The neuter in Bantu

A Systemic Functional analysis

Promoter: Miriam Taverniers

Dissertation submitted in partial satisfaction of the requirements for the degree of Master in Advanced Studies of Linguistics by Sebastian Dom.
Acknowledgements

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**Abbreviations**

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AN</td>
<td>animate</td>
</tr>
<tr>
<td>APPL</td>
<td>applicative</td>
</tr>
<tr>
<td>ATTR_x</td>
<td>attributive prefix (number of class indicated in subscript, here ‘x’)</td>
</tr>
<tr>
<td>AUG_x</td>
<td>augment</td>
</tr>
<tr>
<td>C</td>
<td>consonant</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
</tr>
<tr>
<td>CL_x</td>
<td>nominal prefix/class marker</td>
</tr>
<tr>
<td>CLT_x</td>
<td>clitic</td>
</tr>
<tr>
<td>CND</td>
<td>conditional marker</td>
</tr>
<tr>
<td>CNJ</td>
<td>conjunct</td>
</tr>
<tr>
<td>CON</td>
<td>connective</td>
</tr>
<tr>
<td>COP</td>
<td>copula</td>
</tr>
<tr>
<td>DEM_x</td>
<td>demonstrative</td>
</tr>
<tr>
<td>DO</td>
<td>direct object</td>
</tr>
<tr>
<td>EMPH</td>
<td>emphatic marker</td>
</tr>
<tr>
<td>EVB</td>
<td>extended verb base</td>
</tr>
<tr>
<td>FOC</td>
<td>focus marker</td>
</tr>
<tr>
<td>FUT</td>
<td>future tense marker</td>
</tr>
<tr>
<td>FV</td>
<td>final vowel</td>
</tr>
<tr>
<td>LOC_x</td>
<td>locative prefix</td>
</tr>
<tr>
<td>INAN</td>
<td>inanimate</td>
</tr>
<tr>
<td>NAR</td>
<td>narrative tense marker</td>
</tr>
<tr>
<td>NEG</td>
<td>negative</td>
</tr>
<tr>
<td>NP</td>
<td>noun phrase</td>
</tr>
<tr>
<td>NT</td>
<td>neuter</td>
</tr>
<tr>
<td>OM_x</td>
<td>object marker</td>
</tr>
<tr>
<td>PASS</td>
<td>passive</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>PP_x</td>
<td>pronominal prefix</td>
</tr>
<tr>
<td>POSS</td>
<td>possessive</td>
</tr>
<tr>
<td>PRF</td>
<td>perfect</td>
</tr>
<tr>
<td>PROG</td>
<td>progressive aspect marker</td>
</tr>
<tr>
<td>PRON</td>
<td>pronoun</td>
</tr>
<tr>
<td>PRS</td>
<td>present tense marker</td>
</tr>
<tr>
<td>PRV</td>
<td>perfective aspect marker</td>
</tr>
<tr>
<td>PST</td>
<td>past tense marker</td>
</tr>
<tr>
<td>RC_x</td>
<td>referential/relative concord</td>
</tr>
<tr>
<td>REC</td>
<td>reciprocal</td>
</tr>
<tr>
<td>REFL</td>
<td>reflexive</td>
</tr>
<tr>
<td>REL</td>
<td>relative</td>
</tr>
<tr>
<td>REM</td>
<td>remote past marker</td>
</tr>
<tr>
<td>REP</td>
<td>repetitive/continuative</td>
</tr>
<tr>
<td>S</td>
<td>subject</td>
</tr>
<tr>
<td>SBJ</td>
<td>subjunctive</td>
</tr>
<tr>
<td>SEP</td>
<td>separative</td>
</tr>
<tr>
<td>SM_x</td>
<td>subject marker</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SVB</td>
<td>simple verb base</td>
</tr>
<tr>
<td>TA</td>
<td>tense and/or aspect marker</td>
</tr>
<tr>
<td>V</td>
<td>vowel (in phonological context); verb (in all other contexts)</td>
</tr>
<tr>
<td>VP</td>
<td>verb phrase</td>
</tr>
</tbody>
</table>
Conventions

(Partly from Halliday & Matthiessen 2014: ix-x)

- Operators in system specification

<table>
<thead>
<tr>
<th>Operator</th>
<th>Symbol</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>entry condition leading to terms in system</td>
<td>:</td>
<td>ergative : effective/middle</td>
</tr>
<tr>
<td>systemic contrast</td>
<td>/</td>
<td>declarative/interrogative; declarative/imperative</td>
</tr>
</tbody>
</table>

- Graphic conventions in system networks

\[
a \rightarrow \begin{cases}
  x \\
y
\end{cases}
\]

there is a system \( x/y \) with entry condition \( a \) [if \( a \), then either \( x \) or \( y \)]

\[
a \rightarrow \begin{cases}
  x \\
y
\end{cases} \rightarrow \begin{cases}
  m \\
y
\end{cases}
\]

there are two systems \( x/y \) and \( m/n \), ordered in dependence such that \( m/n \) has entry condition \( x \) and \( x/y \) has entry condition \( a \) [if \( a \) then either \( x \) or \( y \), and if \( x \), then either \( m \) or \( n \)]
Part 1. Introduction and background

1.1 Introduction

The central aim of this dissertation is to make an analysis of the neuter in Bantu within the framework of Systemic Functional Grammar (henceforth SFG). The neuter is a verbal suffix which derives a one-participant clause from a basic, underived two-participant clause, as illustrated for Kiga, a Bantu language spoken in Uganda, in (1).

(1) **KIGA (JE14)** (Taylor 1985: 147)
   a. Rutafa y-aa-yat-a amate.
      Rutafa SM-PST-spill-FV milk
      ‘Rutafa spilt the milk.’
   b. amate g-aa-yat-ik-a.
      milk SM-PST-spill-NT-FV
      ‘The milk (got) spilt.’

The neuter thus encodes an alternation between a two-participant and one-participant clause in which the Goal (Undergoer, Patient) of the basic, underived clause (1a) becomes the sole participant of the derived clause (1b), and the agent-like participant of the basic, underived clause becomes inexpressible.¹ This has been called the ergative or anticausative alternation, depending on the framework in which the phenomenon is studied. It has been shown that there are generally five ways in which the alternation is encoded cross-linguistically (Haspelmath 1993). These are summarised below.

Table 1. The five alternation types (based on Haspelmath 1993)

<table>
<thead>
<tr>
<th>Alternation type</th>
<th>Examples from Haspelmath (1993: 91-92)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Causative alternation</td>
<td></td>
</tr>
<tr>
<td>a. One-participant basic/underived²</td>
<td>Georgian</td>
</tr>
<tr>
<td>b. Two-participant derived</td>
<td>a. <em>duy-s</em> ‘cook’ (intr.)</td>
</tr>
<tr>
<td></td>
<td>b. <em>a-duy-eb</em> ‘cook’ (tr.)</td>
</tr>
<tr>
<td>2. Anticausative alternation</td>
<td></td>
</tr>
<tr>
<td>a. One-participant derived</td>
<td>Hindi-Uru</td>
</tr>
<tr>
<td>b. Two-participant basic/underived</td>
<td>a. <em>khul-naa</em> ‘open’ (intr.)</td>
</tr>
<tr>
<td></td>
<td>b. <em>khol-naa</em> ‘open’ (tr.)</td>
</tr>
<tr>
<td>3. Equipollent alternation</td>
<td></td>
</tr>
<tr>
<td>Both verbs derived from the same basic verb</td>
<td>Japanese</td>
</tr>
<tr>
<td>stem</td>
<td>a. <em>atum-aru</em> ‘gather’ (intr.)</td>
</tr>
<tr>
<td></td>
<td>b. <em>atum-eru</em> ‘gather’ (tr.)</td>
</tr>
<tr>
<td>4. Labile alternation</td>
<td></td>
</tr>
<tr>
<td>Same verb root used for one- and two-participant member</td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>a. <em>open</em> (intr.)</td>
</tr>
<tr>
<td></td>
<td>b. <em>open</em> (tr.)</td>
</tr>
<tr>
<td>5. Suppletive alternation</td>
<td></td>
</tr>
<tr>
<td>Two different verb roots used for one- and</td>
<td>Russian</td>
</tr>
<tr>
<td>two-participant member</td>
<td>a. *goret’ ‘burn’ (intr.)</td>
</tr>
<tr>
<td></td>
<td>b. *žetc’ ‘burn’ (tr.)</td>
</tr>
</tbody>
</table>

¹ I try to stay as theory-neutral as possible in my terminology used to describe the alternation here, this to avoid any misconception or confusion due to unfamiliar terms on the part of the reader.
² Haspelmath (1993: 97-8) employs the following three criteria for establishing the basic form of the alternation pair: (i) phonological markedness, (ii) direction of neutralisation, and (iii) productivity.
However, the neuter suffix has a number of other derivational functions. It is used to express what I will label a potential clause (Guthrie 1962: 210), which corresponds to the English adjectival construction ‘be V-able/ible’, or can be paraphrased as ‘can be V-ed’. This is illustrated in (2) for Chewa, a Bantu language spoken in Malawi, Zambia and Mozambique.

(2) **CHEWA (N31b) (Dubinsky & Simango 1996: 759)**

chipatso ichi ndi cho-lum-ik-a.
fruit DEM is ATTR-bite-NT-FV³
‘This fruit is biteable.’

Finally, the neuter can combine with certain verbs resulting in an idiosyncratic or non-compositional semantic derivation. In (3), we have the Chewa verb root *-gul-* ‘buy’, which becomes *-gulik-* ‘be cheap’ when the neuter suffix *-ik-* is added.

(3) **CHEWA (N31b) (Dubinsky & Simango 1996: 756)**

chimanga chi-ku-gul-ik-a ku msika.
corn SM-PROG-buy-NT-FV LOC17 market
‘Corn is cheap at the market.’

These are the three most encountered features of the neuter described in the literature. It is important to emphasise, however, that they should not (but nevertheless can) be encoded systematically all three together in every Bantu language by the neuter suffix. Cross-linguistic variation and differences of the functional behaviour of the verbal suffix will be treated in Part 2.

The remainder of this part first sets out the research questions and objectives (1.2). In section 1.3 an introduction to the Bantu languages is provided. The alternation realised by the neuter as illustrated in (1) has been dealt with extensively in different linguistic frameworks for a rich variety of non-Bantu, and mostly Indo-European, languages. Section 1.4 provides an overview of the three most influential and important frameworks that have reflected upon this alternation: SFG (§1.4.1), the Typological framework (§1.4.2) and Government and Binding theory (§1.4.3). The fifth and last section of this part (1.5) describes the methodology concerning the two following parts. Part 2 provides a description of the neuter in Bantu based on the existing literature. A full overview and theoretical analysis of the various functions and meanings of the neuter is provided in section 2.1: the ergative alternation (§2.1.1), the agentless passive derivation (§2.1.2), the potential (§2.1.3) and the idiosyncratic derivation (§2.1.4). Next, I discuss the co-occurrence of the neuter with other verbal suffixes in section 2.2, and argue that the separative intransitive suffix can be analysed as a concatenation of the separative transitive and neuter suffix (§2.2.10). Section 2.3 deals with two Bantu language

³ There is no unified way of glossing which I could adopt. Different authors gloss differently. I have tried to conform most of the various systems to a unified way of glossing in this dissertation. However, I have not been able to resolve some inconsistencies. For example, some authors have indicated the class number of the noun prefixes, and others have not. Since I am not familiar with the grammar and noun class system of every language treated in this dissertation, examples taken from sources in which the class number is not indicated lack them as well here. Some authors separate the noun class marker from the nominal stem by means of a dash, whereas others do not but indicate the class number in the gloss by means of a colon. Again, I do not know for all the languages which part of the noun is the prefixal morpheme and which is the nominal root. Apart from such minor inconsistencies, I have tried to make the glossing system used here as consistent as possible.
groups in which some or all functions, generally attributed to the neuter, are encoded by a different marker or another strategy in some languages. The last section of Part 2 (2.4) discusses which questions remain unanswered after an overview and theoretical description of the neuter based on (examples from) previous studies. The third Part presents the results of new data and research, focusing on one language in particular, namely Ganda, the biggest language of Uganda. After an introduction of the language in section 3.1, the four functions of the neuter are discussed: the unergative (section 3.2), the agentless passive (section 3.3), the potential (section 3.4) and the idiosyncratic derivation (section 3.5). The focus shifts here from providing a basic description to a more detailed analysis of specific instances of neuter clauses in a particular language, thus fine-tuning some of the assumptions and hypotheses made in Part 2. Part 3 is entirely based on a corpus-drive research, and in section 3.6 the preliminary results of a frequency study of neuter verbs are presented and discussed. The General conclusion provides an overview of the new findings (section 4.1), and lists issues that should be taken in consideration for further research on the neuter (section 4.2).

1.2 Research questions and objectives

The core objective of this dissertation is to make a description of the neuter and its function(s) introduced in section 1.1. In doing so, I use the theory of SFG as an analytical tool. Although usually the general theory and specific description interact with and challenge each other, I believe that in this dissertation the use of the theoretical apparatus of SFG has enriched the description of a particular linguistic element, namely the neuter suffix. The concept that language is a metafunctional semiotic system (Caffarel et al. 2004b: 10), and that the three metafunctions are combined at the clause rank, give structure and meaning to the clause, but are also realised by the clause, allows us to look at the neuter suffix in ways different and with a greater degree of delicacy than previous studies have (the theoretical terms and concepts are elaborated below in §1.4.1). The present work provides the first description of a Bantu language within the model of SFG, and thus ties in with the domain of systemic functional typology in that it gives a description of a previously unexplored language group (at least within systemic functional typology). However, this does not come without its deficiencies and complications. A comprehensive systemic functional description of a Bantu language is nonextant; thus, when venturing into the lexicogrammatical system, which is where languages tend to differ from each other, the structural analyses made in this dissertation for a number of Bantu languages are explorative. Most of the descriptive categories are borrowed from Halliday & Matthiessen’s (2014) description of the English grammatical system. Although this is not unproblematic, it has been noted that starting from scratch can take very long (and definitely would take too long for the timespan of this work) and thus that one might as well “model the description of one language on the description of another — this is the method of transfer comparison […]” (Caffarel et al. 2004b: 15; bold in original).

The main hypothesis of this dissertation is that the neuter is a polysemic suffix, i.e. that the different meanings denoted by the neuter are expressed by one and the same suffix. This goes against Dubinsky & Simango’s (1996: 759) analysis, who claim that “there are two -ik affixes, one which derives statives and which has the thematic constraint on its distribution […], and one which derives potentials and does not have the same constraint.” I will show that the polysemy of the neuter is located in both the representational and interpersonal layer of mean-
ing construed by the clause. Representationally, the neuter is used in three configurational structures: (i) it expresses the unergative member of the ergative alternation pair; (ii) it derives an effective receptive (i.e. passive) clause from an effective operative (i.e. active) clause, in which it is furthermore impossible to express the Actor/Initiator, or a Senser denoting a specific entity; this will be labelled the ‘agentless passive constellation’; (iii) a neuter clause can encode a specific type of relational intensive attributive process, in which the Attribute participant is typically realised by a verb. The polysemy in the interpersonal layer can be described as a neuter clause expressing either an objective proposition about a state of affairs, or a subjective statement on the dynamic modality of an entity, an act, or a fact.

Polysemy implies that the various functions or meanings of the element in question are interrelated. I will argue that both the unergative and agentless passive neuter clause have identical configurations in which the Actor/Initiator/Senser participant is omitted and the Goal/Medium participant functions as Subject, and that these are derived from an effective, two-participant configuration of the same process type. I adopt Davidse & Heyvaert’s (2007) concept of subjectification in order to relate the unergative and agentless passive neuter clause to the relational attributive neuter clause.

A survey of the literature has demonstrated that this verbal suffix has not yet received the same amount of attention as some of the other suffixes found in Bantu (e.g. the causative, passive, applicative and associative/reciprocal). With the descriptive objective, I thus wish to give a theoretically more fine-grained and more extensive analysis of the neuter, based on a cross-linguistic study (Part 2). This part also serves to demonstrate the lack of in-depth studies of the neuter, as it will be shown that there are still many issues left untouched (section 2.4). The third Part therefore presents an explorative, corpus-driven analysis of the neuter in Ganda, as a first attempt to tackle the problems and answer the questions concerning the neuter not yet investigated. Although a lack of time did not allow me to make an in-depth study of the verbal suffix in Ganda, a corpus-driven approach makes it possible to analyse the neuter in a context of natural language usage. This dissertation lays out a pathway for further investigations and more detailed and quantitative research on the neuter suffix, for Ganda specifically and for Bantu languages in general.

This study thus is innovative in four respects:

- It will be the first dialogue between SFG and Bantu languages; i.e. Bantu languages have never been treated within the model of SFG.
- An extensive, cross-linguistic and theoretically motivated study of the neuter based on the existing literature has never been attempted.
- This is the first corpus-driven study of the neuter for any Bantu language in general and for Ganda in particular.
- The neuter has only been analysed in its function as an argument-changing operation (ideationally, in SFG terms). The modal value encoded by the potential function of the neuter (interpersonal meaning) has not been studied and grasped yet in previous works. This aspect of the neuter will be addressed for the first time.
1.3 The Bantu languages

The Bantu languages are spoken in a large area south of an (imaginary) line that runs from the borderland between Cameroon and Nigeria to the most southern part of Somalia. The exact number of Bantu languages is unknown, but estimates range from 250 to 600. This wide gap of uncertainty can be attributed to the well-known linguistic problem of language versus dialect, which is mainly a sociolinguistic issue. Nurse & Philippson (2006a: 3) list a number of criteria that have been established based on Continental and American schools of sociolinguistics, that have not taken into account and thus are not completely applicable to the (socio)linguistic reality of Africa in general, and the Bantu area in particular:

“The conventional, largely sociolinguistically based, answer says that a language tends to be the standard variety, be written, have more speakers, have some form of official status, have prestige, and not be intelligible to speakers of other ‘languages’. By contrast, dialects are not the standard, not written, have fewer speakers, have no official status, have little or no prestige, and are mutually intelligible. In sub-Saharan Africa these distinctions are only partly true and in any case any distinction between language and dialect is part linguistic, part political, part prestige-related.” (Nurse & Philippson 2006a: 2-3; italics SD)

The large number of language varieties can be reduced, when loosely applying the criteria outlined above, to a ‘guestimate’ (Nurse & Philippson 2006a: 3) of 300, and probably less. Genetically, the Bantu languages belong to the wider Niger-Congo phylum. The borderland between Cameroon and Nigeria is believed to be the original homeland of the Bantu population and the Bantu language family, now “one of the world’s linguistically most crowded areas, with Cameroon having almost 300, and Nigeria about 500 languages” (Nurse 2008: 9). The spread of the Bantu people from this homeland throughout the southern part of the continent, also known as the ‘Bantu expansion’ (and a widely debated topic, cf. among others Bostoen et al. 2013, Bostoen & Grégoire 2007, Flight 1988, Hiernaux 1968, Oliver 1966, Pakendorf et al. 2009, Schoenbrun 2001, Vansina 1984, 1995), is believed to have occurred around 3000 BC (Nurse & Philippson 2006a: 5). Currently, approximately 250,000 people speak at least one Bantu language (Nurse 2008: 3). ‘At least’ is stressed here because it is important to highlight that multilingualism is a very normal and frequent phenomenon in the African context. If an African speaks a local variety as a first language, s/he most probably also has learnt to speak at least one of the varieties of the surrounding villages or linguistic areas, and furthermore possibly a vernacular or lingua franca, and perhaps the national language of the country s/he lives in (Dimmendaal 2011: 179). Finally, due to the ages of colonisation, many Africans speak in addition at least one exogenous language, mostly French, English, Portuguese or, more recently, Chinese (the latter not because of the colonial history but due to recent politico-economic dynamics between some African countries and the Republic of China), all this giving rise to interesting (socio)linguistic language-contact phenomena.

Within Bantu linguistics, various classifications of the language family have been proposed, either based on linguistic-genetic studies, e.g. Bastin et al. (1999), or on areal-typological grounds, of which Guthrie’s (1971) is the most authoritative. The latter has become a very popular reference tool for Bantu languages (Maho 2001: 43), and can said to be
more stable than linguistic-genetic classifications because it does not have to be constantly updated due to new discoveries in the field of historical-comparative, lexicostatistical and/or genetic linguistics. Guthrie divided the Bantu area in fifteen zones, each with a specific letter. Revisions of his classification have been proposed, but only the addition of a sixteenth zone (J) based on a revised version of the Tervuren scholars has been largely accepted by the Bantuist community. This zone covers some languages of Guthrie’s zone D and some of zone E. Maho (2001: 41) proposes that Guthrie’s classification as a referential tool should not be changed (i.e. the recoding of already enlisted and coded languages) apart from the addition of newly ‘discovered’ language varieties.

Each zone is divided in a number of language groups, and each language group consists of specific languages. Like most classifications, Guthrie’s has a coding system. Every language is referred to by means of an upper-case letter (encoding the zone) and two digits of which the decimal stands for the language group and the two-digit number for the actual language. In some instances the code is extended by a lower-case letter, which indicates dialectal variety. For example, the language Tetela, spoken in the central part of the Democratic Republic of the Congo, is located in zone C and language group 70, which is labelled as the Tetela group, and is furthermore classified as the first language of this group. Throughout this dissertation, every language will be followed by its referential code between brackets, e.g. Tetela (C71). For languages of the later added zone J it is still indicated whether they belonged to Guthrie’s zone D or E, e.g. Kinyarwanda (JD61) and Bukusu (JE31c). The language codes used in this dissertation are based on the revised classification of Guthrie by Maho (2009). The following page shows the zones of Guthrie’s classification.

Bantu languages are agglutinative and well-known for their noun class system. Each noun is marked by means of a nominal prefix belonging to a certain gender. A gender consists of a prefix pair, one indicating singularity and the other plurality. Furthermore, the prefix marker on the head noun governs agreement on the other elements of the noun phrase and on the verb. This is illustrated in (4) for Chewa (N31b).

\[
\text{(4)} \quad \begin{array}{ccc}
\text{a-lendô-wo} & \text{a-na-bwéra} & \text{ku-mu-dzi.} \\
\text{CL}_2\text{-visitor-those} & \text{SM}_2\text{-PST-come-FV} & \text{CL}_{17}\text{-CL}_3\text{-village}
\end{array}
\]

‘Those visitors came to the village.’

(Bearth 2006: 139)

A noun class is defined by Maho (1999: 145) as “a combination of a given noun prefix (NP) with a given set of concords (C).” Such a prefix, representing a class, is referred to by means of a number. In (4), for example, the prefix \text{a-} of \text{alendô} ‘visitors’ is referred to as the prefix of class 2. The numbering system is arbitrary, and is usually based on the system established for the noun prefixes reconstructed for Proto-Bantu (see Katamba 2006: 104). Various reconstructed noun class systems have been proposed for Proto-Bantu, of which Welmers’ (1973) counts the most prefixes, i.e. 23 (Katamba 2006: 104). Nominal prefixes can be distinguished

\[4\] As we can see, noun prefix is generally abbreviated as NP in Bantu linguistics. However, this might lead to confusion as NP more commonly stands for ‘noun phrase’. Therefore I use the abbreviation CL for noun class in my glossing system to avoid confusion.
Map 1. Guthrie’s classification of the Bantu languages, with the addition of zone J
(http://www-01.sil.org/silesr/2002/016/bantu_map.htm)
from each other on the basis of three criteria: (i) the form of the prefix, (ii) the corresponding plural and (iii) the corresponding pronominal and verbal concord markers. In Lubà (L31a), e.g., the nominal prefixes of class 1 and 3 have the same form, *mu-* and the same verbal concord prefix, *ù-*, but the former takes its plural in class 2, *ba-*, and the latter in class 4, *mi-*. This is shown in (5).

(5) **LUBA (L31a)** (Kabuta & Schiffer 2009a: 60)

a. mu-àna ù-di nè mu-tù mu-nène.
   CL₁-child SM₁-be.PRS with CL₃-head CL₃-big
   ‘The child has a big head.’

b. ba-àna bà-di nè mi-tù mi-nènè.
   CL₂-child SM₂-be.PRS with CL₄-head CL₄-big
   ‘The children have big heads.’

Bantu languages are ‘verby’, meaning that a great deal of information is or can be encoded in the verb phrase. A single, inflected verb can express a complete sentence. The reconstructed morphological structure inherited from its ancestral language, Proto-Bantu, is the following (adapted from Nurse 2008: 40):

Pre-SM + SM + NEG + TA + OM + root + extension + FV + post-FV

This structure is not necessarily preserved in modern Bantu languages. Often morpheme slots have been dropped, and others might have been added or have a different function due to language-internal innovations (for a general overview, cf. Nurse 2008: 53ff.).

The neuter suffix is located in the extension slot. ‘Extension’ can be seen as a terminological synonym for verbal suffix commonly used in Bantu linguistics, but has a very specific definition. ‘Verbal suffix’ thus is a more general notion, which can refer to extensions as well as other morphological material following the verb root. However, throughout this dissertation I will use both terms as equivalents. Extensions always follow the verb root or radical and thus quite literally ‘extend’ it (Guthrie 1962: 202). A verb root and its extensions make up an extended base. A base can also be simple, i.e. a root without suffixes. Schadeberg (2006: 71) makes an important distinction between extensions as a form-meaning pair, in which case the extension can be called a suffix, and a formal extension empty of any meaning or function, which he terms an expansion or formal suffix. Most Bantu verb roots have either a CV or a CV(V)C structure. Any VCn-sequences in the verb base following the root can be analysed as either extensions or expansions. The verbal base is followed by the final vowel (FV). The extensions have a number of functions: some are used to encode voice phenomena (in the sense of Kulikov outlined above) such as the causative, applicative (dative), associative/renciprocal and passive; some express aspectual categories, such as repetitive, habitual, imperfective; others have a more specialised meaning, e.g. the extensive, separative or tentative. The list of extensions varies greatly among languages, some having undergone phonological or semantic changes, others having been lost and new ones developed. In some cases an extension can become less productive, to the extent that it has become lexicalised. In such instances, the extension is no longer used to change the meaning or valency of a basic, underived verb, but has become fossilised and is sometimes still retained in a few verbal lexemes. Often the basic,
underived verb is no longer attested. The list of extensions reconstructed for Proto-Bantu are the following (Schadeberg 2006: 72):

\[
\begin{align*}
*{-i/-ici} & \text{ causative} \\
*{-l} & \text{ dative (applicative)} \\
*{-ik} & \text{ impositive} \\
*{-ik} & \text{ neuter} \\
*{-am} & \text{ positional (stative)} \\
*{-an} & \text{ associative (reciprocal)} \\
*{-ag-~-ang-} & \text{ repetitive} \\
*{-al} & \text{ extensive} \\
*{-at} & \text{ tentative (contactive)} \\
*{-ol-; -ok-} & \text{ separative tr.; itr. (reversive)} \\
*{-u/-ibu-} & \text{ passive}
\end{align*}
\]

It should be noted that the neuter extension is homophonous with the impositive. The latter has, however, almost the opposite meaning: ‘to put something into some position’ (Schadeberg 2006: 74), i.e. some sort of causation.

1.4 Theoretical framework

In this section the three main linguistic models that have theorised about the alternation illustrated in example (1) in the introduction, are considered: Systemic Functional Grammar (§1.4.1), the Typological framework (§1.4.2) and Government and Binding (henceforth GB) (§1.4.3). SFG, and Systemic Functional Linguistics in general, will be presented more extensively as it is the theoretical framework adopted in this study.

1.4.1 Systemic Functional Grammar

1.4.1.1 General overview

SFG (and Systemic Functional Linguistics) was developed by Michael Alexander Kirkwood Halliday from the early ’60s onwards (cf. among others Halliday 1961, 1963, 1967/8), and focuses on the usage of language, i.e. language use in its wider, social context (a functional theory of language as opposed to formal linguistics). Language is thus approached as a social meaning-making resource, in which the different components of the language work together to create meaning. In this regard, text analysis plays a central role in SFG, in that texts (either spoken or written) represent language in its most natural realisation. Halliday distinguishes three metafunctions of language (Halliday & Matthiessen 2014: 30-1; henceforth H&M):⁵

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⁵ H&M (2014: 31) comment on the use of the term metafunction, instead of function, that “there is a long tradition of talking about the functions of language in contexts where ‘function’ simply means purpose or way of using language, and has no significance for the analysis of language itself (…). But the systemic analysis shows that functionality is intrinsic to language: that is to say, the entire architecture of language is arranged along functional lines. (…) The term ‘metafunction’ was adopted to suggest that function was an integral component within the overall theory” (bold and italic in original).
• the *ideational* metafunction: when language is used to construe human experience, i.e. to talk about events, situations and happenings.

• the *interpersonal* metafunction: language as enacting social relationships.

• the *textual* metafunction: language used for the organisation of discourse. This function is usually described as ‘combining the two previous functions in a coherent whole’.

The ideational metafunction is further divided into an experiential component, encoding our experiences, and a logical component that relates these different experiences to one another.

It is argued that a theory of grammar should pertain to ‘what is possible’, i.e. the *meaning potential* of a language (H&M 2014: 23). To build up a clause or text, language users make choices in a wide array of different systems. In other words, lexicogrammar can be represented as a system network. Structure, or the interdependency and relatedness between the different parts of a clause or text, is the outcome of a number of systemic choices. Language is thus organised *paradigmatically*, whereas the structure or *syntagmatic* ordering is the result of combinations of choices from sets of alternatives (H&M 2014: 21-24).

SFG distinguishes different levels of encoding or strata that make up language. The stratification model is usually visualised by means of a number of co-tangent circles, in which each stratum or level incorporates a circle representing a ‘lower’ level, and itself being part of a bigger circle representing a higher stratum (Figure 1). Because the primary motive of language is the making of meaning, semantics is the highest stratum. Context is included in the stratification because any linguistic action takes place in a specific context, and it is ultimately the semantics of language as a system that interfaces with language as a social instrument.

![Figure 1. Stratification (H&M 2014: 26)](image)
As we can observe in Figure 1, SFG does not differentiate between grammar and lexis, but treats the two components as either two ends of a continuum. The term *lexicogrammar* thus indicates that there is an interaction between the lexicon on the one hand and the grammar on the other, i.e. they are not different constituents of the clause but rather form an interlocking component. This theoretical point of view is radically different from the generativist framework, where the grammar and lexicon are seen as distinct modules of language.

Because the functions of the neuter are located inside the lexicogrammar, I will zoom in on this part of SFG (for further reading on SFG in general, see H&M 2014 and references therein).

As stated earlier, different components of the language work together in order to make meaning. Turning this around, the clause, which is the basic element of the lexicogrammar, realises three types of meaning related to the three metafunctions (ideational, interpersonal and textual). This is summarised in Table 2, showing for each metafunction the type of meaning (‘clause as…’), the underlying system and the general organisation (‘structure’) of that system.

Table 2. Three lines of meaning in the clause (adapted from H&M 2014: 83)

<table>
<thead>
<tr>
<th>Metafunction</th>
<th>Clause as …</th>
<th>System</th>
<th>Structure⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>textual</td>
<td>message</td>
<td>THEME</td>
<td>Theme ^ Rheme</td>
</tr>
<tr>
<td>interpersonal</td>
<td>exchange</td>
<td>MOOD</td>
<td>Mood [Subject + Finite] + Residue [Predicate (+ Complement) (+ Adjunct)]</td>
</tr>
<tr>
<td>experiential</td>
<td>representation</td>
<td>TRANSITIVITY</td>
<td>process + participant(s) (+ circumstances)</td>
</tr>
</tbody>
</table>

The clause as a message pertains, in short, to what is generally known as information structure, with the Theme-Rheme distinction adopted from the Prague school of linguists (H&M 2014: 89). I will not further expand on the textual meaning of the clause, as we have to go into further detail in the representational and interpersonal meanings of the clause, realised by means of the transitivity and mood systems, in order to situate the systemic functional description of the neuter.

1.4.1.2 Experiential structure

As mentioned above, the experiential (i.e. ideational) function of language is to talk about events and experiences. In the words of H&M (2014: 212), “[…] experientially, the clause construes a quantum of change in the flow of events as a figure, or configuration of a process, participants involved in it and any attendant circumstances” (bold in original). The system underlying the realisation and organisation of these ‘goings-on’ (H&M 2014: 213) is that of transitivity. The flow of events or ‘processes’ is central in the transitivity system, and there are a limited number of different process types (H&M 2014: 213-20):

---

⁶ It should be noted that these structures are based on the lexicogrammar of English, and should not be thought of as ‘universal’. For structural and systemic differences between languages, I refer the reader to Caffarel et al. (2004a), and more specifically Matthiessen (2004) therein.
- **Material**: prototypically actions and events; outer experiences. These are usually contrasted with mental processes.
- **Mental**: what goes on on the inside (of ‘oneself’); processes of perception, emotion and imagination.
- **Relational**: these are processes in which we relate different fragments of our experience with each other.
- **Behavioural**: a combination of mental/inner and material/outer processes; the outward realisation of inner emotions.
- **Verbal**: processes of saying and speaking, and communication more generally.
- **Existential**: processes of being and having.

These six process types are not to be considered as separate and distinct categories, but as neighbouring regions in a continuous space. This is usually represented as a circle with a number of zones, as in Figure 2. In this sense, we have the three basic processes - material, mental and relational - with the processes that can be described as a mix of two of the basic ones situated between them - behavioural, existential and verbal. It should also be noted that this is a prototype network: some processes can be categorised under one process type. However, many processes do not categorically fall under one specific type, but have elements of neighbouring types as well. They can be located more closely to the borders of a zone in the circle.

**Figure 2. The grammar of experience: types of process in English (adapted from H&M 2014: 216)**

In a functional approach to language, where the meaning of linguistic elements is central, the participants involved in different types of processes logically receive different names according to the roles they play in the goings-on and the different properties each process ascribes to them. Some of these participants are displayed under the names of the process types in Figure 3, which illustrates the process types in the form of a system network.
We now turn to one specific process type, viz. material processes. These are events of ‘doing-&-happening’, and always involve a central participant called the Actor, which is “the source of the energy bringing about the change” (H&M 2014: 224). The Actor can be the sole participant featuring in the process, in which case the clause is analysed in traditional frameworks as an intransitive clause. However, the process can also be extended onto a second participant at whom or which the flow of energy is directed, called the Goal. Such a two-participant clause has traditionally been termed as transitive. This distinction makes up a second relevant subsystem of the transitivity system, namely that of participant voice, illustrated in Figure 4. An effective clause corresponds to the two-participant clause, where there is quite literally an effect on one participant which stems from or is brought about by the other. This can be construed from two points of view – either from that of the initiator of the energy flow, in which case we have an operative clause, or from the viewpoint of the affected participant, with a receptive clause. This distinction coincides with the traditional opposition between ‘active’ and ‘passive’ voice. A one-participant event is neither receptive nor operative, and is therefore called ‘middle’.\(^7\) Pseudo-effective clauses, then, have a second participant apart

\(^7\) The terms ‘effective’ and ‘middle’ are defined here in accordance with Davidse (1992). In H&M (2014: 349) these terms are defined differently, the crucial element distinguishing them from each other being ‘agency’: “A clause with no feature of ‘agency’ is neither active nor passive but middle. One with agency is non-middle, or effective, in agency” (bold in original). We will see in the following section that the subsystem of voice as outlined by Davidse (1992) is more fine-grained with regard to the notion of agency. Furthermore, ‘middle’ is a concept that is used in different frameworks to refer to a number of linguistic phenomena. Throughout this dissertation, I will sometimes use the term in a context different from this one. For clarity, I will explicitly mention...
from the Actor, which is typically not affected, or “not a ‘done-to’” (Davidse 1992: 125). In this respect it differs radically from Goals, and is thus called ‘Range’, first defined by Halliday (1967: 58) as “[specifying] the extent of [the process’s] scope or relevance.” The examples he (ibid.) provides are ‘he climbed the mountain’, ‘he played five games’ or ‘he walked the streets’, the words in italics representing the Ranges.

