Gorwaa has verbal nouns, composed of a verbal stem, a linker, and the suffix. For example, in (25) below the verbal noun appears after the main verb (recall that Gorwaa is considered verb-final); example (26) shows the verbal noun (with an incorporated object) fronted to sentence-initial position.

(25)   ana daayumiít huriingwoo   [20150727 19.1]

  ∅-∅   m-daayuút-iít-∼'∼ huriingw-ó-**oo**
  S.P-AUX EXT-fear.1-EXT-PST cooking-L.MO-**X**

  'I fear cooking.'

(26)   ma'aáy wahaangwoo a aleslawaká   [20150727 58.1]

  ma'aay∼'∼ wahaangw-ó-**oo** ∅-a-∅ aresláw-aká
  water-L.N∅ drinking-L.MO-**X** A.P-P.F-AUX be_able.1-NEG.PRES

  'I cannot drink water (lit. 'drinking water, I cannot').'

These verbal nouns are not instances of noun incorporation, where the noun is preverbal and does not take the linker or *-oo/-(h)ee* suffix (Harvey 2018). The literal translation of (26) suggests that the verbal noun functions as a frame-setting topic; this will be important for our later analysis, where I argue that these verbal nouns are outside of the main clause verbal domain, as Mous & Qorro (2010) argue for parallel cases in Iraqw.

3.8.   *Object of comparison*

Mous & Qorro (2010) discuss cases in Iraqw where the *-o* suffix is added onto the object of comparison. We see this pattern in a set of elicitation data investigating Gorwaa comparatives.

(27)   inós ka tleer ta garmawoo   [20160927 m.1]

  inós   t-ng-a-∅   tleer ta garma-ó-**oo**
  PRO.3SG MP-A.3-P.F-AUX long ? boy-L.MO-**X**

  'She is tall compared to the boy.'

Note that noun phrases modified by an adjective take the suffix on the adjective, not the noun, suggesting that it attaches to the NP, not the N (there is little data elsewhere in the corpus with adjectival modifiers in contexts where we expect the suffix).

(28)   inós ka tleer ta garmá uuree   [20160927 5.1]

  inós   t-ng-u-∅   tleer ta garma-ó úr=**ee**
  PRO.3SG MP-A.3-P.M-AUX long ? boy-L.MO big-**X**

  'He is tall compared to the tall boy.'

While we previously saw the suffix in non-referential contexts such as negation, it also appears on the object of comparison with a demonstrative.[4]

---

[4] In the February 2018 database, the *-ee* suffix here was glossed as IMP.SG.O. This is an auto-glossing error; such a verbal suffix could not appear in this nominal context (Andrew Harvey, p.c.), and so I have changed the gloss to X to indicate the *-oo/-(h)ee* suffix.

(29)   inós ka tleer ta garmaqee   [20160927 2.1]

      inós   t-ng-a-∅   tleér ta garma-ó-qá'-**ee**

      PRO.3SG MP-A.3-P.F-AUX long ? boy-L.MO-DEM3-**X**

      'She is tall compared to that boy.'

The fact that the suffix can occur with the definite demonstrative *-qá'* is surprising if it contributes non-specific interpretation, as will be discussed later.[5] Although cases of the *-oo/-(h)ee* suffix with this demonstrative are rare — out of 434 occurrences of *-qá'* in the database, 15 (= 3%) appear to contain *-oo/-(h)ee* — the co-occurence shows that the suffix is compatible with referential contexts.

3.9.   Summary

In this section we have seen examples showing that the the Gorwaa *-oo/-(h)ee* suffix appears in the contexts summarised in Table 1 above. A large number of these contexts are non-veridical/downward-entailing environments, such as negation and polar questions. These are non-referential contexts that can be characterised in terms of non-specificity, a notion which may explain the cases in which the presence of the marker varies pragmatically (e.g. in the case of regions).[6] It appears that adverbials, locatives, and even verbal nouns can function as sentence-initial or sentence-final frame-setting topics, which are marked by the suffix.

I will now consider possible analyses of these data, highlighting empirical similarity with the phenomenon of Bantu augment drop, which is better-studied than the South-Cushitic suffixation pattern and has an interesting overlap in contexts.

