CHAPTER 7

# ASPECT, TENSE AND MOOD

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## 1 INTRODUCTION

This chapter differs in two main ways from the corresponding chapter in the first edition (Nurse 2003). First, it has a section on mood/modality, not included in the first edition. Second, the sections on aspect and tense (henceforth AT) are revised in light of Nurse (2008). We also refer to other authors who offer alternative theoretical approaches, even if they often lack the broad geographical scope of this chapter.

We focus here on the typology of aspect, tense and mood in Bantu (henceforth ATM), more specifically on the semantics of these ATM categories, how they interact, the systems they form, the range of variation they manifest and their expression both segmental and tonal.

Several features make Bantu and this chapter interesting: the multiple time divisions (Section 6), the attempt to quantify aspect in Bantu (Section 5), the encoding of these categories (Section 3), which is often different from how other languages in the world encode, the intensity and rapidity of grammaticalisation in Bantu ATM, and the first formal view of mood and modality in Bantu (Section 7).

Valid generalisations about AT rely on having a geographically inclusive and typologically representative base. The base used here is that in Nurse (2008: 4), comprising more than 210 languages that are thought to be reasonably discrete and representative of the whole area. It includes at least one language from each of Guthrie's zones and groups (Guthrie 1971, Maho 2009). A schematic analysis of the languages is available online: www.faculty.mun.ca/dnurse/Tabantu/. The 210 breaks down into 100 core languages, used for detailed examination and statistical statements, and 110 peripheral languages. The amount of detail depends on the source. The description of any language involves three main variables: author's knowledge of how the language, and especially AT, works; how much data is presented; and the theoretical approach. The data presented tends to support the approach. Readers coming to a description with a different theoretical stance and looking for different data will not find all they seek. Many general grammars and even some specialised analyses use quite disparate terminology for the same phenomena, and the quantity of good and relevant data presented for tense and especially aspect is often limited. Although a firm line between "good" and "less good" data is hard to draw, we would say there was "good" data for 20–25 languages in the AT database, and "less good" for the rest. Generalisations are only as good as the data they rest on. There has been a recent upswing in higher quality descriptive work. We hope this will continue with new studies also being better theoretically informed. Section 7 on Mood and Modality uses a slightly modified version of the Nurse (2008) 100 languages sample (cf. Devos & Van Olmen 2013: 55–56).

## 2 VERB STRUCTURES, CATEGORIES EXPRESSED IN THE VERB

The verbal word has a similar structure in most Bantu languages. Meeussen (1967) reconstructs it for Proto-Bantu with a slightly more elaborate schema than in (1).

(1) Initial – Subject – Negative – T(A) – Object ≠ Root – Extension(s) – Final – Suffix

Slots to the left and right of the Root and Extension(s) in (1) involve inflection. The Initial expresses only two categories common to many Bantu languages, negative and relative, but individual languages express a range of other categories at Initial, because this is a slot where new material often becomes grammaticalised. Extension involves a small, closed set of often valency-changing categories, of which causative, applicative, stative, reciprocal, separative and passive are the most common (cf. Chapter 6). Final also includes a small, closed set originally having to do with mood and aspect, but now including negation and tense in some languages. Across Bantu, Suffix includes only a marker of imperative plural, although, as the Initial, newly grammaticalised material can become attached here. The other labels are self-explanatory. Sections 4, 5 and 6 below deal with the slots important to the expression of tense and aspect: Initial, T(A) and Final. In nearly all structures of this type, tense is encoded to the left, aspect to the right. Aspectual categories are often more closely linked to the root than tense.

Many Bantu languages also have verb compounds or multi-verb constructions, treated by some analysts as biclausal. In such structures, the first word is usually an inflected auxiliary which is followed by the infinitive of the main verb, as in (2a). However, certain languages also have multi-verb constructions in which the lexical verb is inflected, as in (2b).

(2) a Ngindo P14 (Nurse 2003: 91)
*tu-ø-tenda* *ku-hemer-a*
$SP_{1PL}$-PRS-do $NP_{15}$-buy-INF
'We are buying.'

b Kimbu F24 (Derek Nurse field notes)
*xʊ-xa-lɪ* *xʊ-xʊ-gʊl-a*
$SP_{1PL}$-PER-be $SP_{1PL}$-PROG-buy-FV
'We are still buying.'

Some languages even have verbal compounds that have three words or have been analysed this way, as in (3).

(3) a Hehe G62 (Nurse & Makombe 1979: 117)
*saa* *tu-ø-va* *tu-ø-gus-ile*
FUT (< come?) $SP_{1PL}$-PRS-be $SP_{1PL}$-PRS-buy-PRF
'We will have bought.'

b Sukuma F21 (Nurse 2008: 30)
*d-áá-lí* *dǒ-tạalí* *dó-líí-gól-a*
$SP_{1PL}$-$PST_4$-be $SP_{1PL}$-PER $SP_{1PL}$-PROG-buy-FV
'We were still buying.'

Structures of the three types are common across the Bantu area. In the North-West, there may be a structural spectrum, from languages having the one-word structure just described, through languages where this structure is loosening, to languages where some or all of the pre-stem material is not phonologically bound (Beavon 1991, Ernst 1991). A corollary is that grammaticalised material forms into what is known as serial verbs. Because of this typological discrepancy between a few North-Western languages and the rest, they are sometimes exceptions to the generalisations following. We deal with the widespread rather than the narrow.

Tense, aspect and mood are not the only categories expressed at Initial, T(A), Final and Suffix. Lack of space prevents proper discussion of other categories. Instead we list them and mention works giving an overview, where we are aware of them. The categories are negation, at the Initial and/or Negative slots above, or less commonly via a separate word (Kamba-Muzenga 1981, Güldemann 1996, Devos & van der Auwera 2013); relatives, marked at Initial, Suffix, tonally or via a separate word (Nsuka-Nkutsi 1982); focus and assertion, indicated at Initial, T(A) or tonally (Dalgish 1979, Hyman & Watters 1984, Wald 1997); degrees of certainty in affirmation, marked variously; and conditionals (Saloné 1979, Parker 1991) (see also Section 7).

## 3 HOW TENSE AND ASPECT ARE ENCODED

Most tense and aspect encoding in Bantu languages involves a combination of three main components: inflection of the verb, tone, and the use of verbs additional to and commonly preceding the main lexical verb. These additional verbs occur as auxiliaries in most Bantu languages or as serial verbs in a few North-Western languages.

The simplest *way* of encoding tense and aspect is via a single segmental or tonal marker in a single word. The Venda S21 example in (4) illustrates the segmental approach; the tones here play little role.

(4) Venda S21 (Ziervogel *et al*. 1981)

| | | |
|---|---|---|
| *r-ó-rém-á* | vs. | *ri-<u>d</u>o-rém-á* |
| $SP_{1PL}$-PST-chop-FV | | $SP_{1PL}$-FUT-chop-FV |
| 'We chopped.' | | 'We will chop.' |

Each form in (4) is a word with four morphemes, but only the pre-stem morpheme is significant for AT: *<u>d</u>o* marks future, *o* marks past. Contrary to most Eastern Bantu languages, the fourth morpheme, the FV, plays no role in the marking of AT here. As Swahili G42, Venda has three possible FVs, one associated with general negation, one with subjunctive, leaving *-a* as the default case, associated with any or all tenses and aspects, thus semantically neutral for AT. All AT marking thus occurs at the pre-stem position.

Since Bantu languages typically have tone or pitch-accent, most use tone in a major way in indicating verbal categories. First, lexical stems typically fall into one of a small number of underlying tone classes. Then, on the left of the stem the (tense) marker may carry its own tone, and on the right, the (aspect) Final likewise. Additionally, total verb forms may carry an imposed tonal melody for individual tenses and aspects (cf. Odden & Bickmore 2014). There may also be floating and other kinds of tones, which tend to fuse with the kinds of tones described. Finally, a number of phonetic processes link these underlying tones to each other and to surface realisations, so that underlying and surface

tones are rarely the same. Surface tones normally therefore carry grammatical information. We exemplify only three of the myriad tonal possibilities that result from these variables. The three are Lingala C36d (Dzokanga 1995), Haya JE22 (Muzale 1998) and Koonzime A842 (Beavon 1991).

Lingala has a quite simple tonal system: the surface tones are also the underlying tones. Therefore, the differences between the three forms are the tone differences at Subject and FV.

(5) Lingala C36d (cf. Meeuwis 1995: 100ff)

| *a-pés-aka* | vs. | *a-pés-áká* | vs. | *á-pés-aka* |
|---|---|---|---|---|
| $SP_{3SG}$-give-HAB | | $SP_{3SG}$-give-REM.PST | | $SP_{3SG}$.SBJV-give-INT |
| 'S/he regularly gives.' | | 'S/he gave.' | | '. . . (that) s/he (may) really give.' |

Haya is a restricted tone language. The subject *tu-*, stem *-gur-*, NEG *ti-* and PROG *ni-* are underlyingly L, while FV *-á* is H. There are several possible explanations for the H on *-á*, but the tone of FVs cannot be predicted on general grounds (so other final *-a* in Haya are low). None of the three words has a tense morpheme at T(A), because none is marked for time reference. There is a regular process whereby final H is thrown back to the penultimate before pause. For a more complete analysis of this in Haya, see Hyman and Byarushengo (1984).