In the following section I will zoom in on the theoretical description of the alternation realised by the neuter as described for example (1) in the introduction.

1.4.1.3 The ergative model

Recapitulating, we have seen that material processes can be represented as Actor-process-Goal constellations, when effective, and Actor-process constellations when middle (not taking into account the pseudo-effective clauses for the time being). We have also defined the Actor as the participant instigating the process, i.e. the source of a flow of energy. Typical properties attributed to the Actor are consciousness, animacy (or humanness), volitionality and intentionality. Examples of this kind of material clauses are shown in (6) and (7).

(6) [He’s always here;] he’s living up there now.
    (H&M 2014: 225)

(7) a. The lion sprang.
    b. The lion caught the tourist.
    (H&M 2014: 226)

We observe furthermore that the clause in (7b) can semantically be seen as an extension of the clause in (7a). Thus, the lion can jump from a rock onto the ground, in which case we would state the clause in (7a). However, the lion could perform the same action in order to catch the tourist, i.e. direct the flow of energy of springing at the person in danger. The one- and two-participant events can thus be seen as an alternation in which the second (two-participant) is a semantic extension of the process of the former (one-participant) clause. We can observe furthermore that a different verbal lexemes (spring and catch) are used in English for respectively the one- and two-participant clause. Now consider the examples in (8) and (9).

---

Figure 4. Voice: a system network

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---

in which context ‘middle’ should be interpreted whenever it is NOT used to refer to a one-participant clause in the context of the participant voice system.

The following section is based on Davidse’s (1992) article on ergativity. For a slightly different approach to the notion of ergativity within the framework of SFG, see H&M (2014: 336ff.).
In these clauses we also find material processes, such as *fry* and *open*. However, in contrast to the participant in (7a), we cannot state for a clause such as *the pancakes will fry* that the sole participant (*the pancakes*) is conscious, volitional, animate or intentional. In other words, whereas the participant of *the lion jumped* is clearly an Actor, this description does not hold for the participants of the middle clauses in (8a) and (9a). The participant of this type of process is called a Medium. Furthermore, it is not elucidated whether the processes in (8a) and (9a) took place by themselves, or whether they were brought about by some sort of causer, external to the process. This vagueness has been described by Davidse (1992: 109) as *voice syncretism*. The syncretism can be resolved by adding a second participant which is typically an external causer, also called Instigator. This is illustrated in (9b), which is the effective alternate of (9a). Notice that in this case the same verbal lexeme is used in the middle as well as in the effective clause in English. We thus have two models or types of construals, summarised in Figure 5.

**Table 1.** Types of construal: transitive versus ergative model

<table>
<thead>
<tr>
<th>Transitive model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>effective:operative</strong></td>
<td>Actor</td>
</tr>
<tr>
<td><strong>= transitive</strong></td>
<td><em>The lion</em></td>
</tr>
<tr>
<td><strong>middle</strong></td>
<td>Actor</td>
</tr>
<tr>
<td><strong>= intransitive</strong></td>
<td><em>The lion</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ergative model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>effective:operative</strong></td>
<td>Instigator</td>
</tr>
<tr>
<td><strong>= ergative</strong></td>
<td><em>Lizzy</em></td>
</tr>
<tr>
<td><strong>middle</strong></td>
<td>Medium</td>
</tr>
<tr>
<td><strong>= unergative</strong></td>
<td><em>The door</em></td>
</tr>
</tbody>
</table>

Figure 5. Types of construal: transitive versus ergative model

The bold lines in Figure 5 indicate for each model the central participant, i.e. the Actor in the transitive and the Medium in the ergative construal. Thus, in the transitive model “the Actor-Process complex is grammatically more nuclear and relatively more independent” whereas the ergative model has “a more nuclear, independent Medium-Process complex” (Davidse 1992: 110). Furthermore, when a second participant is added to the basic constellation, there is an extension to the right in the transitive model, but an extension to the left in the ergative model. This is illustrated in Figure 6.
In traditional terminology, we would state that in the transitive alternation the same participant functions as (grammatical) subject in both the intransitive and transitive clauses, whereas in the ergative alternation it is the (grammatical) object of the two-participant clause that functions as (grammatical) subject of the one-participant clause. The description of the latter alternation strongly resembles that of the passive, and many studies have been dedicated to the analysis of the grammatical, functional, pragmatic and semantic differences between the ergative alternation and passive operation (the literature on this topic will be more extensively discussed in the sections in 2.1).

The ergative alternation has also been described in other linguistic frameworks. Before presenting briefly their points of view on the ergative alternation in §1.4.2 and §1.4.3, I will first provide an introductory sketch of the interpersonal structure of the clause.

1.4.1.4 Interpersonal structure

In the previous section, the structure of the clause as a representation of our experiences has been briefly outlined. However, when we model these experiences through language, we typically talk about them to other people. In other words, language is an interactive (speech) event in which the clause is used as a means to provide and demand information or goods and services (H&M 2014: 135). Clauses providing or querying for information are termed propositions, and those in which goods and services are offered or demanded are termed proposals. For the description of the neuter, I will have to address the grammar of propositions, leaving aside that of proposals (for further reading, see H&M 2014: 160ff.).

In Table 2 (§1.4.1.1) the main functional elements of the structure of the clause as exchange are presented, viz. the Subject, Finite, Predicator, Complement and Adjunct. The Subject corresponds to what has traditionally been called the grammatical subject. It is the element with modal responsibility, namely “that of which something is being predicated” and which “supplies the rest of what it takes to form a proposition: namely, something by reference to which the proposition can be affirmed or denied” (H&M 2014: 78, 145). In English the Subject can be identified, among other ways, by the fact that it is picked up by the pronoun in the mood tag (H&M 2014: 141), e.g. he in the Olympic champion didn’t cheat, did he?. In Bantu languages it can be recognised as that element which controls verbal cross-reference, as shown in (10).
A remarkable difference between English and Bantu languages is that in the latter, circumstances of location can function as Subject seeing that they trigger cross-reference on the verb, whereas in English locational circumstances cannot realise the Subject (H&M 2014: 155). Locative circumstances are marked by locative prefixes in Bantu (generally numbered 16, 17 and 18) which adhere onto or precede the nominal prefix of the noun expressing the location (11). The Herero clause in (11a), in which the Actor participant òvàndù ‘people’ is Subject and the locational circumstance móngándá Adjunct, can alternate with (11b), in which the circumstance of location is Subject and the Actor functions as Complement. This alternation is termed ‘locative inversion’ and has been treated extensively in the Bantu literature (among others, Bresnan 1994, Bresnan & Kanerva 1989, Buell 2009, Demuth & Mmusi 1997, Marten 2006, Creissels 2011).

In English we can say the guests entered the house, didn’t they?, or in the house entered the guests, didn’t they?, where they identifies guests as Subject in both clauses. But we cannot say into the house entered the guests, didn’t there? The circumstance of location in the house in the English equivalent of (11) functions as marked Theme (H&M 2014: 98), which is a textual category, followed by the Rheme which consists of the Predicator entered and the Subject the guests. English and Herero (and Bantu more generally) thus differ as to which ideational elements can function as Subject. This is demonstrated in Table 3.

Table 3. Comparison of the three lines of organisation of Herero and English clause with locative inversion

<table>
<thead>
<tr>
<th>Herero</th>
<th>móngándá</th>
<th>mwáhití</th>
<th>òvàndù.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘into the house’</td>
<td>entered</td>
<td>the guests.’</td>
</tr>
<tr>
<td>Ideational</td>
<td>Circumstance: location</td>
<td>Process: material</td>
<td>Actor</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Subject</td>
<td>Predicator</td>
<td>Complement</td>
</tr>
<tr>
<td>Textual</td>
<td>Theme</td>
<td>Rheme</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English</th>
<th>into the house</th>
<th>entered</th>
<th>the guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td>Circumstance: location</td>
<td>Process: material</td>
<td>Actor</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Adjunct</td>
<td>Predicator</td>
<td>Subject</td>
</tr>
<tr>
<td>Textual</td>
<td>Theme</td>
<td>Rheme</td>
<td></td>
</tr>
</tbody>
</table>
In the preceding paragraph we have already encountered the Adjunct, which is defined as that element that cannot function as Subject. The Adjunct is mostly realised by adverbial groups and prepositional phrases (H&M 2014: 155).

The Actor participant òvändù ‘people’ in (11) realises the Complement, as shown in Table 3. The Complement is any nominal group in the clause that is not the Subject (H&M 2014: 153). It is important to note here that the nominal group is not identical or reducible to the noun. They constitute different levels in the lexicogrammatical rank scale (clause ~ phrase/group ~ word ~ morpheme; H&M 2014: 21), and a nominal group can have adjectives and verbs (word level) as Heads (H&M 2014: 391, and see §2.1.3 on potential neuter clauses in which the Complement is realised by a verb).

The remaining categories of the interpersonal structure are the Finite and Predicator. These two elements are typically realised by verbal groups in English. The Finite grounds the proposition in the context and locates it in the speech event, either by reference to time by means of the expression of primary tense, or by reference to the speaker’s or hearer’s attitude towards the proposition by means of the expression of modality (H&M 2014: 144). The Predicator is the element which denotes the Process. Often, in English as well as in Bantu, the Finite and Predicator are conflated in one single verb form. This is shown in Table 4 for the eastern Kongo variety Mbeko, in which the present progressive is expressed by the combination of the verbal infix -ta- and the FV -a.

Table 4. Interpersonal structure of Mbeko clause: conflation of Finite and Predicator

<table>
<thead>
<tr>
<th>MBEKO (H16g) (Dom 2013: 55)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dokotóló katánwiiká mwaná bilongo.</td>
</tr>
<tr>
<td>‘The doctor makes the child drink the medicine.’</td>
</tr>
</tbody>
</table>

| Ø-dokotolo | ka-ta-nu-ik-a | mu-ana | bi-longo |
| CL9-doctor | SM1-PROG-drink-IMPS-FV | CL1-child | CL8-medicine |
| Subject | ‘(present) -ta-a’ | -nwiiik’ | Complement |
| Finite | | Predicator | |

The Finite can, however, be untangled from the Predicator, as is shown in Table 5. Here, the future tense is expressed by the preverbal marker si. The absence of a lexical Subject triggers anaphorical verbal agreement, in which case the SM can be analysed as (substituting a lexical) Subject.

Table 5. Interpersonal structure of Mbeko clause: separated Finite and Predicator

<table>
<thead>
<tr>
<th>MBEKO (H16g) (Dom 2013: 57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sí kakúma kúkú mbasi?</td>
</tr>
<tr>
<td>‘Will he arrive here tomorrow?’</td>
</tr>
</tbody>
</table>

| si | ka- | kum-a | kuku | mbasi |
| FUT | SM1- | arrive-FV | here | tomorrow |
| Finite | Subject | Predicator | Adjunct | Adjunct |

H&M (2014: 151) attribute four functions to the Predicator: (i) the expression of secondary tense; (ii) the specification of other aspects and phases such as seeming, trying, and hoping;
(iii) the specification of voice, viz. active and passive; and (iv) the specification of the process type.

With a general definition of Subject, Finite, Predicator, Complement and Adjunct, the most important elements of the Mood system, needed in the analysis of the neuter, have been introduced. In the following sections, I give a concise summary of the terminology and points of view of other theoretical frameworks on the ergative alternation.

1.4.2 The Typological framework

1.4.2.1 Anticausativity

Outside of SFG, the term ‘ergative’ is used in a somewhat different context (see the following section). In the typological tradition, there seems to be no terminological consensus concerning the alternation discussed at the beginning of the introduction. Some terms are recurrently used, but for different aspects of the topic. A widely used term is anticausative. Most authors (e.g. Dixon & Aikhenvald 2000, Haspelmath 1993, Kulikov 2011) use this term to refer to the alternation as a derivational process, i.e. a modification of the diathesis. Diathesis is also known as syntactic/valency patterning or alignment – “a pattern of mapping of semantic arguments onto syntactic functions (grammatical relations)” (Kulikov 2011: 370). According to Kulikov (ibid., footnote 2) this specific use of the term is a recent innovation of the Leningrad-St. Petersburg Typology Group, not yet generally accepted in typological linguistics. Languages can manifest alignment in three ways: by means of (i) case marking, (ii) verbal morphology, and/or (iii) word order. According to Kulikov (2011: 371), “voice is a regular encoding of diathesis through verbal morphology” (italics SD). Thus, in an anticausative derivation a derived, intransitive clause corresponds to a basic, underived transitive clause. Furthermore, the direct object (DO) of the transitive clause becomes promoted and the subject (S) demoted. In the representational system developed by the Leningrad-St. Petersburg Typology Group, this can be summarised as in Figure 7.

![Figure 7. Anticausative (Kulikov 2011: 392)](image)

The capital letters X and Y stand for ‘macroroles’, which are “the main types of participants in a situation” (Kulikov 2011: 369), such as Agent, Actor, Patient, Undergoer. We can observe that one semantic role of the transitive clause (X) is not preserved in the anticausative derivation, which distinguishes it from voice operations such as the passive, antipassive, and dative shift which alter the alignment but do not change the number of semantic roles. The latter can be considered as voices sensu stricto, whereas the anticausative, together with derivations such as the causative, applicative and benefactive, are voices sensu latiore or quasi-voices (Kulikov 2011: 372, 395). What seems to be the defining criterion for this distinction is the effect of the voice operation on the lexical meaning of the verb. It can be argued, however, that even voices in the strict sense have a meaning-changing effect. The antipassive, e.g., of-
ten implies a habitual (aspectual) meaning (see Dom et al. forthcoming for an example of this in a Bantu language). It thus seems to come down to how the concept of ‘voice’ is defined or used: “[D]iatheses and voices in the strict sense of the concepts suggest only modifications in valency pattern with no semantic changes”, although “[…] for some languages, there are also several system-related considerations in favour of the broader understanding of the term ‘voice’, […] [especially] in the case of large voice clusters, such as the middle, which may include diatheses in both the strict (e.g. passive) and the broad (e.g. reflexive) senses of the term” (Kulikov 2011: 395).

In an article on Vedic, Kulikov (1998: 139) uses ‘anticausative’ to refer only to the intransitive derived clause of the alternation. The intransitive member of the anticausative derivation has also been referred to as ‘inchoative’ by Haspelmath (1993), with the corresponding transitive part being called ‘causative’. In this article, Haspelmath studies the directionality of formal derivation of the ‘causative/inchoative’ alternation. The five different alternation types that he discusses have been outlined in Table 1 in the introduction (section 1.1). Interestingly, languages do not simply use one type to express the causative/inchoative alternation. Hindi, for instance, uses an anticausative alternation through stem modification for the verb ‘open’ – khol-naa (intr.) / khul-naa (tr.), but an equipollent alternation for the verb ‘begin’ – šuruu honaa (intr.) / šuruu karnaa (tr.) (Haspelmath 1993: 91-2). However, Haspelmath (1993: 101) shows that even though a language may use more than one alternation type, languages actually exhibit a preference for one or another type of alternation.

It is well-known that the anticausative derivation is restricted to certain types of verbs (Keyser & Roeper 1984, Kulikov 1998, Levin & Rappaport Hovav 1994). What remains a topic of debate is which semantic feature(s) these verbs have in common. Haspelmath proposes ‘the absence of agent-oriented meaning components’ as the central concept underlying the verbs that enter the inchoative/causative alternation, simply because “the inchoative member implies the absence of an agent, [and therefore] it cannot contain agent-oriented semantic elements” (Haspelmath 1993: 93). This group of verbs then consists of a subgroup that participates in a causative alternation, and one subgroup that enters only the anticausative alternation. The crucial difference between the two would be one of likelihood: some verbs express events that are more likely to be caused, while other verbs express situations that are very likely to occur without the intervention of an external force. This degree of likelihood strongly influences the preferred derivational direction and leads Haspelmath (1993: 105) to propose a scale of increasing likelihood of spontaneous occurrence, which is presented here in Figure 8.

```
| ‘wash’ | ‘close’ | ‘melt’ | ‘laugh’ |

inchoative/causative alternations
```

**Figure 8. Scale of increasing likelihood of spontaneous occurrence (Haspelmath 1993: 105)**

The left end of the scale represents situations that are highly unlikely to occur spontaneously and the right end of the scale stands for a high likelihood of occurring spontaneously. Thus, verbs that are located at either sides of the scale are so likely or unlikely to happen spontane-
ously that they do not participate in the inchoative/causative alternation. Verbs situated between the two extremes show preference towards one of the two, based on their location on the scale: more to the right is more likely to be in a causative alternation, and more to the left is more likely to be in an anticausative alternation. The inherent semantic properties of the verbs thus do not lie at the heart of the direction of derivation. Rather, “the correlation between formal and semantic basic-derived (or markedness) relationships should be understood in cognitive terms” (Haspelmath 1993: 106). This means that verbs expressing situations that are cognitively perceived in a language as likely to occur spontaneously will have their unmarked form in the inchoative, and verbs expressing situations that are cognitively perceived as likely to be caused will have their unmarked form in the causative.

In a review of the book in which Haspelmath’s article has been published, Song (1995) provides a critical account of Haspelmath’s analysis. Song (1995: 213) correctly states that the feature of ‘agent-oriented meaning components’ is a rather vague concept seeing how Haspelmath does not specifically defines what these components should be. Furthermore, where does one draw the line on the scale (see Figure 8) and decide what exactly constitutes ‘extremely likely’ and ‘highly unlikely’? In line with this, Kulikov (1998: 143) argues that posing a universal feature for the class of anticausative verbs is untenable due to the fact that specific criteria are probably language specific. He (1998: 150) does not, however, disregard spontaneity but follows Song in that it is too vague a notion to be a useful concept. Kulikov proposes a concrete sub-component of the notion of spontaneity that might be at the heart of the group of anticausative verbs, namely entropy increase. Entropy is defined as a general decrease of energy. Kulikov (1998: 147) has found two semantically coherent groups of verbs in Vedic that can be subsumed under the more general notion of entropy, i.e. those of destruction and those of destructuring, “spontaneous processes which result in destroying some natural or artificial system or organism” (ibid.).10 He (1998: 151-2) does remain rather precautious in posing that the concept of entropy increase is the central feature of the anticausative verbs. However, it is probably no coincidence then, that in a general description of the neuter Guthrie (1967: 92) wrote that “it is found […] with a small class of radicals which is at the same time a semantic class (« verba destruendi »)”, and later Schadeberg (2006: 75) states that this verbal suffix “is best represented with […] verbs of destruction.”

1.4.2.2 Ergativity

In typological linguistics, ergativity is a feature uniquely related to formal marking, either by means of case marking or by verbal morphology (Dixon 1979: 59). It refers to languages in which the subject of a transitive clause shows a syntactic patterning different from the object of a transitive clause and the subject of an intransitive clause, the latter two having the same syntactic patterning. This situation is generally contrasted with accusative alignment, in which a language treats the subject of the transitive and intransitive clause alike, as opposed to the object of the transitive clause. The three syntactic arguments are often referred to by the capital letters A (subject transitive clause, ‘Actor’ or ‘Agent), O/P (object transitive clause, or P

10 Kulikov (1998: 152) makes a valid distinction between entropy increase on the one hand and destruction on the other, in that the latter can be a process executed to obtain a goal, i.e. the creation of a new structure. He exemplifies this by the idea of slicing vegetables (destruction) in order to make a salad (creation of new structure).
referring to the most common semantic role of the direct object, namely the ‘Patient’), and S
(subject of the intransitive clause). Thus, in ergative languages A commonly receives the
overt, ergative case, and O and S are marked in the absolutive case, which is often a ‘zero’ or
covert morpheme. In accusative languages A and S generally are in the nominative case,
which is often the basic and formally least marked form, and O in the accusative. The differ-
ent alignment systems are thus referred to by means of the same term as the overt case marker
of that system.

<table>
<thead>
<tr>
<th>ergative alignment</th>
<th>accusative alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A O S</td>
<td>A S O</td>
</tr>
</tbody>
</table>

Figure 9. Ergative vs. accusative alignment

Some languages with an ergative pattern do not have a case system, but have a verbal cross-
reference system in which certain verbal morphemes encode a certain amount of information
only for the O and S functions, and a formally different morpheme cross-references the A
function (Dixon 1979: 66). It is important to note that very few languages have a completely
ergative grammatical system. In most languages the ergative pattern is only attested in some
components of the grammar, such as the case system, whereas the pronouns often show an
accusative patterning. SFG’s ergative alternation is sometimes recognised as ‘lexical ergativi-
ty’ in the typological framework (Dixon 1979: 117). However, it is not commonly referred to
by the notion of ergativity in a typological context, but by terms outlined in the previous sec-
tion (1.4.2.1).

1.4.2.3 The middle domain

Throughout this dissertation, I will sometimes use the term ‘middle’ in its typological sense,
i.e. not referring to a one-participant clause in the context of the participant voice system as
outlined in the section on SFG. The notion of ‘middle’ is frequently used in the Typological
framework to refer to a semantic domain between a prototypical two-participant and one-
participant process. Kemmer (1993) argues that the middle domain’s central properties are
relative distinguishability of participants and relative elaboration of events. The former refers
to the fact that middle events involve two grammatically encoded participants which are in
fact semantically one and the same (‘a single physico-mental entity’). The difference between
the reflexive and middle is cognitive in nature. Reflexivity expresses that a process which is
commonly oriented towards someone or something else, is now performed on the agentive
participant. Middle events, on the other hand, are cognitively less straightforward and involve
processes that are frequently performed on the participant bringing about the event, although
they can also be directed at someone/something else. Relative elaboration of events can be
described as the speaker making a different conceptualisation, in which the Subject of the
clause is thought of as two separate participants in the reflexive, but as one entity in the mid-
le. Kemmer (1993) gives a semantic categorisation of middle processes, the different types
being body actions — subsuming processes of grooming, changing body posture, translational
and non-translational motion —, cognition, emotion, spontaneous action/process, passive middle, logophoric middle, direct reflexive, logophoric reflexive, indirect reflexive, indirect middle, reciprocal and natural reciprocal. Kemmer (1993: 202) represents these different types between a one- and two-participant event as a domain network.

Grammatically, then, the middle can be defined as a ‘cluster of deagentivised syntactic patterns’, subsuming diathesis-changing operations such as the reflexive, passive, anticausative, antipassive, reciprocal and converursive (Kulikov 2013: 265). Various languages have one formal verbal morpheme, a ‘middle marker’, expressing a number of these related functional types, although the exact number of categories can vary from language to language. Thus, semantically as well as grammatically, ‘spontaneous processes’ and ‘morphemes deriving the anticausative’ are categorised as belonging to the middle domain.

1.4.3 Government and Binding

1.4.3.1 Causative/anticausative alternation

Levin & Rappaport Hovav (henceforth L&RH) (1994) make an analysis of the alternation in English, which they call the causative alternation and which they define as a transitive and intransitive sentence pair in which the former can be paraphrased as ‘cause to V-intransitive’ (1994: 35; italics in original). Although Kulikov stated (cf. supra) that the term ‘diathesis’ as a synonym for participant alignment is a rather recent innovation, L&RH (1994: 47) also use ‘diathesis alternations’ to refer to those alternations “which involve changes in the syntactic expression of the arguments of a predicator as well as in its adicity (the number of agents it requires).” They (1994: 41-2) propose that change of state verbs represent the central verb class of the causative alternation in English, although other verb classes such as verbs of emission and position, e.g. buzz, beam, shine, lean, hang, sit and stand, also allow the alternation. L&RH (1994: 49) furthermore discuss the difference between, on the one hand, intransitive clauses which are member of the alternation, and, on the other hand, intransitives that do not have a causative counterpart, such as shudder, blush, tremble and malinger. The crucial notion would be that of internal versus external causation. In an intransitive internally caused eventuality, “some property inherent to the argument of the verb is ‘responsible’ for bringing about the eventuality” (ibid.), whereas intransitive externally caused eventualities “inherently imply the existence of an external causer with immediate control over bringing about the eventuality” (L&RH 1994: 50). This has repercussions for the predicate structure: internal causation relates to monadic predicates and external caused events are inherently dyadic predicates. Monadic and dyadic refer to an event structure in which there is respectively one (sub)event or two subevents:

monadic: laugh [x LAUGH] → one subevent
dyadic: break-transitive [x CAUSE [y become BROKEN]] → two subevents (L&RH 1994: 52)

The analysis proposed by L&RH thus is somewhat the reverse of what we have seen in the previous sections. It is not spontaneity or entropy increase (i.e. the intransitive member or one-participant situation) that is the core of the analysis, but the presence, implicit or not, of
an external causer, thus putting the focus on the fact that there are cognitively two participants. The notion of external causer subsumes agency, but also instruments, natural forces or circumstances (L&RH 1994: 50). It is furthermore asserted that the transitive member of the alternation is more basic, and thus that the alternation is one of detransitivisation (L&RH 1994: 52). Only externally caused events that can occur spontaneously participate in the alternation. Spontaneity should be defined as the absence of volitional intervention of an agent, which is why, according to L&RH (1994: 62), verbs such as assassinate or write do not allow detransitivisation, in that they “denote eventualities that require the participation of a volitional agent and do not admit natural force subjects, […] despite the fact that their meanings involve a notion of ‘cause’.”

Alexiadou et al. (2005) make a completely different analysis, arguing against a derivational approach of the alternation. Instead, they (2005: 16) propose that change of state verbs can be syntactically decomposed into a Voice and CAUS component, which gives the following structure:

\[\text{[Voice [CAUS [ Root ]]}\]

We recognise the external causer of L&RH in the CAUS component, which “introduces a causal relation between a causing event (the implicit argument of CAUS) and the resultant state denoted by the verbal root + theme” (Alexiadou et al. 2005: 16; italics in original). The Voice component is responsible for the introduction of external arguments and is thus involved in the formation of causatives, passives and anticausatives (p. 17). The component consists of agency and manner features. Agency can be attributed a negative or positive value, i.e. Voice [+AG], allowing “agent and causer external arguments in active and passive constructions” (ibid.). Pertaining to anticausatives, the Voice head may either be absent or have a negative value with an implicit causer argument. The fact that the anticausative alternation is restricted to certain verb types is explained by the semantic features of four verb classes:

\[\sqrt{\text{agentive (murder, assassinate)}}\]
\[\sqrt{\text{internally caused (blossom, wilt)}}\]
\[\sqrt{\text{externally caused (destroy, kill)}}\]
\[\sqrt{\text{cause unspecified (break, open)}}\]

(Alexiadou et al. 2005: 17)

In their article, Alexiadou et al. (2005) show that languages can differ in how they treat externally caused roots. E.g., in German and English they can only form passives whereas in Greek this verb class can also form anticausatives. The first (agentive) class inherently requires a Voice head that is [+AG], and thus cannot form an anticausative. The internally caused verb class has no external causer, and thus no Voice head, and therefore it cannot transitivise (The flowers blossom/*The gardener blossoms the flowers). Externally caused verbs can have either Voice [+AG] or [-AG], of which the latter allows non-agentive causers such as instruments or natural forces. The variation between Greek anticausativisation with externally caused verbs and English and German, where this is impossible, is accounted for “in terms of the proposal that Voice [-AG] can be present in the anticausative structure in Greek while this
is not possible in other languages” (2005: 19). The last verb class is unspecified with regard to causation, and can thus appear with or without an external argument.

1.4.3.2 Unaccusativity Hypothesis

The Unaccusativity Hypothesis was first coherently stated as such by Perlmutter in 1978 and afterwards adopted by Burzio (1986). It is a syntactic hypothesis posing that there are two types of intransitive verb classes, unaccusatives and unergatives, of which the features are summarised in Table 6.

Table 6. Unaccusative versus unergative (adapted from Alexiadou et al. 2004)

<table>
<thead>
<tr>
<th></th>
<th>Relational Grammar</th>
<th>Government &amp; Binding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaccusative</td>
<td>Verbs taking a final subject originating as an initial direct object</td>
<td>Verb takes theta-marked deep-structure object [VP V NP] John came</td>
</tr>
<tr>
<td>Unergative</td>
<td>Verbs taking a final subject that was also an initial subject</td>
<td>Verb takes theta-marked deep-structure subject and no object NP [VP V] John sings</td>
</tr>
</tbody>
</table>

Based on this description, intransitive members of anticausative verb pairs can be categorised as unaccusative, although they represent only a subgroup of unaccusativity. It has been argued for Italian that reflexives also are unaccusative (Alexiadou et al. 2004: 2), and that some “two-place predicates such as experiencer-object verbs taking a theme and an experiencer argument and two-place double object verbs taking a theme and a goal/source argument […] have derived subjects, thus qualifying as two-place unaccusatives” (2004: 3-4).

1.4.4 Summary

In the previous sections I have provided an overview of the different theoretical schools and ideas, analyses, interpretations and terminology describing the ergative or anticausative alternation. An overview of the terminology is provided in Table 7 on the following page. As I have stated in the introduction, this study will approach the neuter suffix from an SFG theoretical point of view, and will consequently use the respective terminology (indicated by the bold marking in the overview).

Each column in Table 7 represents one of the three theoretical frameworks discussed in the previous sections. Each row stands for a specific constellation (illustrated under each row/level with an example). The SFG distinction between the ergative and transitive alternation is taken as the starting point of the terminological comparison. The blank boxes in the Table show that for some constellations more elaborated distinctions are made in one theory but not in the other (e.g. the distinction between the ergative and transitive alternation in SFG, or between unaccusatives and unergatives in GB). It should be noted that the distinction between the ergative and transitive paradigm is semantic at heart. In the typological framework and GB theory, formal ways of expressing the transitive alternation are acknowledged and discussed, e.g. A-lability or the antipassive, but the distinctive relation between these and the causative/anticausative alternation is less elaborated. This becomes clear by the observation that the two constellations of both construals are referred to by the same terms, ‘transitive’ and ‘intransitive’. In other words, both the ergative and transitive effective are subsumed un-
der the general heading ‘transitive clause’, and the unergative as well as the transitive middle are referred to by the single term ‘intransitive’. Although both construals do have an effective and middle constellation, the two are semantically different. This is exactly why they receive the different labels *ergative/unergative* and *transitive/intransitive* in SFG.

**Table 7. Terminology of each framework (bold indicating terminology used in this dissertation)**

<table>
<thead>
<tr>
<th>SFG</th>
<th>TYPOLOGY</th>
<th>GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ergative alternation</td>
<td>anticausative alternation</td>
<td>anticausative alternation</td>
</tr>
<tr>
<td>ergative effective</td>
<td>causative</td>
<td>transitive</td>
</tr>
<tr>
<td>causative</td>
<td>transitive</td>
<td></td>
</tr>
<tr>
<td>example: ‘The man rolls the ball.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unergative middle</td>
<td>inchoative/anticausative</td>
<td>intransitive</td>
</tr>
<tr>
<td>anti-causative</td>
<td>intransitive</td>
<td>unaccusative</td>
</tr>
<tr>
<td>example: ‘The ball rolls.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transitive alternation</td>
<td>transitive</td>
<td></td>
</tr>
<tr>
<td>transitive effective</td>
<td>transitive</td>
<td></td>
</tr>
<tr>
<td>transitive</td>
<td>transitive</td>
<td></td>
</tr>
<tr>
<td>example: ‘John sings a ballade.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>intransitive middle</td>
<td>intransitive</td>
<td></td>
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<tr>
<td>intransitive</td>
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<tr>
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<td>intransitive</td>
<td></td>
<td></td>
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<tr>
<td>unergative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>example: ‘John sings.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1.5 Methodology**

This dissertation consists of two central and related Parts. In the first, i.e. Part 2, I give a cross-linguistic overview of the neuter suffix and, in addition, provide an analysis of some phenomena that have been previously unaccounted for, or have been, in my opinion, analysed wrongly. In the second half, i.e. Part 3, I make an explorative, corpus-driven study of the neuter in one particular language: Ganda (JE15).

The data for the cross-linguistic investigation is based on existing literature, more specifically descriptive grammars and scientific linguistic articles. The body of descriptive grammars taken for this study represents the entire collection of descriptive grammars of Bantu languages of the library of African Languages and Literature of the University of Ghent, at least those in which the neuter is treated. Furthermore, to my knowledge only five articles have been published with a specialised study on the neuter, of which I could not obtain the article of Mischke (1994), ‘Neuter verbal extensions in Southern Sotho’. This extremely low number of articles indicates the stunning lack of linguistic studies on the neuter suffix. In other articles, the neuter represents only a subpart of a bigger study, e.g. of an investigation of the extension inventory in some Bantu languages (e.g. Ondo-Mebiame 2007, Westphal *et al.* 1974), and often neither a semantic description nor thorough analysis is provided. There are also works that have been found in a digitalised version on the internet (e.g. Idiata *et al.* 2003 and Lodhi 2002). In other words, the data for the cross-linguistic research consists of all the information I could find and was available to me, and thus should be regarded as a *convenience sample* (Bakker 2011: 106). It covers a total amount of 113 Bantu languages with minimum one language from each zone, which makes it at least geographically balanced and representa-
It is clear from Figure 10 that some language zones are overrepresented in comparison to others. This can be attributed to the fact that in case of some zones there were more data available for some languages than for other zones. Still, if we would consider the overall number of there being 300 Bantu languages to be accurate, the sample represents a third of the entire language family. A more impeding shortcoming of the sources is a bibliographical bias (Bakker 2011: 106). Apart from the fact that many Bantu languages have not yet been studied and described, the grammars used for the language sample are often more than fifty years old, written in an old-fashioned tradition of language description, and do not provide lengthy accounts and in-depth analyses of linguistic phenomena above the stratum of phonology and morphology (Bakker 2011: 107). Attention to this reality has also been drawn by Nurse for the verb system of Bantu languages in particular:

“Quantity and quality of documentation also varies widely. At one end of the scale, a reasonable description or analysis of the verb system exists for perhaps fifty languages, in the form of a book, article, or thesis. At the other end are many dozens of undescribed languages. Between the two are hundreds of languages for which documentation ranges from a word list to an incomplete description.” (Nurse 2012: 1)

Nevertheless, I believe the language sample fulfills the needs of this investigation, the shortcomings being more attributable to the lack of adequate descriptions and analyses of the phenomenon, rather than being an unbalanced representation of the Bantu language family. I have still been able to draw cross-linguistic generalisations and highlight differences among languages.

For the third Part I have collaborated with Deo Kawalya, a PhD student and native speaker of Luganda. For his own study on the expression of possibility in Ganda (see e.g. Kawalya et al. 2014), he has compiled a corpus of more than 3 million words (tokens), which is, on the
one hand, rather small when compared to some corpora of Indo-European languages, but quite big, on the other hand, when considered in the context of Bantu studies.

Table 8. Additional information on the Ganda corpus

<table>
<thead>
<tr>
<th>Period</th>
<th>Tokens</th>
<th>Genre</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890s</td>
<td>1,028</td>
<td>Agriculture</td>
<td>22,356</td>
</tr>
<tr>
<td>1900s</td>
<td>152,258</td>
<td>Culture</td>
<td>169,548</td>
</tr>
<tr>
<td>1910s</td>
<td>9,499</td>
<td>Environment</td>
<td>9,254</td>
</tr>
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<td>1920s</td>
<td>6,968</td>
<td>Finances</td>
<td>51,679</td>
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<tr>
<td>1930s</td>
<td>-</td>
<td>Folktales</td>
<td>34,561</td>
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<td>7,932</td>
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<td>44,081</td>
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<td>1950s</td>
<td>167,297</td>
<td>History</td>
<td>406,080</td>
</tr>
<tr>
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<td>Instructions</td>
<td>189,912</td>
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<td>Magazines</td>
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<td>2000s</td>
<td>1,464,540</td>
<td>Newspapers</td>
<td>615,341</td>
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<tr>
<td>2010s</td>
<td>870,146</td>
<td>Novels</td>
<td>290,724</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plays</td>
<td>24,890</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Politics</td>
<td>42,495</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radio-news online</td>
<td>7,321</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion</td>
<td>829,268</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Songs</td>
<td>3,675</td>
</tr>
</tbody>
</table>

The study presented in Part 3 is ‘corpus-driven’, meaning all examples have been generated by the corpus only. This methodological approach, recently coined as Bantu corpus linguistics, is still in its infancy (Kawalya et al. 2014: 61) and is an incipient but expanding method of doing Bantu linguistics.13 There are many benefits to this way of working, but H&M (2014: 51-2) list the following three basic advantages: the data is (i) authentic, (ii) includes spoken language and (iii) is of a large quantity. The following paragraph elucidates how the data were subtracted from the corpus and discusses problems encountered.