4.   Discussion
4.1.   Augment drop in Bantu

Many Eastern Bantu (Niger-Congo) languages have a nominal prefix called the augment (also called 'initial vowel' and 'pre-prefix'; Van de Velde 2019; Halpert to appear). This prefix occurs before the noun class prefix (the noun class prefix is as a gender prefix, see e.g. Carstens 2008). For example, the Runyankore-Rukiga noun *omupiira* 'ball' is composed of the augment *o-*, the class 3 prefix *mu-*, and the noun root *-piira* 'ball'. In some scenarios, the augment can be dropped (∅-*mu-piira*). In this section I show that the phenomenon of augment drop is an interesting parallel to the Gorwaa *-oo/-(h)ee* suffix.

As Asiimwe (2014) discusses in her doctoral dissertation on Runyankore-Rukiga, augment drop is obligatory in a variety of contexts, and is optional elsewhere. For example, in the negation context in (30), augment drop is obligatory. An overview of contexts is given in (31).

---

[5] I thank Jurriaan Wiegertjes for bringing such examples to my attention.

[6] Note that I limit the discussion of this paper to the *-oo/-(h)ee* suffix, but Mous & Qorro (2010) discuss a verbal counterpart *-a* which appears in irrealis contexts. It may be the case that such a suffix appears in the verbal domain in Gorwaa.

(30) Tinaareeba muntu   Taylor (1985:89), as cited in Asiimwe (2014:123)
      Ti-n-aa-reeb-a   ∅-mu-ntu
      NEG-1SG-PST.RM-see-FV ∅-1-person
      'I saw nobody.'

(31) **Contexts in which the augment is dropped in Runyankore-Rukiga**
      (a) object nouns after negative verbs,
      (b) after *buli/ibara* 'every',
      (c) in interrogatives with the question word *ki*,
      (d) after the prepositions *omu/aha* 'inside'/'at',
      (e) on adjectives as complements to main verbs,
      (f) nouns following the absolute pronoun,
      (g) vocative nouns

                                                                  (Asiimwe 2014:120–4)

We see that these contexts, especially the first four, overlap with those in which Gorwaa nominals must take the *-oo/-(h)ee* suffix. Furthermore, the contexts which match the Gorwaa are also those in which augment drop is found most robustly across most Bantu languages (Halpert to appear). As Halpert discusses, augment drop in Bantu is most likely in nonspecific and indefinite environments, such as negation, with other contexts such as vocatives more variable crosslinguistically (Asiimwe 2014; Halpert to appear).

   Having seen that there is empirical overlap between Gorwaa suffixation and Bantu augment drop, we can consider whether the existing analyses for Bantu can be applied to Gorwaa. I will discuss two analyses: a featural analysis proposed by Asiimwe (2014) for Runyankore-Rukiga, and a nominal licensing analysis proposed by Halpert (2012, 2015) for Zulu. The purpose of the following discussion is to test whether these analyses extend to Gorwaa, rather than to evaluate them for Runyankore-Rukiga and Zulu.

4.2.   (Non-)specificity

In Asiimwe (2014)'s treatment of the Runyankore-Rukiga augment, she shows that augment drop is syntactically obligatory in contexts such as negation and that it varies in other contexts dependent on the pragmatic context. Using different information structural contexts, Asiimwe shows that specificity is an important pragmatic factor conditioning the presence of the augment, where specificity is understood as referential specificity, i.e. the speaker has a particular referent in mind, as opposed to a quantificational use of an indefinite (Karttunen 1968; Fodor & Sag 1982; Lyons 1999). Asiimwe therefore proposes that the augment is a D (determiner) element with a [+specific] feature.

   If we take such an analysis for Gorwaa, the proposal would be that the Gorwaa *-oo/-(h)ee* suffix has a [−specific] feature, given that it appears in the environments in which the Runyankore-Rukiga augment is lost, like an 'anti-augment'. This analysis captures the fact that a large number of the contexts reviewed in section §3 above are non-specific, non-veridical and downward-entailing environments, and as such we can expect them to pattern together across languages.