(6) Haya JE22 (Nurse 2010)

| [*tu-ø-gúr-a*] /*tu-ø-gur-á*/ | vs. | [*ti-tu-ø-gúr-a*] | vs. | [*ni-tu-ø-gúr-a*] |
|---|---|---|---|---|
| $SP_{1PL}$-PRS-buy-FV | | NEG-$SP_{1PL}$-PRS-buy-FV | | PROG-$SP_{1PL}$-prs-buy-FV |
| 'We buy.' | | 'We don't buy.' | | 'We are buying.' |

Koonzime is more complicated tonally. Its $PST_1$ is only marked tonally and in four places. As analysed by Beavon (1991), *be* 'they,' *fumo* 'build' and *mi-mbɛr* '4-house' in (7) have tones as indicated; the LH on 'house' is realised as rising. PFV *si* is inherently toneless. $PST_1$ is indicated by the four underlying tones, which surface in different ways. The first L fuses with the preceding H, giving H. The second H surfaces on the preceding toneless PFV. The third L appears on the second syllable of the root, while the fourth replaces the following L.

(7) Koonzime A842 (Beavon 1991)

| *be-* | | *si-* | | *fumo* | | # | *mi-* | *mbɛr* |
|---|---|---|---|---|---|---|---|---|
| H | L | H | L | L | H | # | L | LH |
| $SP_2$ | $PST_1$ PFV | $PST_1$ | build | $PST_1$ | $PST_1$ | # | $NP_4$ | house |

'They built houses.'

A common pattern has prefixes and finals combine to show AT. Typically, the pre-stem morpheme(s) mark tense, while the finals indicate aspect, as in the Gikuyu E51 example in (8).

(8) Gikuyu E51 (Johnson 1980)

| *tw-a-hanyok-irɛ* | vs. | *tw-a-hanyok-etɛ* | vs. | *tw-a-hanyok-aga* |
|---|---|---|---|---|
| $SP_{1PL}$-$PST_3$-run-PFV | | $SP_{1PL}$-$PST_3$-run-PRF | | $SP_{1PL}$-$PST_3$-run-IPFV |
| 'We ran.' | | 'We had run.' | | 'We were running.' |

This type of pattern, with its multiplicity of encoded categories and use of post-stem structure, is probably older, while systems such as that of Swahili G42, because of their fewer encoded categories, greater use of auxiliaries and diminished use of post-stem structure, are probably newer.

A major source of innovation is the constant emergence of forms based on auxiliaries or modals and a main verb, either in the infinitive or in an inflected form, as in the Mwera P22 example in (9) (Harries 1950). This is the remotest degree of futurity. A Mwera speaker would have little trouble analysing the form as deriving from *ci-tu-ø-ji-e ku-uma* 'we-will-come to-buy,' by simple deletion of infinitival *ku*. One could easily imagine the next stage to be simplification of the vowel sequence [*ieu*]. The previous two stages are also pretty transparent. All future formation in Mwera involves the subjunctive *-e*: (non-factual) subjunctive was semantically extended to (non-factual) future. Initial *ci-* points to an even earlier stage as it is a grammaticalised form of 'say,' used in all Mwera future tenses and common in the languages of the area (Botne 1998).

(9) Mwera P22 (Harries 1950)
*ci-tu-ji-e-uma*
$FUT_3$-$SP_{1PL}$-come-FUT-buy
'We will buy.' (Far Future)

Another transparent case is the Haya JE22 Present Progressive Negative presented in (10). Stage 1 represents an assumed past stage, where auxiliary and main verb were separate. At Stage 2, they have fused in a form commonly heard today. Stages 3–6, dialectal or personal forms also heard today, derive from Stage 2 by r-deletion, not otherwise a regular Haya feature, and by other tonal and segmental adjustments. The forms with falling tone are still to be analysed as compounds, while those with level H are one word. This kind of grammaticalisation is a constant process. All the languages examined in detail show signs of recent or on-going grammaticalisation.

(10) Haya JE22

| | |
|---|---|
| Stage 1 (historical) | *ti-tú-ri* *ku-gur-a*<br>NEG-$SP_{1PL}$-be $NP_{15}$-buy-INF |
| Stage 2 (today) | *ti-tú-riku-gur-a*<br>NEG-$SP_{1PL}$-PROG-buy<br>'We aren't buying.' |
| Stages 3–6 (today, personal or dialectal) | [*titwíìkugura, titúùkugura, titúúkugura*, *titwííkugura*] |

A possible stage, intermediate between the Eastern/Southern and North-Western patterns, is where successive operations of grammaticalisation result in a complex string of pre-stem morphemes, up to four in number, unlike the more usual single morpheme. This mostly occurs in two geographical areas: one in northeast Tanzania, the other in a few languages on the eastern side of Lake Victoria (JE40).

(11) a Chaga E60 (Vunjo E622C dialect) (Moshi 1994: 142)
*à-lé-màà-èndà-írzérz-a*
$SP_{1SG}$-$PST_2$-PFV(< finish)-IPFV(< go)-speak-FV
'S/he had already spoken.'

b Shambaa G23 (Besha 1989: 64)
*ní-tà-zà-nà-hè-mù-ítáng-à*
$SP_{1SG}$-PRS-ANT-FIRST-WHEN-$OP_1$-call-FV
'I might call her.'

c Gusii JE42 (Whiteley 1960: 37)
*ba-tá-á-kó-raa-ná-gó-sang-er-er-ek-an-a*
$SP_2$-NEG-PST-PROG-SEQ-CNT-PROG-meet-APPL-APPL-STAT-ASSOC-FV
'They should perhaps first meet together.'

This section has outlined five strategies for encoding AT: purely segmental, purely tonal, a combination of segments and tones, the use of two word structures with auxiliaries and a string of morphemes at T(A). For purposes of exposition they have been presented discretely, but in practice a combination of these often carries the grammatical message.

## 4 ASPECT AND TENSE CATEGORIES

The terms tense (abbreviated T) and aspect (A) have been used hitherto without definition. Tense is classically defined as the grammaticalised representation of (that is, verbal inflection for) location in time, and aspect as the representation of the internal temporal constituency of a situation (cf. Comrie 1976). Tense establishes the time framework, and aspect then sets out how the situation is distributed within the time framework.

Aspects can be identified in many Bantu languages by considering the two word structures mentioned in (1) and illustrated in the first example in (2a). The auxiliary verb of such structures may be inflected for several categories, the most prominent being tense. The auxiliary itself carries limited semantic material, its main function being as a placeholder to carry the categories that set the temporal scene. Aspect is marked in the second verb. Since encoded aspects are few, only a few morphemes typically occur in the T(A) position in the second verb. Thus, a good method of identifying aspect is to examine the morphology of the second verb. The first verb is often omitted, leaving only aspect marked on the verb, because the time framework is usually known to the participants in daily discourse.

Affirmative, negative and relative forms are three interlocking dimensions of the same system, but are not necessarily mapped directly on to one another. Affirmatives tend to show the largest set of tense-aspect contrasts. Negatives and relatives usually have a reduced set of contrasts. The theoretical framework underlying Sections 3 and 4 rests on certain assumptions:

(i) AT categories are not just a list to be learnt or memorised. While there are notable exceptions, many treatments of Bantu languages have tended to treat individual AT morphemes as self-standing, which are listed, have labels attached and meanings given, with little or no reference to the other members of the system. Consequently, it is often unrightfully claimed that aspect is hard to distinguish from tense.
(ii) AT categories form an interlocking system, in which most aspects co-occur with most tenses.
(iii) Systems and categories are cognitively based and do not necessarily directly reflect the events or objects of this world. They reflect human organisation and categorisation of these objects and events. These categories have a strong cognitive component,

which is why the categories themselves tend to be relatively stable over time, and tend to re-occur across languages.

(iv) A discrete AT form has a specific and unique range of meaning, different from that of other forms in the language.

(v) A form derives its basic meaning by contrast with other forms within the verbal paradigm. Since each form and meaning is so derived, while there can be some overlap between forms, there is rarely total overlap, because that would make a form redundant. Some Swahili speakers would claim that the verb forms in (12) are always or often semantically identical, as are the ones in (13). There are two possibilities: either the many speakers are wrong, because they have overlooked certain subtle semantic differences which they have trouble articulating, or they are right, in which case one member of each pair can probably look forward to a short life, as language does not usually tolerate absolute redundancy for long, or one member will undergo semantic change.

(12) Swahili G42 (Nurse 2008: 13)

| *tu-na-sem-a* | vs. | *tw-a-sem-a* |
|---|---|---|
| $SP_{1PL}$-PROG-say-FV | | $SP_{1PL}$-PRS-say-FV |
| 'We are talking.' | | 'We talk.' |

(13) Swahili G42 (Nurse 2008: 13)

| *tu-li-ku-w-a* | *tu-ki-zungumz-a* | vs. | *tu-li-ku-w-a* | *tu-na-zungumz-a* |
|---|---|---|---|---|
| $SP_{1PL}$-PST-SM-be-FV | $SP_{1PL}$-SIT-chat-FV | | $SP_{1PL}$-PST-SM-be-FV | $SP_{1PL}$-PROG-chat-FV |
| 'We were chatting.' | | | | |

(vi) The meaning of a form is flexible and can be modified in use and discourse. Therefore, an AT system is not inflexible or unchanging.

(vii) Aspect is more fundamental than tense, which explains the order AT adopted here, rather than the commoner TA. Many languages in the world have aspectual, but no tense, contrasts. Bantu AT systems developed out of early Niger-Congo, for which only aspect is assumed. Every finite verb form has aspect.

(viii) A verb form can have only one tense but more than one aspect. It can have but a single tense, as an event cannot normally take place at two different times. Multiple aspects are possible because an event can be viewed and represented in more than one way simultaneously, as for instance in English 'they might have been eating.' However, verb compounds can encode two tenses, one representing the relationship between speech time and first event time, the second that between first event time and a second event. Views differ on whether such structures should be considered biclausal.