As a first step I had to identify all the instances of the neuter suffix in the corpus. For this, I used the corpus query program ‘WordSmith Tools’. As predicted, this was very labour intensive because (i) the phonological sequence [ik] is not restricted to the neuter but can appear as a ‘random’ phonological VC sequence in nouns, adjectives, adverbs, verb roots, etc., and (ii) the corpus has no part-of-speech taggings (a tagged corpus is nearly nonexistent for Bantu languages, see De Pauw et al. 2006), meaning that I could not narrow down the query to verbs only. I was able to automatically exclude obvious mismatches such as ‘Amerika’, ‘Satanika’ and several personal names through a specific ‘exclusion’ function of WordSmith. In order to filter out as many non-verbal words as possible, I composed a complex search formula based on the morphological verb structure. I inserted all the Ganda verbal agreement markers in our search term, followed by three question marks. A question mark in WordSmith represent one

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13 In Kawalya et al. (2014: 61) it is discussed that a number of studies have been published around and after the millennium which are corpus-based. It is, however, only since de Schryver & Nabiye (2010) that a research has been made driven entirely on corpus material. Since then, the Languages and Cultures department of the University of Ghent brings together a number of PhD projects workin on different Bantu languages in which corpus-driven research is the central method for data acquisition.
single character in the corpus, in contrast to an asterisk, which stands for ‘any number of characters’. In most Bantu languages, and consequently also in Ganda, verb roots have a CVC structure, thus using three question marks I again tried to automatically omit as many non-verbal (longer or shorter) words as possible. After the question mark characters for the verb root I inserted the neuter suffix [ik] and its allophone [ek], followed by an asterisk. The idea of allowing any number of characters after the suffix is to see if other verbal suffixes follow the neuter, as well as morphemes expressing aspect, which is encoded at the end of the verb structure in Ganda. I made two search terms, one with the subject markers of the conversational (human) participants, i.e. 1st/2nd/3rd person singular and plural, and a second with the subject agreement markers of the nominal prefixes. The subject markers are:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person</td>
<td>N-?(^{14})</td>
<td>tu-</td>
</tr>
<tr>
<td>2nd person</td>
<td>o-</td>
<td>mu-</td>
</tr>
<tr>
<td>3rd person</td>
<td>a-</td>
<td>ba-</td>
</tr>
</tbody>
</table>

Other SMs: gu-, gi-, ki-, bi-, li-, ga-, ki-, bi-, e-, zi-, lu-, ka-, tu-, bu-, ku-, mu- 

The vowels /o, u, i, e, a/ become the approximants /w, y/ when followed by the remote past marker -a-, which I also accounted for in our search formula. There are a limited number of monosyllabic (CV) roots, -f- ‘die’, -li- ‘eat’, -v- ‘go’, and -u- ‘give’. I thus made a different search term for these verbs, beginning with an asterisk, then the specific C(V) verb roots, followed by [ik] and a second asterisk. Only for one monosyllabic root would [ik] be rendered [ek], namely -u- ‘give’ → [-u-ek-]. I made a specific query for the neuter verb, -week-, with the participant agreement markers. In summary, the following search formulas were used:

- CV roots
  - *fiik*/*liik*/*viik*
- -week-
  - nweek*/oweek*/aweek*/tuweek*/muweek*/baweek*
- participant agreement markers + CVC roots with neuter
  - n???ik*/o???ik*/wa???ik*/a???ik*/tu???ik*/twai???ik*/mu???ik*/ba???ik*
  - n???ek*/o???ek*/wa???ek*/a???ek*/tu???ek*/twai???ek*/mu??ek*/ba???ek*
- SMs + CVC roots with neuter
  - gu???ik*/gw??ik*/gi???ik*/gya???ik*/ki???ik*/kya???ik*/bi???ik*/bya???ik*/e???ik*/ya???ik*/zi???ik*/zaa???ik*/lu???ik*/lwa???ik*/li???ik*/lya???ik*/ga???ik*/ka???ik*/kaa???ik*/bi???ik*/ku???ik*/ba???ik*/
  - gu???ek*/gwai???ek*/gi???ek*/gya???ek*/kya???ek*/bi???ek*/bya???ek*/e???ek*/ya???ek*/zi???ek*/zaa???ek*/lu???ek*/lwa???ek*/li???ek*/lya???ek*/ga???ek*/kaa???ek*/kaa???ek*/bi???ek*/
- SMs + CVC roots with neuter
  - gu???ik*/gwai???ek*/gi???ik*/gya???ik*/ki???ik*/kya???ik*/bi???ik*/bya???ik*/e???ik*/ya???ik*/zi???ik*/zaa???ik*/lu???ik*/lwa???ik*/ li???ik*/lya???ik*/ga???ek*/kaa???ik*/kaa???ik*/bi???ik*/

\(^{14}\) The capital N stands for a homorganic nasal, i.e. the nasal changes its place of articulation according to the following phoneme.
There are a number of structures that I have not queried for with these search terms: (i) the neuter verb -week- with subject agreement markers of the nominal prefixes, (ii) verb roots with a longer phonological structure than CVC, e.g. [CVNCik], [CVVCik], [CVCVik], etc, and (iii) verbs marked for future tense, which is encoded by the infixal morphemes -nna-, -li-, or verbs marked for the negative anterior/perfect (‘not yet’) with -nna- or with -kya- expressing the ‘still-tense’ (Comrie 1985: 54). Nevertheless, the above formulae resulted in more than 10,000 results, with plenty of ‘noise’. Having outrun all possibilities of automatic filtering, D. Kawalya undertook the task of going through all the query results, deleting the mismatches. The correct data with neuter clauses were converted to an excel file. In a new excel sheet each instance was numbered, having a total of 1448 neuter clauses. In a third column the verb stem, i.e. the root and any verbal suffix following (including the neuter), plus the final vowel of the corresponding example was added, which allowed to alphabetically order all the examples on the basis of the different verbs.

![Figure 11. Structure of Ganda data in excel spreadsheet](image)

Again, limits of time and space did not allow us to analyse and treat each example individually. First, D. Kawalya’s collaboration was a side-project, his PhD study having absolute priority, and second, his stay in Belgium lasted until the 29\(^{\text{th}}\) of March 2014, giving us a limited amount of time to collaborate in person. However, I was now able to make at least a frequency study of a number of neuter verbs. D. Kawalya and I translated each clause for verbs of which there was only one instance, and for recurrent verbs we translated a small number of examples (the exact number depending on the overall number of recurrences of the specific verb). Translations of the chosen clauses were made in a Word file, and each translated example was highlighted in green in the Excel spreadsheet, as is shown for the example in row 30 in Figure 11.

After a first examination of the query results, almost no ergative verbs were found. To test whether they were lost during the filtering process (automatically or by hand), I made a Ganda equivalent of Haspelmath’s (1993: 97) list of ergative/lexical causative verbs. Although only four ergative verbs translated into a neuter verb in Ganda, -menyek- ‘break’ (intr.), -yononek- ‘be destroyed’, -siik- ‘fry’ (intr.) and -tandik- ‘begin’ (intr.), this resulted in an additional 6505 neuter clauses. These were integrated in the Excel spreadsheet and subsequently translated on the basis of the same criteria as the previous query sample. The final number of neuter instances that I have been able to extract from the corpus is 7953. By not working systematically on every example it is also certain that a number of the results involve the impositive rather than the neuter extension. Furthermore, as I have indicated above, not all search options have been exploited, which means that more data are still unaccounted for. It should
be stressed, however, that the Ganda corpus study is only explorative and part of a broader research.
Part 2. The neuter in Bantu

This Part gives a cross-linguistic overview of the neuter based on a sample of 113 languages. Furthermore, I will make an analysis of the functions of the neuter within the framework of SFG, providing new insights and revise studies made by others which in my opinion were not able to account for the relation between the different functions of the extension on the different layers of meaning in the clause.

2.1 The neuter extension

A first point worthy of discussion is the terminology used to label this extension. The following list sums up all the different terms found in my data to refer to one and the same extension. Some labels are only attested once, others are more recurrent, ‘neuter’ being the most frequently used term.

‘Capable’ form           neuter-stative
derived intransitive      neutro-passive
impositive                passive
ineutrale/mediale Form (German) potential
intransitif positif (French) reflexive impositive
intransitive              resultative
intransitive Subjectivform (German) spontaneous
medio-passive             static
neuter                    stative
neuter passive            tolerative
neuter-directive

Schadeberg (2006: 75) comments on the term ‘neuter’ that it “has the disadvantage that it suggests a general syntactic function (closer to passive than to active voice).” He goes on that the extension combines most often with verbs of destruction and experciener verbs, and thus that the label ‘neuter’ “does not express the specific link with the two semantic categories mentioned.” However, the alternative Schadeberg proposes, namely ‘neutro-passive’, does not seem to solve the problem that he poses for ‘neuter’ in this regard, even though he writes that it is “a more precise semantic-syntactic label.” Several studies have proven that there are fundamental differences between the ergative alternation and the active/passive voice alternation (among others Alexiadou et al. 2006, Kallulli 1999 for Indo-European languages, and Dubinsky & Simango 1996 and Seidl & Dimitriadis 2002 for Bantu languages, which are discussed in the following sections). In this sense, it would be misleading to add ‘passive’ to the label. Schadeberg (2006: 75) does correctly state that other labels such as stative or intransitive are too abstract or are better suited for other extensions. Terms such as ‘potential’, ‘stative’, ‘medio-passive’, ‘spontaneous’ or ‘resultative’ cover only one part of the three functions of the extension. I therefore opt for the label ‘neuter’, interpreting it as indicating that the participant bringing about the flow of energy, i.e. the Actor or Initiator, is omitted from the constellation. This renders the clause more objective or neutral (perhaps more fitting here than ‘spontaneous’), which is in line with the voice syncretism of the unergative.
As we have seen in the previous section, the neuter has been reconstructed for Proto-Bantu as *-ɪk-, with a second-degree closed front vowel (and even further back for Proto-Niger-Congo as *-ke, Voeltz 1977 in Hyman 2007: 151). The Proto-Bantu neuter form has a variety of manifestations in present-day languages due to the diachronic 7-to-5 vowel merger and sonorisation and lenition of the consonant *k. Some Bantu languages have lost the opposition between [i] and the first-degree vowel [i] with the subsequent omission of the former. This process, in which the seven vowel system of Proto-Bantu has been reduced to five in some present-day languages, is also called the 7-to-5 Vowel Merger (Schadeberg 1995). Other languages have retained the seven vowel system, either in its initial or in a modified form. However, in very few grammars of languages having retained the opposition, are the vowels [ɪ] and [ɛ] distinguished from [i] and [e] by the authors, which is why the list of attested forms of the neuter is probably not complete. Moreover, the closed vowel can alternate with the mid-close vowels [e] or [ɛ] due to the synchronic morpho-phonological rule of vowel height harmony (Hyman 1999).

Attested forms of the neuter extension in present-day Bantu languages

- -ɪk-, -ɪ-, -k-, -ig-, -ix-, -iɣ-, -ih-, -iɛ-, -i-
- -ek-, -eg-, -ey-, -eh-, -ɛh-, -eɣ-, -e-, -ɛ-, -ə

The following sections are organised according to the derivational functions of the extension, i.e. the ergative alternation (2.1.1), the agentless passive derivation, (2.1.2), the potential derivation (2.1.3) and the idiosyncratic derivation (2.1.4).

2.1.1 Ergative alternation

A first function of the neuter is to express the unergative member of an ergative alternation pair as outlined in §1.4.1.3. This has been coined by Schadeberg (2006: 75) as the extension indicating that the subject of the derived verb is factually affected, and has been hinted at by Guthrie (1962: 210) when he asserted that “the meaning assigned to the extension -ɪk- should […] be shown as neuter -/ (active), where the oblique stroke is preceded by a short dash to show that the entailment is from right to left” (bold and italic in original). Thus, an unergative clause is derived from an ergative one by means of the neuter extension, as is shown in (12), (13) and in Table 9.

(12) **BENA (G63)** (Morrison 2011: 370)

- a. u-mu-ana a-haa-deeny-ile u-tu-bihi igólo.
  AUG₁-CL₁-child SM₁-PST-break-FV AUG₁₃-CL₁₃-tree yesterday
  ‘The child broke the twig yesterday.’
- b. u-tu-bihi a-haa-deeny-ih-ile igólo.
  AUG₁₃-CL₁₃-tree SM₁₃-PST-break-NT-FV yesterday
  ‘The twig broke yesterday.’
(13) **TSWANA (S31)** (Creissels 2002: 403)

a. *Ngwana o thubile mae.*

ηnwàñá ō-tʰūb-íl-é mà.

CL₁: enfant SM₁: casser-PRF-FV CL₆: œuf

‘L’enfant a cassé les œufs.’

b. *Mae a thubegile.*

mà á-tʰūb-èχ-ìl-è.

CL₆: œuf SM₆: casser-NT-PRF-FV

‘Les œufs se sont cassés.’

Table 9. Ergative (effective) and unergative (middle) constellation of (12)

<table>
<thead>
<tr>
<th>(12)’</th>
<th>u-mu-ana</th>
<th>a-haa-deeny-ile</th>
<th>u-tu-bihi</th>
<th>igólo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ergative</td>
<td>Initiator</td>
<td>Process: material</td>
<td>Medium</td>
<td>Circumstance: time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(12)’</th>
<th>u-tu-bihi</th>
<th>a-haa-deeny-ih-ile</th>
<th>igólo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unergative</td>
<td>Medium</td>
<td>Process: material</td>
<td>Circumstance: time</td>
</tr>
</tbody>
</table>

The affectedness of the Medium correlates with resultative aspect: in order for the Medium to be affected, the process must at least have begun to happen, and has often already been completed. Although this has not been empirically tested to my knowledge, intuitively I assume that an unergative clause will more often be stated after the process took place than it is uttered in order to describe the process taking place at the moment of speech. We are partly dealing here with what has been called in Cognitive Grammar the *epistemic problem* (Langacker 2001: 263), i.e. the difficulty of observing a punctual event and at the same time reporting it. It would be practically impossible to state that the twig in example (12a) is breaking at the exact same moment when it hits the ground. For some ergative processes the epistemic problem is less restrictional, e.g. *the door is closing/opening*. Nevertheless, the relation between ergative verbs, the neuter derivation and an end-state focus, i.e. resultative aspect, is also illustrated by the lexical examples given in many English-based grammars of Bantu languages, in which the unergative member of the alternation marked by the neuter extension, is often translated in English by a past participial form of the underived verb, as shown in Table 10. However, the translations could also have been intended, by the author, to resemble the passive forms of the basic verbs, which is not improbable seeing how the neuter and passive share a superficial resemblance.
<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-bù- ‘mix’</td>
<td>-bùè- ‘be mixed’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Φàk- ‘sprinkle, spill’</td>
<td>-Φàkè- ‘be sprinkled, spilled’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-ɲángw- ‘tear’</td>
<td>-ɲángwè- ‘be torn’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-ɲing- ‘shake’</td>
<td>-ɲingè- ‘be shaken’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-rib- ‘close’</td>
<td>-ribè- ‘be closed’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-rùw- ‘open’</td>
<td>-rùwè- ‘be opened’</td>
<td></td>
</tr>
<tr>
<td>EWONDO (A72)</td>
<td>-dib- ‘stop; fill up, enclose’</td>
<td>-dibi- ‘be stopped; be filled up, be enclosed’</td>
<td>Redden (1979: 106)</td>
</tr>
<tr>
<td></td>
<td>-ɲab- ‘tear, rip (up/open), burst’</td>
<td>-ɲabi- ‘be torn, be ripped (up/open), be burst’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-sal- ‘split’</td>
<td>-sali- ‘be split’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-búg- ‘break in two/up’</td>
<td>-búgi- ‘be broken in two/up’</td>
<td></td>
</tr>
<tr>
<td>RANGI (F33)</td>
<td>-ün- ‘break’</td>
<td>-ünik- ‘be broken’</td>
<td>Stegen (2002: 142)</td>
</tr>
<tr>
<td></td>
<td>-tól- ‘crack sth.’</td>
<td>-tórik- ‘be cracked’</td>
<td></td>
</tr>
<tr>
<td>SWAHLI (G42)</td>
<td>-unj- ‘break’</td>
<td>-unjik- ‘be broken’</td>
<td>Seidl &amp; Dimitriadis (2002: 243)</td>
</tr>
<tr>
<td></td>
<td>-pik- ‘to cook’</td>
<td>-piik- ‘be cooked’</td>
<td></td>
</tr>
<tr>
<td>BENA (G63)</td>
<td>-deeny- ‘break’</td>
<td>-deenyèh- ‘be broken’</td>
<td>Morrison (2011: 309)</td>
</tr>
<tr>
<td></td>
<td>-hend- ‘break’</td>
<td>-hendek- ‘be broken’</td>
<td>Maddox (1938: 35)</td>
</tr>
<tr>
<td>NYORO (JE11)</td>
<td>-cw- ‘break’</td>
<td>-cwek- ‘be broken’</td>
<td>Rubongoya (1999: 200)</td>
</tr>
<tr>
<td></td>
<td>-hend- ‘break’</td>
<td>-hendek- ‘be broken’</td>
<td>Morris &amp; Kirwan (1957: 122)</td>
</tr>
<tr>
<td>NYANKORE (JE13)</td>
<td>-hend- ‘break’</td>
<td>-hendek- ‘be broken’</td>
<td></td>
</tr>
<tr>
<td>MAMBWE (M15)</td>
<td>-unj- ‘break’</td>
<td>-unjik- ‘be broken’</td>
<td>Kawimbe (1962: 28)</td>
</tr>
<tr>
<td></td>
<td>-fun- ‘break’</td>
<td>-funik- ‘be broken’</td>
<td>Schoeffer (1907: 47)</td>
</tr>
<tr>
<td>BEMBA (M42)</td>
<td>—</td>
<td>-swek- ‘be broken’</td>
<td>Hetherwick (1927: 163)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-ng’ambik- ‘be torn’</td>
<td></td>
</tr>
<tr>
<td>YAO (P21)</td>
<td>-tem- ‘break in two’</td>
<td>-temek- ‘be broken’</td>
<td>Whiteley (1966: 39)</td>
</tr>
<tr>
<td>SESOTHO (S33)</td>
<td>-rob- ‘break’</td>
<td>-robèh- ‘be broken’</td>
<td>Sharpe (1960: 103)</td>
</tr>
</tbody>
</table>

It is no coincidence that most of the examples in Table 10 are equivalents of the verb ‘break’, seeing that it is the most frequently used verb in grammars to illustrate the ergative alternation. This manner of translation is typical for English- and German-based grammars, whereas in French-based grammars an infinitive in combination with the reflexive pronoun is often provided as translation. This is not illogical, as the reflexive pronoun is a middle marker (see §1.4.2.3 on the middle domain and middle markers) in French and other Romance languages.

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16 I am not using the term ‘simple verb base’ in a strict sense, i.e. a verb root without any extensions or expansions, but rather use it to refer to any verb base (simple, extended or expanded) which is not derived by the extension under discussion. The (simple, extended or expanded) verb base under the heading SVB is subsequently derived in the row marked by the heading EVB by the extension under discussion.
(Creissels 2006: 26ff., Kemmer 1993), and generally marks the unergative member of the ergative alternation. Again, the reflexive is also involved in the expression of the passive, which could also be the intended translation of the authors for the neuter verbs.

Table 11. Neuter verbs translated with the reflexive/middle infinitival form in French-based grammars

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEN (A44)</td>
<td>-nök- ‘casser’</td>
<td>-nökè- ‘se casser de soi-même’</td>
<td>Dugast (1971: 235)</td>
</tr>
<tr>
<td>ISANGU (B42)</td>
<td>-tènè- ‘abîmer’</td>
<td>-tènè- ‘s’abîmer’</td>
<td>Idiata (1998: 152)</td>
</tr>
<tr>
<td>BONGILI (C15)</td>
<td>-mùn- ‘briser’</td>
<td>-mùnìg- ‘se briser’</td>
<td>Mangulu (2008: 30)</td>
</tr>
<tr>
<td>MBESOA (C51)</td>
<td>-bùl- ‘casser’</td>
<td>-bùlik- ‘être cassé’</td>
<td>Mangulu (2012: 120)</td>
</tr>
<tr>
<td>SUKUMA (F21)</td>
<td>-beenz- ‘casser quelque chose’</td>
<td>-beenzèk- ‘se casser’</td>
<td>Batibo (1985: 168)</td>
</tr>
<tr>
<td>YOMBE (H16c)</td>
<td>-bul- ‘casser’</td>
<td>-budik- ‘se casser’</td>
<td>De Clercq (1921: 54)</td>
</tr>
<tr>
<td>RWANDA (JD61)</td>
<td>-vun- ‘briser en deux’</td>
<td>-vunik- ‘se briser’</td>
<td>Hurel (1951: 80)</td>
</tr>
<tr>
<td>RAMWPA (JD61)</td>
<td>-sèsek- ‘se répandre’</td>
<td>-menek- ‘se verser’</td>
<td>Vandermeiren (1912: 153)</td>
</tr>
<tr>
<td>TALINGA (JE10(2))</td>
<td>-mor- ‘détacher doucement’</td>
<td>-mok- ‘se détacher doucement’</td>
<td>Paluku (1998: 228)</td>
</tr>
<tr>
<td>HAYA (JE25)</td>
<td>-zu- ‘remplir’</td>
<td>-zurik- ‘se remplir’</td>
<td>Kuijpers (1922: 106)</td>
</tr>
<tr>
<td>KWEZO (L13)</td>
<td>-bùl- ‘briser’</td>
<td>-bùlik- ‘être cassé’</td>
<td>Forges (1983: 286)</td>
</tr>
<tr>
<td>BEMBA (M42)</td>
<td>-tob- ‘casser’</td>
<td>-tobek- ‘se casser’</td>
<td>Noël (1935: 94)</td>
</tr>
</tbody>
</table>

However, in some French-based grammars the participe passé, corresponding to the English past participial form, is given.

Table 12. Neuter verbs translated with participe passé in French

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISANGU (B42)</td>
<td>-mùn- ‘casser’</td>
<td>-mùnìg- ‘être cassé’</td>
<td>Ondo-Mebiame (2000: 187)</td>
</tr>
<tr>
<td>RWANDA (JD61)</td>
<td>-vûn- ‘briser’</td>
<td>-vunik- ‘être brisé’</td>
<td>Coupez (1961: 58)</td>
</tr>
<tr>
<td>KILUBA (L33)</td>
<td>-lûk- ‘fendre’</td>
<td>-lûlik- ‘être fendu’</td>
<td>Vandermeiren (1912: 153)</td>
</tr>
<tr>
<td>BEMBA (M42)</td>
<td>-tob- ‘casser’</td>
<td>-tobek- ‘être cassé’</td>
<td>Noël (1935: 94)</td>
</tr>
</tbody>
</table>

Concerning the participants, it has been amply shown that the Initiator of the ergative clause is omitted and furthermore inexpressible in the unergative neuter clause (Dubinsky &
Simango 1996, Khumalo 2009, Mchombo 1993, Seidl & Dimitriadis 2002). The inexpressibility distinguishes the neuter from the passive, in which the omitted Actor can be expressed in an oblique phrase. This is shown in (14).

(14) **NDEBELE (S44)** (Khumalo 2009: 166, 168)

a. um-fana u-val-a isi-valo.
   CL1-boy SM1-shut-FV CL7-door
   ‘The boy closes the door.’

b. isi-valo sa-val-ek-a (*ngu Thabo).
   CL7-door SM7-shut-NT-FV by Thabo
   ‘The door closes (*by Thabo).’

c. isi-valo sa-val-w-a (ngu Thabo).
   CL7-door SM7-shut-PASS-FV by Thabo
   ‘The door was closed (by Thabo).’

Dubinsky & Simango (1996: 750) and Khumalo (2009: 167) illustrate that the semantic difference between the neuter and (agentless) passive can be even more explicitly shown in negated clauses, as in (15). The passive clause in (15a) indicates that the beans were never cooked, whereas the neuter (15b) can be used to describe a situation in which the beans are half-cooked but not yet completely, i.e. focusing on the event itself rather than on the fact that someone has acted upon them or not.

(15) **CHEWA (N31b)** (Dubinsky & Simango 1996: 750)

a. nyemba si-zi-na-phik-idu-e.
   beans NEG-SM-PST-cook-PASS-FV
   ‘The beans were not cooked (at all).’

b. nyemba si-zi-na-phik-ik-e.
   beans NEG-SM-PST-cook-NT-FV
   ‘The beans were not cooked.’

Other tests have been provided in the literature for demonstrating that in a neuter clause the Initiator participant is deleted, but that the Actor is still implicitly present and thus only suppressed in a passive clause. These are control constructions or purpose clauses (16), agent-oriented adverbs (17), and instrumental circumstances (18). For each test the passive clause allows the respective element, whereas the neuter does not.

(16) **CHEWA (N31b)** (Mchombo 1993: 17)

a. mphâtso zi-na-sôkône-čdw-a kutí pa-sa-khál-é ku-kondêra.
   CL10:gifts SM10-PST-mix-PASS-FV that SM16-NEG-be-SBJ CL15-favor
   ‘The gifts were mixed up so that there should be no favouritism.’

   CL10:gifts SM10-PST-mix-NT-FV that SM16-NEG-be-SBJ CL15-favor
(17) **NDEBELE (S44)** (Khumalo 2009: 168)
   a. isi-valo sa-val-w-a ngabomo.
      CL7-door SM7-shut-PASS-FV deliberately
      ‘The door was closed deliberately.’
      CL7-door SM7-shut-NT-FV deliberately

(18) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 257)
* chungu ki-li-pig-ik-a kwa nyundo.
   cooking.pot SM-PST-break-NT-FV with hammer
   ‘The cooking pot was hit with a hammer.’
Seidl & Dimitriadis do not provide a grammatical passive counterpart for the Swahili example in (18).

In sum, it has been shown that one function of the neuter extension is to derive the unergative member from the ergative constellation. A number of tests, which have been discussed in the literature, demonstrate the semantic and syntactic differences between a neuter and a passive clause. However, the suffix is not restricted to ergative verbs only but can be combined with non-ergative verbs as well. This results in a number of different readings, which will be discussed in the following sections.

2.1.2 Agentless passive derivation

The neuter’s function is not restricted to the encoding of unergative clauses and thus to ergative verbs. It can also be combined with non-ergative verbs, which in some cases results in an agentless passive clause. The ideational configuration and meaning of the agentless passive clause is still different from that of the potential, discussed in the next section. For instance, the clause in (19a) does not translate in English as ‘the clothes were washable’. However, it is still different from the passive in (19b) in that the expression of an oblique agentive phrase is ungrammatical.

(19) **CHEWA (N31b)** (Dubinsky & Simango 1996)
   a. mbale zi-na-tsuk-ik-a (*ndi Naphiri).
      plates SM-PST-wash-NT-FV by Naphiri
      ‘The plates were washed (*by Naphiri).’
   b. mbale zi-na-tsuk-idw-a (ndi Naphiri).
      plates SM-PST-wash-PASS-FV by Naphiri
      ‘The plates were washed (by Naphiri).’

Lexical examples found in grammars of non-ergative verbs with the neuter are presented in Table 13. For these we can only assume that the derived verb construes an agentless passive configuration, since no syntactic examples are provided.
<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-sòrw- ‘shave’</td>
<td>-sòrw- ‘be shaven’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-àdzòb- ‘bury’</td>
<td>-àdzòb- ‘be buried’</td>
<td></td>
</tr>
<tr>
<td>FANG (A75)</td>
<td></td>
<td></td>
<td>Ondo-Mebiame (2007: 122)</td>
</tr>
<tr>
<td>BÉO (C45A) (Fr.)</td>
<td>-kamo- ‘tuer’</td>
<td>-kamo(je)- ‘être tué’</td>
<td>Gérard (1924: 74)</td>
</tr>
<tr>
<td>BEYA (D25)</td>
<td>-bundik- ‘être pris’</td>
<td></td>
<td>Stappers (1973: 13)</td>
</tr>
<tr>
<td>MITUKU (D13)</td>
<td>-haat- ‘sweep’</td>
<td>-haatik- ‘be swept’</td>
<td>Barlow (1951: 123)</td>
</tr>
<tr>
<td>KIKUYU (E51)</td>
<td>-rii- ‘eat’</td>
<td>-riik- ‘be eaten’</td>
<td></td>
</tr>
<tr>
<td>KAMBA (E55)</td>
<td>-iw- ‘hear, feel’</td>
<td>-iwik- ‘be heard, felt’</td>
<td>Whiteley &amp; Muli (1962: 106)</td>
</tr>
<tr>
<td>SHAMBALA (G23)</td>
<td>-šund- ‘strafen’</td>
<td>-šundik- ‘sich strafen lassen (gestraft sein)’</td>
<td>Kotz (1909: 32)</td>
</tr>
<tr>
<td>RWANDA (JD61)</td>
<td>-vúg- ‘dire’</td>
<td>-vúgik- ‘être dit’</td>
<td>Coupez (1985: 19)</td>
</tr>
<tr>
<td>RUNDI (JD62)</td>
<td>-imb- ‘creuser’</td>
<td>-imbik- ‘se creuser’</td>
<td>Ménard (1908: 195)</td>
</tr>
<tr>
<td>GUSII (JE42)</td>
<td>-ßuat- ‘hold, seize’</td>
<td>-ßuatek- ‘be held’</td>
<td>Cammenga (2002: 381)</td>
</tr>
<tr>
<td>CHOKWE (K11)</td>
<td>-hond- ‘wringen’ (’wring’)</td>
<td>-hondek- ‘afgewrongen zijn’ (’be wrung’)</td>
<td>Van Den Eynde (1960: 38)</td>
</tr>
<tr>
<td>KILUBA (L33)</td>
<td>-fil- ‘forger’</td>
<td>-fûlik- ‘être forgé’</td>
<td>Vademeriren (1912: 153)</td>
</tr>
<tr>
<td></td>
<td>-on- ‘pêcher, faire mal (un travail)’</td>
<td>-ônek- ‘être mal fait’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-bömbe- ‘tremper’</td>
<td>-bömbeek- ‘être trempé’</td>
<td></td>
</tr>
<tr>
<td>BEMBA (M42)</td>
<td>-seb- ‘tamiser’</td>
<td>-sebek- ‘être tamisé’</td>
<td>Noël (1935: 94)</td>
</tr>
<tr>
<td>SENGA (N41)</td>
<td>-luw- ‘forget’</td>
<td>-luwik- ‘be forgotten’</td>
<td>Ranger (1928: 187)</td>
</tr>
<tr>
<td>YAO (P21)</td>
<td>-oko- ‘save, rescue’</td>
<td>-okok- ‘be saved, rescued’</td>
<td>Whiteley (1966: 39)</td>
</tr>
<tr>
<td>MABIHA (P25)</td>
<td>-put- ‘wipe’</td>
<td>-putik- ‘get wiped’</td>
<td>Harries (1940: 131)</td>
</tr>
<tr>
<td>TSWANA (S31)</td>
<td>-rat- ‘love’</td>
<td>-ratêg- ‘become loved’</td>
<td>Cole (1955: 196)</td>
</tr>
<tr>
<td></td>
<td>-batl- ‘seek’</td>
<td>-batlêg- ‘be sought, be wanted’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-dir- ‘do, make’</td>
<td>-dirêg- ‘become done’</td>
<td></td>
</tr>
<tr>
<td>SESOTHO (S33)</td>
<td>-tlam- ‘bind’</td>
<td>-tlameh- ‘gebind wees’ (’be bound’)</td>
<td>Van Eeden (1941: 199)</td>
</tr>
<tr>
<td></td>
<td>-seny- ‘vernief’ (’destroy’)</td>
<td>-senyeh- ‘vernief raak, bederf raak’ (’be destroyed, be rotten’)</td>
<td></td>
</tr>
</tbody>
</table>

The participants of the process play an important role in the interpretation of the clause. For instance, the verb *bend* can be used unergatively (e.g. in the proverb *as the twig is bent, so is the tree inclined*), but in the clauses in (20) an agentless passive interpretation is more likely, seeing that baskets and bows cannot bend spontaneously. However, as is shown in (19a)

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19 Fr. indicates that the source is written in French, Gr. in German, Dtc. in Dutch and Afr. in Afrikaans. For Dutch and Afrikaans the English translation is provided.
above and in (20) below, an agentive prepositional phrase is ungrammatical in a neuter clause even though conceptually we have to assume that someone or something has bent the basket or the bows.

(20) **CHEWA (N31b)** (Mchombo 1993: 7, 16)

a. dengu li-na-pind-ik-a.  
   CL5:basket SM5-PST-bend-NT-FV  
   ‘The basket got bent.’

b. maũta a-na-pind-ik-a pa dzūwa (*ndí alenje).  
   ‘The bows got bent in the sun (*by the hunters).’

Mental perceptive clauses seem to behave differently with regard to expressing the Senser obliquely. Mental processes always involve two participants: a Senser (see Figure 2 in section 1.4.1.1) and a Phenomenon, viz. that what is being sensed. In (21) the Senser *anthu önse ‘all people’ is expressed in a prepositional phrase marked by *kwá.*

(21) **CHEWA (N31b)** (Mchombo 1993: 6)

nkhání yá Katenje y-a-mv-ek-á kwá anthu  
PP2:all  
‘The story of Katenje has been heard by all the people.’

It should be noted, however, that the preposition introducing the participant is not the same preposition that marks the oblique agentive phrase in a passive clause, which is *ndi* as can be seen in (19b). The use of a different preposition in Chewa could be explained by the fact that we are dealing here with two different process types; mental perceptive in (21) and material in (19b). The preposition *kwa* is a combination of the noun class prefix 17, which has a locative meaning (in Bantu more generally (Katamba 2006: 116)), and an associative morpheme -a.20 A literal interpretation would be that the sound travelled to and has arrived at (locative), i.e. has been heard by, the listeners. Thus, while *ndi* is used for oblique phrases introducing agent-like participants (among others, see (24b) below where it is used to introduce a circumstance of instrument), *kwa* figures as a preposition for Sensers.21 From this example we can hypothesise that only Initiators and Actors are inexpres sible in a neuter clause, but that other participants of process types different from the material one might be allowed, such as Sensers or Sayers. Note that these examples and thus the tentative conclusion drawn from them, hold only for Chewa. In Swahili, neither Initiators of material processes (Seidl & Dimitriadis 2002: 20 Mchombo analyses the preposition as the connective of class 16. However, we can see in (20) that the nominal prefix of class 16 is *pa.* Although I have no proficient knowledge of Chewa grammar, the preposition *kwa* seems to consist of the pronominal prefix of class 17 which has been reconstructed for Proto-Bantu as *ku* and is still retained in a large number of present-day Bantu languages (Katamba 2006: 104, 109), and the connective morpheme -a. Katamba (2006: 109) also provides the nominal class system of Chewa, showing that the prefix of class 17 is *ku,* confirming my analysis.

21 This is based only on the analysis of the examples in (18) and (19). Since I have not studied the grammar of Chewa, it has to be stressed that this argument should not be interpreted as a convincing conclusion.
nor Senses of mental processes (here a mental cognitive process) are allowed as an oblique phrase in a neuter clause:

(22) **SWAHILI** (Seidl & Dimitriadis 2002: 246)

* a-na-tambul-ik-a na mjini.
SM-PRS-know-NT-FVby town

‘She is well-known by the town (the townspeople).’

