

AFFIX *KI* IN OLD KANEMBU VERBS: A BACKGROUNDING PROGRESSIVE-COMPLETIVE CATEGORY

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Abstract: Old Kanembu has an aspectual category that derives from imperfective stems by the affix *ki*. The *ki*-forms occur in conflicting aspectual domains, the main semantic discrepancy being between progressive and completive readings. The progressive-completive is a rare, but not non-existent category in world languages, and Old Kanembu seems to be one such language. Completive events presuppose a phase of duration prior to the phase of completion. The selection of the aspectual phases in a given *ki*-form is determined by aspectual lexical semantic as well as by pragmatic and discourse factors of the situations described in Old Kanembu texts. The main unifying semantic and pragmatic property of various occurrences of *ki*-forms can be described as liminal process which establishes background for the following (foregrounded) event.

Key words: Old Kanembu, aspect, progressive-completive, information structure, backgrounding, relevance, historical pragmatics.

1. Introduction

This study is a sequel to my previous article in “Language in Africa” on foregrounding categories of past and future tenses in Old Kanembu (Bondarev 2020). The foreground tenses are kind of mirror categories of the background aspectual category discussed here. Old Kanembu is an extinct Saharan language which survives in annotations to the Qur’anic manuscripts of the 17th to 18th century produced in the Borno sultanate, what is now northeast Nigeria and southeast Niger. Interlinear and marginal translations of the Qur’an into Old Kanembu (henceforth

OKb) pay close attention to the discourse semantics of described events, and as a result, selection of specific verb categories is controlled by pragmatic factors.

The affix *ki* is ubiquitous in finite and non-finite verb forms and can often be confused with two homophonous (homographic) nonrelated morphemes, namely the past tense *kV* and applicative *kV* (*V* = vowel). A further complication arises from the occurrence of this morpheme in conflicting, seemingly mutually exclusive, aspectual domains. The major semantic discrepancy is between progressive and completive readings, although “progressive-completive” is not an unknown category in world languages (Bickmore 2007: 403, 404 on Cilungu; Decker 2013: 80 on Belize Kriol).

Completives are typically aligned with the anterior (perfect) and perfective senses (“the first family” of grammatical tense-aspect categories, in Croft’s (2012: 169–170) terms, referring to the sets of aspectual senses in Bybee et al. 1994), whereas progressives are part of the imperfective sets of senses including present and habitual (“the second tense-aspect family”). However, the two aspectual families are usually considered connected through the category of perfect which has “the continuous relevance of a previous situation” (Comrie 1981: 56).

That the item *ki* occurs in seemingly conflicting aspectual situations may suggest that *ki* represents two different homophonous morphemes, one being progressive and the other completive. However, drawing on my current understanding of OKb data and typological affinity between imperfective/progressive and completive aspects (Frawley 1992: 301; Croft 2012: 107–108) I suggest a uniform analysis of this ambiguous element and treat it as one and the same operator cumulatively encoding both aspectual meanings.

The main unifying semantic property of various occurrences of *ki*-forms can be described as *liminal process which establishes a background or precondition for the following (foregrounded) event*. As Croft (2012: 108) argues “Completive and Terminative constructions require the event to be durative, that is, they specify that there is a phase other than the rest phase prior to the profiled completion or termination

[of] transition phase”. Transitory/temporary (contingent) phases of events and processes are typically encoded by progressive operators (Comrie 1981; Frawley 1992: 314; Plungian 2003: 300; Timberlake 2007: 289; Croft 2012: 100) and thus both aspectual readings naturally match as two phases of the same situation seen from ‘inside’ (unlike imperfective and perfective which construe events as external units) and so one aspectual profile presupposes the other. Importantly, and in line with the backgrounding semantics encoded by the *ki*-forms in OKb, both progressive and completive have “the effect of backgrounding the event in expectation of a more salient event to follow” (Pennington 2012: 5 on the completive and progressive in Ma Manda; also see Frawley 1992: 297, 301). Which of the two phases of “aspectual contour” (Croft 2012) is selected (or “profiled”) in a given context of OKb texts seems to be conditioned by various Aktionsart / lexical semantic, pragmatic and discourse factors.¹

2. Preliminaries on aspectual, pragmatic and syntactic properties of *ki*

Some of the uses of the *ki*-forms describe continuous non habitual situations seen as temporary (contingent).² As cross-linguistically typical for the progressive, the *ki*-forms “provide a background frame for other predicates that report significant change in the world” (Timberlake 2007: 288). Although under a general definition of progressiveness as “the combination of progressive meaning and non-stative meaning” (Comrie 1981: 35), the progressive does not naturally apply to the verbs with stative semantics, languages nevertheless differ in the degree

¹ Interesting parallel is attested in Bantu languages where the verbal prefix *ki* (a chance resemblance, no doubt!) has persistent and simultaneous taxis semantics and (specific to language) may also have progressive, precedence and conditional readings (Güldemann 1998: 162–166).