(ix) Regardless of their morphological exponence, tenses and especially aspects have certain common semantic features in most languages. While these may not be quite universal, they are certainly widespread (Comrie 1976, 1985, Dahl 1985, Bybee *et al*. 1994).

Finally, as this is not a theoretical treatise but an account of Bantu, there is a necessary balance between theoretical finesse and making the account accessible to readers. Other theoretical positions are defended in, for instance, Aksenova (1997), Bochnac and

Matthewson (2015), Botne and Kershner (2008), Güldemann (1996, 2003), Hewson (2012, 2016b, 2016a).

## 5 ASPECT

The same few aspect categories occur constantly across Bantu, with relatively little variation, while tenses vary more. Even when their morphological exponents are destroyed or recycled, aspects are often maintained in a new guise.

Six aspects are widespread in Bantu, in the related Niger-Congo languages and worldwide: PERFECTIVE (PFV) (a similar category is also referred to by others as FACTATIVE, PERFORMATIVE, even AORIST, cf. Welmers (1973: 346), Faraclas *et al*. (2007)), contrasting with IMPERFECTIVE (IPFV), PERFECT (PRF, also ANTERIOR or RETROSPECTIVE), PROGRESSIVE (PROG), PERSISTIVE (PER) and HABITUAL (HAB)/ITERATIVE (ITR). The advantage of reducing aspects to a few major categories and labels is that they become more transparent. The disadvantage is that the picture may become oversimplified and ignore other subtleties and less common aspectual categories. Few languages show clear evidence of all six categories together. In (14) and (15), the basic aspects of Basaa A43 and Ndendeule N101, in conjunction with the different tense morphemes with which they can be combined, are illustrated.

(14) Basáa A43 (Nurse 2010)

a PFV

| *a* | *ń-ˈjɛ́* | | *a* | *ń-lɔ* | |
|---|---|---|---|---|---|
| 3SG | PRS-eat | | 3SG | PRS-come | |
| ‘He eats.’ | | | ‘He comes.’ | | |

b IPFV

| *a* | *ḿ-ɓɛl-ɛ́k* |
|---|---|
| 3SG | PRS-plant-IPFV |
| ‘He is/will be planting (today).’ | |

c PRF

| *a* | *má* | *ˈjɛ́* | *a* | *má* | *lɔ* |
|---|---|---|---|---|---|
| 3SG | PRF | eat | 3SG | PRF | come |
| ‘He has already eaten.’ | | | ‘He has already come.’ | | |

d PROG

| *a* | *yé* | *ˈjɛ́* | *a* | *yé* | *lɔ* |
|---|---|---|---|---|---|
| 3SG | PROG | eat | 3SG | PROG | come |
| ‘He is eating.’ | | | ‘He is coming.’ | | |

e HAB

| *a* | *ń-ˈɓɛ́ná* | *ˈjɛ́* |
|---|---|---|
| 3SG | PRS-HAB | eat |
| ‘He often eats.’ | | |

f PER

| *a* | *ngí* | *jɛ̂k* | | *a* | *ngí* | *lɔ̂k* | |
|---|---|---|---|---|---|---|---|
| 3SG | PER | eat | .IPFV | 3SG | PER | come | .IPFV |
| ‘He is still eating.’ | | | | ‘He is still coming.’ | | | |

(15) Ndendeule N101 (Nurse 2010)

a PST-PFV
*ti-aki-telek-a*
$SP_{1PL}$-PST-cook-FV
'We cooked (before today).'

b PRS-PFV
*ti-ø-telek-a*
SP1PL-PRS-cook-FV
'We cook, are cooking.'

c FUT-PFV
*ca-ti-telek-a*
FUT-$SP_{1PL}$-cook-FV
'We will cook.'

d PST-IPFV
*ti-a-hip-á*
$SP_{1PL}$-PST-smoke-IPFV
'We were smoking.'

e PRS-IPFV
*ti-ø-hip-it-á*
$SP_{1PL}$-PRS-smoke-IPFV
'We are smoking.'

f PST-PRF
*ti-a-hik-ite*
$SP_{1PL}$-PST-arrive-PRF
'We had arrived.'

g PRS-PRF
*ti-ø-hip-ite*
$SP_{1PL}$-PRS-smoke-PRF
'We have smoked.'

h PST-HAB
*ti-aki-hipahipa*
$SP_{1PL}$-PST-smoke.HAB
'We used to smoke.'

i PRS-HAB
*ti-ø-hipahipa*
$SP_{1PL}$-PRS-smoke.HAB
'We smoke regularly.'

j FUT-HAB
*ca-ti-hipahipa*
FUT-$SP_{1PL}$-smoke.HAB
'We will smoke regularly.'

PERFECTIVE (PFV) presents an event as an undifferentiated and time-bounded whole without regard to the internal constituency of the event. It takes an exterior view of the event as a whole. It typically answers questions such as "When did you X?," to which the answer could be "We X-ed this morning (yesterday, last week)." The X could take a longer or a shorter time. Thus "wrote" as in "wrote the number 2" or "wrote a long letter" or "wrote a book" refers to time periods of different lengths, but presents the writing as a single past act. Dahl (1985) lists questions that typically produce PFV responses along with questions that produce other kinds of responses. Although PFV can have future reference, they more often co-occur with past, because past events are better known and more easily defined than future ones. All languages examined had PFV forms, often restricted to past. They are typically expressed by one-word forms, inflected at T(A). Every language in the Nurse (2008) database is analysed as having a PFV.

By contrast, IMPERFECTIVE (IPFV) has to do with the internal constituency of events. IPFV verbs usually represent events characterising a longer period, so they are not punctual. They often represent backgrounded events for events foregrounded by the use of PFV. IPFV is used in two senses, to contrast with PFV or to represent an unbounded situation that lasts over a period of time. A typical imperfective represents a situation as part complete, part incomplete. Some languages have a single category to express imperfectivity. Others have an IPFV coordinate with PROG, HAB, PER and others. Yet others have no single imperfective category but only distinct categories to represent PROG and HAB, and sometimes CONTINUOUS and PER. All languages examined had an imperfective in one or other of these senses. The available

data sometimes gets in the way of a clear analysis of individual languages. Often we had to rely on data which is not exemplified but merely translated (often inadequately) into English or other languages. For instance, in several cases, a single form might be translated as 'we were buying,' which could be progressive or imperfective, and also as habitual 'we used to buy' – is it progressive, imperfective, habitual or do the terms need revising? Similarly, some writers have several "present tenses," which all translate as English 'we buy, we are buying,' none really a present or a tense. While most languages have some overlapping forms, three or four semantically identical "presents" is implausible. Given this, it is currently impossible to state IPFV categories common to all Bantu languages with certainty. The best that is possible is describing common situations. All the languages examined have a contrast between a PFV and at least one IPFV category in Comrie's sense. As illustrated in (16), the PFV is unmarked or morphologically simpler than the IPFV. Thus:

(16) PFV vs. IPFV in number of Bantu languages

a Kako A93 (Ernst 1991)

| *á-tă-kwá* (PFV) | *á-tă-bé* | *ké-kwà* (IPFV) |
|---|---|---|
| $SP_1$-FUT-leave | $SP_1$-FUT-be | PROG-come |
| 'She will leave.' | 'She will be leaving/is about to leave.' | |

b Punu B43 (Jean Blanchon, personal communication)

| *á-tsí-lá:mb-ə̀* (PFV) | *à-lá:mb-ə̀* | *à-tsì-là:mb-a:ng-ə̀* (IPFV) |
|---|---|---|
| $SP_1$-PST-cook-FV | $SP_1$-cook-FV | |
| 'She cooked.' | 'She was cooking.' | |

c Leke C14 (Vanhoudt 1987)

| *bá-támbuz-í* (PFV) | *bá-bé-ak-í* | *mô-támbud-é* (PFV) |
|---|---|---|
| $SP_2$-walk-$PST_1$ | $SP_2$-be-IPFV-$PST_1$ | PROG-walk-FV |
| 'They walked.' | 'They were walking.' | |

d Lega D25 (Meeussen 1971)

| *tu-ka-bulut-a* (PFV) | *tu-ka-bulut-ag-a* (IPFV) |
|---|---|
| $SP_{1PL}$-FUT-pull-FV | $sp_{1pl}$-fut-pull-ipfv-fv |
| 'We will pull.' | 'We will be pulling, pull regularly.' |

e Rangi F33 (Oliver Stegen personal communication)

| *tw-a:-sék-iré* (PFV) | *kʊ-séka* | *tw-á-rɪ* (IPFV) |
|---|---|---|
| $SP_{1PL}$-PST-laugh-PFV | $NP_{15}$-laugh-INF | $SP_{1PL}$-PST-be |
| 'We laughed.' | | 'We were laughing.' |
| | *tw-á:-rɪ* | *tw-á-sék-a* |
| | $SP_{1PL}$-PST-be | $SP_{1PL}$-PST-laugh-FV |

f Pogoro G51 (Nurse 2010)

| *tu-sek-iti* (PFV) | *tu-wer-iti* | *tu-anku-sek-a* (IPFV) |
|---|---|---|
| $SP_{1PL}$-laugh-PFV | $SP_{1PL}$-be-PFV | $SP_{1PL}$-PROG-laugh-FV |
| 'We laughed.' | | 'We were laughing.' |

g Nyakyusa M31

| *a-tʊ-kʊ-ʊla* (PFV) | *a-tʊ-kʊ-j-a* | *pa-ku-ʊla* (IPFV) |
|---|---|---|
| FUT-$SP_{1PL}$-$NP_{15}$-buy | FUT-$SP_{1PL}$-$NP_{15}$-come-FV | $NP_{16}$-$NP_{15}$-buy-INF |
| 'We will buy.' | | 'We will be buying.' |

As the data in (16) suggests, IPFV may be expressed by inflection, usually at Final, or by using auxiliaries (tones not marked where not reliably known). The suffix *-a*(*n*)*g-* is often

associated with IPFV. A pre-stem zero form, unmarked for aspect or tense, and suggesting that an action characterises a huge, unspecified period, occurs in many languages. It is used when the distinction between IPFV, PROG or HAB is not important, relevant or known. All database languages have an IPFV.