It should be noted that the mental processes in the two cases for Chewa and Swahili above, are of the like-type (H&M 2014: 247-8), for which the Senser is always in subject position in the basic clause and is omitted by the neuter derivation. On the basis of the examples in (23), we could tentatively state that with mental processes of the please-type the Phenomenon, which is always in subject position in the basic clause, is still expressible in a prepositional phrase.

(23) **SWAHILI** (Schadeberg 2004: 11, 12)

a. -patika na mauti ‘être surpris par le mort’  <  -patika ‘be available’
b. -patika na shida ‘éprouver des difficultés’

The neuter verb -patika ‘be available’ receives an idiomatic meaning through the addition of some specific participants such as mauti ‘death’ or shida ‘difficulties’. This resulting non-compositional or idiomatic meaning expresses a mental process of the please-type, viz. ‘be surprised (by death)’ and ‘feel/have (difficulties)’. Although no clausal examples are provided, the presence of the Phenomenon in both examples seems to indicate that they can be expressed in an oblique phrase with na, which is also used in Swahili to mark the oblique agentive phrase in passive clauses.

As is shown in (24) for Chewa, neuter clauses do not allow instrumental circumstances (24a), in contrast to passives (24b). This is due to the fact that instruments imply an Actor or Initiator acting upon the instrumental entity (Davidse & Heyvaert 2007: 43). Therefore, the grammaticality of instrumental circumstances is often used as a test to investigate the implicit presence of an Actor/Initiator participant (Alexiadou et al. 2006: 190, L&RH 1994: 50). Haspelmath (1993: 93) furthermore defines the meaning ‘by means of a sharp instrument’ as one of his proposed agent-oriented meaning components, which is inherently implied by the verb cut.

(24) **CHEWA** (Dubinsky & Simango 1996: 752)

a. *kalata i-na-lemb-ek-a ndi pensulo.
letter SM-PST-write-NT-FV with pencil
b. kalata i-na-lemb-edw-a ndi pensulo.
letter SM-PST-write-PASS-FV with pencil

‘The letter was written with a pencil.’

We have already seen that neuter unergative clauses in combination with an instrumental circumstance are ungrammatical in Swahili (see (18) at the end of the previous section). Seidl & Dimitriadis provide an example, (25) below, illustrating that instrumental adjuncts, on the other hand, are allowed in a neuter clause.
(25) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 257)

\[
\text{a-li-chom-ek-a kwa maneno haya.}
\]

SM₁-PST-stab-NT-FV with words these

‘He was stabbed by these words.’

However, when taking a closer look at the semantics of the instrument adjunct, it becomes clear why it is possibly allowed in a neuter clause in this case. The instrumental circumstances in (18) and (24) refer to material objects (a hammer or pencil) which have to be used by a forceful, volitional, agentive participant. Furthermore, there has to be direct contact between the instrument and the Goal (in case of the hammer and the cooking pot in (18)), or the instrument plays a central role in the process, i.e. the pencil has to be used in order to create the letter in (24).  

The instrument maneno haya ‘these words’ in (25), on the other hand, is not a material entity, and furthermore only experienced by the Goal. There is no direct contact or causation and the Goal is not materially affected (or damaged) by the instrument. The mental effect thus actually originates from within the Goal participant. The speaker of the words might not even had the intention of hurting the person in question, thus possibly lacking in forcefulness, volitionality and agentivity.

Seidl & Dimitriadis provide a fourth feature of the Swahili neuter in addition to the three tests we have seen in 2.2.1 – the ungrammaticality of oblique agentive phrases, purpose clauses, agent-oriented adverbs and instrumental circumstances – namely the impossibility of the neuter to occur with punctual temporal modifiers. This can be accounted for by the fact that the neuter focuses on the end-state of a change of state process, viz. resultative aspect. The end state is typically atelic, atemporal and unbound, and therefore does not allow punctual temporal modifiers. This is illustrated in (26).

(26) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 250)

\[
*i-li-sem-ek-a jana saa kumi na nusu kuwa (…).
\]

SM-PST-say-NT-FV yesterday time ten and half that

‘It was said yesterday at four thirty that (…).’

The atelic property of the neuter does allow more general, non-punctual temporal modifiers, as is shown in (27). The meaning then implies that ‘it was sayable all day yesterday’.

(27) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 250)

\[
i-li-sem-ek-a jana kuwa…
\]

SM-PST-say-NT-FV yesterday that

‘It was said yesterday that…’

---

22 In SFG, the category of material processes is further divided in actions affecting a pre-existing entity, which are called *transformative* material processes, and actions creating a new entity, termed *creative* material processes (H&M 2014: 231-34). The verb *write* is a material creative process in this regard, and the pencil an indispensable instrument.

23 It seems the authors have made a translational error. The numeral *kumi na nusu* should, according to the gloss, be translated as ‘ten thirty’. Nevertheless, I have kept both their glosses and translation since I am not proficient in Swahili and will therefore not modify any information provided in the original source.
In relation to progressive aspect, Seidl & Dimitriadis (2002: 250) compare Swahili neuter predicates with English stative verbs as an aspectual verb class. The latter are incompatible with progressive aspect (28a) whereas a Swahili neuter clause can have progressive aspect (28b).

(28) a. *John was knowing German.
   b. chakula ki-lu-kuwa ki-me-pik-ik-a sana.
      food SM-PST-be SM-PRF-cook-NT-FV very
      ‘The food was being much cooked.’
      (Seidl & Dimitriadis 2002: 250-1)

However, the ungrammaticality of (28a) can be attributed to the incompatibility of the semantics of *know to be in the progressive, rather than to it being a stative verb. It is generally known that ‘stative’ mental clauses are more often in the simple present than in the progressive (H&M 2014: 254). However, examples do exist of the less common and more marked combination of a mental clause and progressive aspect, as illustrated in (29).

(29) And people were diagnosing all these things, and so she was very concerned at what was really happening, and nobody was believing it - particularly my brother-in-law.
      (H&M 2014: 254; bold in original)

Other stative verbs can combine with progressive aspect, such as *my husband was being sick at that time. It should be investigated more thoroughly whether neuter mental clauses in Swahili have no difficulty in combining with progressive aspect. Overall, the point Seidl & Dimitriadis want to make here is not convincing.

I have shown in this section that if the neuter is suffixed onto a non-ergative verb, the resulting constellation can be an agentless passive one. Moreover, I have shown that mental process clauses may behave differently from material clauses with regard to the expressability of the Senser. Furthermore, it has been asserted that in some cases instrumental adjuncts are grammatical in a neuter clause. Although no explanation has been provided by the authors for why this is the case, I have stated that in the particular example used to prove their argument, the clause involves a mental process and the instrumental adjunct is not a material object, thus having no material effect on the Goal. Rather, the effect is completely attributable to the Goal, as s/he experiences or senses the effect, rather than having been affected materially. In the following section I will discuss a second and very productive function of the neuter in combination with a non-ergative verb, namely to realise a potential clause.

2.1.3 Potential derivation

The potential neuter clause expresses the attribution of a property to the participant realised by a nominal group. In English a potential clause is translated with the adjectival phrase ‘be V-able’, which is said to ‘*refer to a quality of the P” of the basic clause and, in case of intransitive verbs “the quality is attributed to S” (Comrie 1978: 390; for P and S see the section on the Typological framework). This is shown in (30).
On the *ideational* level, a potential clause is equivalent to relational intensive attributive clause, which expresses a process ascribing a quality, the Attribute participant, to a certain entity, the Carrier. Relational processes do not involve a ‘flow or input of energy’ (H&M 2014: 260), in contrast to the processes in the previous sections with which the neuter specifically focuses on the end phase and completion of that flow of energy and on the participant at which it is directed (by someone else or ‘spontaneously’). The Carrier is always encoded by a nominal group referring to a specific or generic entity, the Thing. The Attribute is encoded by the verb, which functions as a nominal group, and more specifically as an Epithet. Epithets are a functional element of the nominal group expressing a quality of the Thing/Carrier (H&M 2014: 376). The logical and experiental layers of organisation involved in the potential clause are represented for (30) in Table 14.

In English, the process in relational intensive attributive clauses is typically expressed by a verb (see H&M (2014: 268) for an overview of the different verbs that can figure in a relational clause). In Bantu languages, however, the relational process of a potential clause is encoded by the neuter. The extension thus functions as a non-verbal attributive predicate. Thus, in a potential clause the non-verbal attributive predicate and the Attribute are conflated in one single, finite VP.

Table 14. Logical, experiental and interpersonal structure of the Swahili clause in (30)

<table>
<thead>
<tr>
<th>(30)*</th>
<th>barua</th>
<th>hii</th>
<th>imesomeka</th>
</tr>
</thead>
<tbody>
<tr>
<td>logical</td>
<td>Head: Thing: noun</td>
<td>Post-Modifier: Deictic: demonstrative</td>
<td>Head: Epithet: verb</td>
</tr>
<tr>
<td>experiental</td>
<td>Carrier</td>
<td>Process: relational: intensive: attributive -ik-</td>
<td>Attribute <em>imesoma</em></td>
</tr>
<tr>
<td>interpersonal</td>
<td>Subject</td>
<td>Finite + Predicator -me-….ek-a</td>
<td>Complement -som-</td>
</tr>
</tbody>
</table>

There are different kinds of intensive attribution, which can be identified by three criteria.24

- *membership specification*: the Attribute encodes either an entity or a quality
- *domain of attribution*: the attribution is either material or semiotic. The latter subsumes three types:
  - emotion/attitude
  - cognition/probability
  - desideration/obligation
- *phase of attribution*: the temporal course of the process can be either neutral or phased. Phased attribution is marked as:

---

24 The theoretical part of this paragraph is entirely based on H&M (2014: 268-276).
time phase, which can be:
  - inceptive
  - durative

reality phase, which can be:
  - apparent
  - perceptive
  - realised

In a potential clause, such as the one in (30), the Attribute is qualitative. Qualitative Attributes typically have Epithets as Head of the nominal group, in contrast to entity Attributes, which have a Thing as Head. The attribution of a potential clause can both be material or semiotic. Compare, for example, Senga (N41) -pendek- ‘be countable’, denoting material attribution, to Swasi (S43) -funek- ‘be desirable’, which denotes semiotic attribution of the desideration type. H&M (2014: 273-276) discuss “a variety of ‘attributive’ clauses in which the Attribute denotes a quality of sensing (i.e. semiotic domain) equivalent to the Process of a ‘mental’ clause” or “denotes a material quality (i.e. material domain) equivalent to the Process of a ‘material’ clause.” It seems quite evident that potentials can be seen as such a variety in that the Attribute/Epithet is typically encoded by a verb, which functions as the Event element of the verbal group denoting a (material or mental) process in a related underived clause. Finally, the phase of attribution is neutral, meaning that the temporal course or ‘phase of unfolding through time’ is unspecified.

Lexical examples of neuter verbs expressing potentiality are provided in Table 15.

Table 15. Neuter verbs with potential meaning

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIKUYU (E51)</td>
<td>-haat- ‘sweep’</td>
<td>-haatik- ‘be sweepable’</td>
<td>Barlow (1951: 123)</td>
</tr>
<tr>
<td></td>
<td>-hot- ‘do’</td>
<td>-hotek- ‘be doable’</td>
<td>Gecaga &amp; Kirkaldy-Willis (1953: 98)</td>
</tr>
<tr>
<td>KAMBA (E55)</td>
<td>-som- ‘read’</td>
<td>-somek- ‘be readable’</td>
<td>Whiteley &amp; Muli (1962: 106)</td>
</tr>
<tr>
<td>NYAMWEZI (F22)</td>
<td>-ból- ‘can’</td>
<td>-bólek- ‘be possible’</td>
<td>Maganga &amp; Schadeberg (1992: 161)</td>
</tr>
<tr>
<td>NYANYEMBE (F22D)</td>
<td>-saw- ‘zählen’</td>
<td>-sawik- ‘zähmbar sein’</td>
<td>Velten (1901: 62)</td>
</tr>
<tr>
<td>CHASU (G22)</td>
<td>-kwe- ‘besteigen’</td>
<td>-kweik- ‘besteigbar sein’</td>
<td>Kotz (1909: 32)</td>
</tr>
<tr>
<td></td>
<td>-tag- ‘verkaufen’</td>
<td>-tagik- ‘verkäuflich sein’</td>
<td></td>
</tr>
<tr>
<td>SHAMBALA (G23)</td>
<td>-bel- ‘verachten’</td>
<td>-belek- ‘verächtlig sein’</td>
<td>Roehl (1911: 192)</td>
</tr>
<tr>
<td>(Gr.)</td>
<td>-nw- ‘trinken’</td>
<td>-nwelek- ‘trinkbar sein’</td>
<td></td>
</tr>
<tr>
<td>SWAHILI (G42)</td>
<td>-tambul- ‘recognise’</td>
<td>-tambulik- ‘be recognizable’</td>
<td>Seidl &amp; Dimitriadis (2002: 245)</td>
</tr>
<tr>
<td></td>
<td>-siki- ‘hear’</td>
<td>-sikik- ‘be audible’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-ju- ‘know’</td>
<td>-julik- ‘be knowable’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-sem- ‘say’</td>
<td>-semek- ‘be sayable’</td>
<td></td>
</tr>
</tbody>
</table>

BENA (G63)
Potential clauses such as (30) above and (31) below, resemble what have been termed middle clauses for Indo-European languages, illustrated in example (32). 26 This resemblance has also been noted by Seidl & Dimitriadis (2002: 254ff.), although their analysis differs from the one made in this work due to different theoretical approaches.

(31) CHEWA (N31b) (Dubinsky & Simango 1996: 760)
mbalame iyi ndi yo-ombel-ek-a.
bird DEM is ATTR-shoot-NT-FV
‘This bird is shootable.’

26 The term ‘middle’ here is used in the typological sense.
More than 50 years later, the book still sells well.

b. The new Holden Berlinda handles like a junior sports sedan (…).

c. When no longer required, the discs remove easily.

(Davidse & Heyvaert 2007: 38-39)

In the following paragraphs, I will lay out the main principles of Davidse & Heyvaert’s (2007) analysis of the middle and relate it to the potential neuter construction.

Davidse & Heyvaert give an interpersonal account of middle clauses, and define it as an intermediate option between active and passive on the level of *clausal voice* (not to be confused with the system of *participant voice* which is located in the ideational/representational dimension). The intermediate status of middles is construed in English by an active verb form and a patient-like subject. Davidse & Heyvaert argue that “the relation between non-agentive subject and active VP characteristics of the middle is a modal letting relation” (p. 76). The concept of a letting value originates from Talmy’s (2000) *force dynamics*, which is a semantic category central in the expression of the grammatical category of modality. Force dynamics consists of two opposite force-exerting entities, the agonist and antagonist. The former can be seen as the entity or participant performing (or wanting to perform) the action, and the latter as affecting the execution of that action by the agonist. In middle clauses such as (32c) the antagonistic Subject entity *discs* ‘lets’ the implicit agonist remove them, i.e. the discs do not complicate or hinder the action of removal. It is, furthermore, the Finite which expresses the modal *letting* value (or a *hindering* value when the polarity is negative). The intermediate position of the middle between active and passive can be accounted for in the context of the letting model, in that it combines an active aspect, viz. the positive conduciveness or negative hindrance attributed to the subject, and passive aspect, viz. “the subject/antagonist is always lower on the semantic role hierarchy than the agentive agonist” (p. 59). Thus, in summary, “middles express a judgment of how the antagonist force exerted by the inanimate subject entity impacts on the agonist’s action” (p. 62).

Davidse & Heyvaert make a categorisation of different middle types, of which the two most important with regard to the potential-neuter are: (i) the *process-oriented* middle which “focuses on whether the properties of the entity construed as subject are conducive to the action as such” (p. 67), and (ii) the *facility-oriented* middle which “focuses on whether the properties of the subject-entity are conducive to carrying out the process easily or with difficulty” (ibid.). The second type always involves clauses with adverbs such as *easily*, *well*, or *with great difficulty* (as in (32c)).

The interpersonal account of the middle provides interesting insights concerning a *interpersonal* modal analysis of the potential function of the neuter extension. First, we can conclude that the neuter extension, being part of the Finite as non-verbal predicate, expresses the modal value of letting. Second, the potential clause can be categorised as a process-oriented middle. The potential neuter clause does not elucidate whether the process expressed by the (lexical) verb root can be carried out easily or with difficulty (facility-oriented middle), but asserts only that the subject lends itself to the execution of the action. However, a basic potential clause such as (33a) below can be extended by an adverb of manner, resulting in a facility-oriented middle clause, illustrated in (33b) for Swahili and in (34) for Tswana. Furthermore, Seidl & Dimitriadis give two interpretations for the clause in (30) above: either *this*
letter is readable or this letter could be read easily. The second interpretation relates more closely to the facility-oriented middle type. Muriungi (2008) also gives a facility-oriented middle interpretation (“an “easy” reading: Z was easy to V”, Muriungi (2008: 3)) to a simple potential-neuter clause, i.e. without an adverb of manner, as is shown in (35).

(33) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 254)
   a. godoro li-na-lal-ik-a.
      mattress SM-PRS-sleep-NT-FV
      ‘This mattress can be slept on.’
   b. kitanda ki-na-lal-ik-a vizuri.
      bed SM-PRS-sleep-NT-FV well
      ‘This bed sleeps well.’

(34) **TSWANA (S31)** (Creissels 2002: 403)
   *Mae a thubega motlhofo.*
   màí á-tʰú-b-ɛ́χ-à mòtlʰôʃô. CL6:œuf SM6-casser-NT-FV facilement
   ‘Les œufs se cassent facilement.’

(35) **THARAKA (E54)** (Muriungi 2008: 3)
   mbûri n-i-ûrag-ik-ir-e.
   CL9:goats FOC-SM9-kill-NT-PFV-FV
   ‘The goat was easy to kill.’ (It wasn’t strong.)

The Swahili examples in (33) also illustrate another point made by Davidse & Heyvaert, namely that the Subject in a middle, or in this case a potential, clause is not restricted to Goal participants only, but can also be realised by a circumstance of location as in (33) or a circumstance of instrument, as in the pen writes smoothly. When intransitive verbs are derived by means of the neuter with a potential reading (such as sleep), the circumstances of the process are the primary and only target for the subject role in the resulting middle neuter clause. The ideational difference between a potential clause derived from an intransitive clause and one derived from a transitive one, is shown in Table 16. In this situation, Schadeberg’s (2006: 75) definition of function of the neuter, viz. that the subject is factually or potentially affected by the action, does not correctly summarise its function in that the Subjects in (33) are not affected Goals but circumstances of location.

Table 16. Comparison of ideational and interpersonal structure of (33) and (34)

<table>
<thead>
<tr>
<th>(33)’</th>
<th>kitanda</th>
<th>kinalalika</th>
<th>vizuri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td><strong>Circumstance: location</strong></td>
<td>-ik-</td>
<td>kinalala</td>
</tr>
<tr>
<td>Process: relational: intensive: attributive</td>
<td>Attribute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Subject</td>
<td>-na-...-ika</td>
<td>-lal-</td>
</tr>
<tr>
<td>Finite + Predicator</td>
<td>Complement</td>
<td>Adjunct</td>
<td></td>
</tr>
</tbody>
</table>
With regard to the reality status, Davidse & Heyvaert (2007: 61-2) comment that the action expressed by the middle clause can remain ‘virtual’, which corresponds to the potential verb as attributing a property to the subject, or the action can be actualised. In Gusii (JE42), the reality status is taken one step further: a non-ergative verb root can be extended by just one neuter suffix, in which case the extension indicates that the subject is in a potential state of letting. However, if the neuter suffix is reduplicated, the dubbel extension expresses that the Subject can be made or brought into a state of letting, but is not yet so (Cammenga 2002: 381). This is shown in (36). The author has not glossed his examples but provides the basic verb, which allows us to identify the neuter verb (indicated in bold) in the clauses.

(36) **GUSII (JE42)** (Cammenga 2002: 381)

a. -miŋɔk- ‘to run’
   
   aβaana ƞkomiŋɔka βare.
   ‘The kids are running.’

b. -miŋɔyeik- ‘to be actually runnable’ (i.e. it is possible to hold a race there, for example).
   
   ase aria ƞkomiŋɔyeikα are.
   ‘That place is runnable’ (i.e. it is possible to hold a race there, for example).

c. -miŋɔkeik- ‘to be (potentially) runnable’
   
   ase aria ƞkomiŋɔkeikα are.
   ‘That place is (potentially or latently) runnable’ (i.e. it may be used as a racecourse, for example, but not readily so: it will first have to be made fit for that purpose).

In Chewa the difference between the potential and ergative meaning of the neuter has become constructionalised (this will be more extensively elaborated theoretically below, after a presentation of the data). The potential reading can only surface in clauses where the VP consists of an auxiliary and the lexical verb, as is illustrated in (37). A clause with an auxiliary and an ergative verb is ambiguous between a potential and unergative clause, as in (38). The unergative interpretation can only unambiguously surface when an auxiliary is lacking (39).

(37) **CHEWA (N31b)** (Dubinsky & Simango 1996: 759)

mwana uyu ndi wo-kumbatil-ik-a.
child DEM is ATTR-embrace-NT-FV
‘This child is embraceable.’
The potential construction in Chewa has entered a network of copula constructions in which the VP consists of an equivalent of *be* functioning as auxiliary, which realises both the Finite and Predicator, and a Complement.\(^{27}\) The Complement of such a copula construction can be a non-finite verb, which is the case for potential-neuter clauses as in (37) and (38), a noun, locative, adjective or question word (Kiso 2012: 84). Relational verbs can also appear in a copula construction, as is shown in (40).

(40) **CHEWA (N31b)** (Kiso 2012: 84)

a-dza-khal-a o-zizir-a.
SM-FUT-become-FV ATTR-be.cold-FV

‘It (the water) will be cold.’

Like ergative verbs, relational verbs can function as finite verbal predicates in which case they are marked for TA and take the obligatory verbal subject concord:

(41) **CHEWA (N31b)** (Kiso 2012: 84)

a-dza-zizir-a

SM₁-FUT-be.cold-FV

‘It (the water) will be cold.’\(^{28}\)

Non-finite verbal Complements in copula constructions differ from finite verbal Predicators in that they (i) are no longer marked for TA, which is expressed on the auxiliary Predicator, and (ii) no longer agree with the subject by means of a verbal subject concord. We can observe this difference by comparing example (38) with (39). In the potential clause in (38) the verb -swek- agrees with the subject by means of the prefix zo-, whereas in the unergative clause in (39) the verb -swek- takes the verbal subject marker zi-, which we also find on the copula in (38). The prefix that we find on the verbal Complement has been termed ‘associative’ (Mchombo 1993: 8) or ‘attributive’ (Kiso 2012: 84), and is not only used for non-finite verbs in attributive copula constructions, but also for attributive relative clauses (42), or when a verb is used as an attributive relative predicate (43).

\(^{27}\) The auxiliary *ndi* in (37) is a lexicalised copula “used for nominal predication in sentences referring to the present […]”, and “is always unmarked for tense-aspect and person […]” (Kiso 2012: 25).

\(^{28}\) Kiso does not provide an explanation for why (33) and (34) are translated identically in English, even though grammatically we have a different construction in Chewa.
(42) CHEWA (N31b) (Kiso 2012: 160-1)

[...]munthu wo-low-a m’-khola la nkhosa
[...]man ATTR-enter-FV in-stable of sheep
0-sa-dzer-a pa khomo, koma ku-chit-a
ATTR-NEG-pass.through-FV at entrance/doorway but CL15-do-FV
ku-kwerer-a pena, ameneyo ndi wakuba ndi wolanda.
CL15-climb.up-FV somewhere else that one is thief and robber
‘[...] the man who does not enter the sheep pen by the gate, but climbs in by some other way, is a thief and a robber.’

(43) CHEWA (N31b) (Corbett & Mtenje 1987: 11)

kamwana ko-kongola29 ka-ku-gon-a.
small.child ATTR-prett SM-PRS-sleep-FV
‘The pretty small child is sleeping.’

The attributive prefix always agrees with the head noun and differs morpho-phono logically from the verbal subject concord. Lexical adjectives agree with the head noun by an at first hand formally different attributive prefix:

(44) CHEWA (N31b) (Dubinsky & Simango 1996: 761)

Chibwe a-na-li wa-mfupi.
Chibwe SM1-PST-be ATTR-short
‘Chibwe was short.’

However, according to Dubinsky & Simango (1996: 761, footnote 14), both verbal and adjectival attributive prefixes have the same morphological structure:

Table 17. Attributive prefixes in Chewa (N31b) (adapted from Dubinsky & Simango 1996: 761, footnote 14)

<table>
<thead>
<tr>
<th>morphological structure</th>
<th>AGR₁</th>
<th>a</th>
<th>AGR₂</th>
<th>ROOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>adjective</td>
<td>wamfupi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>example (44)</td>
<td>u-</td>
<td>a-</td>
<td>m-</td>
<td>fupi</td>
</tr>
<tr>
<td>verb</td>
<td>wokumbatilika</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>example (37)</td>
<td>u-</td>
<td>a-</td>
<td>u-</td>
<td>kumbatilika</td>
</tr>
</tbody>
</table>

The first part, [AGR₁ + a], is most likely a connective, which usually has this morphological structure in Bantu languages, the prefix in AGR₁ agreeing with the head noun (Meeussen 1967: 106, Van de Velde 2013). This is shown for Sikongo (H16a), a Kikongo variety spoken in Angola and the Democratic Republic of the Congo in (45).

(45) SIKONGO (H16a) (Bentley 1887: 556)

a. n-ti mi-a N-bote
CL4-tree PP4-CON CL9-goodness
‘good trees’

29 In a footnote, Corbett & Mtenje (1987: 11) state that -kongol- is a verb root, but do not provide a translation (relational attributive ‘be pretty’?).
The apparent difference between the adjectival and verbal attributive prefix in Chewa then is caused by the different prefixes in AGR2 and a phonological process resulting from the concatenation of the connective and either the adjectival or verbal prefix. However, if the morphological analysis put forth by Dubinsky & Simango is correct, then it seems that the verbal prefix in AGR2 no longer productively agrees with the head noun but rather remains -u. This can be observed from the fact that Dubinsky & Simango, by posing the morphological structure in Table 17, claim that the phonological sequence /a-u/ becomes /o/ in Chewa, and from the fact that the vowel /o/ is present in all attributive prefixes regardless of the class of the head noun: o-, wo, lo-, cho-, yo-, zo-, to-, po-, ko- or mo- (Kiso 2012: 84). Thus, zosweka from example (38) should be analysed as:

<table>
<thead>
<tr>
<th>Morphological structure</th>
<th>AGR₁</th>
<th>a</th>
<th>AGR₂</th>
<th>ROOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>zosweka</td>
<td>zi-</td>
<td>a-</td>
<td>u-</td>
<td>sweka</td>
</tr>
</tbody>
</table>

and not as:

<table>
<thead>
<tr>
<th>Morphological structure</th>
<th>AGR₁</th>
<th>a</th>
<th>AGR₂</th>
<th>ROOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>zosweka</td>
<td>zi-</td>
<td>a-</td>
<td>zi-</td>
<td>sweka</td>
</tr>
</tbody>
</table>

Corbett & Mtenje (1987: 11, footnote 4) make a slightly different morphological analysis, in which they propose that the morpheme following the connective is the class 15 prefix ku-, which is used for the infinitival form of the verb (e.g. Chewa ku-su-a ‘to break’) (Katamba 2006: 116). In this case, the verbal Complement predicate consists of the connective and the infinitival form of the lexical verb. This analysis seems more plausible, as it does not have to cope with the problem of ‘an agreement marker which does not agree’.

As we can see in (42) above, the VP of an attributive relative clause does not take an auxiliary. A potential-neuter verb which is used in this grammatical context can be interpreted as an equivalent of a verb used adjectively in English, as in (46).

(46) **CHEWA (N31b)** (Mchombo 1993: 8)

a. chitumbúwá chó-dy-č-k-a
   CL₇:pancake ATTR₇:eat-NT-FV
   ‘an edible pancake’

b. mbúzi zó-b-č-k-a
   CL₁₀:goat ATTR₁₀:steal-NT-FV
   ‘goats that can be stolen (stealable goats)’

Predicate relativisation is a common strategy in Bantu for expressing verbal adjectives, as shown for Swahili in (47).
As in Chewa, the Swahili neuter in (47) should grammatically be analysed as a relative clause: the object concord slot is occupied by a referential (Schadeberg 1992: 17) or relative (Ngonyani 2001: 61) concord, which is used in a number of constructions such as the formation of referential demonstratives or after the possessive concord (Schadeberg 1992: 17). Literally the Swahili clause thus translates as The water that was spilled does not gather, and there is agreement between the neuter verb and the head noun by the subject concord marker as well as by the referential/relative concord marker.

I make a leap here to Construction Grammar in order to correctly define my interpretation of the constructionalisation of the potential meaning in Chewa, which I stated above. In Construction Grammar, constructions are viewed as “stored pairings of form and function” (Goldberg 2003: 219), to which are attributed six sorts of properties: (i) phonological, (ii) morphological, (iii) syntactic properties (these are formal), and (iv) semantic, (v) pragmatic and (vi) discourse properties (these are associated with meaning) (Croft 2001: 18 in Trousdale & Norde 2013: 36). By proposing that the potential meaning of the neuter is constructionalised or constructionalising, I mean that the specific semantic property, viz. the potential meaning, is encoded by a specific syntactic property, viz. an attributive construction. A change is thus occurring on the lexicogrammatical level, in which the potential has become differentiated from the unergative, no longer solely by the verb class (ergative vs. non-ergative verbs), but also by a different construction. Constructionalisation defined as “the dynamic reorganisation of associations in the constructional network of a language” (Trousdale & Norde 2013: 36) exactly describes the situation at hand: the potential clause is semantically as well as morphosyntactically incorporated in the network of attributive constructions. Semantically, in that the potential does not express a process which occurs or has occurred spontaneously, but denotes the attribution of a quality to the Carrier/Subject. Morphosyntactically, because there is an organisational shift from a material or mental clause to a relational attributive clause with a non-finite verbal Attribute, the lexical verb having lost its verbal morphology, viz. it is no longer marked for TA which is encoded on the copula, and agrees with the Subject by means of an attributive prefix instead of a subject concord marker. In terms of grammaticalisation theory (Hopper & Traugott 2003), the Predicator has been reanalysed as an attributive verbal Complement, and consequently, through analogy or actualisation (De Smet 2012), received and lost specific morphological marking, making the verbal Complement (more) identical to other attributive verbal Complements such as non-verbal complements of relational copula constructions or attributive relative predicates. That actualisation/analogy is a similarity-based process of change, which has been pointed out recently by De Smet (2012: 603), is thus confirmed in this case study. Linguistic change is furthermore a gradual process, often with intermediate stages in which the old and new meanings and/or constructions are attested at the same time (Hopper & Traugott 2003: 52). This can be observed from the fact that an attributive copula construction with an ergative verb is ambiguous between an unergative and a po-
potential reading (see example (38)). The neuter extension, originally encoding both the relational process on the ideational level and the modal letting value on the interpersonal level, no longer marks the former which is now expressed by the copula (similar to the encoding of the relational process in English). The two metafunctional modes of meaning expressed in the organisation of the potential clause in Chewa are shown in Table 18.

Table 18. Analysis of the structure of the potential clause in Chewa: different layers of organisation

<table>
<thead>
<tr>
<th>CHEWA (N31b) (Dubin-sky &amp; Simango 1996: 759)</th>
<th>chipatso ichi fruit DEM</th>
<th>ndi is</th>
<th>cho-lum-ik-a. ATTR-bite-NT-FV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td>Carrier</td>
<td>Process: relational Attribute</td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Subject</td>
<td>(present) Finite ndi Predicator Complement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘This fruit is biteable.’</td>
<td></td>
</tr>
</tbody>
</table>

The potential reading can surface with both ergative and non-ergative verbs, as was shown for Chewa in (37)-(39). I have also shown that circumstances of instrument are not allowed in unergative and agentless passive neuter clauses, as opposed to passive clauses derived by the regular passive extension (see the two previous sections). In contrast to this, potential clauses in Ndebele with non-ergative verbs do allow instrumental circumstances, which is illustrated in (48). Potential clauses with ergative verbs, on the other hand, are not grammatical with instrumental circumstances, as shown for Swahili in (49).

(48) NDEBELE (S44) (Khumalo 2009: 169)

i-N-kukhu ya-qum-ek-a ngengqamu.
AUG0-CL9-chicken SM0-cut-NT-FV with.knife
‘The chicken was cutable with a knife.’

(49) SWAHILI (G42) (Seidl & Dimitriadis 2002: 257)

* kuku ki-li-pik-ik-a kwa kijungu hiki.
chicken SM-PST-cook-NT-FV with little.pot DEM
‘The chicken was cookable with this little pot.’

I have not been able to verify whether a Swahili equivalent of (48) would be grammatical nor whether a Ndebele translation of (49) would be ungrammatical, i.e. whether we are dealing with language-internal restrictions or restrictions on the level of Bantu more generally.

In summary, in this section I have discussed the relation between middle and potential clauses, arguing that the potential can be categorised as a process-oriented middle type. The attribution of a property to the Subject, expressed by the neuter extension as a non-verbal predicate, is identical to Davidse & Heyvaert’s force dynamic’s analysis of English middles, in which it is argued that the middle expresses a modal value of conduciveness/hindrance. A language-internal phenomenon has been discussed regarding the constructionalisation of the potential in Chewa, viz. the shift from the paradigm of finite verbs (for unergative verbs) to the paradigm of attributive constructions with attributive prefixes different from the subject concord marker and with copula optionality (for non-ergative verbs). Finally, it has been
shown that unergative clauses do not allow circumstances of instrument in potential clauses, whereas non-ergative clauses do.

2.1.4 Idiosyncratic derivation

The neuter can, in some instances, be a meaning-changing extension. When suffixed onto a basic verb, the original meaning is no longer preserved in the derived neuter verb, but the neuter verb becomes lexicalised, i.e. has a specialised meaning. However, there is usually still a semantic relation between the meaning of the basic and the neuter verb, and the latter often expresses an unergative process in which the sole participant coincides with the Goal of a corresponding effective process, for which English seems to use a suppletive alternation. This is shown in (50): -tayik- does not translate in ‘be thrown away’ but in the neutral, non-agentive ‘be lost’. The ‘new’ meaning of the derived verb can express a process type different from the one expressed by the underived verb. This is illustrated in (51). The basic verb -lim- denotes a material process, ‘cultivate’, and the derived neuter verb -limik- expresses a relational attributive ‘be bountiful’.

(50) CHEWA (N31b) (Dubinsky & Simango 1996: 756)
  makiyi ako a-na-tay-ik-a.
  keys POSS2SG SM-PST-throw.away-NT-FV
  ‘Your keys were lost.’

(51) CHEWA (N31b) (Dubinsky & Simango 1996: 756)
  chaka chatha chimanga chi-na-lim-ik-a.
  year last corn SM-PST-cultivate-NT-FV
  ‘Last year corn was bountiful.’

The newly expressed process type is not always relational: attributive. As shown in Table 19, the mental perception verb -m̩n̩- ‘see’ in Nzadi (B856) becomes the material middle verb -m̩nk̩- ‘shine’. More lexical examples of the idiosyncratic, also referred to as non-compositional (Seidl & Dimitriadis 2002: 248) derivational function of the neuter extension are provided in Table 19.