² Cf. Comrie’s (1981: 38) definitions for English progressive that has a tendency to indicate contingent situations.

of the non-stative uses of stative verbs (Comrie 1981: 35–39). As demonstrated below, the OKb *ki*-category operates on both dynamic and stative predicates. In line with Comrie’s analysis (Comrie 1981: 37), when OKb stative verbs occur in *ki*-forms they refer to temporary states as opposed to permanent states.

Cross-linguistically, some stative verbs are less compatible with progressive reading, as, for example, *know*. In OKb, the verb (*n*)*dug* ‘know’ occurs in *ki*-forms, suggesting a progressive-completive construal specific to this language. Under various approaches to the analysis of aspect, the verb ‘know’ is usually analysed as being an inceptive state (Bickel 1997; Johanson 1996; Croft 2012: 38), an aspectual type that have initial boundary (phase) followed by a state. This easily lends to completive meaning but is not natural with progressive meaning. However, aspectual lexical and grammatical operators may coerce a predicate into various aspectual types, usually contingent on the aspectual potential of the predicate but often typologically unpredictable.³ English progressive *-ing*, for example, has a wide semantic scope (Comrie 1981) but does not naturally occur with stative predicates; nonetheless some progressive uses do include stative verbs (*live*, *stand*) and also can expand the scope of the progressive to render *emotive* (affective) meaning (*see*) (Comrie 1981: 37). A similar pragmatic function of emotive emphasis is attested in the *ki*-forms of the OKb verb (*n*)*dug* ‘know’, as discussed below with examples (9) and (12).

Another function of *ki* that does not contradict its progressive-completive semantics is *relevance*, as defined by Croft (2012: 143) for pluperfect and experiential perfect: “the prior occurrence of an event is relevant to the current... situation”. This function is used to relate the encoded event to a foregrounded situation and bring the event “up to a current level of relevance in the memory of the speaker and has/ obtains relevance for the moment of speech” (Eads & Persson 2013:

³ Cf. Plungian (2004: 395) on impossibility of unified description of Russian aspect or Croft (2012: 84ff) on polysemy, derivation and vagueness as three extremes but still insufficient approaches to unified analysis of aspect.

363; also cf. Souag's (2013: 198) interpretation of some usages of the perfect marker *-a* in Berber as having *relevance* meaning).

The *ki*-forms predominantly occur in dependent syntactic environment, such as adverbial locative and temporal constructions, complement clauses and relative clauses as subjects of be(come)-constructions or in the main clauses but also encoded as locative constructions. One of the frequent occurrences of the *ki*-forms is in adverbial clauses encoded as locative constructions, which is another common crosslinguistic feature of progressive aspect (Comrie 1981: 99–103; Croft 2012).

3. *ki* in finite forms

I will now turn to examples to demonstrate a range of aspectual semantics expressed by the morpheme *ki*, providing arguments for its progressive/completive interpretation in the backgrounded events. This section deals with the finite verbal forms, in which person and number are indexed in the inflectional forms. In finite forms, the morpheme *ki* is usually attached to the imperfective stems which are characterised by reduced vowels in the inflectional slot and a non-productive affix *s** (the asterisk after *s* designates this morpheme's non-productive nature). The vowel segment of the morpheme *ki* is either encoded as <i> or <ɪ> (unclear condition) and the consonant segment *k* is sometimes written as <g>. In 3rd person forms, the agreement marker *s* is usually deleted (as is the case with any tense and derivational affixes in OKb). The same (repetitive) Qur'anic phrases can be translated either by the *ki*-forms or by the OKb imperfective. This covariance with imperfective forms offers a three-way analysis of *ki*, as follows: (a) *ki*-forms are interchangeable with the progressive/simultaneous reading of the imperfective; (b) *ki* adds a completive phase to the progressive situation, and (c) it adds an emotive/affected meaning to the same progressive semantics ('to be in *persistent* state or to be *indeed* in a certain state or to persistently do something). Cases with (a) are instructive for the analysis of *ki* as operating only on imperfective and

thus having natural potential for progressive. Cases with (b) are instructive for progressive-completive interpretation of *ki*, and (c) for the uses of *ki* conditioned by pragmatics and discourse.