PRF denotes a situation that started in the past but continues into the present, or the continuing present relevance of a previous situation. It focuses on the result phase, subsequent to the situation. In Bajuni G41, for instance, the PRF marker is *-ndo-*, e.g., *i-ndo-vunda* 'it is rotten' (*-vunda* is a stative verb) vs. *Masudi ndo-andoka* 'Masudi has gone out' (*-andoka* is a dynamic verb). 80% of the languages examined seem to have a PRF. This figure should be treated with care, partly because it is not always possible to distinguish PRF and (near) past. PRF is primarily expressed by reflexes of the Proto-Bantu final **-ide*, i.e., *-ile, -ele, -ire, -ie*, etc. (cf. Bastin 1983), which suggests this is a category with a long Bantu history. From the definition and the facts it becomes clear that PRF easily shades over into stative or past (in French up to the late 18th century 'I saw' was rendered by *je vis* PST, today replaced in speech by *j'ai vu* PRF). It becomes past by loosening, and then losing, the requirement that it have present relevance. Our analysis suggests that since the kinds of past event that have present relevance are often recent events, PRF first becomes near or middle past, then perhaps associated with all pasts. Many languages have reflexes of **-ide* associated with some form of past. On the other hand, it can become purely stative by losing the requirement that some past event have led to the present state. There are fewer examples of languages that have gone or are going in this direction and there is then a possibility that it will become completely associated with a small set of stative verbs, such as 'lie,' 'sleep,' 'sit,' 'be,' 'stand' and 'know,' and be no longer productive, as in Shona S10, Yeyi R41 and some Chaga E60 varieties. Our data suggests that where **-ide* has been replaced as a marker of PRF, it is most often by grammaticalised forms of verbs meaning 'finish.'

PROG is a focused imperfective, which narrows attention to the temporal space around the time of reference or speaking, and for a short preceding period, so contrasting with general IPFV. As such, it is incompatible with stative verbs, whose emphasis is permanent state, e.g., *I am knowing that 2 + 2 = 4. The class of stative verbs has a fairly common core across languages, but there is some cross-linguistic variation. As noted above, PROG is often hard to distinguish in the available data from similar categories, such as CONTINUOUS. Whereas in English 'we were fishing' is both PROG ('. . . when you saw us') and CONTINUOUS ('. . . all week'), many Bantu languages may contrast these two, so when the data source gives a single translation into English, without context, it is impossible to know which category is intended. So, although we cannot state with certainty that all Bantu languages have this category, it appears to be very common. 63% of the database languages were analysed as having a PROG. It is so often and widely renewed that it is hard to say whether older Bantu might have expressed it by a single inflected form. Nowadays it is mainly expressed by grammaticalised forms that visibly derive from 'be' or 'have' plus locative or verbal noun ('be in, be at, be with, have, etc.') (cf. Bastin 1989a, Heine *et al*. 1993). In most cases LOC and INF (verbal noun) are represented by *ku-*. Proto-Bantu had a class 15, mostly the INF, marked by *ku-*, and a class 17, marked by *ku-*. In most languages, the two are segmentally, and in most instances tonally, identical. It is therefore likely that in many languages in the database both could be labelled identically. Grammaticalisation theory suggests that most are in fact LOC (Heine *et al*. 1993). Note what is called the INF in English has the shape *to X* (*to go*), where *to* is a LOC. Bantu has several verbs that translate 'be' and the one that figures most often in PROG is the one that indicates temporary being

(*-li, -ri*): 'be in/at a particular place' becomes 'be at a particular time or in a particular situation (or both).' So present PROG forms that involve *-li*/*-ri* 'be' plus *-ku-*/*-i-* 'verbal noun,' often with an overt locative, are common.

(17) Lwena K14 (Yukawa 1987a)

a *ngu-li* (*na*) *ku-tángis-a*
$SP_{1SG}$-be (with) $NP_{15}$-teach-INF
'I am (with) teaching.'

b *ngu-ná-p-ú* (*na*) *ku-tángis-a*
$SP_{1SG}$-PST-be-PST (with) $NP_{15}$-teach-INF
'I was (with) teaching.'

(18) Luba L33 (Beckett 1951)
*ngi-di* *mu-ku-dim-a*
$SP_{1SG}$-be $NP_{18}$-$NP_{15}$-cultivate-INF
'I am (in) cultivating.'

(19) Umbundu R11 (Schadeberg 1990)

a *ha-ví-lí* *l*(*a*) *ó-ku-kolà*
NEG-$SP_{8}$-be with AUG-$NP_{15}$-grow-INF
'They are not growing.'

b *ó-kasí* *l*(*a*) *ó-ku-yw-á*
$SP_{1}$-be with AUG-$NP_{15}$-bathe-INF
'She is bathing.'

c *nd-a-kála* *l*(*a*) *ó-ku-túng-a*
$SP_{1SG}$-PST-be with AUG-$NP_{15}$-build-INF
'I was building.'

PERSISTIVE (PER), occurring in at least 50% of the core languages, affirms that a situation has held continuously since an explicit or implicit point in the past up to the time of speaking ('be still Xing'). SITUATIVE (SIT), occurring only in 11% of the core languages and only in Eastern Bantu, suggests that a situation is open-ended and could continue for a long time. Mentioned in Doke (1935), it was taken up again of late in Hewson (2007). PER and SIT are discussed in Nurse (2008: 145–149) and PER also in Nurse (2003: 99).

HABITUAL (HAB) also occurs widely, i.e., in 43% of the database languages. It represents a situation "characteristic of an extended period of time, so extended that the situation is viewed as a characteristic feature of a whole period" (Comrie 1976: 27). We consider ITERATIVE (ITR) here as representing a situation that is repeated, an incomplete series of complete events. This definition differs from that of authors such as Bybee *et al*. (1994: 160) and Bhat (1999: 53ff) who reserve ITR for mono-occasional repetition in contrast to repetition that happened on different occasions signaled by categories like the FREQUENTATIVE and/or HAB. While the distinction between HAB and ITR is easy enough to grasp objectively, in practice it is less clear. Some sources describe as ITR situations that others label HAB. Here we use the single label HAB, but readers should keep in mind that this may include ITR. It is very often associated with reflexes of **-a*(*n*)*g-* after the root. If limited in time reference, it is mostly to past or timeless situations, for pragmatic reasons. HAB

can merge semantically with other types of HAB, apparently the common cause for its disappearance.

(20) Mbala H41 (Ndolo 1972)

| *ga-loomb-aang-a* | *ga-gu-loomb-aang-a* |
|---|---|
| $SP_1$-request-HAB-PST | $SP_1$-HOD.PST-request-HAB-FV |
| 'She used to request.' | 'She used to request (recently).' |

Keeping in mind the caveats mentioned, aspects in the 100 core languages are distributed as follows: PFV 100%, PRF 83%, PROG 63%, IPFV 60%, PER 50%, HAB 43%.

## 6 TENSE

Tenses locate a situation in time relative to a reference point, which is most often – but not always – the present or time of speech. Since tenses reflect not the world but our categorisation of the world, different languages may divide the timeline up differently, resulting in a different number of tenses. In principle, a timeline can be cut at many points. Many Bantu languages – but notably not some of the widely used ones such as Swahili G42 or Shona S10 – are known for their multiple time divisions, leading analysts to comment that Bantu had the richest set of contrasts in their sample. Numbers of tense contrasts in the 100 core languages are as shown in (21).

(21)

| No. tenses | No. languages with _____ pasts | No. languages with _____ futures | No. languages where total pasts = total futures |
|---|---|---|---|
| 0 | 0 | 9 | 0 |
| 1 | 17 | 47 | 15 |
| 2 | 41 | 25 | 17 |
| 3 | 31 | 16 | 9 |
| 4 | 10 | 1 | 1 |
| 5 | 1 | 2 | 0 |

These figures should be seen as grossly and not absolutely accurate, because of uncertainty in the analysis of some languages. Since such languages are few, the overall picture is clear enough and can be taken as being typical of Bantu. It can also be seen that this table makes no mention of "present tenses." When grammars claim that a language has several presents, that is, several identical ways of referring to the same fleeting moment, we have to be sceptical. In our experience, these "presents" are usually aspects, that is, they are different representations of the time within the event. Often forms referring to "present" are not marked for time, or only minimally. Why mark for time what is obvious to the participants? Present is the default case after past and future.

Future is problematic in a different way. Past time and past tenses are generally easier to characterise than non-pasts. Because the future hasn't happened yet, and especially if it is only a short distance away, it can be an extension of the "present" and thus often represented by PROG or HAB. This is a natural semantic extension of "present." Such forms have not been counted as discrete futures in what follows. Such extensions of the present are often coeval with formally discrete near futures, differing only by factors such as degree of certainty or firmness of intent, or not at all. Firmness of intent and degree of certainty

often appear in characterisations of futures. Some languages are even described as having, for instance, a near future, a far future and an uncertain future. Just because future is not only concerned with stating firm facts, it relies quite heavily on the use of modal or volitional verbs, on auxiliary verbs, of which "come" and "go" are the commonest in our sample, and on the subjunctive. Future reference is more often renewed than past, and the morphemes involved range along the grammaticalisation path from full auxiliary to post-subject inflectional morpheme with classic CV shape. Younger and older speakers of the same language sometimes differ in their choice of future alternatives.