The fact that the Gorwaa *-oo/-(h)ee* suffix appears after the linker could be taken as evidence that it is a determiner, if we follow Harvey (2018)'s analysis of the linker as in D; otherwise, its ability to follow demonstratives (e.g. (25)) also situate it (minimally) around the D domain. According to Harvey (2018)'s analysis, the linker is a D head marking refentiality. The fact that the linker and the *-oo/-(h)ee* suffix may appear in non-specific contexts such as negation, where the noun cannot be referential, argues against this analysis of the linker. I leave the question of whether the linker has any semantic import (or whether it is simply conditioned by the phonology and syntactic structure) to further study.

Although Asiimwe (2014)'s featural analysis would capture some of the pattern in Gorwaa, non-specific determiners are incredibly rare crosslinguistically. In a typological sample of 185 languages, Becker (2019) found only 5 instances of non-specific determiners. This means that proposing a non-specific suffix in Gorwaa is more unusual from a typological perspective than proposing a specific suffix in Bantu, and so the burden of proof is on the Gorwaa researcher to justify this. Furthermore, Becker (2019) proposes an implication that a language with a non-specific marker must also have a specific marker. If this implication holds, we predict that Gorwaa would also have such a specific suffix. I will briefly discuss this, although it is a point that warrants a more extensive study of Gorwaa information structure in order to answer more thoroughly.

A candidate for a specific suffix in Gorwaa is the marker *-ko*, which is called an indefinite marker by Harvey (2018). Based on the following data we can see that *-ko* is used in indefinite contexts (32) and introduces new discourse referents (33).

(32) xaano{-∅|ko} i bará qaaymoo   [20191203 28]

xaano-ó{-∅|**ko**}   i=∅   bará qaaymoo-r′
tree-L.MO{-∅|**INDEF**} S.3=AUX in   field-L.FR

'The tree is in the field.' (without *-ko*);
'Some tree is in the field.' (with *-ko*)

(33) Garma ina hardáh ay dír xa'anoko ur. Tsoowoo nguna óh.
Xa'ano{ko|∅} nguna tsaát.   [20191203.25, 26]

garma i=∅=na   hardáh   ay di-r′   xa'anó-**ko**
boy   S.3=AUX=IMPRF arrive.M.PST to place-L.FR tree-L.MO-**INDEF**

  ur   tsoowoo ng=u=∅=na   óh   xa'ano-ó{-**ko**|∅}
  big.N axe   A.3=P.M=AUX=IMPRF seize.M.PST tree{-**INDEF**|∅}

  ng=u=∅=na   tsaát
  A.3=P.M=AUX=IMPRF cut.M.PST

'The boy arrived at some big tree$_i$. He grabbed an axe. He cut some tree{*$_i$|✓$_i$}.'

While further investigation should identify whether *-ko* is properly treated as a general indefinite marker or a specific marker (for example in applying the tests in Becker 2019 and Haspelmath 1997), one important point to note from these data is that the *-ko* suffix does not take the linker, unlike the suffix *-oo/-(h)ee*. This suggests that the *-ko* suffix, which is clearly an indefinite marker of some kind, is not simply a counterpart to the *-oo/-(h)ee* suffix.[7]

---

[7] An anonymous reviewer points out that, if the linker is purely phonologically conditioned, its presence or absence does not have any bearing on whether *-ko* and *-oo/-(h)ee* are related. However, I believe it is likely that the linker tells us something about the structure of the nominal, although I leave the details of this open for further research.

Another argument against treating *-oo/-(h)ee* as a counterpart of *-ko* is that the two suffixes may occur together, as in the examples below. This shows that the markers are not in direct competition with each other, which we may predict if we treated *-oo/-(hee)* as carrying a [−specific] feature and *-ko* as specified for [+specific].[8]

(34) ana hi'imiít wa ló bará ayaheeko   [20160927 47.1]

    ∅-∅-na   -m-hi'iít'~^~   wa ló bará aya-ó-**ee-ko**

    S.P-AUX-IMPRF EXT-travel.1-PST ? ? in   land-L.MO-**X-INDEF**

    'I travelled very much in a certain land.'