The examples below show progressive/simultaneous uses of both *s**-imperfective forms (1) and *ki*-forms (2), suggesting that such uses are interchangeable.⁴

(1) *s*-imperfective* (1YM/2: 110, etc.; used for translation of Arabic imperfective)

<i>agō</i>	<i>nadiyi</i>	<i>s-dī=ka</i>
thing	2PL.SBJ	<i>s*</i> -do.2PL.IPFV=IO

‘(Allah sees) what you are doing.’

(2) *ki-form*

2ShK 2: 144. (Ar. IPFV)

<i>tandi</i>	<i>ki-s-a-di-yi=kan</i>
3PL	<i>ki-s*/s-3PL-do-IPFV=ABL</i>

‘(God is not unaware) of what they are doing.’

Note that in (2), as with all 3rd person forms, the segment <-s-> is ambiguous and can either be analysed as the non-productive *s** or 3rd person agreement marker *s*. But since *ki* usually deletes the 3rd subject marker *s* in most of the forms, it is more likely that such <ki-s> sequences in 3rd person forms represent the frozen *s**, which occurs sporadically.

3.1. *ki* in main clauses

Although most uses of the *ki*-forms occur in dependent syntactic environment, there are rare occurrences of the *ki*-form corresponding

⁴ Since *ki* has progressive semantics, its interchangeability with the imperfective in translation of the Qur’anic sentences which express God’s consistent awareness of human activity also suggests that the scribes interpreted such sentences in progressive sense, i.e. God being simultaneous observer of what humans do.

to the main clause in Arabic (3). The verb ‘teach’ (a causative of ‘know’) appears in locative construction marked by locative *nn* (variant spelling *nin* or *n*).

(3) (1YM/3: 48) (Ar. IPFV) “He will teach him the Book and wisdom, the Tora and the Gospel” (Abdel Haleem 2005: 38).

<i>tīka</i>	<i>ki-s-ātūdūy=nin</i>	<i>kitābn</i>	<i>ki-s-ātūdūy=nn</i>
3SG.DO	<i>ki-s*/s-teach.3SG=LOC</i>	book.and	<i>ki-s*/s-teach.3SG=LOC</i>
<i>ḥikman</i>	<i>ki-s-ātūdūy=nn</i>	<i>tawrēn</i>	<i>lānjīlnn</i>
wisdom.and	<i>ki-s*/s-teach.3SG-LOC</i>	Tora.and	Gospel.and

‘He will (be) teach(ing) him the Book, the wisdom, the Tora and the Gospel.’

The context of this Qur’anic passage seems to justify a progressive-completive reading of the *ki*-form. The predicate ‘teach’ is construed as a process ‘teaching’ which leads to the completion phase ‘get someone know something’ (“incremental accomplishment” in Croft (2012: 62)’s terms) and both phases are important profiles of the depicted situation. Thus, the angels first tell Mary that God will teach Jesus those scriptures (i.e. process: knowledge will incrementally be acquired) and then (in Q.3: 50) Jesus will confirm the truth of the Torah (i.e. result: knowledge acquired) to the Children of Israel.

3.2. Main clause of reported speech

The examples of the uses of *ki* with the verbs ‘believe’ and ‘plot’ may also be treated as occurrences in the main clause. Although the clauses are complements of speech verbs of reported speech constructions, they are expressed as direct reported speech. As the examples below demonstrate, the marker *ki* indicates prior events and it combines with both activity predicate (‘plot’) and (transitory) state predicate (‘believe’). If with ‘plot’ the situation seems to no longer hold, ‘believe’ (in this context) presupposes that the state still holds at the moment of Pharaoh’s speech. However, both situations share the property of relevance of the

prior event to the current situation (the Pharaoh's speech).⁵ As a result of the magicians having believed in Moses' God, Pharaoh accuses them of the supposed plotting to drive out the people (of authority) and threatens the magicians by punishment. Thus, believing and plotting constitute a combined prior event that presupposes (provides the ground for/result in) an event that follows (punishment).

The uses of *ki* in this context is not conditioned by syntax and/or temporal adverb 'before'. This is evident from non-*ki* forms that frequently occur with the adverbial construction 'before' (e.g. with perfective in 1YM/10: 91, 1YM/12: 76, past in 1YM/22: 42 and future in 1YM/4: 159). This supports the suggested analysis that this category has an aspectual potential wider than just 'the prior occurrence of the event'. Otherwise, the adverb 'before' would have been a default environment for *ki*.⁶

To demonstrate a consistent correspondence of the *ki*-forms (in boldface) to the mentioned prior states/events, the examples below are given in full context of the OKb comments on two ayas that describe the same situation in varying details. In (4a) both 'believe' and 'plot' are mentioned, and in (4b) 'believe' is expressed in the imperfective to convey the magicians' proclamation of faith and the *ki*-form to refer to the fact that this act of believing occurred before Pharaoh's granting it.