Table 19. Neuter verbs with idiosyncratic meaning

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LONDO (A11)</td>
<td>-Φém- ‘jump’</td>
<td>-Φémê- ‘be light, nimble’</td>
<td>Kuperus (1985: 197)</td>
</tr>
<tr>
<td></td>
<td>-b̥̥ńw- ‘open’</td>
<td>-b̥̥ńwê- ‘develop’</td>
<td></td>
</tr>
<tr>
<td>DUALA (A24)</td>
<td>-pimb- ‘wegwer- fen’</td>
<td>-pimbe- ‘verloren gehen’</td>
<td>Ittmann (1939: 133)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BANKON (A42)</td>
<td>-bom- ‘schlagen’</td>
<td>-bomî- ‘hingefallen sein’</td>
<td>Spellenberg (1922: 61)</td>
</tr>
<tr>
<td></td>
<td>-wom- ‘stechen’</td>
<td>-wume- ‘verwundet sein’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-kag- ‘binden’</td>
<td>-kêgî- ‘gerunzelt sein’</td>
<td></td>
</tr>
<tr>
<td>NEN (A44)</td>
<td>-fät- ‘fermer les mains’</td>
<td>-fâtê- ‘se crisper spontanêment’</td>
<td>Dugast (1971: 235)</td>
</tr>
<tr>
<td></td>
<td>-kêt- ‘cueillir’</td>
<td>-kêtê- ‘tomber spontanêment de l’arbre (se cueillir de soi-même)’</td>
<td></td>
</tr>
<tr>
<td>EWONDO (A72)</td>
<td>-sɪn- ‘hassen’</td>
<td>-sɪŋi- ‘wünschen, daß’</td>
<td>Nekens (1913: 52)</td>
</tr>
</tbody>
</table>
(Gr.) etwas nicht geschehen wäre

**BULU (A74a)** (Fr.)
- *lik-* ‘laisser’
- *wök-* ‘entendre, percevoir’

**NZADI (B865)**
- *mën-* ‘see’
- *mënkw-* ‘shine’

**LOKELÉ (C55)** (Fr.)
- *ino-* ‘revenir’
- *ini-* ‘rentrir’

**MITUKU (D13)** (Fr.)
- *tümik-* ‘servir’

**MOSHI (E62a)** (Gr.)
- *ka-* ‘bleiben, verharren’
- *kaik-* ‘anhänglich sein, zu einem oder etwas gehören’

**SUKUMA (F21)** (Fr.)
- *kal-* ‘terminer quelque chose’
- *kalek-* ‘arriver à la fin’

**NYAMWEZI (F22)**
- *tum-* ‘cut, chop’
- *ßon-* ‘see’
- *ßonék-* ‘have a meal’
- *tüm-* ‘send’
- *tümék-* ‘be liked or loved’
- *tümik-* ‘snap (as of a rope)’

**CHASU (G22)** (Gr.)
- *tet-* ‘sagen’
- *tetik-* ‘gebräuchlig sein (Redensarten)’

**SHAMBALA (G23)** (Gr.)
- *ban-* ‘verderben’
- *banik-* ‘sterben’

**SWAHLI (G42)**
- *hesabu-* ‘count’
- *hesabik-* ‘be regarded, considered’

**KITUBA (H10a)**
- *lemb-* ‘be tired’
- *lembik-* ‘soften, become soft’

**RWANDA (JD61)** (Fr.)
- *vún-* ‘briser’
- *vúnik-* ‘être fragile’

**NYORO (JE11)**
- *kir-* ‘surpass’
- *kir-* ‘get well’

**GANDA (JE15)**
- *yonoon-* ‘spoil’
- *yonoonek-* ‘get out of order’

**CHOKWE (K11)** (Dutch.)
- *lal-* ‘met velen sterven, op zijn’
- *lalik-* ‘veel gespleten zijn’

**LUBA (L31a)**
- *tàp-* ‘slaan’ (‘hit’)
- *tàpik-* ‘zich blesseren, Kabuta & Schiffer

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30 In the original work, the author uses the exact same verb base for the underived and derived member. I have copied the form here, but suspect that this might be an error and the neuter verb should be *kirik-*.
In its idiosyncratic function, the neuter does not necessarily modify the diathesis of the basic verb, thus being able to combine with middle verbs. Since the idiosyncratic derivation is highly language-specific, the idiosyncratic-neuter can combine with middle verbs in some languages, such as Swahili as shown in Table 20, but not in other languages, as illustrated in (52) for Chewa.

Table 20. Swahili neuter verbs from basic intransitive verbs (adopted from Seidl & Dimitriadis 2002: 253)

<table>
<thead>
<tr>
<th>EVB</th>
<th>Gloss</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>nang’anik-ik-a</td>
<td>be.oily-NT-FV</td>
<td>‘shine’</td>
</tr>
<tr>
<td>mak-ik-a</td>
<td>be.amazed-NT-FV</td>
<td>‘be surprised’</td>
</tr>
<tr>
<td>chelew-ek-a</td>
<td>be.late-NT-FV</td>
<td>‘be late’</td>
</tr>
<tr>
<td>lew-ek-a</td>
<td>be.drunk-NT-FV</td>
<td>‘be drunk’</td>
</tr>
<tr>
<td>patan-ik-a</td>
<td>agree-NT-FV</td>
<td>‘get along’</td>
</tr>
<tr>
<td>hudhuri-ik-a</td>
<td>be.present-NT-FV</td>
<td>‘be present’</td>
</tr>
<tr>
<td>sim-ik-a</td>
<td>stand-NT-FV</td>
<td>‘set up’</td>
</tr>
<tr>
<td>in-ik-a</td>
<td>stoop-NT-FV</td>
<td>‘tilt’</td>
</tr>
<tr>
<td>v-ik-a</td>
<td>dress-NT-FV</td>
<td>‘provide with clothes’</td>
</tr>
</tbody>
</table>

(52) CHEWA (N31b) (Mchombo 1993: 7)

-nyow-a ‘get wet’
-gw-a ‘fall’
-lir-a ‘cry’
-uluk- ‘fly’

However, this small amount of examples should not conclusively indicate that the idiosyncratic neuter does not combine with middle verbs in Chewa. Moreover, Seidl & Dimitriadis
(2002: 254) assert that only unergative intransitive verbs such as those in Table 20 are compatible with the neuter. Unacussatives, on the other hand, are not:

(53) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 254)

a. *-fik-ik-
   -arrive-NT-

b. *-j-ik-
   -come-NT-

c. *-w-ik-
   -be-NT-

d. *-kal-ik-
   -stay/sit-NT-

The basic verb root of (53d) -kaa- ‘stay, sit’ can also be used in an effective clause with the meaning ‘dwell, live (in), inhabit, reside (at)’. As such, it is perfectly compatible with the neuter suffix: -kalik- ‘be habitable’ (Seidl & Dimitriadis 2002: 254, footnote 13).

Although the resulting meaning of the derived verb is almost always language-specific, the idiosyncratic-neuter of the verb see, which is reconstructed in Proto-Bantu as the verb root *-bon-, is more widespread than the other verbs found in Table 19. This can be concluded, on the one hand, from the fact that it has been reconstructed for Proto-Bantu, viz. *-bonik- ‘appear’ (Bastin et al. 2003), and on the other hand because the extended verb root is frequently attested in the language sample. Although it is only represented in the sample for the zones H, J, L, M, N, P, and R, I suspect that where the reflex of *-bonik- was not mentioned in the grammars, the authors did not incorporate it rather than the reflex being lost in the languages of the zones not listed here. The consulted grammars and articles provide no additional information that can be presented and analysed here. In section 3.5 of Part 3, however, I will discuss the lexicogrammatical aspects of this neuter verb for Ganda.

2.1.5 Summary

From the previous sections we can conclude that the neuter has three main functions. The first function is to derive a one-participant clause from a two-participant clause. The Subject participant of the neuter clause typically is the participant realising the Complement of the underived clause. One subpart of this function is the encoding of the unergative member of an ergative alternation pair. This reading can only surface when the neuter is combined with a verb that expresses an ergative process. If this function is expressed with a non-ergative verb, the resulting semantic interpretation is similar to an agentless passive clause. There is often a semantic focus on the end state of the process in a neuter clause, generally implying a resultative aspect. Because of this aspectual focus on the (end) state of an affected or undergoing participant, the original Subject participant of the underived clause is cognitively and semantically absent in the neuter clause. The grammatical repercussions are the impossibility of oblique agentive phrases, purpose clauses, agent-oriented adverbs and circumstances of instrument in neuter clauses. This also constitutes the core difference between the neuter and the passive. The second, potential function of the extension conveys two meanings related to two different levels of language. As was outlined in §1.4.1.1, the metafunctions of language make up three different organisations of the clause. Ideationally, the clause is construed by making
choices in the transitivity network, which subsumes the type of construal (transitive vs. ergative), participant voice and the type of process. In its potential meaning, the neuter denotes an relational attributive process and thus functions as a non-verbal attributive predicate. It relates an Attribute, realised by the lexical verb, to a Carrier, the participant in Subject role. Interpersonally, the clause structure consists of a Subject, a Finite and a Predicator, and the system network is that of mood (H&M 2014, Chapter 4). The potential function of the neuter encodes the modal value of letting or conduciveness, often paraphrased as ‘can be V-ed’ or ‘be V-able/ible’. In the classification of middle types of Davidse & Heyvaert (2007: 67) we can categorise the potential neuter as a process-oriented middle type. An interesting development has been discussed for Chewa, in which the potential function of the neuter can only be encoded by a copula construction (except when the neuter verb is the predicate of a relative clause). The realisation of the relational attributive process is transferred from the neuter onto the copula. The interpersonal modal letting value, however, is still expressed by the extension. The lexical verb becomes non-finite (as opposed to unergative neuter verbs) and agrees with the subject by means of an attributive prefix instead of a subject marker. It is not uncommon in the languages of the world that both the unergative and middle are expressed by the same formal marker (Davidse & Heyvaert 2007: 72, Kemmer 1993: 147-8), and from a typological point of view the neuter thus can be labeled as a middle marker (although it is definitely not the only one in Bantu), viz. in Kulikov’s (2013) sense that a middle marker typically subsumes a number of deagentivising grammatical operations. This polysemy subsequently should be accounted for by an underlying relation between the two functions. Davidse & Heyvaert (2007: 73) “propose that the middle construction is linked to the ergative intransitive by a process of SUBJECTIFICATION, viz. a shift from the description of a verifiable state of affairs to a subjective statement of dynamic modality.” There is no doubt that, due to the fact that both the unergative and potential are expressed by the same marker, an ergative verb root extended by the neuter is ambiguous between an unergative and potential reading. Although this has not yet been discussed in the literature, I assume that the ambiguity is resolved by contextual information, and if no context is given, that the unergative is the default reading. An overview of the different ideational configurations and interpersonal structures, and their differing meanings, is provided in Table 21. The third main function of the neuter is the idiosyncratic derivation. This term indicates that the meaning expressed by the underived verb is not preserved when derived by the extension. A possible consequence is that the neuter verb expresses a process type different from the basic verb, and can, in some languages, suffix onto (some, but not so much all) middle verbs.

In the following sections, I discuss the combination of the neuter with other extensions, restrictions on the order, implications and influences on the meaning and function, and language-specific phenomena.
Table 21. Overview of ideational and interpersonal layers of neuter clauses

<table>
<thead>
<tr>
<th>IDEATIONAL</th>
<th>INTERPERSONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUCLEAR STRUCTURE</strong></td>
<td><strong>MEANING</strong></td>
</tr>
<tr>
<td>Medium-Process</td>
<td>unergative</td>
</tr>
<tr>
<td>Goal-Process</td>
<td>agentless passive</td>
</tr>
<tr>
<td>Carrier-Process-Attribute</td>
<td>relational attributive</td>
</tr>
</tbody>
</table>
2.2 The neuter in combination with other extensions

2.2.1 Suffix ordering in Bantu

It is known that Bantu languages allow multiple extensions to co-occur within the same verb base (see among others Hyman 2007, Hyman & Katamba 1991, Hyman & Mchombo 1992, Mathangwane 2001, McPherson & Paster 2009). An example of such suffix stacking is provided in (54) for Yao.

(54) YAO (P21) (Ngunga 2000 in Hyman 2007: 153)
   a. taam-a ‘sit’
   b. taam-ik-a ‘seat’ (put in seated position) impositive
   c. taam-uk-ul-a ‘unseat’ reversive (tr.)
   d. taam-uk-ul-igw-a ‘be unseated’ passive
   e. taam-uk-ul-igw-aasy-a ‘cause to be unseated’ causative
   f. taam-uk-ul-igw-aasy-an-a ‘cause each other to be unseated’ reciprocal
   g. taam-uk-ul-igw-aasy-an-il-a ‘cause each other to be unseated for/at’ applicative

The order of extensions is not free, but governed by on the one hand two general rules – the Mirror Principle and the CARP template – and on the other hand language-specific morphotactic constraints, which may overrule the general constraints. Both will be discussed briefly in the following paragraphs.

The Mirror Principle has been coined by Baker (1985: 375) as the rule that “morphological derivations must directly reflect syntactic derivations (and vice versa)”, redefined in the context of extension stacking as “morphemes whose semantics have narrower scope over the semantics of a root should appear closer to the verb root than morphemes whose semantics have wider scope” (Good 2005: 3). This is relatively straightforward and can be observed in the Yao example in (54): the impositive and reversive transitive extensions change the meaning of the verb root, and thus suffix most closely to it. The following extensions – passive, reciprocal, causative, applicative – are rather argument-changing extensions and each take scope over the meaning of the previously extended verb base.

The CARP template is an extension order proposed by Hyman (2003) on a synchronic level, and later (Hyman 2007: 158) for PB on a diachronic level (see also Good 2005 for an extensive diachronic study on the order of causative and applicative). The order of the extensions assumed by the CARP template is: causative1-applicative-reciprocal-causative2-passive. The second causative is the PB extension *-i- which, according to Guthrie (1967: 92) has “last position (even after prefinal and after C of -jde)” (and see also Good 2005 for the final position of the second causative). The CARP template is commonly preferred when there are no other morphotactic rules governing the order (Mchombo 2007: 206).

However, suffix ordering is also frequently governed by language-specific, morphotactic constraints based on language-internal morphological and phonological rules. In Nande (JD42), for example, the applicative must always precede the reciprocal extension, regardless of the semantic scope, as shown in (55) below. Semantically, the reciprocal has scope over the verb root, and the applicative then over the reciprocalised verb, and following the Mirror Principle we would expect the same order formally. However, morphologically the reciprocal
obligatorily has to follow the applicative. In Kalanga (S16), for example, the order reciprocal-applicative is unproblematic, shown in (56).

(55) **NANDE (JD42)** (Hyman & Katamba 1991: 134)
-meny-ir-an-
-hit-APPL-REC-
‘hit each other for/at’

(56) **KALANGA (S16)** (Mathangwane 2001: 399)
-lób-an-il-
-beat-REC-APPL-
‘beat each other for’

Multiple extensions may over time evolve into compound suffixes with a single function. Such is the case for the passive extension in the languages of the Ewondo-Fang A70 group, which has the form *-vb*àn-* and consists of a middle (in the typological sense) extension *-b(à)* and the reciprocal/associative *-an-* (Bostoen & Nzang-Bie 2010).

The neuter suffix is generally not considered in the literature on suffix ordering. However, a combination of the neuter with another extension often results in interesting interactions. This will be elaborated in the following sections. I will only be able to discuss combinations of the neuter with other extensions for Swahili, Chewa, Ndebele and Tharaka as these are the only languages for which I have data concerning this topic. However, an overview of the neuter in combination with every extension will not be provided, as the authors have not systematically tested and presented results of the full extension inventory with the neuter. There is thus a considerable lack of data with regard to extension stacking in combination with the neuter, for the languages considered in particular and for the Bantu languages in general.

### 2.2.2 Causative-neuter

Tharaka is the only language for which I found evidence that a combination of the causative and neuter extension is unproblematic, as shown in (57). More importantly, the neuter takes scope over the causativised process, viz. the potentiality expressed by the neuter takes scope over someone making Maria kill the goat, not over Maria killing the goat. Thus, the Initiator/Actor added by the causative is omitted by the neuter, which, importantly, indicates that the causation of Maria killing the goat is easy to do. The extension order thus conforms to the Mirror Principle. It should be noted that Muriungi (2008) does not use the common terminology employed in Bantu or general linguistics for the description of the extensions; for example, he labels and translates the causative extension as ‘coerce’, the neuter as ‘able’, and the repetitive as ‘erratic’.

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31 Regarding the form of the extensions other than the neuter in the following sections: see 1.3 for the Proto-Bantu reconstructions. The reflexes in present-day languages are often identical to or at least identifiable when compared with the reconstructed forms. I will thus not discuss for each extension individually the synchronic forms of the extensions for the languages used in the examples.
Maria n-a-ûrag-îk-ir-e mbûri.
‘Maria was easy to coerce to kill the goat but the killing of the goat was not easy as the goat was quite strong.’

In order to have the neuter take scope over the initial, caused process, i.e. the killing of the goat, a construction with a causative auxiliary -tem- ‘make’ has to be used, illustrated in (58). Note that the clause constellation is different from the example above. In (57), we find the prototypical constellation of an effective clause, namely Actor-process-Goal, with the Initiator being omitted. In the clause in (58), on the other hand, the Actor is removed from the constellation, with the preservation of the Initiator. Moreover, we have a relational Carrier-Attribute constellation following the causative auxiliary: Initiator-cause-Carrier-[Process+Attribute].

John n-a-tem-ir-e mbûri j-ûrag-ik-a.
‘John made the goat easy to kill.’ (By tying its legs together.)

With regard to the causative-neuter combination in Ndebele, Khumalo (2009: 170) writes that “it is difficult to tell whether [(59)] is grammatical and acceptable at once”, although he does confirm later on that the example presented here in (60) is acceptable.

? aba-fana ba-seng-is-ek-a u-chago (ngubaba).
‘The boys were made to be milking by the father.’

um-vundla wa-gijim-is-ek-a e-mini.
‘The hare was chaseable during the day.’

Due to the fact that Khumalo does not discuss the apparent difference and grammaticality of the two clauses any further, we can only assume that a neuter can be combined with a causative when the former expresses the potential function (60), but is disallowed when it derives a passive-like clause (59). One could also wonder whether a clause in which the Medium, Goal or Range of the basic effective clause is maintained instead of the Actor, such as the cow was made to be milked or the father made the cow to be milked/ready to be milked/milkable, would be possible and unproblematic (in line with the Tharaka example in (58)).

The data for Chewa are contradictory. Mchombo (1993) provides two examples which seem to indicate that the causative can be followed by the neuter, although violating the Mirror Principle. In (61), we have the semantic derivation bend > bendable > make bendable, thus the order ‘simple root > neuter > causative’. Formally, however, the causative precedes the neuter.
Dubinsky & Simango (1996), on the other hand, state that the neuter cannot follow the causative, as shown in (62).

(62) **CHEWA (N31b)** (Dubinsky & Simango 1996: 753)

* Chibwe a-na-thamang-its-ik-a.
  Chibwe SM1-PST-run-CAUS-NT-FV
  ‘Chibwe was made to run.’

A similar analysis can be made as for the Ndebele clauses, viz. the combination neuter-causative is only grammatical in a potential clause. Dubinsky & Simango furthermore do not elaborate on whether an equivalent of (62) without the causative is grammatical. This seems highly improbable, seeing that the underived clause is middle; and we have seen that middle clauses can only be derived as a potential clause (leaving aside for the moment the idiosyncratic function), in which case only circumstances can realise the Subject role, and not Actor participants such as Chibwe. Dubinsky & Simango discuss a number of causativised verbs which have a lexicalised meaning in Chewa. Such is the case for the verbal base -thamangitsa, meaning ‘chase’, that we find in (63). This is a non-ergative process, and can thus appear in a potential-neuter clause, as in (63), but not in a (forced) unergative clause (i.e. without a copula) such as in (62). Other lexical causative verbs also combine with the neuter, as will be further elaborated below.

(63) **CHEWA (N31b)** (Dubinsky & Simango 1996: 760)

Chibwe ndi wo-thamang-its-ik-a.
  Chibwe is ATTR-run-CAUS-NT-FV
  ‘Chibwe is chaseable.’

Often the lexicalised causative verb has undergone phonological changes in which the last consonant of the verb root and the first vowel of the causative extension -ets- are dropped, and the remaining voiceless affricate consonant /ts/ of the extension has become a voiced fricative /z/ (Dubinsky & Simango 1996: 763). Interestingly, the uncausativised basic verb is still attested in Chewa, which can be productively derived by the regular causative extension -ets-. Some examples are provided in (64).
The lexicalised verbs have become effective, in that they have an Initiator-process-Medium constellation, and not an analytical causative constellation Initiator-process-Actor-Medium. This is shown by comparing -kwerets- ‘make climb’ with the productive causative extension, to the lexicalised -kwez- ‘hoist’ in (65).

Dubinsky & Simango (1996: 764) discuss that the syntactic status of mtengo ‘tree’ in (65a) is that of a second object argument of the analytical causative predicate. The word order usually defines the syntactic argument structure in Bantu, which is of special importance for the arguments following the verb in a three-participant clause: the immediately-after-the-verb position is reserved for Beneficiaries, in the case of a ditransitive or applicative clause, or Actors, in the case of a causative clause, and the position following the first object is occupied by Goals, Mediums or Ranges (Bearth 2006: 124). Dubinsky & Simango (1996: 764) write that the lexicalised predicate in (65b) cannot take two objects (mwana and mtengo) because the verb no longer expresses an analytical causative, but is now an effective verb. It is important to note that the participant status of mtengo in (65a) is different from its status in (65b) exactly because we are dealing here with different participant voices. In the first example, mtengo is a Range, an oblique participant function which I have discussed in short in section 1.4.1.1. The clause is thus an analytical causative of a basic pseudo-effective clause (the child climbs the tree), and analytical causatives do not modify the participant voice of the basic process (Davidse 1992: 120). The other two examples are indeed lexicalised effective clauses involving the two-participant process ‘hoist’, as asserted by Dubinsky & Simango (1996: 764), in which mtengo functions as a circumstance of location. Consequently, because of the different partic-

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32 This constellation is typical for Bantu, but different from English. In many Bantu languages, analytical causatives are expressed by the causative extension, and the Actor of the basic effective clause is removed from Subject position to an immediately-after-the-verb position. In English, on the other hand, analytical causatives involve the causative auxiliary make, with the Actor of the basic effective clause preceding the process, as in Joan (Initiator) made her sister (Actor) kiss the frog (Medium).
participant status it cannot be syntactically encoded as a second object complement of the VP, but is encoded as an oblique adjunct by taking the locative prefix *mu*. See Table 22.

Table 22. Comparison of ideational structure of analytical and lexical causative clauses in Chewa

<table>
<thead>
<tr>
<th>(65)’</th>
<th>Chibwe</th>
<th>anakweretsa</th>
<th>mwana</th>
<th>mtengo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td>Initiator</td>
<td>Process: material</td>
<td>Actor</td>
<td>Range</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(65)’</th>
<th>Chibwe</th>
<th>anakweza</th>
<th>mwana</th>
<th>mu mtengo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td>Actor</td>
<td>Process: material</td>
<td>Goal</td>
<td>Circumstance: location</td>
</tr>
</tbody>
</table>

The two verbs *-lirits-* and *-liz-*, found in (64), do not seem to differ much semantically, both meaning ‘make cry’. However, the former is more selectionally restricted than the latter, as is shown in (66).

(66) CHEWA (N31b) (Dubinsky & Simango 1996: 765)

a. Naphiri a-na-lir-its-a mnyamata/*belu.
   Naphiri SM-PST-cry-CAUS-FV boy/*bell
   ‘Naphiri made the boy cry.’

b. Naphiri a-na-liz-a mnyamata/belu.
   Naphiri SM-PST-make.cry-FV boy/bell
   ‘Naphiri made the boy cry/rang the bell.’

It has already been shown in (63) above that lexicalised verbs with the productive causative extension *-ets-* can combine with the neuter verb. This holds as well for the lexicalised causative verbs that we find in (64), such as *-liz-* ‘make cry’, shown in (67), as opposed to *-lirits-* with the productive causative extension (67).

(67) CHEWA (N31b) (Dubinsky & Simango 1996: 767)

a. mwana uyu a-na-li wo-liz-ik-a mosavuta.
   child DEM SM-PST-be ATTR-make.cry-NT-FV without.problem
   ‘This child was able to be made to cry, easily.’

b.*mwana uyu a-na-li wo-lir-its-ik-a mosavuta.
   child DEM SM-PST-be ATTR-cry-CAUS-NT-FV without.problem

Some of the lexical causative verbs given in the literature, and presented below in (68) and (69) in combination with the neuter, have been discussed by Halliday (1968: 197) as forming an ergative pair encoded in English by suppletion, e.g. *learn* or *study/teach, feed/eat*, of which one is the unergative (*learn, eat*) and the other the ergative member (*teach, feed*).

(68) CHEWA (N31b) (Dubinsky & Simango 1996: 760)

mwana uyu ndi wo-dy-ets-ek-a.
   child DEM be ATTR-eat-CAUS-NT-FV
   ‘This child is feedable.’
Interestingly, then, Bantu languages such as Chewa and Swahili in (68) and (69) derive the ergative member by means of the causative (causative instead of anticausative alternation), which can subsequently be derived by the neuter extension resulting in a potential clause.

In Tswana the causative-neuter combination -eseg- has evolved into an allomorph of the simple neuter -eg-. There is no difference in meaning between the two (Creissels 2002: 403), indicating that the causative has completely lost its original derivational function and meaning. Lexical examples of -eseg- are given in Table 23. When an underived verb base ends in -(ol)og- (it is not always clear whether this is an expansion or the separative extension), the ending of the verb base and the causative extension undergo a morpho-phonological change. The uvular fricative /g/ of the base ending and the first vowel of the causative are deleted, resulting in the phonological sequence /oseg/. Sandilands (1953) does not give an English equivalent for the simple verb bases.

Table 23. Extension combination neuter-causative -eseg- in Tswana (S31)

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>-dumêl-</td>
<td>-dumêlêség- ‘be agreeable, believable, credible’</td>
<td>Cole (1955: 198, 199)</td>
</tr>
<tr>
<td>-rapêl-</td>
<td>-rapêlêség- ‘be entreatable’</td>
<td></td>
</tr>
<tr>
<td>-gôpol-</td>
<td>-gôpolêség- ‘be reasonable, conceivable’</td>
<td></td>
</tr>
<tr>
<td>-golol-</td>
<td>-gololêség- ‘become freed, liberated’</td>
<td></td>
</tr>
<tr>
<td>-tlwaêl-</td>
<td>-tlwaëlêség- ‘be amicable, gainsome’</td>
<td></td>
</tr>
<tr>
<td>-amogêl-</td>
<td>-amogêlêség- ‘be acceptable’</td>
<td></td>
</tr>
<tr>
<td>-bônal-</td>
<td>-bônalêség- ‘be visible, exposed to view’</td>
<td></td>
</tr>
<tr>
<td>-lebal-</td>
<td>-lebalêség- ‘be forgettable’</td>
<td></td>
</tr>
<tr>
<td>-lô-</td>
<td>-lôêség- ‘become bewitched’</td>
<td></td>
</tr>
<tr>
<td>-alaf-</td>
<td>-alafêség- ‘be curable, become cured’</td>
<td></td>
</tr>
<tr>
<td>*-belay-,</td>
<td>-belaêség- ‘be doubtful, incredible’</td>
<td></td>
</tr>
<tr>
<td>-bolok-</td>
<td>-bolokêség- ‘be preservable’</td>
<td></td>
</tr>
<tr>
<td>-lébog-</td>
<td>-lébosêga ‘be worthy of reward, be acceptable’</td>
<td></td>
</tr>
<tr>
<td>-lémosêga</td>
<td>‘become evident, recognisable, comprehensible’</td>
<td></td>
</tr>
<tr>
<td>-pitikolosêga</td>
<td>‘be rollable, become rolled’</td>
<td></td>
</tr>
<tr>
<td>-pitikologa ‘roll, become turned over’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-pôtolosêga ‘be surroundable, circumnavigable’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-dikologa</td>
<td>‘revolve, go round’</td>
<td>-dikolosèga</td>
</tr>
<tr>
<td>-tlwaologa</td>
<td>‘become unaccustomed’</td>
<td>-tlwaolosèga</td>
</tr>
<tr>
<td>-rumol-</td>
<td>-rumolèsèg-</td>
<td>‘be teasable, provokable, irritable’</td>
</tr>
<tr>
<td>-tlwaèl-</td>
<td>-tlwaèlèsèg-</td>
<td>‘be easy to be accustomed to’</td>
</tr>
<tr>
<td>-bolok-</td>
<td>-bolokèsèg-</td>
<td>‘be in a state of safety, be saveable’</td>
</tr>
<tr>
<td>-baakany-</td>
<td>-baakanyèsèg-</td>
<td>‘be in a ready/prepared state’</td>
</tr>
</tbody>
</table>

Sandilands (1953: 243)

2.2.3 Neuter-causative

Mchombo (1993) is the only source providing information on the combination ‘neuter-causative’ for Chewa, in which the specific order is acceptable as shown in (70).

(70) CHEWA (N31b) (Mchombo 1993: 12)

a. -dy-ek-èts-a
   -eat-NT-CAUS-FV
   ‘make edible’

b. -pind-ik-its-a
   -bend-NT-CAUS-FV
   ‘make bendable’

In these examples the order of the extensions in Chewa follows the Mirror Principle: the neuter has the narrowest scope, viz. over the verb root, and -its- takes scope over the neuter, i.e. the potential meaning is causativised.

Although no examples are given, Khumalo (2009: 171, footnote 8) writes that the neuter cannot precede the causative in Ndebele.

2.2.4 Applicative-neuter

In line with the Ndebele data on the causative-neuter (see examples (59) and (60)), Khumalo provides an example of a passive-like applicativised clause (71) with a pseudo-effective constellation ‘milk milk’ (i.e. Process-Range) and questionable grammaticality status (the English translation is also grammatically very complex), and a second applicativised potential clause which is unproblematic, shown in (72).

(71) NDEBELE (S44) (Khumalo 2009: 170)

?aba-fana ba-seng-el-ek-a u-chago ngubaba.
CL2-boy SM2-milk-APPL-NT-FV CL3-milk by.father
‘The boys were made being milked milk for by the father.’

(72) NDEBELE (S44) (Khumalo 2009: 171)

um-mango u-qum-el-ek-a e-zitolo.
CL3-journey SM3-cut-APPL-NT-FV LOC-stores
‘The journey can be short-cutable at the stores.’
Some questions arise from a closer observation of (71). Is the NP *abafana* the Beneficiary participant, i.e. was someone forced by the father to milk some milk for the boys, or are the boys the Range, i.e. are they being milked by someone (which seems rather impossible or nonsensical), or are they Actors, this is the ones milking something for an unmentioned but implied Beneficiary?

In Chewa, on the other hand, the order ‘applicative-neuter’ is ungrammatical, as shown in (73) and (74).

(73) **CHEWA (N31b)** (Mchombo 1993: 12-13)
    a. *-pind-ir-ik-a
        -bend-APPL-NT-FV
    b. *-wereng-er-ek-a
        -read-APPL-NT-FV
    c. *-kwiny-ir-ik-a
        -crease-APPL-NT-FV

(74) **CHEWA (N31b)** (Dubinsky & Simango 1996: 753)
    * Chibwe  a-na-phik-ir-ik-a  nyemba.
    Chibwe  SM1-PST-cook-APPL-NT-FV  beans
    ‘Chibwe was cooked beans for.’

Unfortunately, Dubinsky & Simango do not elucidate what the correct equivalent of the English clause in (74) would be in Chewa.

2.2.5 Neuter-applicative

The function of the applicative is traditionally defined as promoting an oblique participant or circumstance to the status of a core argument of the predicate. The semantic role of the participant can be the Beneficiary or Maleficiary, Recipient, Client, circumstance of location, of (locative) goal (De Kind & Bostoen 2012: 109ff., Ngonyani 1998), of reason or purpose (also referred to with the common denominator ‘motive’; Alsina & Mchombo 1990: 502, Bresnan & Moshi 1990: 149, De Kind & Bostoen 2012: 107ff.), or circumstance of instrument. According to Mchombo (1993: 13), only an applicative introducing a circumstance of location (75), reason (76), or a Maleficiary Complement (77) combine with a neuter verb in Chewa.

(75) **CHEWA (N31b)** (Mchombo 1993: 13)
    mphatsó  zànù  zi-na-ónông-ek-er-a  m’ndènge.
    ‘Your gifts got damaged (while) in the aeroplane.’

(76) **CHEWA (N31b)** (Mchombo 1993: 13)
    njingá  iyi  y-a-pind-ik-ir-a  phûzo.
    CL5:bicycle  DEM9  SM9-PRF-damage-NT-APPL-FV  CL5:spite
    ‘This bicycle has got bent out of spite.’
In (77) the Maleficiary ‘me’ is pronominally encoded in the object concord slot immediately before the verb root.

Although Mchombo does not provide any examples showing the impossibility and ungrammaticality of applicativised neuter verbs with a Beneficiary applied object, Dubinsky & Simango do present a counterexample disputing this claim:

In (78) the door opens either automatically, or is opened by someone (the translation given by the authors is very passive-like, and I assume it could also be translated as the door opens for Chibwe, as in an automatic door opening), in the benefit of Chibwe. It thus seems possible, in contradiction to Mchombo’s claim, to have a Beneficiary participant introduced by the applicative suffixed onto a neuter verb.

Very little information is provided for Ndebele. In a footnote Khumalo provides the following example:

Although it is difficult to tell without any context, the added participant role seems to be that of a Beneficiary here.

Tswana (S31) also allows the neuter-applicative combination. In (80) the applicative introduces a circumstance of location.

My analysis of the verb base differs from that of the authors. They give the following morpheme analysis and glosses: -tsekuk-ira ‘open-NT-APPL’ (they do not distinguish the FV from the applicative extension). However, in another example ((15c) in the original article) with the same verb root and the passive and applicative extension we find -tsekul-idw-ira ‘open-PASS-APPL-’, i.e. with the ending -ul- instead of -u-. In yet another example ((5) in the original article) we find the verb root -tsek- ‘close’. These data suggest that we are dealing with the separative extension pair -ul- (tr.)/-uk- (intr.), which I have thus indicated in my morpheme analysis and glosses.
2.2.6 Neuter-reciprocal

The extension order ‘neuter-reciprocal’ is ungrammatical in Chewa, as is shown in (81).

(81) CHEWA (N31b) (Mchombo 1993: 11)
   a.*-ph-ek-an-a
       -kill-NT-REC-FV
   b.*-pind-ik-an-a
       -bend-NT-REC-FV
   c.*-onong-ek-an-a
       -damage-NT-REC-FV

There are, however, a great number of languages that do allow this specific combination. In some languages the neuter undergoes phonological changes, resulting in forms such as -akan-, -ankan- or -inkhan-. The allowance of the neuter-reciprocal is not an areal or genealogical feature, as the languages in which it appears are widespread over the Bantu area, as shown in Table 24. All examples are from Dammann (1954).

Table 24. Lexical examples of the combination ‘neuter-reciprocal’

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Damman (1954)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOSHI (E62a)</td>
<td>-havik- ‘sich teilen’</td>
<td>-havikan- in Abteilungen auseinandergehen’</td>
<td>p. 164</td>
</tr>
<tr>
<td>SHAMBALA (G23)</td>
<td>-tailik- ‘wissen können’</td>
<td>-tailikan- ‘allgemein bekannt sein’</td>
<td>p. 169</td>
</tr>
<tr>
<td></td>
<td>-jilik- ‘eßbar sein’</td>
<td>-jilikan- ‘gut eßbar sein’</td>
<td></td>
</tr>
<tr>
<td>MANYANGA (H16b)</td>
<td>—</td>
<td>-tekakan- ‘verkäuflich sein’</td>
<td>p. 171</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-vangakan- ‘ausführbar sein’</td>
<td></td>
</tr>
<tr>
<td>LUVALE (K14)</td>
<td>—</td>
<td>-palakan- ‘gemeinsam pressen’</td>
<td>p. 171</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-hitakan- ‘sich wiederholt vor- und zurückbewegen’</td>
<td></td>
</tr>
<tr>
<td>NYIHA (M23)</td>
<td>-lulih- ‘ungehorsam sein’</td>
<td>-lulinkhan- ‘ungehorsam sein’</td>
<td>p. 169</td>
</tr>
<tr>
<td>LAMBA (M54)</td>
<td>-sik- ‘begraben’</td>
<td>-sikakan- ‘zusammen begraben sein’</td>
<td>p. 169</td>
</tr>
<tr>
<td></td>
<td>-put- ‘bedecken’</td>
<td>-putakan- ‘weit verstreut sein’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-pend- ‘zählen’</td>
<td>-pendakan- ‘zusammen gezählt sein’</td>
<td></td>
</tr>
</tbody>
</table>

Although in most cases the meaning of the derived verb is a combination of that of the neuter and reciprocal, the compound Londo suffix -ɛ̀n- (-ɛ-an-) has a variety of functions and sometimes behaves as an allomorph of the simple reciprocal -an-, as shown in (82).
In (83), however, we find a remnant of the neuter’s end state focus meaning. The neuter-reciprocal in (83a) implies that the action of grinding should never be performed with that stone, whereas the simple associative/instrumental in (83b) does not imply that the abstinence should hold longer than the current situation. This is comparable to the Chewa example in (15) of negative neuter clauses, illustrating the end state focus meaning of the neuter which is not implied by the passive.