(35) ana hi'imiít wa ló bará ayakowoo   [20160927 46.1]

    ∅-∅-na   -m-hi'iít'~^~   wa ló bará aya-ó-**ko-oo**

    S.P-AUX-IMPRF EXT-travel.1-PST ? ? in   land-L.MO-**INDEF-X**

    'I travelled very much in a certain land.'

Furthermore, we have seen in example (26) from section §3.8 above that *-oo/-(h)ee* may co-occur (albeit infrequently) with the specific demonstrative *-qá*, which provides additional evidence against the analysis of *-oo/-(h)ee* in terms of a non-specific feature.

The most convincing reason not to take this featural analysis, however, is the fact that the Gorwaa suffix occurs in other environments such as adverbs, as seen in section §3 above, where the adverbial expressions function as frame-setting topics. Topicality is linked to specificity (see e.g. Heim 1982; Portner & Yabushita 2001; Portner 2002; Von Heusinger 2019), and so the fact that the same marker would be used for *non*-specificity in addition to topicality is surprising if the marker really is contributing a non-specific feature. Note that the same semantic incompatibility is reached if we think of anti-givenness or non-referentiality rather than specificity, as these terms are all closely linked. Instead of pursuing this featural analysis, I therefore suggest that the marker has a primarily syntactic function, following Halpert (2012, 2015)'s analysis of Zulu augment drop, which I will turn to now.

4.3.   Case

In Halpert (2012)'s disseration on Zulu, she writes that 'it is difficult to understand the Zulu augment as making any particular semantic contribution: [...] the augment can mark definiteness, indefiniteness, specificity, nonspecificity, high- or low-scope' (Halpert 2012:225). Instead of directly relating the augment to specificity and definiteness as Asiimwe (2014) does, Halpert argues that the Zulu augment is involved in argument licensing, following the generative syntax notion that all nominals must be licensed in order for the derivation to be licit. This stems from the Case Filter (Chomsky 1981), later subsumed under the Activity Condition (Chomsky 2001). For Bantu, invoking abstract Case is significant as there is ongoing debate as to whether Case Theory applies to Bantu languages (Baker 2008; Diercks 2012; Halpert 2012; Van der Wal 2015) and to African languages more generally (König 2008).

Crucial to Halpert's analysis is the position of the nominal with respect to the *v*P. She posits a 'Licensor Phrase', LP, that sits between *v*P and TP. The licensor head L probes downwards

---

    [8] As the translations for (34) and (35) do not differ, the question of whether the difference in the order of the two suffixes has an interpretative effect is something I also leave for further investigation.

to license the first nominal in *v*P, and so those nominals can appear without the augment, while other nominals are intrinsically licensed by the augment, as illustrated below.[9]

(36)   **Nominal licensing in Zulu**
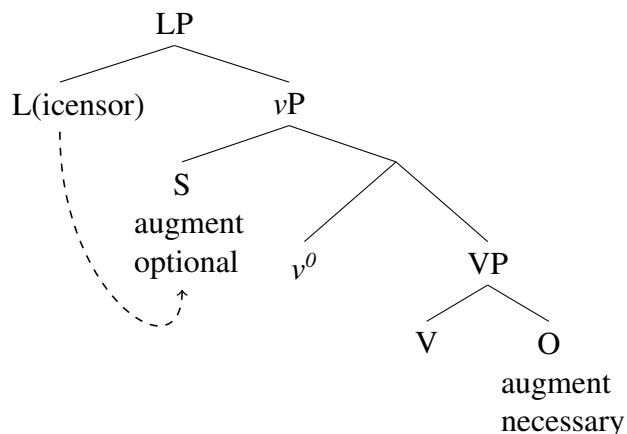
adapted from Halpert (2012:166)

Although Halpert (2012) focuses her discussion on arguments, oblique adjuncts are noted to be licensed in the same way as these augmentless nominals (Halpert 2012:172). In contrast, lower nominals that are complements to V or nominals that have moved outside of the *v*P require an augment in order to be licensed, as Halpert argues that V does not assign Case in Zulu.