(4) a. (1YM/7: 123) (Ar. PFV) "... but Pharaoh said, 'How dare you **believe** in Him **before** I have given you permission? This is a plot you have **hatched** to drive the people out of the city!'" (Abdel Haleem 2005: 102).

<i>fīrʕawānyī</i>	<i>kūrajādīyī</i>	<i>guljī</i> ,		
Pharaoh.SBJ	ruler.3pl.SBJ	say.3SG.PFV		
<i>nadīyī</i>	<i>ki-z-rāyu=rē</i>	<i>jī</i>	<i>guljī</i> ,	
2PL.SBJ	<i>ki-s*-believe.2PL.IPFV=TAG</i>	say.3SG.CNV	say.3SG.PFV	

⁵ Cf. Croft's terminology (2012: 143).

⁶ Cf. progressive in the Middle English both with process and stative predicates 'believe' (Croft 2012: 88, citing Ziegler 1999: 78–79).

tī mūsaka nadī=ro jazrēyu=ka amartbi kmbrbun,
 3SG Moses.DO 2pl=IO believe.2PL.IMP=DO order.GEN before.LOC
ʔatt gbē jī guljī,
 this.DET plot say.3SG.CNV say.3SG.PFV
nadīyi tika gbē-ki-nyu jī guljī,
 2PL.SBJ 3SG.DO plot-ki-2PL.IPFV say.3SG.CNV say.3SG.PFV
madīnagin gbē-ki-niyu jī guljī,
 city.INE plot-ki-2PL.IPFV say.3SG.CNV say.3SG.PFV
nadīyi danī ʔitulūgiyu=ro tikan yālji=ka
 2PL.SBJ so.that drive.out.2PL.IPFV=SBJV it.ABL people.3SG=DO
 ‘The Pharaoh, their ruler, said, ‘You believed?’, he said, ‘in Moses, before (receiving) the order: ‘Believe!’ This is a plot’, he said, ‘you were plotting it’, he said, ‘you were plotting it in the city’, he said, ‘so that you could later drive its (of the city) families out’’.

b. (1YM/26: 46–49) “...and the sorcerers fell down on their knees, exclaiming, ‘We believe in the Lord of the World, the Lord of Moses and Aaron.’ Pharaoh said, ‘How dare **you believe** in him **before** I have given you permission?’” (Abdel Haleem 2005: 233).

nābi mūsabi nābi harūnabi kmāgka yazrayye
 prophet Moses.GEN prophet Aaron.GEN lord.DO believe.1PL.IPFV
ʔa firʕawānye guljī, nadīyi ki-zrāyu=rē
 say.3PL.CNV Pharaoh.SBJ say.3SG.PFV 2PL.SBJ ki-believe.2PL.IPFV=TAG
jī tī nābi mūsaka nadīro amāribi kmbrbun
 say.3SG.CNV 3SG prophet Moses.DO 2PL.IO order.GEN before.LOC
 ‘They were saying, ‘we believe in the Lord of prophets Moses and Aaron’; Pharaoh said, ‘You believed?’, he said, ‘in Moses, before the order (was given) to you?’

3.3. *ki*-forms of *gul* ‘say’

One of the most frequent occurrences of *ki* in the manuscripts is with the speech verb *gul* ‘say’. Almost all such occurrences are in temporal adverbial clauses which in turn function as direct complements of

predicates with the meaning ‘remember’ (that is, ‘remember when’). Such uses may correspond to Arabic imperfective and perfective forms which either emphasise a simultaneous meaning of the act of speaking (in case of imperfective) or a completion of a speaking-event prior to a following situation (which may be expressed overtly or referred to covertly/elliptically). Both perfective and imperfective uses of Arabic speech verbs, introduced by the Qur’anic phrase ‘(remember) when’, set up background for a more salient (foregrounded) situation. Thus, all uses of ‘say/speak’ encoded by *ki*-forms of OKb *gul* ‘say’ (‘remember when you were saying’) can be construed as progressive-completive describing the act of speaking as transitory process (uttering phrases) upon completion of which a new situation is introduced into the discourse. Examples (5)–(6) profile some of these uses of the verb *gul* ‘say’ and provide a comparative context for aspectual difference between *ki*-forms and past tense forms. In both examples (5) and (6), the OKb glosses give translation of the same Arabic phrase *wa ið qulnā* ‘and (remember) when we said’ with the Arabic verb in perfective form. The OKb phrase in (5) has a *ki*-form of the verb *gul* ‘say’ whereas the phrase in (6) does not exhibit the *ki* morpheme. The main difference between the two events described by the same Arabic phrase ‘when we said’ is that of anterior and posterior semantics. Thus, the speech event in (5) establishes a background for the salient part of the discourse (disobedience of the wrongdoers) and so the speech is a precondition for what follows it. In (6), the speech event is a result of the act of Moses’s prayer and thus is construed as a posterior foregrounding event. This analysis is further corroborated by the use of the *ki*-form of the OKb verb ‘to pray’ in the same (6) where the act of prayer provides a background for this micro ground-figure situation (a prayer and response to it).