Moreover, it should be recognised with Botne (2012: 541–542) that "[a]lthough the hodiernal/hesternal or hodiernal/prehodiernal divisions (or their future equivalents) appear to be robust crosslinguistically, perhaps even prevalent [. . .], there is evidence to suggest that this is not always the correct characterisation of the distinction. Rather, a more appropriate characterisation in many cases may be one of currently relevant [. . .] versus adjoining time units" and that "remoteness needs to be conceptualised not only in terms of prehodiernal intervals and Currently Relevant vs. Adjoining time units, but also in terms of separate, dissociated worlds or domains (Botne & Kershner 2008)" (Botne 2012: 548). In certain languages, remoteness distinctions such as hodiernal and hesternal, although used in grammars, are to be considered as secondary interpretations rather than fundamental TA categories.

With these caveats in mind, certain generalisations are possible about the data. With few exceptions, nearly all Bantu languages examined have either one, two, three or four past tenses. Those with two (41%) and three (31%) are the most numerous, followed by those with one (17%) and finally with four (10%). Multiple pasts are normal, whereas multiple futures are much less common, so it can be said that most Bantu languages have multiple past tenses, whereas under half (44%) have multiple futures. In those with three, near past normally refers to the events of today, i.e., "hodiernal," starting this morning (it is our impression that most "Bantu" days start at sunrise but this needs wider study); middle past refers either just to the events of yesterday, i.e., "hesternal," or yesterday and some few days before; and far past to events prior to those of the middle past. In languages with four pasts, the fourth most often refers to events that occurred immediately before the time of speaking/present. In those with two pasts, the near past refers either to the events of today, or today and yesterday, with the further past referring to prior events. In languages with one past, reference to recent events is also often made via the PRF. For examples of languages with two, three and four pasts, see the sketches of Rwanda JD61, Ganda JE15 and Bemba M42, respectively, in Nurse (2010). For a single past, see (4) above.

With few exceptions, all languages had one, two or three discrete future tenses. Those with one (47%) and two (25%) are the largest groups, followed by those with three (16%). With a doubtful exception (Mwera P22), the number of futures never exceeded that of pasts. General temporal divisions ("hodiernal," "crastinal") mirror those of the past, except that the semantic extension of the "present" often overlaps with the nearest future. Swahili G42, Zulu S42, Mande A46, for which see Nurse (2010), and Logooli JE41 in (22) exemplify languages with one, two, three and four futures, respectively.

(22) Logooli JE41 (Lwane 1976, Nurse 2003: 101–102)

| a | *kɔ-ra-gɔr-a* | b | *na-kɔ-gɔr-ɪ* |
|---|---|---|---|
| | $SP_{1PL}$-FUT-buy-FV | | FUT-$SP_{1PL}$-buy-SBJV |
| | 'We will buy.' (Near Future) | | 'We will buy.' (Middle Future) |

c *kʊ-rika-gʊr-a*
SP$_{1PL}$-FUT-buy-FV
'We will buy.' (Far Future)

d *kʊ-rɪ-gʊr-a*
SP$_{1PL}$-FUT-buy-FV
'We will buy.' (Uncertain future)

The exceptions to the statement that most languages have between one and four discrete pasts are Mwiini G412 (Somali coast), Ilwana F22G (northeast Kenya), Comorian G44, some languages in the North-East and some Zone S (southern Africa) languages. The first three have collapsed PRF and PST and use the former PST final to encode the combined single category. In the first two this seems to have come about under heavy influence from neighbouring Cushitic communities. It would be interesting to see similar cases from other parts of the Bantu area. The exceptions to the claim about the number of futures are some G30 languages from Tanzania, plus Yeyi R41, which have a single non-past category.

Widespread inherited markers of past outnumber those of future, although whether this reflects the original situation or results from the frequent renewal of future markers is unclear. For past reference, most languages surveyed had reflexes of *-a*(*a*)-, *-ile*, and *-ka-*, in that order of frequency. *-a*(*a*)- is so written because both long and short forms occur, often tonally contrastive, semantically different, and sometimes in languages which have otherwise neutralised the inherited vowel length distinction. This merits further examination. The Final *-ile* probably originally represented PRF but has become a past, or the past, marker in a significant number of languages (cf. Botne 2010, Crane 2012).

It may surprise readers that so many Bantu languages have multiple past reference, yet apparently involving so few morphemes. Any overview of Bantu tense and aspect encoding would conclude that there is in fact no contradiction. With two or three pre-stem morphemes, two Finals (*-ile*, neutral *-a*), two contrastive tones and occasional new grammaticalised morphemes, multiple tense contrasts can be achieved. The overall data strongly suggests constant flux, and constant systemic and semantic permutation.

Although *-laa-* and *-ka-* seem to be inherited markers of futurity, both appear to be geographically limited, especially *-laa-*, which occurs only in eastern Africa, although a morpheme with similar meaning and shape occurs in some Grassfields Bantu. The constant renewal of future reference via grammaticalisation should be kept in mind here. Reflexes of the former subjunctive *-e* occur in most contemporary languages and are often associated in some way with future reference (cf. Section 7). A zero pre-stem marker is the commonest indicator of 'present'/non-past/IPFV.

The literature does not much discuss whether time reference is flexible or fixed. Since neither our own data nor that in the source grammars is complete on this issue, we rely on impression rather than hard figures. The impression is based on detailed examination of a few languages, on discussions with speakers of some of those languages, and on a visible discrepancy between analytical statements and actual textual use in some descriptions. While some representations of time are quite concrete ("We saw him on January 23 at 2pm"), many are not. Some variability is factual. Thus, if your language has three pasts and you refer to something you do several times a day, every day, the three pasts will be as described above (today: yesterday and maybe a few days earlier: prior to that). But if you refer to planting, which in large parts of Africa occurs annually, then the near past can refer to the most recent planting, which could be several months earlier, the middle past to last year's planting, the far past to planting seasons before that. If you refer to acts of God, or the origins of your ethnic group, far past would have a different referent again. Some variability can also be subjective, in how the speaker sees or represents the facts. Events

can be moved nearer or further using appropriate tenses (cf. Besha 1989: 288–300). It is our impression that this flexibility of reference occurs widely across Bantu.

Another category, probably best regarded as a tense and widespread in Bantu is the CONSECUTIVE (CONS). It is not discussed here, but treated in Nurse (2003: 101–102) and Nurse (2008: 120–123).

## 7 MOOD AND MODALITY

Mood and modality have not been the most popular topics in Bantu studies. Doke (1935: 146–147) identifies eight moods: imperative, infinitive, indicative, subjunctive, participial, potential, conditional and contingent. This classificatory system has been applied in many descriptive grammars of zone S Bantu languages (cf. also Güldemann 1997: 78), languages which have seen the highest number of studies dedicated to mood so far (e.g., Fourie 1989, Louwrens 1990, Crane 2009), although zone J languages are gaining ground (e.g., Bostoen *et al*. 2012, Mberamihigo 2012, Kawalya *et al*. 2014, Mberamihigo 2014, Mberamihigo *et al*. 2016). Doke (1935: 146) defines "modal" as well, but it refers to a very broad category including aspect. Following Meinhof (1906: 61), he characterises verbal suffixes as being "modal" in contrast to prefixes which are temporal. The idea that modality is mainly marked through suffixes, and especially the subjunctive final vowel *-e*, is prevalent within Bantu literature (cf. Nurse 2003: 91, Nurse *et al*. 2010). Such is the case in broader typological studies on mood and modality where Bantu languages are typically classified with languages like Spanish that are well known for their indicative/subjunctive system, and not with languages like English known for their modal auxiliaries (Palmer 2001: 107–108, de Haan 2006: 33).

We adopt here a definition of mood and modality which allows for the inclusion of at least some of the moods traditionally distinguished in Bantu grammars, but which also includes modal notions that were hardly investigated in Bantu studies until very recently. Following Hengeveld (2004: 1190), we define mood as the grammatical expression of a large semantic area that can be subdivided in illocution and modality. Illocution is concerned with types of speech act and modality refers to expressions that can be characterised in terms of possibility and necessity. For the definition and delimitation of the category of modality, we mainly follow van der Auwera and Plungian (1998).

Cross-linguistically modal meanings tend to be expressed by a wide range of morphological, syntactic and lexical categories (de Haan 2006: 32–41 and confirmed by Schicho (1995: 127) for Swahili G42). For reasons of space, this section focuses on verbal forms dedicated to the expression of different types of illocution and modality.

### 7.1 Illocution

Under illocution, we subsume optatives and directive speech acts, i.e., second-person imperatives, cohortatives, jussives and prohibitives. We do not include interrogatives here as they tend to be expressed by question words, particles or intonation and not by verbal elements. The above illocutionary use categories are typically expressed by only two form categories: the Imperative and the Subjunctive. As stated in the above, we cannot consider the full range of expressions of modality. Non-verbal means of conveying illocution and modality, like the optative conjunctive in (23), are therefore not discussed below. Similarly, the use of dedicated TA-markers for illocutionary purposes, like the

directive use of the future tense in (24), though interesting, also goes beyond the scope of this overview chapter.

(23) Zulu S42 (Doke & Vilakazi 1948: 5, Fourie 1989: 53)
*akwaba* *i-zulu* *li-zo-dum-a*
would.that $NP_5$-weather $SP_5$-FUT-thunder-FV
'One could wish that it would thunder.'