The parallel for Gorwaa would be that the *-oo/-(h)ee* suffix tells us something about the position of the nominal with respect to the verb phrase — a nominal marked by the suffix has moved from its base position within the VP. The exact nature of the licensing likely differs from Zulu, as Halpert suggests that languages can vary in terms of whether L and V act as Case assigners. An interesting piece of evidence about the position of Gorwaa nouns marked by the suffix comes from verbal nouns, which look at first sight as if they are complements to the verb within the verb phrase, but in fact are outside the VP. Consider the example below, repeated from section §3 above.

(37)   ana da'ayumiít huriingwoo   [20150727 19.1]

   ∅-∅   m-daayuút-iít-~'~   huriingw-ó-**oo**
   S.P-AUX   EXT-fear-EXT-PST   cooking-L.MO-**X**
   'I fear cooking.'

Here, the selector *ana* does not show agreement with the verbal noun *huriingwoo* 'cooking', which is marked by the *-oo/-(h)ee* suffix. Instead, the selector behaves intransitively, marked as a speech act participant as the sole argument of an intransitive clause (as indicated by the gloss S.P), meaning that the verbal noun *huriingwoo* is not functioning as the syntactic object (i.e. the complement) of the verb. We therefore have evidence that the verbal noun is outside the VP, supporting an analysis of *-oo/-(h)ee* as a Case suffix marking nominals outside of the VP.

For the other environments in which the *-oo/-(h)ee* suffix appears, we can say that it appears on adjuncts that are not licensed by a head within or adjacent to the *v*P (and so the suffix is spelled out as an intrinsic licensor, like the Zulu augment rather than an anti-augment). This

---

[9] Carstens & Mletshe (2016) argue against Halpert that focus, not nominal licensing, conditions augment drop in Zulu and Xhosa. I present Halpert's account as Pietraszko (2020) has argued convincingly against this rebuttal.

explains its appearance on sentence-initial and sentence-final adverbials and PPs that function as frame-setting topics, which can be analysed as sentential adjuncts; Mous & Qorro (2010) draw the same conclusions for Iraqw. For the comparison cases, it is unclear exactly what the syntax of the comparative construction is, with *ta* unglossed in the corpus. It could be that *ta garamawoo* in (27) is an adjunct, and can felicitously be left out. This analysis also makes the prediction that negated nominals and nominals in polar questions have moved outside of the verb phrase. A full analysis requires study of Gorwaa syntax more broadly, but key parts are the position of negation (e.g. in a NegP) and the existence of a Q operator which may trigger movement of the nominal in polar questions.

Universal quantification is an area that needs further study in Gorwaa. It could be that nominals following the quantifier *umó* are outside of the *v*P due to Quantifier Raising and therefore have to be licensed by the suffix *-oo/-(h)ee*, although much more information (e.g. scope-taking patterns and behaviour of other quantifiers) is required in order to draw up an appropriate analysis. Furthermore, Mous & Qorro (2010) raise the question of whether Iraqw *umúu* 'every' is actually a quantifier. As we have already seen, an enclitic *=qo* can intervene between *umó* and the noun in Gorwaa. The same is true in Iraqw, which Mous & Qorro (2010) suggest is evidence in favour of a bipartite structure. However, the authors acknowledge that further tests need to be done. Note that South-Cushitic is not alone in having an emphatic clitic on the universal quantifier; the same phenomenon is found for example in Passamaquoddy (Algonquian), where the prenominal quantifier *psi* can occur with the emphatic clitic *=te* (Bruening 2008). This is not taken by Bruening as evidence against the quantifier forming a constituent with the NP that follows it. However, a potential difference between Passamaquoddy *psite* and Gorwaa *umoqo* is that the former can occur alone, whereas to my knowledge the Gorwaa quantifier cannot.