The neuter-reciprocal combination has been more extensively treated in the literature for Swahili. Some basic verb roots can be suffixed with either the neuter (84a) or with the neuter-reciprocal (84b).

In some cases the meaning of the neuter and neuter-reciprocal derived verbs appears to be the same, and for other verbs there is a semantic difference between the two:

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB -ek-</th>
<th>EVB -ekan-</th>
</tr>
</thead>
<tbody>
<tr>
<td>-sem-</td>
<td>‘say’</td>
<td>-semek- ‘be sayable’</td>
</tr>
<tr>
<td>-tambu-</td>
<td>‘recognise’</td>
<td>-tambulik- ‘be recognisable’</td>
</tr>
<tr>
<td>-zindu-</td>
<td>‘rouse’</td>
<td>-zinduk- ‘be roused’</td>
</tr>
<tr>
<td>-tamani ‘desire’</td>
<td></td>
<td>-tamanik- ‘be desirable’</td>
</tr>
<tr>
<td>-siki-</td>
<td>‘hear’</td>
<td>-sikik- ‘be audible’</td>
</tr>
<tr>
<td>-ju-</td>
<td>‘know’</td>
<td>-julik- ‘be knowable’</td>
</tr>
<tr>
<td>-kos-</td>
<td>‘err’</td>
<td>-kosek- ‘be unavailable’</td>
</tr>
</tbody>
</table>
Some neuter verb bases are not accepted by all speakers, as opposed to their neuter-reciprocal equivalents which are regarded as unproblematic. Schadeberg (2004: 11) writes: “The preference for -ik-an- can be so strong that verbs such as -patika, -wezeka and -julika are quite unacceptable for some speakers” (italics in original). Seidl & Dimitriadis (2002: 244, footnote 6) inform the reader that “[a]nother consultant, a speaker of standard Swahili from the mainland, did not generally treat the reciprocal stative as optional: those verbs that allowed it used it obligatorily.”

Based on a frequency study made by Schadeberg (2004), we could tentatively propose that the neuter-reciprocal combination appears more often with non-material process verbs. Although the corpus used was very small (only fourty Swahili books, available on the University of Helsinki Language Corpus Server (UHLCS)), Schadeberg (2004: 11, 13) states on the basis of the results of his explorative and unrefined study (which he admits himself) presented in Table 25 on the next page, that:

“On the whole the [neuter verbs] with -ik- and those with -ik-an- do not fall into neat categories allowing either one or the other or both. Rather, there appears to be a cline with marked preferences at each end. […] The most frequently used verbs of this kind [-ik-an-] involve an experiencer […]” (italics in original)

We could draw a line between the first nine verbs and the rest in Table 25. The first nine are very frequently attested with -ik-an-. These are all non-material process verbs, including mental perception and cognition, or verbal processes (except for -wezek- ‘be feasible’). In the middle, some verbs which have been queried were unattested in the corpus (0 for both -ik- and -ik-an-). From -somek- (30) to the last verb, -tumik-, we observe an increase of -ik-. In this last group, all verbs denote material processes. Thus, it seems that we can make a categorical distinction, contra Schadeberg’s claim above, namely material vs. non-material. Material process verbs appear more frequently with the neuter, whereas non-material process verbs are more frequently attested with the neuter-reciprocal. It is important to stress that I do not want to make any conclusive statements based on an explorative corpus study made by someone else, but rather make some preliminary observations. A follow-up of Schadeberg’s study with a bigger corpus should be made to test this hypothesis (e.g. the material process verb -tawanyik- ‘be scattered’ was not attested, but should, according to my prediction, be more frequently used with the simple neuter).
Table 25. Verbs with -ik/-ik-an- and their frequencies in Swahili (adapted from Schadeberg 2004: 11-12)

<table>
<thead>
<tr>
<th>-ik-</th>
<th>Frequency -ik-</th>
<th>Frequency -ik-an-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. -onek- ‘be visible’</td>
<td>5</td>
<td>±790</td>
</tr>
<tr>
<td>2. -wezek- ‘be feasible’</td>
<td>0</td>
<td>±400</td>
</tr>
<tr>
<td>3. -patik- ‘be available’</td>
<td>0</td>
<td>±370</td>
</tr>
<tr>
<td>4. -julik- ‘be known’</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>5. -semek- ‘be said’</td>
<td>10</td>
<td>79</td>
</tr>
<tr>
<td>6. -kosek- ‘be missing’</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>7. -takik- ‘be desirable’</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>8. -tambulik- ‘be recognisable’</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>9. -bainik- ‘be evident’</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>10. -sikik- ‘be heard’</td>
<td>±200</td>
<td>2</td>
</tr>
<tr>
<td>11. -sikilik- ‘be heard’</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>12. -changanyik- ‘be mixed’</td>
<td>38</td>
<td>3</td>
</tr>
<tr>
<td>13. -shindik- ‘be surpassed’</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14. -husik- ‘be concerned (with)’</td>
<td>±260</td>
<td>2</td>
</tr>
<tr>
<td>15. -gundulik- ‘be discovered’</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16. -sifik- ‘be characterised’</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>17. -tendek- ‘be feasible’</td>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>18. -tajik- ‘be worthy of mention’</td>
<td>80</td>
<td>1</td>
</tr>
<tr>
<td>19. -kanik- ‘be deniable’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20. -onyek- ‘be warned’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21. -tawanyik- ‘be scattered’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>22. -tindik- ‘be cut off’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23. -vumik- ‘be famous’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24. -zibik- ‘be plugged’</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25. -kalik- ‘be habitable’</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>26. -zulik- ‘be brought into the open’</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>27. -pendek- ‘be popular’</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>28. -pitik- ‘be passed’</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>29. -gawik- ‘be divided’</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>30. -somek- ‘be legible’</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>31. -fichik- ‘be hidden’</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>32. -zimik- ‘be extinguished’</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>33. -mwagik- ‘be spilled’</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>34. -gawanyik- ‘be divided’</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>35. -katik- ‘be cut’</td>
<td>±40</td>
<td>0</td>
</tr>
<tr>
<td>36. -vunjik- ‘be broken’</td>
<td>73</td>
<td>0</td>
</tr>
<tr>
<td>37. -tumik- ‘be used’</td>
<td>259</td>
<td>0</td>
</tr>
</tbody>
</table>

Although often the neuter-reciprocal results in a potential semantic derivation (see all examples above), the associative (together) meaning of -an- is preserved in some instances, as shown in (86).

(86) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 268)

a. sahani z-ote zi-me-vunj-ik-an-a.
   plate PP_{10}-all SM_{10}-PRF-break-NT-REC-FV
   ‘All the plates have been smashed up together.’
   SM₂-PST-learn-CAUS-NT-REC-FV
   ‘They were taught together.’

c. -fum-u-k-an-a
   -weave.together-SEP-NT-REC-FV
   ‘disperse (of a crowd)’

d. -bagu-k-an-a
   -separate-NT-REC-FV
   ‘quarrel among each other, be divided into factions’

All examples in (86) are unergative clauses (or lexical ergative verbs with the neuter), leaving open the question whether the associative meaning of the reciprocal extension is automatically preserved in unergative neuter clauses, but becomes lost in potential clauses. This would be in line with the [material — neuter] vs. [non-material — neuter-reciprocal] divide. Ergative processes are a subtype of the material process type, and the simple neuter is used to derive the unergative configuration. If *-an- is added, it will denote its associative meaning, as in (86). Non-ergative and non-material processes appear more commonly in the potential clause, which can be expressed by a combination of the neuter-reciprocal, the latter losing its associative/reciprocal meaning.

A remarkable difference in Swahili between a simple neuter and neuter-reciprocal clause is that in the latter the omitted Actor participant can be expressed via a prepositional phrase, as shown in (87) and (88), whereas in the former this cannot be done with the Initiator (this is discussed in §2.1.2 and illustrated in (22), repeated here as (87)).

(87) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 246)
   a.*a-na-tambul-ik-a na mjini.
      SM-PRS-know-NT-FV by town
   b. a-na-tambul-ik-an-a na mjini.
      SM-PRS-know-NT-REC-FV by town
   ‘She is well-known by the town (the townspeople).’

(88) **SWAHILI (G42)** (Seidl & Dimitriadis 2002: 246)
   hu-on-ek-an-i na watu siku hizi.
   NEG.SM₂SG-see-NT-REC-FV.NEG by people days these
   ‘You haven’t been seen around by people these days.’

The examples in (87b) and (88) have been rejected by G. Mertens, a near-native speaker and teaching assistant of Swahili at Ghent university (personal communication). Mertens has stated that he has never encountered a clause with a neuter-reciprocal verb followed by a prepositional *na*-phrase. This indicates that the clauses are not acceptable for all Swahili speakers, and perhaps are only grammatical in some dialectal varieties (although these examples should be evaluated by more native speakers in order to make any decisive statements about them). Seidl & Dimitriadis (2002: 239, footnote) elaborate that two of their informants speak the Zanzibari variety, and one other has been consulted for the standard variety. Concerning the clauses above, it is not indicated by the authors which informant has produced the examples.
and whether they have been checked by the other two informants. Nevertheless, Seidl & Dimitriadis make a generative-oriented analysis of the neuter based on the assumption that the examples above are correct. They argue that stativisation (the term they use for the function of the neuter) in Swahili does not involve an external reduction operation (a concept which they do not elaborate), but that:

“the lexical operation triggered by the Swahili [neuter] morpheme is a variant of saturation […] which [they] refer to as arbitrarization. Like ordinary saturation, arbitrarization binds the suppressed argument by an existential quantifier. But the introduced variable is marked as “arbitrary” […] meaning it cannot be given a specific denotation.” (Seidl & Dimitriadis (2002: 260); italics in original)

Presuming that the examples in (87b) and (88) are acceptable and grammatical, my analysis is different from that of Seidl & Dimitriadis. First of all, (87a) illustrates that a Senser cannot be reintroduced in a mental neuter clause with an agentless passive configuration (in contrast to Chewa, as was shown in 2.1.2, example (21)). However, when a neuter verb is extended by the reciprocal suffix, the Senser can be reintroduced in an oblique phrase (87b). The associative extension is highly polysemous in Bantu, and has a wide number of functions and denotes various notions such as reciprocity (either productive or lexicalised), collective situations, chaining situations, repetitiveness, intensive/extensive, comitative/instrumental, and unergativity (the latter will be discussed in §2.3.1 below) (Bostoen et al. forthcoming). The various meanings of the associative extension can be described more generally as denoting a process involving multiple participants and/or events. In the literature various terms and definitions have been used and proposed in order to describe polysemous markers involving reciprocity. Lichtenberk (2000), in his article on the reciprocal marker in some Oceanic languages, subsumes the different meanings under the more general semantic concept of plurality of relations: “there is plurality of relations in an overall situation […] if what can be considered to be basically one and the same relation holds more than once either between one or more participants and the event/state they are involved in, or between the relevant entities” (Lichtenberk 2000: 34). Creissels & Nouguier-Voisin (2008: 291) label this broader category ‘co-participation’, viz. “constructions that imply a plurality of participants in the event they refer to, without assigning them distinct roles.” Maslova (2007) refers to this as a polyadic event type or structure, for which she provides the following definition:

“Some type of participation in an event constitutes a polyadic participant role if it must be shared by minimally two separate participants. An event structure counts as polyadic if it involves such a role.” (Maslova 2007: 336; italics and underlining in original)

When used in Swahili with non-material process verbs derived by the neuter (as in (87b) and (88) above), the reciprocal extension no longer expresses reciprocity, but does not lose its function as marker of plurality of relations/co-participation/polyadic participation. Plurality of relations can, furthermore, be subdivided into the notions of plurality of participants and plurality of events. In combination with the neuter, which normally grammatically deletes the participant in Subject position of the basic clause (the Senser or Sayer), the semantic notion of plurality of relations, and more specifically that of plurality of participants expressed by the
associative extension, allows the expression of the deleted participant. This ‘addition or preservation of an implicit argument’-function of the reciprocal morpheme, invoked by the plurality of relations semantics, is not uncommon as it has been shown that it is also involved in Bantu antipassive constructions (Bostoen et al. forthcoming, Dom et al. forthcoming).

2.2.7 Passive-neuter

The suffix order passive-neuter is ungrammatical in Chewa, as shown in the following examples:

(89) **CHEWA** (N31b) (Mchombo 1993: 9)
   a. *-pind-idw-ik-a
      -bend-PASS-NT-FV
   b. *-onong-idw-ik-a
      -damage-PASS-NT-FV
   c. *-kwiny-idw-ik-a
      -crease-PASS-NT-FV

The passive and neuter are both valency-decreasing derivational operations with a near-identical modification of the participant alignment. It is thus not surprising that a combination of passive and neuter is excluded.

2.2.8 Neuter-passive

For the same reasons stated above, the combination neuter-passive is impossible in Chewa as illustrated in (90).

(90) **CHEWA** (N31b) (Mchombo 1993: 9)
   a. *-pind-ik-idw-a
      -bend-NT-PASS-FV
   b. *-onong-ik-idw-a
      -damage-NT-PASS-FV
   c. *-kwiny-ik-idw-a
      -crease-NT-PASS-FV

It is quite surprising then, that in Ndebele (91) and Swahili (92) this extension combination is unproblematic. Unfortunately, Khumalo (2009) provides no translation for the Ndebele examples in (91).

(91) **NDEBELE** (S44) (Khumalo 2009: 171)
   a. -luny-ek-w-a
      -bite-NT-PASS-FV
   b. -hlal-ek-w-a
      -sit-NT-PASS-FV
   c. -hlek-ek-w-a
      -laugh-NT-PASS-FV
According to Seidl & Dimitriadis, clauses with the neuter-passive combination allow an oblique agentive phrase, as illustrated in (93).

(92) **Swahili (G42)** (Seidl & Dimitriadis 2002: 252)

\[
\text{pa-me-vunj-ik-w-a sahani meza-ni.} \\
\text{SM\textsubscript{16}-PRF-break-NT-PASS-FV plate table-on} \\
\text{‘On the table was broken a plate.’}
\]

(93) **Swahili (G42)** (Seidl & Dimitriadis 2002: 252)

\[
\begin{align*}
\text{Sydna Abubakr a-ka-mimin-ik-w-a na machozi kwa furaha […]} \\
\text{Sydna Abubakr SM\textsubscript{1}-NAR-pour-NT-PASS-FV by tears of happiness} \\
\text{‘And Sydna Abubakr was trickled down upon by tears of happiness […]’}
\end{align*}
\]

The example in (93) has also been rejected by G. Mertens as ungrammatical, who claims to never have encountered the sequence neuter-passive in Swahili. Again assuming that this clause is acceptable, the same argumentation can be applied as for the clause in (25), section 2.1.2. The participant of the prepositional phrase, *machozi kwa furaha* ‘tears of happiness’, is non-agentive and non-volitional. Furthermore, the tears are brought about by the mental process of feeling happiness, thus originally stemming from within the Medium *Sydna*. We could thus tentatively propose that in (93) the *na* phrase is allowed because it introduces a participant which semantically lacks all properties commonly attributed to an Actor participant.

Seidl & Dimitriadis (2002: 252) refer in a footnote to a Shona grammar of Fortune (1955), in which the neuter-passive combination is described as grammatical:

(94) **Shona (S10)** (Fortune 1955 in Seidl & Dimitriadis 2002: 252, footnote 10)

\[
\begin{align*}
\text{a. -on-ek-w-a} \\
\text{-see-NT-PASS-FV} \\
\text{‘be seen’} \\
\text{b. -gon-ek-w-a} \\
\text{-be.able-NT-PASS-FV} \\
\text{‘be possible’}
\end{align*}
\]

Semantically the passive does not seem to modify the derivational outcome of the neuter. *See > be seen and be able > be possible* are both frequently attested neuter derivations. The difference between a simple neuter clause and a neuter-passive thus must be located on a different level than the verbs lexical derivation in Shona.

2.2.9 Neuter-extensive in zone S languages

(Junod 1896: 167). Schadeberg (2006: 77) attributes it the central meaning ‘to be in a
spread-out position’. In many zone S languages a combination of the neuter and the extensive
functions as an allomorph of the simple neuter. The neuter-extensive has a few slightly differ-
ent forms, depending on the reflex of the neuter in a specific zone S language. Common in all
combinations is that the first vowel of the neuter undergoes regressive vowel harmony caused
by the open front vowel /a/ of the extensive suffix: -akal-, -agal-, -afal-, -ahal-. Lexical
examples are presented in Table 26.

Table 26. Neuter-extensive extension in zone S languages

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWANA (S31)</td>
<td>-ngôtl- ‘make small’</td>
<td>-ngôtlafal- ‘become small’</td>
<td>Cole (1955: 197-8)</td>
</tr>
<tr>
<td></td>
<td>-lel- ‘be very hot, of the sun’</td>
<td>-lelafal- ‘become very hot’</td>
<td></td>
</tr>
</tbody>
</table>
|           | -thop- ‘plunder, rob’ | -thopafal- ‘become plun-
dered’ |
|           | -tlhôk- ‘lack, be without’ | -tlôkafal- ‘become lack-
ing, be scarce’ |
|           | -dir- ‘do, work’ | -diragal-/-dirafal- ‘be-
come done, happen, come to pass, take place’ |
|           | -bôn- ‘see’ | -bônagal-/bônafal- ‘be plain or evident’ |
|           | -sweu (adjective) | -sweufal- ‘become white’ |
|           | bothuthô (noun) | -thuthafal- ‘become warm or hot’ |
|           | -ntlè (adjective) | -ntlafal- ‘become nice, pretty, clean’ |
|           | leswè (noun) | -leswèfal- ‘become dirty’ |
| SOTHO (S32) (Gr.) | — | -vonagal- ‘sich sehen lassen, erscheinen’ | Endemann (1876: 65) |
|           | — | -utloagal- ‘sich hören lassen, erschallen’ |
|           | — | -liragal- ‘sich thun lassen, d.h. geschehen (active)’ |
| SOTHO (S32) | -bôn- ‘see’ | -bônagal- ‘be clearly seen’ | Louwrens et al. 1995: 31 |
| SESOTHO (S33) (Afr.) | -bon- ‘sien’ (‘see’) | -bonahal- ‘sichbaar wees’ (‘be visible’) | Van Eeden (1941: 199-200) |
|           | -utlo- ‘hoor’ (‘hear’) | -utloahal- ‘hoorbaar wees, verstaanbaar wees’ (‘be audible’) |
|           | -ets- ‘doen’ (‘do’) | -etsahal- ‘gebeur, in die toestand wees van ge-
doen te word’ (‘happen, be in a condition of being done’) |
<p>|           | -hlok- ‘ontbreek, no- | -hlokahal- ‘nie meer” |</p>
<table>
<thead>
<tr>
<th>Language</th>
<th>Example Verb</th>
<th>Meaning</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sesotho</td>
<td>-phèt-</td>
<td>'accomplish'</td>
<td>Doke &amp; Mofokeng (1957: 155)</td>
</tr>
<tr>
<td>Ndebele</td>
<td>-fún-</td>
<td>'want'</td>
<td>Ziervogel (1959: 81)</td>
</tr>
<tr>
<td>Zulu</td>
<td>-on-</td>
<td>'perceive'</td>
<td>Doke (1947: 139)</td>
</tr>
<tr>
<td>Swazi</td>
<td>-fihl-</td>
<td>'hide'</td>
<td>Ziervogel (1952: 77)</td>
</tr>
<tr>
<td>Tsonga</td>
<td>-tw´-</td>
<td></td>
<td>Baumbach (1987: 71)</td>
</tr>
<tr>
<td>Ronga</td>
<td>-endl-</td>
<td>'faire'</td>
<td>Junod (1896: 167)</td>
</tr>
</tbody>
</table>

Sandiland’s Tswana examples show that the extension -afal- is productively used to derive verbs from abstract nouns or lexical adjectives (although the author does not provide translations of the nouns or adjectives).

2.2.10 The separative intransitive: a case for separative-neuter combination

The separative is an extension pair with a transitive and intransitive member, reconstructed for Proto-Bantu as *-ʊl-/-*ok- respectively. They are usually synchronically treated as an extension pair with as core meaning ‘movement out of some original position’ (Schadeberg 2006: 78). However, as been hinted at by Nurse & Hinnebusch (1993: 370) in their historical linguistic account of the Sabaki languages, it is very likely that the intransitive *-ʊk- is a contracted form of the separative transitive *-ʊl- and the neuter *-ɪk-. The separative intransitive has been reconstructed for Proto-Bantu and even further back for Proto-Niger-Congo as *-ko (Voeltz 1977 in Hyman 2007: 151), with the velar plosive /k/ also found in the Proto-Niger-Congo neuter suffix *-ke. Schadeberg (2006: 77) seems to suspect a similar analysis when he writes for the separative extensions that “[f]urther morphological segmentation seems to be indicated,” but does not want to come to this plausible, hypothetical analysis, as he goes on: “but the consonants l and k do not recur as morphemes with the meanings ‘transitive/intransitive’” (ibid.; italics in original). Fully supporting Schadeberg’s phonological observation, it nevertheless seems quite tenable that semantically we have a two-step derivation, and accordingly, we can assume an original two-step formal derivation: a basic verb is first derived by the separative transitive, which most often gives an opposite meaning (however, the separative has a number of other related functions (Schadeberg 2006: 78) — e.g. Mituku (D13) -lindık- ‘close’ > -lindo- ‘open’ (Stappers 1973: 13) — and is subsequently detransitivised by the neuter, which derives the unergative member — -lindo- ‘open’ > -lindık- ‘open’ (ibid.) = [lindo-ɪk-]. It should be noted that the suffix -ɪk- of the basic verb is not the neuter extension but the impositive, which often alternates with the separative extension pair (Schadeberg 2006: 74).
Semantically this hypothesis can account for the fact that a great number of ergative verbs do not take the basic neuter extension, but rather are extended by the separative intransitive in order to express the unergative, as shown in Table 27.

Table 27. The separative intransitive extension in Bantu

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSOGO (B31)</td>
<td>—</td>
<td>-nitog- ‘s’enlever, se tirer de’</td>
<td>Walker (1950: 45)</td>
</tr>
<tr>
<td>ISANGU (B42)</td>
<td>-tsib- ‘fermer’</td>
<td>-tsibüg- ‘être ouvert’</td>
<td>Ondo-Mebiame (2000: 186)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-gäbüg- ‘revenir’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-yùmüg- ‘secher’</td>
<td></td>
</tr>
<tr>
<td>NZADI (B865)</td>
<td>—</td>
<td>-tsyemüg- ‘se perdre’</td>
<td>Crane et al. (2011: 109)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-lunguk- ‘think, study, learn’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-pasuk- ‘explode’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-baluluk- ‘turn’ (around)</td>
<td></td>
</tr>
<tr>
<td>MBOMITABA (C14)</td>
<td>-sum- ‘mettre en terre’</td>
<td>-sumw- ‘s’arracher’</td>
<td>Vanhoudt (1987: 178)</td>
</tr>
<tr>
<td></td>
<td>-wümümb- ‘courber’</td>
<td>-wümümbw- ‘se redresser’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-yëky- ‘barrer le passage’</td>
<td>-yekw- ‘se dégarger, laisser le passage’</td>
<td></td>
</tr>
<tr>
<td>BONGILI (C15)</td>
<td>—</td>
<td>-wumo- ‘s’éveiller’</td>
<td>Mangulu (2008: 30)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-lango- ‘se casser’</td>
<td></td>
</tr>
<tr>
<td>ENGA (C315)</td>
<td>-bet- ‘dormir’</td>
<td>-betsw- ‘s’éveiller’</td>
<td>Mangulu (2008: 76)</td>
</tr>
<tr>
<td></td>
<td>-bot- ‘engendrer’</td>
<td>-botsw- ‘être né’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-sangw- ‘s’élever’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-to- ‘venir de’</td>
<td>-imbw- ‘se coucher’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-nyäng- ‘solidify’</td>
<td>-nyängw- ‘melt’</td>
<td>Meeuwis (2010: 156)</td>
</tr>
<tr>
<td></td>
<td>-sàmb- ‘plead, defend’</td>
<td>-sàmbw- ‘devalue, lose face, depreciate’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-kund- ‘bury’</td>
<td>-kundw- ‘be unearthed, be exhumed’</td>
<td></td>
</tr>
<tr>
<td>BOA (C44)</td>
<td>-gám- ‘crier’</td>
<td>-gámw- ‘crier’</td>
<td>Mangulu (2005: 85)</td>
</tr>
<tr>
<td></td>
<td>-bûm- ‘casser’</td>
<td>-bûmu- ‘se casser’</td>
<td></td>
</tr>
<tr>
<td>MBESA (C51)</td>
<td>-sìsol- ‘réveiller’</td>
<td>-sìsw- ‘s’éveiller’</td>
<td>Mangulu (2012: 220)</td>
</tr>
<tr>
<td>SO (C52)</td>
<td>-lim- ‘éteindre’</td>
<td>-limo- ‘disparaître’</td>
<td>Mangulu (2012: 47)</td>
</tr>
<tr>
<td>MONGO (C61)</td>
<td>-ât- ‘fendre’</td>
<td>-åtsw- ‘être pourfendu’</td>
<td>Hulstaert (1965: 276)</td>
</tr>
<tr>
<td></td>
<td>-bák- ‘fixer’</td>
<td>-bákw- ‘être détaché’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-bás- ‘pousser contre’</td>
<td>-båsw- ‘être détaché’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-él- ‘être dans le besoin’</td>
<td>-ëjw- ‘être sauvé du besoin’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-fik- ‘respecter’</td>
<td>-fikw- ‘être désonoré’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-kàmb- ‘souffrir’</td>
<td>-kåmbw- ‘être aidé dans le souffrance’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-kund- ‘enterrer’</td>
<td>-kunjw- ‘être déterré’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-lek- ‘passer’</td>
<td>-lekw- ‘être passé’</td>
<td></td>
</tr>
</tbody>
</table>
### BANGUBANGU (D27) (Dutch)
- **-mám-** ‘serrer’
- **-gang-** ‘binden’
- **-namat-** ‘kleven’

### KIKUYU (E51)
- **-hing-** ‘shut’

### NYANYEMBE (F22d) (Greek)
- **-tanduk-** ‘zerrissen sein’

### SWAHILI (G42)
- **-funguk-** ‘open’
- **-geuk-** ‘change’
- **-yeyuk-** ‘melt’
- **-inuk-** ‘rise’

### SIKONGO (H16a) (French)
- **-fúk-** ‘couvrir’

### RWANDA (JD61) (French)
- **-ziuk-** ‘s’ouvrir’

### RUNDI (JD62) (French)
- **-rokok-** ‘guérir’
- **-sibok-** ‘sprout’

### GANDA (JE15)
- **-buulukuk-** ‘ripen, be fully ripe’
- **-fuumuuk-** ‘be blown away (dust), evaporate’

### LUBA (L31a)
- **-wetuk-** ‘be bent’

---

By assuming that the neuter is involved in the formation of the separative intransitive, all the unergative verbs in Bantu can be subsumed under the neuter (i.e., all those whose basic, underived verb base expresses the ergative member, but not those with another direction or means of derivation). In other words, it coherently brings together the unergative derivational function under the neuter only, instead of attributing it to two different extensions, the neuter and the separative intransitive.

#### 2.2.11 Summary

It has been shown in the previous sections that combinations of the neuter with other extensions show plenty of language-specific variation. Sometimes one of the two extensions loses
its original function, e.g. the causative of -eseg- in Tswana or the neuter of -en- in Londo. The Swahili neuter-reciprocal combination is especially interesting. It is more frequently found with non-ergative verbs, expressing potentiality, as opposed to the simple neuter which is more often found with ergative verbs encoding the unergative. However, if -ikan- is used with an ergative verb the associative meaning of -an- is preserved. We thus observe a categorical difference in behaviour and meaning between ergative and non-ergative process verbs. Furthermore, the possibility of expressing the original Subject participant of the underived clause in an oblique agentive phrase in Swahili, can be accounted for by the plurality of relations function of the reciprocal extension. I have furthermore proposed that the separative intransitive extension, synchronically viewed as morphologically one single extension, can be analysed as a combination of the separative transitive and the neuter extension (although this is definitely not a new idea).

In the next section I discuss two case studies of (i) language zones in which a number of languages have not retained a reflex of the neuter extension, and express one or more of the functions generally encoded by the neuter, by different means, and (ii) languages in which the neuter co-exists with other strategies for encoding the unergative and/or potential derivation.

2.3 Languages lacking a reflex of the neuter extension

Not all extensions are equally productive in a specific Bantu language. The list of reconstructed Proto-Bantu extensions is not fully attested in all languages, and through various diachronic stages of a language an extension might have lost in productivity, becoming more and more lexicalised until it no longer can be analysed as a derivational form-meaning unit. However, when an extension becomes fossilised, the synchronically underived, basic verb base often still expresses a meaning relatable to the original meaning of the extensions. Such is the case for -an- in Luba (L31a). Reciprocity is no longer marked by the Luba reflex of the Proto-Bantu reciprocal suffix -an-, but is productively expressed by the compound repetitive/reciprocal -aŋgan-. However, -an- can still be found on verbs expressing what is generally called ‘lexical reciprocity’ (Knjazev 2007), e.g. -sang-an- ‘meet’, -fù-an- ‘resemble’ (Dom et al. forthcoming). The neuter is, in this regard, an extension that easily becomes lexicalised in that it does not only have a diathesis-modifying effect on the argument structure, but also has a highly specialised meaning. In its ergative function the extension naturally occurs only with a limited number of verbs belonging to a subcategory of material process verbs. As for its potential meaning, this can easily be adopted by other means of expression. Ngala (C36d), e.g., uses a construction with the auxiliary -kok- ‘can’ and the passivised infinitive of the lexical verb as Complement, illustrated in (95).

(95) **NGALA (C36d)** (M. Meeuwis, p.c.)

mo-sala e-kok-i ko-sal-am-a.

CL3-work SM1.INAN-can-PRS CL15-do-PASS-FV

‘The work is doable.’ (lit. ‘the work can be done.’)

The idiosyncratic derivation is obviously already highly lexicalised in its semantic derivation-al meaning. For example, Maganga & Schadeberg (1992: 161) categorise the neuter as an unproductive extension, listing only a handful of typical unergative and potential verbs, and
neuter verbs with a highly specialised idiomatic meaning — e.g., -bélék- ‘break’, -tonék- ‘be liked or loved’, -bōnēk- ‘have a meal’ (from -bōn- ‘see’).

In the following sections I discuss two case studies of language groups that synchronically do not express the unergative and potential by means of the neuter extension.

2.3.1 Zone A languages

Zone A languages are mostly spoken in Cameroon (except for a large part of the Fang languages of the A70 group and some individual languages of A30, A80 and A90), and thus lie immediately next to the closest relatives of the (narrow) Bantu languages, viz. Grassfields Bantu (see Watters 2006). It is fairly well-known among Bantuists that languages which are located in the northwestern part of the Bantu area have certain innovative features which make them in some regards less similar to the prototypical Bantu language (Crane et al. 2011: 3, Nurse & Philippson 2006a: 5). This is not surprising, as especially the languages of zone A are situated in a linguistically enormously diversified language area forming a Sprachbund, with languages that belong to other genetic families than Bantu. The areal diversity has led to major changes in the structures of both Bantu and non-Bantu languages caused by contact over a timespan of five millenia (Nurse & Philippson 2006a: 5).

First of all, it should be stressed that even though the languages which will be discussed in the following paragraph do not have a productive neuter, they are not representative for the entire zone A in regard to this discussion. There are plenty of zone A languages that still have a reflex of the neuter, e.g. Londo (A11), Duala (A24), Bankon (A42), Kpāʔ (A53), Ewondo (A72), Bulu (A74a) and Fang (A75) to mention a few. Equally important is that some languages have a reflex of the neuter, but also have another marker expressing one of the functions ascribed to the neuter, e.g. Nen (A44) and Ewondo (A72).

In three zone A languages of the sample the unergative or agentless passive clause generally marked by the neuter in Bantu, is marked differently. Mòkpè (A22), for example, uses an extension with the form -ßv-. The vowel following the bilabial consonant generally is a copied vowel of the verb root. The ending -ßa is used in all cases where the last vowel of the verb root is not /e/ or /o/. If the verb roots do have the vowels /e/ or /o/, the allomorphs -ßê or -ßɔ are used (Atindogbe 2013: 104). Examples are provided in (96).

(96) MÒKPÈ (A22) (Atindogbe 2013: 104)

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>lōfā ‘kill’</td>
<td>lōfāßa ‘be killed’</td>
</tr>
<tr>
<td>lijā ‘bear (a child)’</td>
<td>lijāåßa ‘be born’</td>
</tr>
<tr>
<td>lingbā ‘give’</td>
<td>lingbāßa ‘be given’</td>
</tr>
<tr>
<td>likākā ‘tie’</td>
<td>likåkåßa ‘be tied’</td>
</tr>
<tr>
<td>lizręcā ‘repair, fix, arrange’</td>
<td>lizręcåßa ‘be repaired’</td>
</tr>
<tr>
<td>liñfānē ‘hang’</td>
<td>liñfånëßa ‘be suspended’</td>
</tr>
<tr>
<td>litënēnē ‘straighten’</td>
<td>litënëßa ‘be straightened’</td>
</tr>
<tr>
<td>lilimizrē ‘extinguish’</td>
<td>lilimizrëßa ‘be distinguished’</td>
</tr>
<tr>
<td>ländzó ‘deceive’</td>
<td>ländzɔßaßa ‘be deceived’</td>
</tr>
<tr>
<td>linštō ‘twist’</td>
<td>linštôßaßa ‘be twisted’</td>
</tr>
</tbody>
</table>

The strategy of vowel copying that we find in the -ßv- suffixes is also used in Nen and Ewondo to mark the unergative constellation. In Ewondo, the copied vowel following the
verb root always carries a high tone. If the verb root has a CVCV structure, there is only a tonological difference between the basic and derived verb base. In Nen this is not the case. In both languages we still find a reflex of the neuter extension.