(24) Swahili G42 (Schicho 1995: 155)
*kesho* *u-ta-andik-a* *sentensi* *n-zima* *kwa* *u-fasaha,*
tomorrow $SP_{2SG}$-FUT-write-FV $NP_{10}$.sentence $NP_{10}$-wholefor $NP_{11}$-correct
*mara* *kumi.* *U-na-elew-a?*
$NP_{10}$.time ten $SP_{2SG}$-PRS-understand-FV
'Write the whole sentence correctly ten times by tomorrow. Do you understand?'

Both the Imperative and the Subjunctive are widely attested in Bantu languages. What is more, PB reconstructions have been suggested for them (Meeussen 1962, 1969, 2014). The Bantu Imperative consists of the verbal base with a final suffix *-a*. As reconstructed by Meeussen (1962: 74, 1967: 112, 2014: 35), the verb root has its own lexical tone and the final suffix has a high tone, while the extensions have a polar tone, i.e., a tone opposite to the verb root's lexical tone. North-Binja D24 has retained this tonal pattern.

(25) North-Binja D24 (Meeussen 1962: 70, 2014: 31)
*lindík-á* 'arrange!' *sɨ́ndik-á* 'push!'

Devos and Van Olmen (2013: 10) show that 97 out of a sample of 100 Bantu languages, an adapted version of Nurse's 2008 sample, use the morphologically specialised Imperative for the singular. Plural Imperatives typically include a plural addressee suffix, which is reconstructed as **Vni* for PB and possibly derives from a second person plural pronoun (Van de Velde & van der Auwera 2010: 137).

(26) Orungu B11b (Ambouroue 2007: 244)
*ɣòl-à-ánì* 'buy (pl.)!'

The Imperative is thus a well-established and stable verb form throughout Bantu. However, it may be modified, i.e., reinforced or mitigated, a processes called "illocutionary modification" by Hengeveld (2004: 1192). In some exceptional cases, the modified forms are neutralised and become the regular Imperative form; for a preliminary overview, see Devos and Van Olmen (2013: 10–15). Imperative forms which obligatorily include a reflex of the imperfective extension **-ag-*/**-ang-* are cases in point. Meeussen (1962: 70, 2014: 30–31) identifies three such languages, one of which is Kele C55 as shown in (27).

(27) Kele C55 (Carrington 1943: 205)
*kel-áká* 'do!'

Interestingly, an origin in a more polite and a more emphatic Imperative are equally conceivable. In the first scenario, the development goes from a plural addressee marker,

through an honorific/politeness marker to an imperative marker (Van de Velde & van der Auwera 2010: 135–136, Devos & Van Olmen 2013: 10–13). In the second scenario, an originally more emphatic form linked to the intensive or imperfective sense of the pluractional neutralises to become the regular Imperative (Van de Velde & van der Auwera 2010: 136, footnote 19).

The reconstructed Proto-Bantu Subjunctive has a high-toned subject marker and a final high tone suffix *-é* while all syllables in between are low (Meeussen 1962: 74, 1967: 112, 2014: 35). Lega D25 has retained this tonal pattern.

(28) Lega D25 (Meeussen 1962: 60, 2014: 20)
*túbulúté* 'Let's pull.' *túkụbulé* 'Let's pour.'

All languages in the Devos and Van Olmen (2013) sample have a form that can be considered a Subjunctive. It is important to note that the final suffix *-e* is not a sufficient characteristic of Bantu Subjunctives. First, most languages in Zone B, many in Zone A, and several in Zone C, D and H do not have the Subjunctive final suffix *-e*. They do have forms with final *-a*, which are reminiscent of Subjunctives in *-e* from a tonal and functional perspective (Nurse & Philippson 2006: 179). Next, a final suffix *-e* does not automatically imply a Subjunctive form (Güldemann 1996: 153–158, Van de Velde & van der Auwera 2010: 134).

Apart from expressing the wish of the speaker as an optative, as in (29), the Subjunctive is often described as a polite equivalent of the Imperative (see also Nurse 2008: 28).

(29) Shangaji P312

| *t'* | *ii-fíy-e* | *y-iíta* | *ki-ń-ráfun-e* | *manttúwi* | *ń-wiíxi* |
|---|---|---|---|---|---|
| COP | $SP_9$-arrive-SBJV | $NP_9$-rain.season | $SP_{1SG}$-$OP_1$-chew-SBJV | $NP_{1A}$.peanut | $NP_1$-raw |

'May the end of the rainy season arrive, so I can eat raw peanuts.'

However, it also stands in a double complementary distribution with the Imperative. First, it fills the gaps in the "imperative/hortative paradigm" (Xrakovskij 2001). Whereas the morphologically specialised Imperative is dedicated to the expression of second person imperatives, the Subjunctive is used for cohortatives (28) and jussives (30). In addition, the negative Subjunctive serves as a prohibitive in many languages (31).

(30) Swahili G42 (Sacleux 1909: 238)

| *haya!* | *ni-anz-e* | *kazi* | *y-angu* | *sasa* |
|---|---|---|---|---|
| come.on | $SP_{1SG}$-begin-SBJV | work | $PP_9$-$POSS_{1SG}$ | now |

'Come on! Let me start my work now!'

(31) Shambaa G23 (Besha 1989: 71)
*ú-she-dik-é*
$SP_{2SG}$-NEG-cook-SBJV
'Do not cook!'

Second, the Subjunctive very frequently serves as an "unmarked" second person imperative in the case of plural directives and, especially, directives with object prefixes. As is argued in Devos and Van Olmen (2013: 17–22), its use in the latter context is probably at the origin of hybrid subjunctive-imperative forms, like the one in (32), which has the Subjunctive

final suffix *-e*, but lacks a subject prefix, as is typical for the Imperative. In Subiya K42, the hybrid form ended up replacing the deeply entrenched Bantu Imperative (33).

(32) Ha JD66 (Harjula 2004: 88–89)
*mu-bwiir-e*
$OP_1$-tell-SBJV
'Tell him!'

(33) Subiya K42 (Nurse 2010)
*nyw-ĕ* *menzi*
drink-SBJV $NP_6$.water
'Drink water!'

Although many Bantu languages thus make use of two forms for a series of speech acts, some have a more differentiated set of illocutionary forms. Lega D25 with separate "Hortative" and "Optative" forms is a case in point (34).

(34) Lega D25 (Botne 2003: 443–444)

| | | | |
|---|---|---|---|
| a | *kangúl-á* | *ị-swá* | 'Clear the field!' [Imperative] |
| | clear-IMP | $NP_5$-field | |
| b | *tú-kangul-é* | *ị-swá* | 'Let's clear the field!' [Subjunctive] |
| | $SP_{1PL}$-clear-SBJV | $NP_5$-field | |
| c | *tw-a-kangul-a* | *ị-swá* | 'We should clear the field!' [Hortative] |
| | $SP_{1PL}$-FUT-clear-FV | $NP_5$-field | |
| d | *tw-a-nŭ-kangul-ag-a* | *ị-swá* | 'If only we could clear the field!' [Optative] |
| | $SP_{1PL}$-REM.PST-SEQ-clear-FV | $NP_5$-field | |

Likewise, many Bantu languages express prohibition through a form different from the negative Subjunctive. Devos and Van Olmen (2013: 24–43) show that 29 languages of their sample make use of the negative Subjunctive, either exclusively or along with other strategies, for the expression of prohibition. The other strategies include – in order of decreasing frequency – periphrastic constructions, dedicated prohibitive markers, negative infinitives, negative indicatives and negative imperatives.

### 7.2 Modality

Following van der Auwera and Plungian (1998), we explain modality as the expression of possibility and necessity in four domains: 1) participant-internal (or dynamic) modality, 2) participant-external modality, 3) deontic modality and 4) epistemic modality. Illustrations of all types are given in (35) to (42). Category 3 is seen as subset of category 2 by van der Auwera and Plungian (1998).

(35) Eton A71 (Van de Velde 2008: 341)

| | | | | |
|---|---|---|---|---|
| *à-nè* | *kwàm* | *d-âm* | *lé-sê* | |
| $SP_1$-can(<exist) | INF.do | $NP_5$-thing | $PP_5$-every | |

'He's capable of everything.' (participant-internal possibility)

(36) Changana S53 (E. Nhampoca personal communication)
*ndzi-síndzís-ék-á* *ku-y-a* *mahósí* *svósvi*
$SP_{1SG}$-force-STAT-PRS $NP_{15}$-go-INF behind now
'I need to go to the toilet now.' (participant-internal necessity)

(37) Rundi JD62 (Bostoen *et al*. 2012: 16)
*n-ra-shóbor-a* *ku-siinziir-a* *ha-ri-hó* *i-ki-tănda*
$SP_{1SG}$-PRS.DJ-can-FV $NP_{15}$-sleep-FV $SP_{16}$-be-$LOC_{16}$ $AUG_7$-$NP_7$-bed
'I can sleep (because) there is a bed.' (non-deontic participant-external possibility)

(38) Shangaji P312 (M. Devos field notes)
*oóntú* *oówél-el-e* *ma-xaála* *ee-vulúw-á*
$DEM_1$ $SP_1$.climb-APPL-PFV $NP_6$-unripe.coconut $SP_1$.SUBS-fall-FV
*m-mú-náazi* *e-n-ón-á* *o-m-óóngolééla*
$NP_{18}$-$NP_3$-coconut.tree $SP_9$-PRS-must(<see)-FV $NP_{15}$-$OP_1$-massage-INF
*n'* *o-ń-khánttel-a-khánttéela*
and $NP_{15}$-$OP_1$-rub-INF-RED
'This one climbed after young coconuts and fell out of the coconut tree. S/He has to be massaged and rubbed with oil.' (non-deontic participant-external necessity)