The basic proposal is therefore that Gorwaa nominals marked by *-oo/-(h)ee* can be treated like nominals in Zulu, where the suffix is a form of licensing for nominals that appear in certain syntactic environments and is not needed in others where alternative nominal licensing mechanisms are used. I suggest that the selector and the verb are otherwise responsible for licensing Gorwaa nominals. Mous & Qorro (2010) similarly conclude for Iraqw that the verb and the selector mark subject and object relations, while the *-o/-(h)oo* suffix marks adjuncts. Thinking of this in generative terms, whether the selector can be equated to the LP that Halpert (2012) proposes for Zulu remains to be seen as this relies on further study of the Gorwaa verbal domain. The South-Cushitic selector is always preverbal and can express tense (Mous 2005), which I take as evidence that is must be at or local to T. However, the Gorwaa selector need not be in the exact same position as the LP if we adopt Halpert's stance whereby different heads act as licensors across different languages (Halpert 2012); a similar parametrization of phase heads has been proposed elsewhere in the generative syntax literature (see e.g. Chomsky 2008; Frascarelli 2008).

4.4. Implications

Although there are still many questions about the *-oo/-(h)ee* suffix in Gorwaa and how it relates to referentiality and adjunct/argumenthood, meaning that further data collection and analysis of the existing corpus is required in order to draw up a more formalised analysis, this study has raised a few important points.

Firstly, I show that the 'seemingly disparate morphosyntactic contexts' (Harvey 2018:179)

the suffix occurs in are in fact a set of contexts which pattern together in other languages like the Bantu languages and can be understood through the concepts of (non-)specificity and Case. Secondly, I argue against Harvey (2018)'s claim that the linker is always referential, as I have shown that linkers appear with *-oo/-(h)ee* in non-referential contexts such as negation. I suggest that the linker is not a marker of referentiality, but is required for a combination of prosodic and syntactic reasons. Thirdly, I argue that the *-oo/-(h)ee* suffix marks adjuncts and is attached only to nominals that are outside of the *v*P and/or cannot be licensed by the selector and the verb, which reflects Mous & Qorro (2010)'s analysis of the cognate suffix in the related language Iraqw. Finally, I suggest some small revisions to the glossing and analysis of certain Gorwaa items. For instance, I advocated for *sleemeroo* as being 'all', composed of *sleeme*+linker+*-oo* as opposed to being monomorphemic.

An important point is that the present study is the first at-length treatment of the *-oo/-(h)ee* suffix in Gorwaa and has shown large degrees of similarity between it and its Iraqw counterpart. While I have discussed a generative analysis of the marker, Mous & Qorro (2010)'s functional analysis similarly conclude that the marker 'establish[es] a predication within a sentence as an adjunct', marking the scope of an operation and only appearing on nouns outside the verb phrase (Mous & Qorro 2010:78). Furthermore, the discussion in this paper about the Gorwaa selector allows us to put South-Cushitic languages into the type of '[languages where the selectors] define the left border of a syntactic unit such as the verbal piece in Somali' (Mous 2005:303), therefore contributing to the comparative picture on the syntax of South-Cushitic languages.

Finally, pointing out the empirical similarities between the environments in which the Gorwaa *-oo/-(h)ee* suffix occurs and those in which the Bantu augment is dropped situate Gorwaa within a crosslinguistic picture of nominal syntax. Other relevant cases in which (non-)specificity has been shown to be marked in environments such as negation and universal quantification include differential object marking (DOM) patterns in Spanish and Turkish (Enç 1991), where the presence of an accusative case morpheme on an object is shown to vary with (non-)specificity. It has been argued that these effects should be considered in terms of abstract Case, with specificity a secondary effect (Ormazabal & Romero 2013). This is similar to treating Bantu augment drop and Gorwaa suffixation as syntactic reflexes of nominal licensing. Although language-specific descriptions are needed given degrees of variation, meaning that these debates are not solved, we see that phenomena in different languages pattern together empirically in terms of (non-)specific and topical environments, and are therefore not disparate morphosyntactic contexts, rather contexts which can be characterised syntactically in terms of restrictions on nominal licensing.