Table 28. Vowel copying as a derivational strategy for unergative verbs in Nen (A44) and Ewondo (A72)

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEN (A44) (Fr.)</td>
<td>-únd ‘toucher le fond d’un trou’</td>
<td>-úndù ‘être plein’</td>
<td>Dugast (1971: 235)</td>
</tr>
<tr>
<td></td>
<td>-kōlun ‘demolir’</td>
<td>-kōlunù ‘s’être effondré’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-sūkun ‘renverser’</td>
<td>-sūkunu ‘se renverser’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-tɔmbɔl ‘éplucher’</td>
<td>-tɔmbɔlɔ ‘s’éplucher’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-faton ‘ouvrir les yeux, les mains’</td>
<td>-fatonɔ ‘s’ouvrir spontanément’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-hès ‘incliner un récipient qui n’est pas plein’</td>
<td>-hèsè ‘ne pas être rempli’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-hèsɔn ‘redresser un récipient’</td>
<td>-hèsɔnɔ ‘être bien rempli’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-fɔton ‘redresser un objet courbé’</td>
<td>-fɔtonɔ ‘se redresser de soi-même’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-būŋul ‘rouler à terre’</td>
<td>-būŋulù ‘se rouler par terre’</td>
<td></td>
</tr>
<tr>
<td>EWONDO (A72)</td>
<td>-kɔlɔ ‘hang up’</td>
<td>-kɔlɔ ‘be hanging/hung (up)’</td>
<td>Redden (1979: 106)</td>
</tr>
<tr>
<td></td>
<td>-dii ‘(make) close’</td>
<td>-dii ‘be closed’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-fəd ‘lock/close up’</td>
<td>-fədɔ ‘be locked/closed up’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-yɛm ‘tie up, fasten’</td>
<td>-yɛmɔ ‘be tied/fastened up’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-ŋůnù ‘heap/pile up; give someone too much’</td>
<td>-ŋůnu ‘be heaped/piled up; have too much on hand’</td>
<td></td>
</tr>
</tbody>
</table>

2.3.2 C10-70 languages

The language groups C10-70 are spoken in the western region of the African rainforest, i.e. mostly in Congo-Brazzaville (RC) and Congo-Kinshasa (DRC). Almost all the languages belonging to these groups in the sample have lost the neuter extension. The only exceptions are Bongili (C15), Baati (C43a) and Tetela (C71). This indicates that the loss of the neuter is fairly widespread in these language groups, but has not been lost throughout entirely. Other languages not represented in the sample might have retained a reflex of *-ik-. Still, the sources do not list the neuter in the extension inventory of 17 languages in the sample. Moreover, in nine sources the reciprocal extension -an- is described as marking the unergative or agentless passive constellation, as shown for Ngala (C36d) in (97).
If the Medium refers to a single entity, the unergative reading surfaces automatically. However, when two participants are in Subject position, the clause is ambiguous between a reciprocal and unergative reading, as in (98). The ambiguity has to be resolved by the context. However, when no context is provided, the default reading is reciprocal (Meeuwis 2011: 154).

Lexical examples of the reciprocal extension deriving unergative, potential and idiosyncratic verbs are provided in Table 29. Often the vowel /a/ undergoes vowel harmony with the vowel of the verb root, thus having the phonological form -Vn-.

Table 29. Unergative expressed by reciprocal extension in some Zone C languages

<table>
<thead>
<tr>
<th>Language</th>
<th>SVB</th>
<th>EVB</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGA (C315) (Fr.)</td>
<td>-ok- ‘percevoir’</td>
<td>-okan- ‘se sentir (malade)’</td>
<td>Mangulu (2008: 76)</td>
</tr>
<tr>
<td></td>
<td>-im- ‘sortir’</td>
<td>-iman- ‘sortir, quitter’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-kw- ‘prendre’</td>
<td>-kwan- ‘être pris’</td>
<td></td>
</tr>
<tr>
<td>BOBANGI (C32)</td>
<td>—</td>
<td>-kangan- ‘solidify’</td>
<td>Whitehead (1964: 29-31)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-bengen- ‘jingle’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-bonon- ‘be visible’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-kakatan- ‘be puzzled’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-keketen- ‘be inconsiderable’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-bengetan- ‘be rugged’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-kitaban- ‘tumble’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-yengeben- ‘be right’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>-sokuban- ‘feel sick’</td>
<td></td>
</tr>
</tbody>
</table>
— balangan- ‘be scattered’
— cecengen- ‘be smashed to atoms’
— bênzengan- ‘be warped’
— bindingan- ‘be soiled’
— kolongan- ‘be prepared’
— bolongan- ‘be changeable’
— nyunyungan- ‘be crumpled’

NTOMBA (C35a)
(Fr.)
- pit- ‘gâter, abîmer’
- ím- ‘refuser’
- píct- ‘être gâté’
- íman- ‘être refusé’
- ókan- ‘être entendu, être audible’
- én- ‘être vu, être visible’
- kénen- ‘se montrer’
- bálångan- ‘se disperser’
- bólolangan- ‘être de mauvaise foi’
- nalangan- ‘évoluer’
- telegen- ‘divaguer’
- tålangan- ‘s’éparpiller’
- bûlångan- ‘être en désordre’

Mamet (1955: 21, 28)

BOLIA (C35b)
(Fr.)
- pítt- ‘gâter’
- píttan- ‘être gâté, se gâter’
- én- ‘voir’
- énen- ‘être en vue, être visible’

Mamet (1960: 37)

MBESA (C51)
(Fr.)
— cíitan- ‘être, devenir mauvais’

Mangulu (2012: 120)

TOKOFÉ (C53)
(Fr.)
— bündan- ‘être appuyé contre’
— tiúngan- ‘être attaché à’

Mangulu (2012: 177)

LOKELÉ (C55)
(Fr.)
— longan- ‘brûler’

Mangulu (2012: 220)

MONGO (C61)
(Fr.)
- búng- ‘égarer’
- é- ‘connaitre’
- fíman- ‘se refuser’
- fit- ‘endommager’
- ím- ‘venir de’
- ókan- ‘s’entendre’
- bák- ‘fixer’
- bás- ‘pousser contre’
- bêmbean- ‘se balloner’
- bénjw- ‘s’éloigner’
- bêng- ‘sécher’
- básaan- ‘être acculé’

Hulstaert (1965: 253, 241)
-bën- ‘projeter’  
-bënjean- ‘être long et mince’  
-binjol- ‘éloigner’  
-binjian- ‘s’absenter longtemps’  
-fik- ‘respecter’  
-fikian- ‘être bas, modeste’  
-longan- ‘être en ordre’  

Gérard (1924: 73) notes that the language Béo (C45A) expresses the unergative through vowel copying: -bun- ‘break’ > -bunu- ‘be broken’.

2.3.3 Summary

In this section it has been shown that some Bantu languages have either completely lost the neuter extension, or no longer use it to productively encode the unergative and potential derivation, or use a complementary strategy. These innovations are not language-specific but can be found in a number of languages that are closely related genetically and geographically, and are thus changes that are both diachronic as well as synchronic in nature.

2.4 Remaining issues

Part 2 presents a considerable amount of data, reflexions, observations, assumptions and hypotheses. Even though all the examples originate from the literature, and although a small number of findings have been adopted from older studies, most of the data are interpreted from a different theoretical point of view and were found to support hypotheses previously missed or neglected. Still, a number of questions remain unanswered after a thorough investigation of the literature and the examples they present.

- I have already addressed the issue of ambiguity that arises due to the polysemy of the neuter extension (see the summary in §2.1.5). I stated that when the neuter is combined with an ergative verb, the resulting clause can, in some languages, be interpreted with an unergative or a potential meaning. My assumption is that in such a situation the ambiguity must be resolved by contextual information, and if none is provided, that the unergative reading is the default one. The issue of ambiguity becomes more problematic when the neuter is suffixed onto a non-ergative process verb. If such a situation occurs, the clause can be interpreted as an agentless passive or as a potential clause. Both have the same formal structure (except in Chewa, and perhaps other languages for which this has not yet been noted), but interpersonally the potential encodes dynamic modality, whereas the agentless passive is used to describe a state of affairs. A first factor to take into account would be the influence of TA categories. The state of affairs meaning and end state focus are definitely related to a resultative, perfective or perfect aspect. The relational attributive process and modal value, on the other hand, do not imply (a completion of) the flow of energy, and therefore the potential meaning is less connected to these aspectual categories. Rather, it would be plausible that when an ambiguous clause is in the present tense, the default reading is potentiality, and if it has resultative-like aspect the default reading is the agentless pas-
sive. However, to my knowledge no study has yet investigated this hypothesis or attempted to research how this ambiguity is resolved.

- Although it is often argued that an agent-like participant and circumstances of instrument (implying an Actor/Initiator participant) cannot be expressed in a neuter clause, some examples discussed seem to contradict this assessment. Based on the little data available I have made some tentative hypotheses, which should be tested if they are borne out against more data. Moreover, the number of languages for which information is provided is extremely low, and the problematic lack of data asks for more (cross-linguistic) studies concerning this specific issue.

- The general absence of the neuter in the literature on extension ordering was pointed out in §2.2.1. Although some observations were made in section 2.2, and although probably more information can be found in descriptive grammars, one is still often left in the dark about where the neuter fits in the CARP template, or if and how it interacts with other extensions. Only a handful of languages have been the object of investigation regarding this topic, and more information and cross-linguistic data is needed to have a better understanding and a more general overview of how the neuter combines with other extensions in Bantu.

- In section 1.2, I have stated that the neuter derives a one-participant clause in which the sole participant is the non-nuclear participant of the basic, underived clause. I immediately expounded that the underived clause should not always have a two-participant configuration, mainly because the neuter can also be suffixed onto middle verbs which has been shown in Part 2. What has not yet been studied is how the neuter interacts with the diathesis of lexical three-participant (ditransitive) verbs. Such processes can often be figure naturally in a two-participant configuration, viz. in an effective clause with only two arguments such as *George passes the book*. The question then becomes if and when the neuter is obligatorily or optionally used with a three-place predicate and what the effects are on the argument structure.

My first intention for the following part was to answer some or all of these remaining questions by making a study of the neuter in Ganda. The setup would be to consult both a native speaker and a corpus, using the corpus as a first helping hand to gather basic data, and working with the mother tongue speaker to acquire data that are not attested in the corpus. However, due to lack of time and methodological ideals, the study has become corpus-driven. One ‘problem’ is that, by not modifying or forcing the data and thus letting the corpus ‘speak for itself’ as it were, there can be (and has been, in case of this research) a lack of examples needed to investigate all the points listed above. Although some of the topics are definitely pursued and considered, most of the unresolved issues are not conclusively addressed in detail due to lack of analysed data. However, the overview presented here serves as a starting point for further research on the neuter, both for other scholars and for myself.
Part 3. The neuter in Ganda

Only a few general descriptions of the neuter in number of grammars are available for Ganda. As for most Bantu languages, a study of the extension exceeding the length of a paragraph is nonextant. The four Ganda sources in the sample mention the neuter’s unergative, agentless-passive, and potential derivational function (Ashton et al. 1954: 349-51, Chesswas 1963: 134, Kirwan & Gore 1951: 81, Pilkington 1901: 38-9).

This part presents the first results of a corpus-driven study of the neuter in Ganda, analysing the extension in the light of new insights from the previous part. This explorative research expands the boundaries of the existing literature and studies in that it constitutes a data-driven account of the neuter which, for the first time, allows us to make statements above the level of the clause. The large(r) amount of examples (than in previous studies) makes it possible to refine the analyses first proposed in Part 2.

3.1 Introduction to Ganda

Ganda is a language spoken primarily in the southeastern Buganda province of Uganda (number 9 on Map 2 on the next page), a highly multilingual country with languages from different phyla. The language is located in Guthrie’s original zone E and Tervuren’s zone J, and belongs to the JE10 Nyoro-Ganda group, in which it is classified as JE15. It was originally the language of the biggest linguistic group of Uganda, the Baganda people, who mainly reside in the Buganda province, but Ganda has spread to other, urban, parts of the country. Socio-linguistically it has been used for decades in the academic world and in the government administration, and is recently more and more used in popular culture such as local music, radio and television programmes and film industry. It is also used as a business language and lingua franca, rapidly gaining in prestige. However, because of its relation to the indigenous Baganda people, Ganda has never been accepted as national language (which are English and Swahili) by other indigenous smaller groups such as the Basoga, the Itesot and the Banyankole. It is nevertheless de facto a language of national identity as it is spoken by approximately 4,130,000 people as a native language and by another 1,000,000 second-language speakers. Ganda has, furthermore, a number of dialects such as Ssese, Kooki, Nabuddu, Diopa, and Vuma.

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34 This concise section is entirely based on Nakayiza (2012) and (Lewis et al. 2014).
Map 2. General overview of Uganda’s linguistic landscape (http://www.ethnologue.com/map/UG)
3.2 Ergative alternation

The ergative verbs that have been found in the corpus are listed in (99).

(99) Ergative verbs[^35]

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-meny- ‘break’</td>
<td>-menyek- ‘break’</td>
</tr>
<tr>
<td>-sal- ‘cut’</td>
<td>-salik- ‘decrease’</td>
</tr>
<tr>
<td>-sas- ‘scatter, disperse’</td>
<td>-sasik- ‘dissolve’</td>
</tr>
<tr>
<td>-siirise ‘quiet, silent’</td>
<td>-siirik- ‘stop’</td>
</tr>
<tr>
<td>-tulis- ‘cause to burst/explode’</td>
<td>-tulik- ‘burst’</td>
</tr>
<tr>
<td>-yab- ‘be weak’</td>
<td>-yabik- ‘burst’</td>
</tr>
<tr>
<td>-yoonoon- ‘spoil; ruin, damage’</td>
<td>-yoononek- ‘spoil; be destroyed’</td>
</tr>
<tr>
<td>-zib- ‘block; obstruct; hinder passage to; bar’</td>
<td>-zibikir- ‘block up’</td>
</tr>
</tbody>
</table>

We can observe that the underived verb does not always express the ergative counterpart of the unergative neuter verb (-sal- ‘cut’/-salik- ‘decrease’), or that the direction of derivation for a specific verb is not anticausativisation (by means of the neuter) but rather equipollent, e.g. the pair -tulis/-tulik-, of which the ergative member carries the causative extension -is-. Although the basic verb root -tul- exists in Ganda, it does not seem to be related to the ergative pair, as it means ‘be/become sharp’ and its causativised form is -tuz- and not -tulis- (Murphy 1972: 560). The root to which the neuter is suffixed does not necessarily have to be verbal. The adjective -siirise ‘quiet, silent’ can become suffixed by the neuter resulting in the unergative verb -siirik- ‘stop; be quiet, become silent’. The neuter-applicative verb -zibikir- is translated by Murphy (1972:643) as ‘block up’. Its underived verb root -zib-, however, can be used both in an unergative and ergative clause, as illustrated in (100).

(100) a. Ekkubo lizibye.
    e-li-kubo li-zib-e.
    AUG5-CL5-road SM5-block-PRF
    ‘The road has become blocked.’

b. Ekkubo balizibye.
    e-li-kubo ba-li-zib-e.
    AUG5-CL5-road SM5-OM5-block-PRF
    ‘They have blocked the road.’

(Murphy 1972: 643)

Concerning the verb -siik- ‘fry’, there is no verb root *-si- in Ganda, but a cognate effective verb -siiyiik- ‘scorch, burn’ is attested (Murphy 1972: 496). There is also an indirect semantic link between the underived verb root -yab- ‘be weak’ and -yabik- ‘burst’ (viz. when a recipi-

[^35]: As was stated in section 1.5 on methodology, it is almost certain that more ergative verbs can be found in the corpus, but that they have been missed by our search formula or were accidentally deleted in the manual filter process.
ent becomes weak it can burst), but interestingly, Murphy writes the following for the entry -yab-:

“An extremely large number of derivatives is built from the root -yab-, all of which seem to be related to and to have some such common meaning as ‘break, tear, break away (depart), thin out.’ They are treated here as separate verbs because even if their ultimate unity is allowed, it would be unwieldy to treat them as a unit.” (Murphy 1972: 496; italics and bold in original)

Examples of unergative clauses in Ganda are provided in (101) and (102).

(101) Emiwendo gyombi ogw'abantu n'ente gyasalikanga nnyo, [...].
   e-mi-wendo gi-ombi o-gu-a a-ba-ntu ne
   AUG4-CL4-value PP4-both AUG4-PP4-CON AUG2-CL2-person and
   e-N-te gi-a-sal-ik-a-nga nnyo, [...].
   AUG10-CL10-cattle SM4-REM-cut-NT-FV-REP very.much
   ‘Both the values of people and cattle decreased very much, […]’

(102) Ekibiina ekyo kyasasika mu butabanguko obwaliwo mu mwaka 1945, [...].
   e-ki-biina e-kyo36 ki-a-sasik-a mu
   AUG7-CL7-organisation AUG7-DEM7 SM7-REM-dissolve:NT-FV LOC18
   bu-tabanguko o-bu-a-li-wo37 mu mu-aka 1945 [...].
   CL14-unrest AUG14-SM14-REM-be-CLT1 LOC18 CL3-year 1945
   ‘That organisation dissolved during the unrests of the year 1945, […]’

Although no definite conclusions can be made regarding the interaction between TA and the neuter, there seem to be no apparent restrictions as unergative verbs marked for present progressive (103), general present (104), past (105) and (relative) future (106) are all attest-ed.38 The present tense is expressed by the FV -a and a ‘zero’ morpheme in the TA slot. In (106) the future tense is expressed by means of the verb -jj- ‘come’ (a common strategy in the languages of the world, see Bybee et al. 1994: 252-3).

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36 Ganda has three demonstratives, a proximal, distal and anaphorical one. They are formed by a combination of the (AUG-)PP agreeing with the nominal prefix of the Head and -no, -li and -o respectively. I do not indicate the difference between them in the glosses.

37 The function of this post-final morpheme is rather unclear. D. Kawalya referred me to Botne (2010: 35), who labels a similar morpheme in Luwanga (JE31) as ‘partitive’. However, it is not clear which functions this label covers, nor is it always clear what the morpheme’s function(s) is (are) in Ganda. Therefore, I have opted for the neutral label ‘clitic’.

38 De Wit & Brisard (2014a) have labelled a present tense used to describe an event as a whole, i.e. which locates the situation in its entirety at the time of speaking, as a ‘perfective present tense’ for English. Although this is a rather novel term, it might give a better picture of the temporal frame conceptualised, in contrast to the superficial term ‘general present’. The category is elaborated more extensively in a recent publication (De Wit & Brisard 2014b) which I have not yet been able to obtain.
In some examples there is no tense marking on the neuter verb, but the time frame has been established by the tense marker of a previous verb, as in (107). The null marking on *litulika* and *likaaba* can be considered as a narrative or continuative tense (Nurse 2008: 120ff.). I have not found a grammaticalised formal narrative tense marker for Ganda, although this does not imply there is none. Nevertheless, null marking is not an uncommon way of expressing the narrative (Nurse 2008: 122).

(107) *Eddenzi bwe lyawulira eddobozi lya nnyina waalyo ery'obuyinike ne litulika ne likaa ba.*

When the boy heard his mother’s sorrowful voice, he burst out and cried.'
In (107) the past time reference is established by *lyawulira*, which is marked by the remote past marker *-a*. The two events that follow, ‘burst out’ and ‘cry’, are not marked for tense but express a series of events following *lyawulira*, and are thus located in the same temporal domain.

It has been discussed for Chewa (N31b) and Swahili (G42) that a neuter verb can be used to express verbal adjectives such as *a stolen book* or *a riding car*. In Chewa (see example (46)), Swahili (example (47)) and Ganda this is expressed by a neuter verb as an attributive relative predicate. In Ganda a verb is relativised by adding the augment or pre-prefix (see Katamba 2006: 107ff. or Maho 1999: 60ff.) before the SM (Ashton *et al.* 1954: 136). In (108) this is illustrated by the relative neuter predicate *akamenyeka*. Notice also that there is no overt tense marker on the relative neuter verb.

(108) [...] *n'eddoboozi ly'akasubi akamenyeka linaabagobanga.*

\[\begin{array}{l}
\text{ne e-li-loboozi li-a a-ka-subi a-ka-meny-ek-a} \\
\text{and AUG}_{5}-\text{CL}_{5}\text{-sound PP}_{5}\text{-CON AUG}_{12}\text{-CL}_{12}\text{-grass AUG}_{12}\text{-SM}_{12}\text{-break-NT-FV} \\
\text{li-naa-ba-gob-a-nga.} \\
\text{SM}_{5}\text{-FUT-OM}_{2}\text{-chase-FV-REP} \\
\text{‘[...] and the sound of a breaking straw of grass will always chase them away.’} \\
\end{array}\]

In (109), on the other hand, the attributive relative neuter predicate *amasiike* has the perfect FV *-e*. The perfect is often used to indicate the on-going, continuing end state of a change of state process in Bantu, and thus the time frame of the event encoded by the perfect verb can be interpreted as ‘present’ (Brisard & Meeuwis 2001, Dom 2013: 41ff.).

(109) "*Wattu kola bw’oti: amagi amasiike agange n’agage [...] .”

\[\begin{array}{l}
\text{wattu kol-a bwoti: a-ma-gi a-ma-si-ik-e} \\
\text{please do-FV like.this AUG}_{6}\text{-CL}_{6}\text{-egg AUG}_{6}\text{-SM}_{6}\text{-fry-NT-PRF} \\
\text{a-ga-nge ne a-ga-ge [...] .} \\
\text{AUG}_{6}\text{-PP}_{6}\text{-POSS}_{1SG} \text{and AUG}_{6}\text{-PP}_{6}\text{-POSS}_{1} \\
\text{‘Please do like this: the fried eggs of me and him [...].’} \\
\end{array}\]

The unergative neuter can combine with the applicative extension in Ganda, as shown in (110). The Subject Medium is not overtly expressed in the clause, the SM of class 8 being used either anaphorically to refer to a previously stated Subject or referring to an implied generic Subject (*things*). The applicative introduces a Beneficiary participant, encoded in the OM slot by the OM of the 1st person singular, viz. a homorganic nasal (*-N*).

(110) *Awo we nnamanyira nti byali binnyonoonekedde.*

\[\begin{array}{l}
\text{awo we n-a-many-ir-a nti bi-a-li} \\
\text{then when SM}_{1SG}\text{-REM-know-APPL-FV that SM}_{8}\text{-REM-be} \\
\text{bi-N-yonoon-ik-ir-e.} \\
\text{SM}_{8}\text{-OM}_{1SG}\text{-spoil-NT-APPL-PRF} \\
\text{‘It was then when I knew that things had gone bad for me.’} \\
\end{array}\]
The neuter verb -tandik- ‘start, begin’ can be used both in an effective and middle clause. Unfortunately, none of the examples with -tandik- that we have (arbitrarily) chosen to analyse are in the middle voice. In an ergative constellation the Goal, viz. that which is started, can be an entity (111), a process (112) or an (abstract) location (113).

(111) *Kino kitegeeza nti Ssekabaka Ssuuna II ye yatandikawo ekibuga Kampala.*

kino ki-tegeez-a nti Sse-Ø-kabaka Ssuuna II ye
a-a-tandik-a-wo e-ki-buga Kampala.

SM7-mean-FV that late-CL10-king Ssuuna II PRON1
SM1-REM-start:NT-FV-CLT1 AUG7-CL7-city Kampala

‘This means that late King Ssuuna II is the one who founded the city of Kampala.’

(112) *Zonna ziwe omulundi gumu zitandikire wamu okumaamira.*

zi-onna zi-w-e o-mu-lundi gu-mu zi-tandik-ir-e
PP10-all SM10-give-SBJ AUG3-CL3-time PP3-one SM10-start:NT-APPL-SBJ
wamu o-ku-maamir-a.

together AUG15-CL15-hatch-FV

‘Give all of them [eggs] at once so [that] they start to hatch together.’

(113) *Ogwo omuwendo mulungi okusinga we twatandikira, […].*

ogwo o-mu-wendo mu-lungi o-ku-sing-a we
dem3 AUG3-CL3-price CL3-good AUG15-CL15-surpass-FV where
tu-a-tandik-ir-a […]
SM1PL-REM-start:NT-APPL-FV

‘That price is better than where we started from, […]’

In (112) the subjunctive form, marked by the FV -e, in the unergative verb zitandikire is used in purpose or reason clauses (Ashton et al. 1972: 220). The abstract location in (113), denoted by the question word we ‘(there) where’, conditions the use of the applicative in twatandikira.

I have not yet queried the corpus for separative intransitive verbs as this was not the aim of the present study. Still, verb roots extended with the separative intransitive can be considered to be also derived by the neuter, as was discussed in §2.2.10. Some Ganda equivalents of the ergative verbs of Haspelmath’s (1993) list take the separative rather than the neuter extension, e.g. -gukk/-gull- ‘open’, -fuuk/-fuul- ‘change’, -yawuk- ‘split’, -buuk- ‘bounce’, -zukuk/-zulul- ‘wake (up)’ (‘unergative/ergative’ respectively).

### 3.3 Agentless passive derivation

The neuter verbs attested in the corpus that express a non-ergative process and figure in an agentless passive clause are listed in (114)

(114) Non-ergative verbs with agentless passive reading

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-fun- ‘get, obtain, procure’</td>
<td>-funik- ‘be found/got’</td>
</tr>
<tr>
<td>-lab- ‘see, perceive; find’</td>
<td>-labik- ‘be seen’</td>
</tr>
<tr>
<td>-w- ‘give’</td>
<td>-week- ‘be given’</td>
</tr>
<tr>
<td>-wulir- ‘hear, listen’</td>
<td>-wulikik- ‘be heard’</td>
</tr>
</tbody>
</table>
In this list we find the three-participant verb -\textit{w}- ‘give’, which will be focal in addressing the question of the neuter’s effect on so-called ditransitive verbs. The last verb in the list, -\textit{wulikik}- ‘be heard’, has the applicative verb -\textit{wulir}- as its effective counterpart, and not the simple verb root -\textit{wul}-, which means ‘feel a temporary aversion to’ (Murphy 1972: 603).

The agentless passive function of the neuter can be combined with the three basic tense categories: the (remote) past (115), the (general) present (116) and the future (117).

(115) \textit{Teyaddayo kulabikako}.
\begin{verbatim}
te-a-a-dd-a-yo     ku-lab-ik-a-ko.
NEG-SM1-REM-come.back-FV-CLT1 CL15-see-NT-FV-LOC17
\end{verbatim}
\begin{quote}
‘S/he was not seen again.’
\end{quote}

The (semantic) absence of a Senser participant is nicely illustrated in the negative clause in (115). It is not asserted that one particular person went looking for him/her but did not see him/her, but rather that s/he (the Phenomenon) has gone or disappeared and thus in general was (or could) not be seen anymore.

The example in (116) below is from a screenplay and the clause following the name of the character \textit{Nakiru} describes what is happening on the stage. It is typical for this text genre that non-verbal events that are taking place on scene (i.e. clauses that are not meant to be spoken by the actors), are conceptualised in their totality (which is usually the definition for perfective aspect), but are located in the present (and not in the past, which is more ‘prototypical’ for perfectives; Dahl 1985: 23). This is because the processes should come to live, i.e. be visualised in the reader’s head at the moment the script is being read, which is the present, and at the moment of the play itself. In this context, the term ‘perfective present’ seems very suitable.

(116) \textit{Nakiru: (Eddoboozi lye liwulikika ku muzindaalo ng’akyuka erudda n’erudda.)}
\begin{verbatim}
Nakiru:  (e-li-lobooozi  li-e  li-wulikik-a ku
Nakiru: AUG5-CL5-voice PP5-POSS1 SM5-be.heard:NT:NT-FV LOC17
mu-zindaalo nga a-kyuk-a   e-lu-dda  ne  e-lu-dda.)
CL3-speaker CNJ SM1-turn.around-FV AUG11-CL11-side and AUG11-CL11-side
\end{verbatim}
\begin{quote}
‘Nakiru: (her voice is heard on the speaker turning from one side to another.)’
\end{quote}

The combination of the future tense, expressed by the Finite -\textit{jj}- ‘come’, and the neuter verb -\textit{funik}- ‘be got’ in (117) below translates more naturally in English as ‘will be found’ (the past participle of \textit{found} and not of \textit{find}). Semantically, no Actor is implied as the market will, in a sense, found itself. The farmers, through their hard work, can be seen as indirect causers of or attributors to the foundation of the Medium. There seems to be a change in the process type expressed, \textit{viz.} from material dispositive \textit{get} to material creative \textit{found}, which would mean that the derivation is idiosyncratic rather than agentless passive. Interpreting the clause’s meaning literally, however, the original process of ‘getting’ can be perfectly maintained as expressing an achievement instead of a (future) creation. That which will be obtained, \textit{obutale} ‘the market’, is an abstract concept that already exists in the conceptual world of the speaker and hearers, and not something nonextant that has to be created.
(117) Abalimi baffe mwenna mufube bufubi okulima obutale bujja kufunika.

a-ba-limi ba-fe mu-enna mu-fub-e
AUG2-CL2-farmer PP2-POSS1PL PP18-all SM2PL-work.hard-SBJ
bu-fubi o-ku-lim-a o-bu-tale bu-jj-a
CL14-exertion AUG15-CL15-cultivate-FV AUG14-CL14-market SM14-come-FV
ku-fun-ik-a.
CL15-find-NT-FV
‘(To) all our farmers, just strive to cultivate, the market will be found (lit. be got).’

One of the remaining questions in section 2.4 addressed the issue of the effect of the neuter extension on a three-participant predicate. What are the lexicogrammatical and semantic implications for a ditransitive verb in a neuter clause? In (118), an example is given in which the most prototypical ditransitive verb -w- ‘give’ is derived by the neuter.

(118) Bw’aba nga mu kirowoozo kye alaba nga tekiweeka muntu oba nga kiyitirivu oba nga tekiweekerera mateeka, […]

bwe a-ba-a nga mu ki-rowoozo ki-e a-lab-a
if AUG2-PP2-CON CNJ LOC18 CL7-opinion PP7-POSS1 SM1-think-FV
nga te-ki-w-ik-a mu-ntu oba nga ki-yitirivu
that NEG-SM7-give-NT-FV CL1-person or CNJ CL7-excessive
oba nga te-ki-goberer-a ma-teeka, […]
or that NEG-SM7-follow:APPL:APPL-FV CL6-law
‘If in his opinion he thinks that it is inappropriate that it is given to someone or it is too much or that it doesn’t follow the law, […]’

We can observe from the example above that the neuter derives a two-participant clause from a three-participant one. The Goal is not expressed overtly, but is nevertheless marked on the verb tekiweeka by the SM of class 7 (referring to kintu ‘thing’). The Beneficiary participant muntu immediately follows the verb. The Actor is omitted from the constellation, although it is hard to imagine that semantically something is given to someone without there being a giver. The verb receive is, in this respect, the unergative counterpart of give. This is illustrated in (119) for English, in which the Beneficiary, certain elderly women, fulfils the role of Subject, and the Goal, here the abstract entity absolution of their sins, is Complement. In (119), on the other hand, we find the Actor, the grudge, as Subject, and the Beneficiary the witch and the Goal access as Complements. Just like with the unergative verb learn, the Initiator of receive can be expressed in a prepositional from-phrase (i.e. receive something from someone or learn something from somebody).

(119) a. Certain elderly women receive absolution of their sins in return for their magical knowledge.

b. The grudge, whether or not justified in the victim’s eyes, gives the witch access.
(Stroeken 2010: 30, 74)

However, in (118) the participant functioning as Subject is clearly the Goal, viz. that which is given, and not the receiving Beneficiary participant, which is Complement. The constellation
thus clearly indicates that the meaning of give is not changed into the unergative receive by
the neuter, but rather that the clause is organised as an agentless passive constellation.

In the previous section it was discussed that the neuter can be combined with the beneficial
applicative. The following example in (120) illustrates that the applicative can also be com-
bined with the agentless passive neuter, introducing a circumstance of location.

(120) [...] eddooboozi nga lidda okuva mu nsozi, nga liwulikikira mu bire, [...].
  e-li-looboozi nga li-dd-a o-ku-v-a mu
AUG5-CL5-voice as SM5-return-FV AUG15-CL15-come.from-FV LOC18
N-sozi, nga li-wulik-ir-a mu bi-re...
CL10-mountain CNJ SM5-be.heard:NT:NT-APPL-FV LOC18 Cl8-sky [...].
‘[...] as the voice echoes from the mountains, being heard from the skies, [...]’

3.4 Potential derivation

The potential neuter verbs that have been attested in our corpus query are given in (121).

(121) Potential verbs

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-bal- ‘count’</td>
<td>-balik- ‘be countable’</td>
</tr>
<tr>
<td>-fun- ‘get, obtain, procure’</td>
<td>-funik- ‘be obtainable’</td>
</tr>
<tr>
<td>-gul- ‘buy, purchase’</td>
<td>-gulik- ‘be buyable, affordable’</td>
</tr>
<tr>
<td>-lab- ‘see’</td>
<td>-labik- ‘be visible, can be seen’</td>
</tr>
<tr>
<td>-li- ‘eat’</td>
<td>-liik- ‘be edible’</td>
</tr>
<tr>
<td>-mir- ‘swallow’</td>
<td>-mirik- ‘be swallowable’</td>
</tr>
<tr>
<td>-nyw- ‘drink’</td>
<td>-nywek- ‘be drinkable’</td>
</tr>
</tbody>
</table>

It should be noted that none of the potential clauses that I extracted from the query results
are in the past tense but either in the present or the future, which is rather remarkable. Natural-
ly, the very small sample of clauses is not representative for all potential instances in the cor-
pus. However, it seems indicative that for the unergative and agentless passive clauses, exam-
pies with all three basic tense categories were attested in the extracted sample. We might hy-
pothesise that the potential function of the neuter combines more easily with the present or the
future, although this demands further quantitative research, and less easily so with the past.
There is, nevertheless, a correlation between the semantics of the tense categories on the one
hand, and status of the letting/hindrance value of potentials and polarity on the other hand.40

With a potential clause the speaker makes an assertion about the state of the antagonist entity,
namely that it lets itself partake in (positive polarity) or hinders (negative polarity) the execu-
tion of an action performed by the agonist. For positive and negative potentials, the present
indicates that the antagonist subject entity is in such a state at the moment of speaking, and
the future tense that the entity is going to be in such a state. However, if a positive potential
clause is in the past tense, it is implied that the state of letting no longer holds at the present
moment, e.g. the apartment was affordable (but the price went up last week). Because people

40 I am not using the term ‘status’ to refer to the reality status as discussed by Davidse & Heyvaert (2007: 61-2)
for the middle, but in order to refer to the question whether the antagonist exerts its ‘active’ conduciveness or
hindrance at the time of speaking, or not.
talk more frequently about what is and can/will be, than about what is not, it seems hypotheti-
cally logical that the positive potential is more frequently attested in the present and future
tense than in the past. Negative potentials interact semantically different with the past tense.
In a clause such as the horse was untameable, it is not necessarily implied that the state no
longer holds (e.g. and nobody can ride her still), nor that the hindrance is still in effect at the
time of speaking (e.g. but we had her trained, and now she behaves well). Examples of posi-
tive — (122), (123) —and negative — (124), (125) — potential clauses in the present and
future tense are presented below.

(122) Kubanga basinga enzige obungi, so babalika.
   kubanga  ba-sing-a   e-n-zige       o-bu-ngi,
   because SM2-surpass-FV AUG9-CL9-locust AUG14-CL14-amount
   so   ba-bal-ik-a.
   therefore SM2-count-NT-FV
   ‘Because they are more than locusts, therefore they are countable.’

(123) [...] eno nga ya mazzi maseeneekerevu, mawoomerevu, gamirika mu kuganywa, [...] .
   eno nga  e-a       ma-zzi ma-seeneekerevu, ma-woomerevu,
   DEM9 like PP9-CON CL6-water PP6-soft PP6-fresh
   ga-mir-ik-a    mu    ku-ga-nyw-a, (...).
   SM6-swallow-NT-FV LOC18 CL15-OM6-drink-FV
   ‘[...] this one has soft, fresh water, that can be swallowed (?is swallowable) in drinking,
   [...]’.

(124) [...] era mmwe abeetwala ku mbaga ze batabayiseeko mwandesanga mwalya dda ebita-
   liika.
   era mmwe a-ba-ee-twal-a       ku   N-baga
   and PRON2PL AUG2-SM2-REFL-take-FV LOC17 CL10-wedding
   zi-e       ba-ta-bayis-e-ko mu-andi-e-sang-a
   PP10-REL SM2-NEG-invite-PRF-LOC17 SM2PL-CND-REFL-find-FV
   mu-a-li-a   dda  e-bi-ta-li-ik-a.
   SM2PL-REM-eat-FV short.time.ago AUG8-SM8-NEG-eat-NT-FV
   ‘[...] and those of you who invite yourselves to weddings where you are not invited
   might find that you have already eaten the inedible.’