(39) Zulu S42 (Poulos & Msimang 1998: 284)
*u-nga-ngen-a*
$SP_{2SG}$-POT-enter-FV
'You may enter.' (deontic possibility)

(40) Ngoni N12 (Ngonyani 2013: 7)
*n-dut-e*
$SP_{1SG}$-go-SBJV
'I should go.' (deontic necessity)

(41) Fuliiru JD63 (Van Otterloo 2011: 258)
*à-àngà-b-à* *y-é-w-à-yàbíír-á* *yìzó* *fwárángà*
$SP_1$-POT-be-FV $PP_1$-FOC-$SP_1$-$PST_1$-take-FV $DEM_{10}$ money
'He might be the one who took that money.' (epistemic possibility)

(42) Mongo C61 (Hulstaert 1965: 370)
*b-ĭfo-tsingol-a* *ɔlɔ́kɔ*
$SP_2$-must-explain-FV tomorrow
'They will certainly explain tomorrow.' (epistemic necessity)

In the remainder of this section we look at inflected verb forms, as in (39)-(41), and auxiliary constructions, as in (35), (37), (38) and (42), expressing modal notions. For reasons of space, we do not discuss other means of expressing modality, as there are modal adverbs, such as *ngirango* 'maybe' in (43), the modal use of derivational affixes, such as neuter *-ik-* in (44), and modal lexical verbs, such as *-sindziseka* 'be necessary, need' in (35). In Changana S53, more or less the same meaning can be expressed by at least two other lexical modal verbs, i.e., *-kombela* 'ask, beg, be necessary' and *-fanela* 'be appropriate, be necessary.' For an inventory and discussion of lexical modal

verbs in Rundi JD62 and Swahili G42, see Mberamihigo (2014) and Schicho (1995: 140–146) respectively.

(43) Rundi JD62 (Mberamihigo *et al*. 2016: 252)
*tweebwé* *tu-ri* *a-ba-áarimú* *tu-ø-ígiish-a* *mu*
we $SP_{1PL}$-be $AUG_2$-$NP_2$-professor $SP_{1PL}$-PRS-teach-IPFV $LOC_{18}$
*i-ø-shuúre* *ø-kaminúuza* *i* *Bujuumbura*
$AUG_5$-$NP_5$.school $NP_9$.university $LOC_{19}$ Bujumbura
*ngirango* *mu-ra-mar-ye* *ku-ha-úmv-a*
maybe $SP_{2PL}$-DJ-finish-PFV $NP_{15}$-$OP_{16}$-hear-INF
'We, we are professors, we teach at the University of Bujumbura, maybe you have already heard about it.' (epistemic possibility)

(44) Swahili G42 (Seidl & Dimitriadis 2003: 254, cited in Dom 2014)
*ki-tanda* *hiki* *ki-na-lal-ik-a* *vizuri*
$NP_7$-bed $DEM_7$ $SP_7$-PRS-sleep-NEUT-FV well
'This bed sleeps well.' (participant-internal possibility)

### *7.2.1 Modality through verbal inflection*

For reasons of space, we only discuss the most recurrent affirmative inflections here. As suggested by the examples in (35)–(42), the Subjunctive and the Potential/Conditional, including a reflex of **ngá*, labelled 'potential' by Guthrie (1971: 145) and 'conditional' by Meeussen (1967: 109), are the most recurrent inflectional means of expressing modality in Bantu languages. The Subjunctive is widespread in Bantu and, as mentioned before, has been reconstructed for Proto-Bantu. Still, as far as we know, there is no comparative study of its meaning and use throughout the Bantu domain. It is generally accepted that the Subjunctive has subordinate as well as main clause uses. It is not clear, however, whether it is in origin a subordinate tense which acquired independent uses through "insubordination" (cf. Evans 2007) or whether it started out as a kind of optative which developed harmonic subordinate uses. In grammars of individual languages, one either gets a list of different uses or a rather vague encompassing description often including a reference to "non-factuality." Some efforts have been made to arrive at a coherent description of the Subjunctive in individual languages. Givón (1971, 1994), referring mainly to Bemba M42, argues that the Subjunctive is a dependent tense dedicated to the expression of "coercion." Ngonyani (2013) claims that the Subjunctive in Kisi G67, Ndendeule N101 and Ngoni N12 relates non-facts expressed through deontic modality (weaker manipulation) and epistemic possibility. Leonard (1980) identifies "high likelihood of occurrence" as the unitary meaning of the Subjunctive in Swahili G42. It is our impression that the Subjunctive is mainly used for the expression of participant-external necessity implying weaker, often subjective, obligation, as in (38). Examples of Subjunctives relating permissive meanings, i.e., participant-external possibility, are mainly found in questions, as in (45).

(45) Shangaji P312 (M. Devos field notes)
*ki-viír-e* *n-nyúumpa* *ttíimpho*
$SP_{1SG}$-pass-SBJV $NP_{18}$-$NP_9$.house EMPH.$DEM_{18}$
'May I enter into the house itself?'

The expression of epistemic possibility through the use of a Subjunctive, as reported by Ngonyani (2013), appears to be rare. He describes the use of a Subjunctive after an adverb expressing 'maybe, probably' in Ndendeule N101, but in Swahili G42, for example, the adverb *huenda* 'maybe' is not followed by an affirmative Subjunctive (Devos & de Schryver 2013).

(46) Ndendeule N101 (Ngonyani 2013: 11)
*pangi* *a-hik-e*
probably $SP_1$-arrive-SBJV
'Perchance she/he might come.'

(47) Swahili G42 (Devos & de Schryver 2013)
*huenda* *ma-tatizo* *y-ao* *ya-ta-pungua* *a-ki-anza* *ku-pata* *m-shahara*
maybe $NP_6$-problem $PP_6$-$POSS_2$ $SP_6$-FUT-diminish $SP_1$-sit-begin $NP_{15}$-get $NP_3$-wages
'Maybe their problems will grow less once he starts to earn wages.'

Non-modal extensions according to the model of van der Auwera and Plungian (1998) occur in several languages. The best-known one is the future. Typically, it is not the Subjunctive final alone but rather the combination with future T(A) markers which expresses the future meaning. Different types of future, including Near Futures, as in (48), Remote Futures, as in (9) and Imminent futures, as in (49), can take final *-e*. Modal overtones are obvious with uncertain Near Futures of Great Lakes Bantu languages (Nurse & Muzale 1999: 528–530) and with Remote Futures which refer to events that will take place at an imprecise future time. A modal sense is less clear with Imminent Futures.

(48) Ruri JE253 (Nurse & Muzale 1999: 530)
*ci-la-gur-e*
$SP_{1PL}$-FUT-buy-SBJV
'We will buy (near future, not certain).'

(49) Kaonde L42 (Foster 1960: 32)
*ke* *tú-j-e*
IMM $SP_{1PL}$-come-SBJV
'We are about to eat.'

Subjunctives are also recurrently attested in the protasis of conditional clauses, be they what Timberlake (2007: 322) calls "general," as in (50), "potential," as in (51), or "counterfactual," as in (52). In Lingala C36d, the suffix *-aka* is an alternative for the suffix *-a* of the Subjunctive mostly denoting speaker's insistence. In the protasis of counterfactual conditional sentences, it appears to be the preferred alternative (Meeuwis 2010: 118, 189).

(50) Sukuma F21 (Batibo 1985: 275)
*a-laa-bok-ag-e* *w-aa-gw-á*
$SP_1$-FUT-get.up-IPFV-SBJV $SP_1$-PST-fall-FV
'Each time he got up, he fell.'

(51) Totela K41 (Crane 2011: 333)
*ési* *tù-ly-é* *àhúlù,* *tù-lékùt-à*
if SP$_{1PL}$-eat-SBJV a.lot SP$_{1PL}$-NONCMPL.become.full-FV
'If we eat a lot, we('ll) get full.'

(52) Lingala C36d (Meeuwis 2010: 189)
*sóki* *ná-kéb-aka* *té* *ndé* *na-síl-ís-áki* *mbóngo* *nyónso*
if SP$_{1SG}$.SBJV-beware-FV NEG so SP$_{1SG}$-end-CAUS-PST$_1$ money all
'If I hadn't been careful, I would have lost all my money.'

Another non-modal extension is the use of the Subjunctive in utterances expressing that something is expected to happen, but has not for the moment. In Nkoya L62, for example, *shíloló* followed by the Negative Subjunctive expresses 'not yet.'

(53) Nkoya L62 (Yukawa 1987b: 154)
*shíloló* *ni-ta-lŭsh-e*
yet SP$_{1SG}$-NEG-explain-SBJV
'I have not explained yet.'

So far, the feature linking the illocutionary (cf. Section 7.1), modal and extra-modal uses of the Subjunctive quite straightforwardly is that they all refer to events that are not realised yet, which brings to mind the notion of "irrealis." However, other more factual extra-modal uses are attested as well. The Subjunctive, or at least the subjunctive final, can mark Narratives, as in (54), Past Imperfectives, as in (55) and subordinate clauses of anterior or simultaneous taxis, as in (56).

(54) Bena G63 (Morrison 2011: 278)
*a-gon-ág*e
SP$_1$-sleep-NARR
'Then s/he slept.'

(55) Ndengeleko P11 (Ström 2013: 256)
*aándík-age* *balua*
SP$_1$.write-PST.IPFV NP$_{10}$.letter
'He was writing letters.'

(56) Makwe G402 (Devos 2008b: 337–338)
*n-ní-uúm-a* *panda* *ti-ka-úum-e* *panda* *ti-ní-wíin-a*
SP$_{1SG}$-PFV-leave-DJ NP$_{16}$.out SP$_{1PL}$-CONS-leave-SBJV NP$_{16}$.out SP$_{1PL}$-PFV-dance-dj
'I went outside. . . . When going outside/having gone outside, we danced.'