5. *Conclusion*

In conclusion, I have used a recent corpus of primarily naturalistic language to investigate the distribution of the *-oo/-(h)ee* nominal suffix in Gorwaa. I showed that this suffix appears in a variety of morphosyntactic contexts that can be understood in terms of (non-)specificity and topicality. I compared these to the environments in which augment drop occurs in Bantu and found an interesting degree of overlap. While many of the contexts can be unified by non-specificity, I argued that the marker has a syntactic function at its core, namely to license nominals that are outside of the *v*P and/or cannot be licensed by the selector and the verb. This generative account of the Gorwaa suffix echoes the conclusions of Mous & Qorro (2010)'s functional account of its

Iraqw counterpart and shows the close similarity between these two language varieties. Further study on Gorwaa should investigate the syntactic structure of the *v*P (e.g. whether the selector is a phase head above *v*, and whether V is a Case assigner), quantification, and consider related markers in the language such as the (possibly specific) indefinite suffix *-ko*, in order to draw up a more formalised account of the Gorwaa *-oo/-(h)ee* suffix and Gorwaa syntax as a whole.

Acknowledgements

Abbreviations

1, 2, 3	1st/2nd/3rd person	LPA	level pitch accent
A	agent of transitive clause	M	masculine gender
AUX	auxiliary	MP	mediopassive voice
COP	copula (=AUX)	NEG	negation
DEM1	demonstrative, 1st degree deixis	P	patient of transitive clause (e.g. P.F),
DEM2	demonstrative, 2nd degree deixis		speech act participant (e.g. A.P)
DEM3	demonstrative, 3rd degree deixis	PRED	predication (= X)
EMP	emphasis marker (assumed)	PRO	pronoun
EMPH	emphasis marker	PST	past tense
EXPECT	expectative	RM	relative marker
EXT	verbal extension	REC	reciprocal
F	feminine gender	S	sole argument of intransitive clause
FV	final vowel (Bantu verb ending)	SG	singular number
IMPRF	imperfective aspect	SUBJ	subjunctive mood
INDEF	indefinite marker	Q	question marker
INTERJ	interjection	X	the *-oo/-(h)ee* suffix (topic of paper)
L.FR	feminine r-type linker	´	rising pitch accent
L.FT	feminine t-type linker	`	falling pitch accent
L.MO	masculine o-type linker	^	rising-falling pitch accent
L.N∅	neuter ∅-type linker	?	unknown (not glossed in corpus)

Elisabeth J. Kerr
Leiden University Centre for Linguistics
e.j.kerr@hum.leidenuniv.nl

References

Asiimwe, A. (2014). *Definiteness and specificity in Runyankore-Rukiga*. [PhD thesis]. Stellenbosch University.

Baker, M. C. (2008). *The syntax of agreement and concord*. Cambridge University Press, Cambridge.

Becker, L. (2019). *Articles in the worlds languages*. [PhD thesis]. Universität Leipzig.

Bruening, B. (2008). Quantification in Passamaquoddy. Matthewson, L. (ed.), *Quantification: A Cross-linguistic Perspective*, Emerald, Bingley, pp. 67–103.

Carstens, V. (2008). DP in Bantu and Romance. Cat, C. D. & K. Demuth (eds.), *The Bantu-Romance Connection: A comparative investigation of verbal agreement, DPs, and information structure*, John Benjamins, Amsterdam, pp. 131–165.

Carstens, V. & L. Mletshe (2016). Negative concord and nominal licensing in Xhosa and Zulu. *Natural Language & Linguistic Theory* 34:3, pp. 761–804.

Chafe, W. (1976). Givenness, contrastiveness, definiteness, subjects, topics, and point of view. Li, C. N. (ed.), *Subject and topic*, Academic Press, New York, pp. 25–55.

Chomsky, N. (1981). *Lectures on Government and Binding*. Foris, Dordrecht.

Chomsky, N. (2001). Derivation by phase. Kenstowicz, M. (ed.), *Ken Hale: A life in language*, MIT Press, Cambridge, MA., pp. 1–52.

Chomsky, N. (2008). On phases. Robert Freidin, C. P. O. & M. L. Zubizarreta (eds.), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, Cambridge, MA: MIT press, vol. 45, pp. 133–166.

Diercks, M. (2012). Parameterizing case: Evidence from Bantu. *Syntax* 15:3, pp. 253–286.

Elders, S. & M. Mous (1991). The adverbial qo in Iraqw. Claudi, U. & D. Mendel (eds.), *Ägypten im afro-orientalischen Kontext: Aufsätze zur Archäologie, Geschichte und Sprache eines unbegrenzten Raumes (Afrikanische Arbeitspapiere, special issue)*, Institut für Afrikanistik, Cologne, pp. 125–38.