(125) [...] omwenge omukalu tigujja kunyweka, [...].
   o-mu-enge o-mu-kalu  ti-gu-jj-a       ku-nyw-ik-a, [...].
   AUG3-CL3-alcohol AUG3-CL3-clear NEG-SM3-come-FV CL15-drink-NT-FV
   ‘[...] alcohol alone will be undrinkable, [...]’.

The clause in (126) below is different from those above in that it is a conditional clause. In
terms of Sweetser’s (1990: 113ff.) pragmatic account of conditionality, (126) is a content
conditional, viz. “the realization of the event or state of affairs described in the protasis is a

41 Probably one of the two is picked out by the listener through implicature, if the present status of the let-
ting/hindrance value is not mentioned by the speaker in the preceding or following discourse.
sufficient condition for the realization of the event or state of affairs described in the apodosis.” An important effect of conditionality on the potential is that it enhances the status of the letting value. In contrast to a simple proposition such as this success is obtainable, which asserts that the status of the letting value is ‘active’ at the present moment, the conditional asserts that a requirement has to be met before the success is obtained by the agonist. Thus, even though the potential verb is marked for the present tense, the status of the letting value is only ‘activated’ when the condition expressed in the protasis is realised.

(126) Obuwanguzi buno bufunika ng’omwana wo agenze mu ssomero.
   o-bu-wanguzi buno bu-fun-ik-a nga o-mu-ana
   AUG14-CL14-suces DEM14 SM14-get-NT-FV if AUG1-CL1-child
   u-o a-gend-e mu li-somero.
   PP1-POSS2SG SM1-go-PRF LOC18 CL5-school
   ‘This success is obtainable if your child has gone to school.’

Unfortunately, none of the extracted clauses provides an example in which the potential neuter is combined with other extensions.

3.5 Idiosyncratic derivation
The following non-compositional neuter verbs have been attested in our corpus query:

(127) Idiosyncratic neuter verbs

<table>
<thead>
<tr>
<th>SVB</th>
<th>EVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-bonek-</td>
<td>‘appear’</td>
</tr>
<tr>
<td>-gum-</td>
<td>‘be firm/solid; be faithfull’</td>
</tr>
<tr>
<td>-gumikiriz-</td>
<td>‘be patient; hold out; endure’</td>
</tr>
<tr>
<td>-lab-</td>
<td>‘see’</td>
</tr>
<tr>
<td>-labik-</td>
<td>‘look like, seem, appear; experience; (neg.) be rare’</td>
</tr>
<tr>
<td>-wulir-</td>
<td>‘hear, listen’</td>
</tr>
<tr>
<td>-wulikik-</td>
<td>‘appear’</td>
</tr>
<tr>
<td>-zirik-</td>
<td>‘faint’</td>
</tr>
</tbody>
</table>

Ganda no longer has a reflex of the Proto-Bantu verb *-bon- ‘see’, which is now expressed by the verb -lab-. The neuter verb -bonik- ‘appear’, however, has been maintained. The extended verb root -gumikiriz- combines the neuter, applicative and causative to express a non-derived, i.e. non-compositional, meaning and can, according to Murphy (1972: 113), be used in both a middle and an effective clause. In the latter, -gumikiriz- has the meaning ‘be patient with, support patiently, endure’. Because each verb has a specific meaning, the idiosyncratic neuter verbs in (127) lend themselves less easily to be discussed in more general lines (effect of TA, combination with other extensions, etc.). Therefore, I will discuss each verb individually.

The verb -bonek- goes back to the reconstructed Proto-Bantu roots *-bon- ‘see’ and *-bonek- ‘appear’. In English, appear can be used either in a material clause to denote an event of manifestation, which is also the process denoted by -bonek-, or in a relational clause. I will come back to the second kind of appear in Ganda below. According to D. Kawalya the use and participant choice of -bonek- is mainly used to denote the appearing of the moon. This is illustrated in (128) and (129).
(128) *Mu kiro omwezi gwa Muharram lwe guaboneka [...].*

mu ki-lo o-mu-ezi gu-a Muharram lwe
CL18 CL7-night AUG3-CL3-moon PP3-CON Muharram when
gu-a-bonek-a- (...)
SM3-REM-appear:NT-FV
‘In the night when the Muharram moon appeared [...].’

(129) *[...] bwe yatandika okwekubanga yokka, buli mwezi lwe gwabonekanga.*

bwe e-a-tandik-a o-ku-e-kub-a-nga e-okka,
buli mu-ezi lwe gu-a-bonek-a-nga.
each.time CL3-moon when SM3-REM-appear:NT-FV-REP
‘[...] when it [the drum] started beating itself, each time the moon appeared.’

In (130) *-bonek-* is used in a more modern or non-idiomatic context to refer to the appearing of different kinds of food. It thus seems that the use of *-bonek-* is expanding to express not only to the appearing of the moon but also that of other entities.

(130) *Era olwo enkoko oba turkey [...] lwe bibonekako n’ebikyepere ebirala nga Christmas pudding ne bigendera okwo.*

era olwo e-N-koko oba Ø-turkey lwe bi-bon-ek-a-ko
and then AUG9-CL9-chicken or CL9-turkey when SC8-see-NT-FV-LOC17
ne e-bi-kyepere e-bi-rala nga Christmas pudding ne
with AUG8-CL8-nice.food AUG8-CL8-other like Christmas pudding and
bi-gend-er-a o-kwo.
SM8-go-APPL-FV AUG17-DEM17
‘And then when chicken or turkey [...] appeared together with other kinds of nice food like Christmas pudding and others.’

All these are middle clauses with *omwezi* ‘moon’ or *enkoko oba turkey* ‘chicken or turkey’ as Actors. The process has an ergative flavour in that these participants are low in agency and therefore are not prototypical Actors, i.e. they are not conscious, volitional, intentional, or human (or animate). In relation to this, *appear* in the above clauses implies a certain amount of spontaneity or non-causation of the participant. In (131), on the other hand, the Actor is more agentive and the clause is best translated as *he has manifested himself* instead of *he appeared at Busiro hill*, to indicate that this is not at all a spontaneous process (note that ‘appear’ is expressed by *-labik-* and not *-bonek-* in this example).

(131) “*Yee tumaze okumulaba, era alabikidde wali ku lusozi Busiro.*”

yee tu-mal-e o-ku-mu-lab-a, era a-lab-ik-ir-e
yes SM1PL-finish-PRF AUG15-CL15-OM1-see-FV and SM1-see-NT-APPL-PRF
a-wali ku lu-sozi Busiro.
AUG16-DEM16 LOC17 CL11-hill Busiro
‘*Yes, we have already seen him (the king), and he has manifested himself at Busiro hill.*’
There is thus no causative member with which appear constitutes an ergative/unergative pair. The event of appearing is closely related to mental perceptive processes such as see and look (at), or, to a lesser extent, to material verbs such as show, reveal, bring in(to ‘a location’). The Actor of appear corresponds to the Phenomenon of these agnate perceptive processes, although this is a unidirectional alternation. Every Actor of appear can figure as the Phenomenon of a mental perceptive clause, but not every Phenomenon can figure as the Actor of appear. This is because Phenomena can be realised by (sub)clauses denoting acts or facts (H&M 2014: 251-3). Thus, the sun appeared on the horizon is agnate to the police detective saw the sun on the horizon, but the traveler saw the train leave does not make sense as the train leave appeared, or even as the leaving train appeared. Thus, perceptive verbs are not ergative effective verbs that alternate with appear. See cannot be paraphrased as make appear, whereas ergative decrease is identical to make decrease. Furthermore, the appearing of an entity can be described and conceptually visualised in a text, but this does not imply that the entity in question was actually seen by anyone. The Muharram moon in (128) appeared on a certain night, and this event has subsequently been described by the writer, but perhaps no-one has laid eyes on it during that specific occasion. It is exactly the function of the neuter to indicate that the perception of the entity by a Senser is not important or unknown information for the speaker. Note, however, that the Senser can nevertheless be expressed in a prepositional phrase, e.g. that night the Muharram moon appeared to the lovers.

The verb -labik- can also be used to denote the material process of appearing, as shown in (132) and (133).

(132) [...] naye bannaffe ab’emitala eyo, bwe kalabikako nga bava mu biseera eby’empewo n’obutiti, [...].

(133) [...] Bad Black alabikeko nga 31 omwezi ogujja.
The objective or neutral meaning of *appear* (and of the neuter) is nicely illustrated in the following examples:

(134) **Erinnya Muhammadi lirabikira mu Kulaane emirundi ena. [...]**

\[\text{e-li-nnya} \quad \text{Muhammadi} \quad \text{li-lab-ik-ir-a} \quad \text{mu} \quad \text{Kulaane} \]

AUG5-CL5-name Muhammad SM3-see-NT-APPL-FV LOC18 Koran

\[\text{e-mi-rundi} \quad \text{e-na}, (\ldots). \]

AUG4-CL4-time PP9-four

‘The name Muhammad appears four times in the Koran’.

(135) **Era byabeeranga mu buli kigango Kabaka mwe yalabikiranga.**

\[\text{era} \quad \text{bi-a-ba-er-a-ng-a} \quad \text{mu} \quad \text{buli} \quad \text{ki-gango} \quad \text{Ø-Kabaka} \]

and SM8-REM-be-APPL-FV-REP LOC18 each.time CL7-palace CL19-king

\[\text{mu-e} \quad \text{a-a-lab-ik-ir-a-nga.} \]

PP18-REL SM1-REM-see-NT-APPL-FV-REP

‘And they were always in each palace where the king usually appeared.’

In (134) and (135), absolutely no reference or implication to a Senser is made. Consequently, these material clauses are very similar to an existential clause, demonstrating the fuzziness and continuity of process types from one (in) to the other (H&M 2014: 216, 309). In an existential clause there is only one participant, the Existent denoting an entity or event, and which is simply said to exist. Often a circumstance of place or time is used to specify the spatio-temporal location of the process of being (H&M 2014: 309). Thus, the clause in (134) differs little in meaning from the existential clause *in the Koran there is the name Muhammad four times*, and the clause in (135) is near-identical to *and they were always in each palace where the king usually was*.

### Table 30. Ideational structure of (134) and (135)

<table>
<thead>
<tr>
<th>Erinnya Muhammadi</th>
<th>Lirabikira</th>
<th>Mu Kulaane</th>
<th>Emirundi Ena</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>Process: material</td>
<td>Circumstance: location</td>
<td>Circumstance: frequency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Era 42</th>
<th>Bi-</th>
<th>Abbeeranga</th>
<th>Mu Buli Kigango</th>
<th>Kabaka</th>
<th>Mwe</th>
<th>Yalabikiranga</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existent</td>
<td>Process: existential</td>
<td>Circumstance: location</td>
<td>Actor</td>
<td>Process: material</td>
<td></td>
</tr>
</tbody>
</table>

The effect of the absence of a Senser can be taken one step further than the material clause with *appear* coinciding with an existential one. In (136), the verb base *-labik-* is nominalised to *ndabika* ‘format’ by adding the nominal prefix of class 9 to it. Although the format of a text or a document pertains to its visual aspects, i.e. the design, there is absolutely no implication of a Senser.

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42 The elements *era* and *mwe* do not have any function in the ideational structure of the clause. They are, however, important and fully functional on the textual and clause complex level.
‘It does not require to have a lay-out or format to be followed in writing a testament.’

However, if a Senser participant is expressed (137), marked by the preposition *eri*, then the clause is more closely related to its semantic, mental perceptive, counterpart. If something appears to somebody, we can assume that the Senser has actually sensed (experienced, seen) the entity that has appeared. The clause in (137) is nevertheless still semantically and lexicogrammatically different from the agnate passive perceptive clause *your superiority is seen by all*. First of all, it is formally different because the verb is derived by a neuter in (137) and not by a passive extension, and second, it is structurally different because, according to Ashton *et al.* (1954: 337), the Actor participant in a passive clause follows the verb without any preposition, as in (138). Another element, such as a circumstance of location *mu galagi* in (138), is not allowed to precede the Actor, as shown in (138). Note that the Senser in (137) is realised by a generic, plural non-specific Deictic. It seems that in each instance in which a central participant is expressed obliquely in a neuter clause, it is realised by a non-specific nominal group (see also the related examples discussed in Part 2).

(137) […] okuyitirira kw o kulabikenga eri bonna.

(138) a. *Emmotoka yatwalibwa Mukasa.*

b. *Emmotoka yatwalibwa Musaka mu galagi.*

c.*Emmotoka yatwalibwa mu galagi Musaka.*

(D. Kawalya, personal communication)

When *-labik-* is used in relational clauses, its two meanings are either ‘look (like)’ or ‘seem’. In the former sense *-labik-* figures in relational intensive attributive clauses that are all defined by a perceptive reality phase (H&M 2014: 271-2). In all but one, (142), of the examples of *-labik-* the domain of attribution is material (139)-(141). The Attribute can either denote an entity (139) or a quality (140).
(139) [...] tulioke tulabike nga abantu abasimibwa mu maso go, [...].

tulioke tu-lab-ik-e nga a-ba-ntu
so SM_{1PL}-see-NT-SBJ like AUG_{2-CL2-person}
a-ba-sim-ibu-a mu ma-iso ga-o, [...].
AUG_{2-SM2-appreciate-PASS-FV} LOC_{18} CL_{6-eye} PP_{6-POSS2SG}
‘[…] so that we look like people who are appreciated in your eyes, […].’

(140) [...] birabike bulungi nga biteredde.

bi-lab-ik-e bu-lungi nga bi-tereer-e.
SM_{8-see-NT-SBJ} CL_{14-beauty} like SM_{8-be.in.order-SBJ}
‘[…] so that they look like they are nice and in order.’

In its sense as ‘seem’, -labik- marks an apparent reality phase (H&M 2014: 271-2). In the clause sample from the corpus query, only examples in which the Attribute denotes a quality are attested (141)-(142). In (141) the domain of attribution is material, but the Attribute in the clause in (142) denotes an objective property, amalala ‘pride’ and okwewulira ‘be proud’, which is attributed to a process, namely okuwagaanya ‘to manoeuvre’.

(141) Wazira, obunyiikivu bwa kitange mu kuweereza bulabika bwali bukwata nga kawumpuli nange bwankwata era naweereza nnyo.

wazira, o-bu-nyiikivu bu-a Ø-kit-ange mu
but AUG_{14-CL14-perseverance} PP_{14-CON} CL_{1a-father-POSS1SG} LOC_{18}
ku-weerez-a bu-lab-ik-a bu-a-li bu-kwat-a
CL_{15-serve-FV} SM_{14-see-NT-FV} SM_{14-REM-be} SM_{8-grasp-FV}
nga ka-wumpuli na-anje bu-a-n-kwat-a era
like CL_{12-wumpuli} CON-POSS_{1SG} SM_{14-REM-OM_{1SG}-grasp-FV} and
n-a-weerez-a nnyo.
SM_{1SG-REM-serve-FV} very.much
‘But, my father’s hard work in service seemed contagious like kawumpuli [a certain disease], it also caught up with me and I served a lot.’

(142) Abu Dujaanah yatandika okuwagaanya mu nnyiriri zomulabe mu ngeri eyali erabika mu amalala nga n’okwewulura kumulabikako.

Abu Dujaanah a-a-tandik-a o-ku-wagaany-a mu
Abu Dujaanah SM_{1-REM-start:NT-FV} AUG_{15-CL15-manouver-FV} LOC_{18}
N-nyiriri zi-a o-mu-labe mu N-geri e-a-li
CL_{10-line} PP_{10-CON} AUG_{3-CL3-enemy} LOC_{18} CL_{9-way} SM_{9-REM-be}
e-lab-ik-a-mu a-ma-lala nga ne
SM_{9-see-NT-FV-LOC_{18}} AUG_{6-CL6-pride} like and
o-ku-e-wulir-a ku-mu-lab-ik-a-ko.
AUG_{15-CL15-REFL-be.proud-FV} CL_{15-OM_{1-see-NT-FV-LOC_{17}}
‘Abu Dujaanah started to maneuver through the lines of the enemy in a way that seemed proud [lit. looked like pride] and seemed to be proud.’
In a negated relational attributive clause, -labik- takes on the meaning ‘be not seen’ and, when the verb root is reduplicated, translates most naturally in ‘be rare’, literally ‘be not seen often’. Examples are provided in (143) and (144).

(143) *Bino bye bimu ku bika by'obutiko ebitatera kulabikalabika mu Buganda.*

```
bino bi-e bi-mu ku bi-ka bi-a  
DEM8 PP8-EMPH CL8-some LOC17 CL8-type PP8-CON  
o-bu-tiko e-bi-ta-ter-a  
AUG14-CL14-mushroom AUG8-SM8-NEG-do.usually-FV  
ku-lab-ik-a-lab-ik-a LOC18 Bu-ganda.  
CL15-see-NT-FV-look-NT-FV mu CL14-ganda  
```

‘These are some types of mushrooms that are rare [lit. not usually seen] in Buganda.’

(144) [...] *olw'ekyo ebikokko byabwe tebirabikalabika.*

```
olwo e-kyo e-bi-kokko bi-abwe  
because AUG7-DEM7 AUG 8-CL8-riddle PP8-POSS2  
te-bi-lab-ik-a-lab-ik-a.  
NEG-SM8-see-NT-FV-see-NT-FV  
```

‘[…] because of that, their riddles are rare.’

The neuter verb -labik- can furthermore be used to express the mental process of experiencing. The clause in (145) is the only representative in the clause sample, and it manifests a number of interesting aspects that thus have not been verified yet by more data. The fact that -labik- is the neuter form of -lab- ‘see’, demonstrates the indeterminate construal of ‘experience’ as a mixture of both cognitive and perceptive meaning elements (H&M 2014: 257), which is also illustrated by the comparison that is drawn between seeing in the first clause of the clause group, and experiencing in the second clause. Moreover, not only is the clause effective, viz. with a Senser Kyannyanja and a Phenomenon omuzimu ‘spirit’, but the verb root has both a neuter and a passive extension. This seems to be an example similar to the Swahili clause (93) in §2.2.8. However, as asserted, the behaviour and effects of the neuter-passive combination have not been investigated systematically, and therefore I refrain from making any conclusive statements.

(145) *Kyannyanja bwe yalaba Mbayiwa yali nga alabikiddwa omuzimu.*

```
Kyannyanja bwe e-a-lab-a Mbayiwa e-a-li nga  
Kyannyanja when SM9-REM-see-FV Mbayiwa SM9-REM-be like  
a-lab-ik-r-i-u-a o-mu-zimu.  
SM1-see-NT-APPL-PASS-FV AUG3-CL3-spirit  
```

‘When Kyannyanja saw Mbayiwa it was as if he had experienced a spirit.’

The verb root -gumikiriz- has three extensions, in the respective order neuter-applicative-causative, and is derived from the basic verb root -gum- ‘be firm/solid; be faithful; be brave/courageous; dare; have the nerve/boldness (to)’ (Murphy 1972: 112). The verb can denote both a one- and two-participant event, although only the former is attested in the clause sample.
Yamala gagumikiriza n’akubibwa emigo mingi n’okusibibwa mu nvuba.

‘S/he just endured and was beaten with a stick many (times) and was locked up in prison.’

We have already encountered the neuter verb -wulikik- in its agentless passive meaning ‘be heard’ (section 3.3). However, it can also be used in a relational intensive attributive clause, as shown in (147) and (148). In both clauses the Attribute is realised by the same verb, -vum- ‘be abusive towards’, and the domain of attribution is semiotic in that it denotes ‘subjective sensations’ and ‘inner experiences’ (H&M 2014: 272). I have not verified whether -wulikik- in a relational clause always encodes the attribution of the semiotic property ‘be abusive (towards)’ to the Carrier, i.e. whether they form a unified expression, or whether the combination of the two in the only examples we have in the corpus sample is coincidental.

(147) [...] newakubadde gawulikika mu matu ng’agavuma naye kuba kubuulirira mwana waabwe [...].

‘[...] although it appears to be abusive in the ears, however, it is advice to their child […]’.

(148) [...] n’amukakasa nti bulijjo alina amaaso ga kika kino ekyamuvulikira ng’amuvumye n’alagira bamutte.

‘[...] and she assured him that he has always had this kind of eyes which appeared to her like an abuse and he ordered that s/he be killed.’

The last idiosyncratically derived neuter verb in the list in (127) is -zirik- ‘faint’. In Davidse’s (1992: 130) network of participant voice, faint can be categorised as transitive: mid-
dle: superventive. In middle superventive clauses, there is typically no Goal and, more importantly, the Actor has no control over the event (e.g. he fell/died). The event is conceptualised as happening spontaneously, and this makes it strongly related to unergative clauses which probably motivates the presence of the neuter extension. There appears to be no related, underived verb root -zir-, although the root does exist in Ganda but means ‘forbid; scorn, reject, refuse; abhor; be taboo/forbidden’ (Murphy 1972: 648).

(149) Omwoyo gwange bwe gwazirika munda yange, [...].
    o-mu-oyo       gu-ange       bwe       gu-a-zirik-a       mu-nda
    AUG3-CL3-spirit PP3-POSS1SG when SM3-REM-faint:NT-FV CL18-inside yange, [...].
    PRON1
    ‘When my soul fainted inside of me, [...].’

In the previous four sections a number of neuter clauses have been analysed. The following section provides and discusses the results of an explorative frequency study of the neuter verbs in the corpus.

3.6 Frequency of neuter verbs in the corpus

One of the advantages of a corpus study is the opportunity to quantify the use of neuter verbs in a large amount of texts, a previously unexplored dimension in the research on the extension. There are, however, some drawbacks caused by the search method used for this study, which have been mentioned in section 1.5 on methodology, that should be held in mind when interpreting the results. They are summarily repeated here:

- Due to the manual filtering process:
  - Deletion of some unique clauses (i.e., neuter verbs occurring only once)
- Due to absence of part-of-speech tags:
  - Possible automatic deletion of some instances of neuter verbs
  - Complex search term does not cover all possible neuter verb roots
- Due to large amount of query results:
  - A number of instances that we have not looked at possibly have the homophonous impositive extension instead of neuter

Nevertheless, this explorative part of the study gives at least a comparative idea of occurrences, namely which neuter verbs are more frequently used than others, and reflects on the reasons why this should be so.

The exact number of frequency of the neuter verbs discussed in the previous parts is presented in Table 31. They are arranged from most to least number of occurrences.
### Table 31. Exact frequency of neuter verbs in the corpus

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>-tandik-</td>
<td>‘begin’</td>
<td>5947</td>
</tr>
<tr>
<td>-labik-</td>
<td>‘be seen, be visible, look (like), seem, appear, experience; (neg.) be rare’</td>
<td>1319</td>
</tr>
<tr>
<td>-yonoonek-</td>
<td>‘spoil; be destroyed’</td>
<td>299</td>
</tr>
<tr>
<td>-menyek-</td>
<td>‘break’</td>
<td>188</td>
</tr>
<tr>
<td>-siik-</td>
<td>‘fry’</td>
<td>93</td>
</tr>
<tr>
<td>-wulilik-</td>
<td>‘be heard, appear’</td>
<td>39</td>
</tr>
<tr>
<td>-funik-</td>
<td>‘be found/got; be obtainable’</td>
<td>20</td>
</tr>
<tr>
<td>-inzik-</td>
<td>‘be possible’</td>
<td>17</td>
</tr>
<tr>
<td>-liik-</td>
<td>‘be edible’</td>
<td>8</td>
</tr>
<tr>
<td>-bonek-</td>
<td>‘appear’</td>
<td>5</td>
</tr>
<tr>
<td>-tulik-</td>
<td>‘burst’</td>
<td>4</td>
</tr>
<tr>
<td>-salik-</td>
<td>‘decrease’</td>
<td>2</td>
</tr>
<tr>
<td>-sirik-</td>
<td>‘stop’</td>
<td>2</td>
</tr>
<tr>
<td>-balik-</td>
<td>‘be countable’</td>
<td>1</td>
</tr>
<tr>
<td>-gulik-</td>
<td>‘be buyable, affordable’</td>
<td>1</td>
</tr>
<tr>
<td>-gumikiriz-</td>
<td>‘be patient; hold out; endure’</td>
<td>1</td>
</tr>
<tr>
<td>-mirik-</td>
<td>‘be swallowable’</td>
<td>1</td>
</tr>
<tr>
<td>-nywek-</td>
<td>‘be drinkable’</td>
<td>1</td>
</tr>
<tr>
<td>-sasik-</td>
<td>‘dissolve’</td>
<td>1</td>
</tr>
<tr>
<td>-week-</td>
<td>‘be given’</td>
<td>1</td>
</tr>
<tr>
<td>-yabik-</td>
<td>‘burst’</td>
<td>1</td>
</tr>
<tr>
<td>-zibikir-</td>
<td>‘block up’</td>
<td>1</td>
</tr>
<tr>
<td>-zirik-</td>
<td>‘faint’</td>
<td>1</td>
</tr>
</tbody>
</table>

The high frequency of -tandik- can at least partially be explained by the fact that it is one of few neuter verbs that can be used in both middle and effective clauses, in contrast to the majority of neuter verbs, which are restricted to middle clauses. Furthermore, potential neuter verbs figure only in clauses in which a speaker wants to make an assertion about the conduciveness or hindrance of an entity, whereas -tandik- is not restricted to such subjective statements. The large amount of occurrences of -labik- can be explained by its semantic flexibility, viz. that it can be used in different kinds of clauses to denote various types of processes. The divide between these two most frequent verbs and the rest is strongly visualised in Figure 12.

There is no apparent explanation why some neuter verbs occur only once. This is where, I believe, the error range has influenced the results. The frequency rates have been established by a ‘top-down’ approach: I attempted to collect all neuter verbs in the corpus, have the results ‘cleaned up’ by D. Kawalya without supervision or collaboration (i.e., we did not do this together, discussing for each verb whether it was a mismatch or not), and I transferred the results to excel; at this moment we did discuss together for each verb whether it contained the neuter, the impositive or a formal expansion, deleting the mismatches. It are the remaining instances of the sequence of these processes that are presented here. Throughout the entire process there is an inevitable chance that examples have been lost and deleted. A ‘bottom-up’ approach, where we make a corpus query for each neuter verb individually, is likely to give a more realistic and correct number of occurrence per verb.
Figure 12. Overall frequency of neuter verbs in the corpus
3.7 Summary

In this part the first results of a corpus-driven study of the neuter in Ganda have been presented. Supported by the benefits of natural data, some of the analyses that were made in Part 2 have been slightly refined and/or continued. A first observation is that neither the unergative nor the agentless passive clauses are restricted with respect to tense. It was argued that the status of the interpersonal value of conduciveness of the potential, on the other hand, is affected especially by the past tense, or if the potential verb figures in a conditional clause. It has been shown that an unergative verb as an attributive relative predicate functions as the Epithet of a nominal group, with the Medium as the Head. Although not enough data was available to make a systematic study of extension combinations with the neuter, some examples have shown that neuter verbs in ergative and agentless passive clauses can co-occur with the applicative, which serves to introduce a Beneficiary participant or a locational circumstance. This Part also discussed the detransitivising effect of the neuter on ditransitive verbs, exemplified by the most prototypical three-participant process -w- ‘give’. It has been shown that the representational structure of the resulting neuter clause is the two-participant constellation ‘Goal-process-Beneficiary’, with the omission of the Actor, the Goal functioning as the Subject, and the Beneficiary as the Complement.

In the section on the idiosyncratic neuter verbs, it was shown that the two different processes denoted by the same verb in English, appear, are expressed by three verbs in Ganda, namely -bonek-, -labik- and -wulikik-. All three are derivatives of mental perceptive verbs ‘see’ or ‘hear’. The material process of manifestation is denoted by both -bonek- and -labik-. The latter is, furthermore, used in a number of relational clauses with different kinds of attribution, in which -labik- means ‘appear, seem, look (like)’. It is in the relative attributive sense that -wulikik- is an equivalent of -labik- ‘appear’. One remarkable clause provided an example of a neuter-passive combination extending the verb root -lab-. The resulting meaning was ‘experience’, with both a Senser and Phenomenon encoded as Subject and Complement respectively. It has been proposed that the link between the meaning of -zirik- ‘faint’ and neuter, was the lack of control of the Actor in the material superventive process, making it similar to the spontaneous connotation of unergative clauses.

In a last section the preliminary results of a small frequency study were presented. It showed that especially -tandik- and -labik- had a high rate of occurrence in the corpus, in contrast to the other neuter verbs. This can be explained by the structural indeterminacy of -tandik-, which can be used in both an effective and a middle clause, and the semantic polysemy of -labik- which can function in agentless passive clauses and a wide array of relational attributive clauses, and furthermore has a second idiosyncratic meaning when its verb base is reduplicated and negated, viz. -talabikalabik- ‘be rare’.
Part 4. General conclusion

4.1 Conclusion

In conclusion, I give a general overview of the main findings of this dissertation. More detailed summaries with recapitulations of language-individual discussions can be found in §1.4.4, §2.1.5, §2.2.11 and section 3.7.

This dissertation constitutes the first dialogue between the theory of SFG on the one hand, and Bantu languages on the other. It is furthermore the first in-depth, extensive, cross-linguistic study of the neuter extension. Traditional descriptions, which did not distinguish between the three metafunctional layers of organisation of the clause, have been restricted to a very broad and mainly representational analysis of the neuter’s functions. The present work takes the different meanings and organisational structures of the clause into account in order to make a unified description of the full functional inventory of meanings of the extension, which are located both in the interpersonal and representational domain.

The representational function of the neuter is, in abstract terms, to derive a clause with \( n \) participants from a clause with \( n+1 \) participants; in other words, to reduce the valency or participant number of a basic constellation with one. A three-participant configuration becomes a two-participant clause, a two-participant configuration a one-participant clause, and a basic one-participant configuration will result in a clause in which no participant is present. In case of the latter, a circumstance (of location or instrument) typically realises the function of Subject. The neuter can be used to construe three constellations: (i) it expresses the unergative member of the ergative/unergative alternation by deriving a middle clause from its effective counterpart; (ii) it detransitivises a transitive effective operative (in traditional terminology ‘active transitive’) constellation into a transitive middle operative (‘intransitive agentless passive’) one; and (iii) it denotes relational intensive attributive processes in which the extension functions as a non-verbal attributive predicate and the Attribute is realised by the lexical verb root. As an unergative marker, the neuter is restricted to ergative verbs, which constitute a subtype of material process verbs. Overall, the functions of the neuter restrict it to extend verb bases denoting four process types, viz. material, mental, relational and verbal. However, in some instances the meaning of a relational neuter clause is near-equivalent to that of an existential clause.

The neuter’s interpersonal functions are for the speaker to make either a neutral assertion about a certain state of affairs, or to make a subjective statement about the modal conducive quality of an entity. The former interpersonal layer is realised representationally by the unergative and agentless passive clauses, and the latter by the relational intensive attributive clauses. I have adopted Davids & Heyvaert’s (2007: 73) argument that the two interpersonal meanings are linked to each other by a process of subjectification.

Having established a theoretically based description of neuter clauses and its representational and interpersonal functions, section 2.2 provided an overview of extension combinations involving the neuter. The main conclusion is that the grammaticality of specific combinations and their respective orderings is highly language-specific. The general tendency is that extensions that take narrower scope are located nearest to the verb root. The neuter not only
modifies the participant structure of the underived configuration but changes its meaning; therefore it takes scope over the verb root and appears most closely to it. However, it has been shown that this should not always be so, and that a suffix order in which the neuter is preceded by a causative or applicative is possible in some languages. In this section, I have also argued that the separative intransitive extension *-ok- should be analysed as a conflation of the separative transitive *-ol- and the neuter. A rather large number of ergative verbs are expressed synchronically by the separative intransitive, and such an analysis would bring together all ergative verbs under the neuter.

The third Part serves as a continuation of the cross-linguistic investigation of Part 2. Here, I zoomed in on one specific language, Ganda, to test some of the previously established hypotheses and come to a clearer picture of the neuter’s lexicogrammatical aspects, while at the same time providing a language-specific account of the neuter. This part of the study is entirely corpus-driven, which is not only a first for any study on the neuter, but is furthermore one of the few corpus-driven investigations in Bantu linguistics in general. One of the advantages of a corpus study is that the use of neuter verbs can be quantified. Although the section on frequency was very explorative and the results equally preliminary, it opens up the path to more data-driven work in Bantu studies. One of my intended contributions to the literature on the neuter and benefits of a corpus study is to provide more examples on the level of the clause (in the rank scale). This allowed me to propose that there is an influence of TA on the interpersonal meaning of potential neuter clauses, more specifically that there is an interaction between the past tense, the status of the dynamic modality value and positive/negative polarity.

4.2 Further research

Most of the topics that I have not been able to address in this work are extensively discussed in section 2.4. Here, I will present them in a concise overview, and in addition sum up which issues are to be followed up for Ganda specifically. Points stated in the general overview are not repeated for Ganda, but rather should be addressed in future studies of the neuter in any Bantu language.

1. General:

- Because the representational structure of unergative, agentless passive and potential clauses is often identical in many languages, these clauses are ambiguous as to the two different interpersonal meanings (statement on state of affairs or on dynamic modality). A first question is whether this ambiguity surfaces automatically in every language, or do languages have structural strategies that realise the distinction between the two meanings (finite vs. non-finite copula construction in Chewa). If not, what are the strategies used to differentiate between the two meanings?
- Are there certain lexicogrammatical situations in which the central participant can be expressed obliquely in a neuter clause and if so, what are the conditions?
- A study of the interaction between the semantic values of TA categories and the meanings of neuter clauses, based on natural language data from a corpus has not yet been undertaken.
• It has been argued in the literature that extensions with narrow scope appear more closely to the verb root than other extensions. A cross-linguistic, default template has been proposed, the so-called CARP order, which does not take into account the neuter extension. Where does the neuter fit in in this template?

• Although I have disregarded the textual meaning of the neuter clause, this is a topic that should definitely receive more attention. In the most unmarked configuration of a declarative clause, the Actor/Initiator participant, the Subject and Theme coincide (H&M 2014: 82). Due to the neuter’s modification of the participant voice in the representational structure, however, the Theme and Subject are realised by the Medium/Goal in a neuter clause. The question can be raised why the speaker would topicalise the affected participant instead of uttering the default declarative clause structure. Furthermore, it is the neuter which is used and thus allows to topicalise and foreground the Medium/Goal participant.

2. Ganda

• Logically, the most explorative part of the Ganda research, viz. the frequency study, leaves open the most doors for future studies. First and foremost, the method that was used, was not intended specifically for a frequency study, and therefore the provided numbers might not give an exact idea of the occurrence rate of neuter verbs in the corpus. A specialised study will be able to give a more realistic outcome and subsequently will allow to make more conclusive analyses. Such research will also be able to go into further detail with regard to specific verbs, e.g. provide quantificational information on the use of -tandik- ‘begin’ in middle and effective clauses.
References


Kawalya, Deo, Koen Bostoen & Gilles-Maurice de Schryver. 2014. Diachronic semantics of the modal verb *-sóból-* in Luganda. *International Journal of Corpus Linguistics* 19/1, 60-93.


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___ . 2009. NUGL Online: The online version of the New Updated Guthrie List, a referential classification of the Bantu languages. Online document.


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Appendix

A full bibliographic overview of all the sources of the language sample is provided here. It is organised by the zones of Guthrie’s classification.

Zone A
URL: http://hdl.handle.net/2433/171629.

Zone B

Zone C

Edmiston, Althea Brown. (s.d.). *Grammar and dictionary of the Bushonga or Bukuba language as spoken by the Bushonga of Bukuba tribe who dwell in the Upper Kasai district, Belgian Congo, Central Africa.*


**Zone D**


**Zone E**


**Zone F**


**Zone G**


**Zone H**


**Zone J**

Zone K

Zone L


**Zone N**


**Zone P**


**Zone R**


**Zone S**


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