Güldemann (1996: 154–158), examining the latter use in some M60 languages, argues convincingly that not the subjunctive final but rather an anterior final *-e* is involved, such as the second part of the Perfective final **-ide* (Voeltz 1980) or the so-called deverbative nominal suffix *-e* (Bastin 1989b). The use of the Subjunctive after *tangu* 'since' in Swahili (G42) might be another case in point, e.g., *tangu nifike* 'since I arrived.' Miehe

(1979: 191–192) suggests that rather than a Subjunctive, a remnant of an Old Perfect is involved. Still, more detailed investigations are definitely needed, seeing that the phenomenon is not restricted to M60 languages. More examples are found in Mongo C61 (Hulstaert 1965: 701–702), Kagulu G12 (Petzell 2008: 115) and Kaonde L42 (Wright 2007: 34). Exactly the same tail-head sequence, as in (56), is in other eastern Bantu languages marked by the "narrative/imperfective" (cf. Nurse & Hinnebusch 1993: 365) marker *-ka-* and a final *-a*. Fuliiru JD63 is a case in point (Van Otterloo 2011: 230). An affinity between narrative and subjunctive tenses has been recognised in the literature; see, for example, Carlson (1992) for a number of African languages and Leonard (1980) and Seidel (2008: 326–328) for Swahili G42 and Yeyi R41 respectively. Further in-depth research and cross-linguistic comparisons will make clear whether and how all these uses are connected and whether a vague term like "irrealis" could be significant for Bantu (Bybee *et al*. 1994: 236–240, van der Auwera & Schalley 2004: 92–93, de Haan 2006: 41–45).

The Potential/Conditional is less widespread than the Subjunctive. It occurs in 29% of the core languages (Nurse 2008: 251). Nurse and Philippson (2006: 193–194) and Nurse (2008: 251–252) argue that the conditional and potential meanings are transparently derived from a particle *nga* expressing 'like, as' for which they propose a grammaticalisation path going from a particle to a clitic, to a prefix, and eventually to a T(A) marker. Whether all these stages are necessary or whether these represent all the necessary stages is as yet unclear. Moreover, a number of north-western Bantu languages have *-nga-* forms with past or future meanings, as in Ewondo A72 *mə-ngá-dí* ($SP_{1SG}$-$PST_3$-eat) 'I ate' (Nurse 2010), but these forms might be unrelated (Nurse 2008: 252, footnote 240). Northern Swahili dialects show interesting variation with regard to *nga*. It can be used as a particle (57a), as a defective verb (57b-c), as a concessive marker (57d) and as a marker of epistemic possibility and necessity with the copula *-li* (57e-f). The latter use possibly gave rise to its use in counterfactual conditional clauses marked by *-ngali-* (57g).

(57) Swahili G42 (Sacleux 1939: 677, Miehe 1979: 238–247)

| | | |
|---|---|---|
| a | *si kwamba nga maskini* | 'It is not as if they were poor.' |
| b | *ni-nga watu sao* | 'I resemble those people.' |
| c | *a-ki-nga mwenye wazimu* | 'He was like a maniac.' |
| d | *ni-nga-w-a na nyingi thweka* | 'Although I had many burdens. . .' |
| e | *n-na-zani a-nga-li nyumba-ni* | 'I think he is at home.' |
| f | *a-nga-li m-zima* | 'He must be well.' |
| g | *u-ngali-ku-dy-a dyana u-ngali-m-kut-a* | 'If you would have come yesterday, you would have met him' |

Both the desyntactisation of *nga* and its concomitant semantic evolution thus need further investigation. When used as a T(A) marker *nga* can express possibility in all four modal domains. Examples of deontic and epistemic possibility have been presented in (39) and (41) respectively. The remaining types are shown in (58) and (59). The Potential/Conditional is also attested in the protasis of conditional clauses with or without a conditional conjunction (60). In languages such as Kuria JE43, Zulu S42 and Northern Sotho S32, the Potential/Conditional is used to express all the modal meanings as well as the conditional meaning. For other languages only the modal, only the conditional or a

combination of some modal meanings and the conditional have been reported. In Venda S21, where *nga-* may convey participant-internal possibility (58), this meaning is preferably expressed through the use of the auxiliary *-kon-* 'be able to' (Poulos 1990: 277). The apparent loss of ground of the Potential in favour of auxiliary constructions for the expression of participant-internal possibility is attested in several zone S Bantu languages.

(58) Venda S21 (Poulos 1990: 277)
*a-nga-bambel-a* *naa?*
$SP_1$-POT-swim-FV inter
Can he swim? (participant-internal possibility)

(59) Safwa M25 (Voorhoeve n.d.: 45)
*ba-ga-hw-iíb-il-a* *pásiku*
$SP_2$-POT-$OP_{2SG}$-steal-appl-FV at.night
'They can steal from you at night.' [non-deontic participant-external possibility]

(60) Kagulu G12 (Petzell 2008: 115)
*u-ng'hej-a* *ko-ni-fik-a*
$SP_{2SG}$-COND.come-FV $SP_{2SG}$.FUT-$OP_{1SG}$-find-FV
'If you come, you will find me.'

More research is needed to establish whether this variation in meaning and use reflects a cross-linguistically well-attested evolution from a modal marker of possibility to a conditional marker (van der Auwera & Plungian 1998: 91–93). Exactly this path is hypothesised for the potential/conditional marker *-oo-* in Rundi JD62, whose etymology is still unknown and whose distribution is restricted to a couple of very closely related languages (Mberamihigo 2014: 197–261). However, Kawalya *et al*. (2018) claim a reverse pathway for the Ganda JE15 verbal prefix *-andi-* which they consider to be an "irrealis" marker. It would have been primarily a conditional marker that only subsequently developed different modal meanings.

### *7.2.2 Modal auxiliary constructions*

In line with Anderson (2006: 5), we define modal auxiliaries as elements "that in combination with a lexical verb form a mono-clausal verb phrase with some degree of (lexical) semantic bleaching that performs" a modal function. In his list of common source-target semantics, Anderson (2011: 51–52) only provides one modal auxiliary derived from a source meaning 'come.' Nevertheless, grammars of Bantu languages make clear that auxiliaries play an important role in the expression of modality. In the examples (35)–(42), four out of the eight modal types involve the use of modal auxiliaries. What is more, modal auxiliaries can convey the other types as well, as shown in (61)–(64). Whenever an auxiliary has a known lexical meaning, we add the lexical semantics to the grammatical gloss. The etymology of Kongo ya Leta H10A *lenda* in (62) is not straightforward, but this auxiliary is widespread withing the Kikongo Language Cluster (see for instance Dom 2013: 47, 82, 96, De Kind 2014: 97, De Kind *et al*. 2015: 147). Bentley (1887: 694) translates *-lenda* as 'to possess, to have power' and reports it as used for the expression of participant-internal and possibly also deontic possibility.

(61) Shangaji P312 (Devos 2008a: 19)
*ki-ná* *y'* *oo-ráfúun-a*
$SP_{1SG}$-need(<have) $CONN_9$ $NP_{15}$-chew-INF
'I need to eat.' (participant-internal necessity)

(62) Kongo ya Leta H10A (Fehderau 1962: 86)
*yandi* *lenda* (*ku*)-*sal-a* *sesepi*
he can ($NP_{15}$)-work-FV now
'He may work now.' (deontic possibility)

(63) Saamia JE34 (Botne *et al*. 2006: 62)
*o-xóy-eré* *o-many'-é* *óó-ler-á* *ó-mw-ana*
$SP_{2SG}$-ought-PFV $SP_{2SG}$-know-SBJV $NP_{15}$-raise-FV $AUG_1$-$NP_1$-child
'You ought to know to take care for a child.' (deontic necessity)

(64) Kanyok L32 (Mukash Kalel 1982: 287)
*w-aa-zàb* *w-àà-tùm*
$SP_{2SG}$-CONS-might(<play) $SP_1$-CONS-send
'He might send.' (epistemic possibility)

Grammars often give very little information on the etymology of the auxiliary, the modal domains covered by it and the possible extra-modal uses. Recently, innovative research has been carried out on auxiliaries in Rundi JD62 and Ganda JE15, identifying all modal and non-modal uses of a given auxiliary through corpus-driven research and tracing the semantic evolution with the help of a diachronic corpus. The auxiliary *-shobor-* in (37) is a case in point. It is used in Rundi JD62 for the expression of possibility in the whole modal domain (Bostoen *et al*. 2012, Mberamihigo 2014: 80–92). The modal uses of the cognate form *-sóból-* in Ganda JE15 are less diversified, covering mainly participant-internal and external possibility. The diachronic corpus analysis suggests an increasing "subjectification" in the use of the auxiliary *-sóból-* with the participant-external meanings gaining ground over time on the lexical and participant-internal meanings (Kawalya *et al*. 2014). Following Traugott (2003), subjectification refers to an increasing tendency to express the speaker's subjective perspective on the situation.

### 7.3 Summary

In Section 7 we have tried to give a more diversified picture of mood and modality in Bantu languages. The Imperative and the Subjunctive are the main grammatical means of expressing basic illocutions. The Subjunctive is also involved in the expression of modality but covers only a limited range of modal meanings mostly centered on participant-external and deontic modality. The Potential/Conditional is known to express possibility in all four modal domains and modal auxiliaries do not only fill the remaining gaps but may denote any modal type. Many lacunae in our knowledge of these means of expressing illocution and modality have been indicated in the main text and call for further dedicated research.

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