Enç, M. (1991). The semantics of specificity. *Linguistic Inquiry* pp. 1–25.

Fodor, J. D. & I. A. Sag (1982). Referential and quantificational indefinites. *Linguistics and philosophy* 5:3, pp. 355–398.

Frascarelli, M. (2008). Introduction. Frascarelli, M. (ed.), *Phases of interpretation*, Walter de Gruyter, Berlin/Boston, vol. 91, pp. 1–16.

Halpert, C. (2012). *Argument licensing and agreement in Zulu*. [PhD thesis]. Massachusetts Institute of Technology.

Halpert, C. (2015). *Argument licensing and agreement*. Oxford University Press, Oxford.

Halpert, C. (to appear). The augment. Kula, N., L. Marten, E. Hurst & J. Zeller (eds.), *The Oxford Handbook of Bantu Linguistics*, Oxford University Press, Oxford. URL: [https://tinyurl.com/y3xw5x6q]. Accessed 2020-06.

Harvey, A. (2017). Gorwaa: An archive of language and cultural material from the Gorwaa people of Babati (Manyara region, Tanzania). SOAS, Endangered Languages Archive. URL: [https://elar.soas.ac.uk/Collection/MPI1014224]. Accessed 2018-02.

Harvey, A. D. (2018). *The Gorwaa Noun: Toward a description of the Gorwaa language*. [PhD thesis]. SOAS University of London.

Harvey, A. D. (2019). Gorwaa (Tanzania) language contexts. *Language Documentation and Description* pp. 127–168.

Haspelmath, M. (1997). *Indefinite pronouns*. Oxford University Press, Oxford.

Heim, I. (1982). *The semantics of definite and indefinite noun phrases*. [PhD thesis]. University of Massachusetts.

Hetzron, R. (1980). The limits of Cushitic. *Sprache und Geschichte in Afrika* pp. 7–126.

Karttunen, L. (1968). *What do referential indices refer to?* Rand Corporation, Santa Monica, CA.

Kießling, R. (2000). Some salient features of Southern Cushitic (Common West Rift). *Lingua Posnaniensis* 42, pp. 69–89.

König, C. (2008). *Case in Africa*. Oxford University Press, Oxford.

Lyons, C. (1999). *Definiteness*. Cambridge University Press, Cambridge.

Mous, M. (1993). *A grammar of Iraqw*. Helmut Buske Verlag, Hamburg.

Mous, M. (2005). Selectors in Cushitic. *Typological studies in language* 64, pp. 303–325.

Mous, M. & M. Qorro (2010). The syntactic function of a scope marking suffix in Iraqw. *Journal of African languages and linguistics* 31:1, pp. 47–78.

Ormazabal, J. & J. Romero (2013). Differential object marking, Case and Agreement. *Borealis* 2:2, pp. 221–239.

Pietraszko, A. (2020). The coming apart of case and focus in Bantu. *Natural Language & Linguistic Theory* pp. 1–21.

Portner, P. (2002). Topicality and (non-) specificity in Mandarin. *Journal of Semantics* 19:3, pp. 275–287.

Portner, P. & K. Yabushita (2001). Specific indefinites and the information structure theory of topics. *Journal of Semantics* 18:3, pp. 271–297.

Sasse, H.-J. (1984). Case in Cushitic, Semitic and Berber. Bynon, J. (ed.), *Current progress in Afro-Asiatic linguistics*, John Benjamins, Amsterdam, vol. 28, pp. 111–126.

Tosco, M. (2000). Cushitic overview. *Journal of Ethiopian Studies* 33:2, pp. 87–121.

Van de Velde, M. (2019). Nominal morphology and syntax. de Velde, M. V., K. Bostoen, D. Nurse & G. Philippson (eds.), *The Bantu Languages*, Routledge, New York, pp. 237–269.

Von Heusinger, K. (2019). Indefiniteness and specificity. *The Oxford Handbook of Reference*, Oxford University Press, Oxford, pp. 145–167.

Van der Wal, J. (2015). Evidence for abstract Case in Bantu. *Lingua* 165, pp. 109–132.