(5) (1YM/2: 58) (Ar. PFV) Context: “Remember **when We said**, ‘Enter this town and eat freely there as you will, but enter its gate humbly and say, “Relieve us!” Then We shall forgive you your sins and increase the rewards of those who do good.’ [2: 59] But the wrongdoers

substituted a different word from the one they had been given. So, because they persistently disobeyed, We sent a plague down from the heavens upon the wrongdoers.” (Abdel Haleem 2005: 8–9)

<i>krge</i>	<i>atro</i>	<i>tamōgō</i>
town	DEM.IO	enter.2PL.IMP
<i>niyēh</i>	<i>gul-kī-n-īyē=ka</i>	<i>uḏkurū</i>
say.1PL.CNV	say-ki-AUX-1PL=DO	remember.2SG.IMP(Ar.)

‘Remember (when) we said, ‘Enter this town!’

(6) (1YM/2: 60) (Ar. PFV) Context: “Remember **when Moses prayed** for water for his people and **We said to him**, ‘Strike the rock with your staff.’ Twelve springs gushed out, and each group knew its drinking place...” (Abdel Haleem 2005: 9)

<i>kasti</i>	<i>jam-ki-n=ka</i>	<i>uḏkurū</i>
prayer	say.prayer-ki-3SG.IPFV=DO	remember.2SG.IMP (Ar.)

gul-l-īyyē
say-PST-.2SG.IMP (Ar.)

‘Remember (when) Moses was praying... We said...’

3.4. Other verbs in adverbial constructions of clausal complements of ‘remember’

The other verbs occurring in the adverbial constructions of the complement clauses of the predicate ‘remember’ also exhibit the same tendency to appear in *ki*-forms. But as with the verb *gul* ‘say’, there is variation in selection of aspect/tense categories. However, it seems that the *ki*-forms are preferred for the predicates describing the situations that serve as important reference points for all subsequent events, points against which the more recent situations are judged.

For example, the verbs ‘take’ and ‘do’ occur in *ki*-form in 1YM/33:7-8, but all the verbs that describe the events in the following part of the Qur’anic narrative are in past forms (33: 9–10). The events expressed in the past tense all describe a chain of situations that occur sequentially one after another during a single event of a siege of Medina

(armies approaching and attacking the city, the believers expressing doubts of God's protection, etc). The ordeal of the siege and battle is presented in the Qur'an (33: 11) as a test for the believers. This event and the trial of the believers from which they eventually came out victorious, is to "remind the believers of God's goodness to them" (Abdel Haleem 2005: 266). But what immediately precedes this siege-event in the Qur'anic narrative (Q.33: 7–8) is another reminder (to the Prophet Muhammad) about a pledge taken by God from him and the other prophets that "God will question [even] the truthful about their sincerity, and for those who reject the truth He has prepared a painful torment" (Abdel Haleem 2005: 267). Thus, the trial of the faithful and defeat of the unbelievers are predicated on that pledge. Therefore, it is reasonable to suggest that the occurrence of *ki*-forms only in the pledge part of the narrative (i.e. Q.33: 7–8) is conditioned by the importance of this background situation for the ensuing events. These uses of the *ki*-form are illustrated in (7).

(7) a. (1YM/33: 7)

Ṣahadjādīka ***kī-māgīye***=*ka* *uḍkurū*
pledge.3PL.DO *ki*-take.1PL.IPFV=DO remember.2SG.IMP (Ar.)
'Remember their pledges that we took (from them).'

b. (1YM/33: 8)

?ālay *danī* *īgūriro* *atka* ***kī-dō***
God.SBJ so.that question.3SG.IPFV.SBJV thus *ki*-do.3SG.IPFV
'so that God may thus question (the truthful)' (lit. 'do questioning')

Note, that the *ki*-form <*ki-dō*> of the verb *dī* 'do' in the last example is used in irrealis (purposive) sense, although the event expressed by the predicate is itself placed in the temporal domain of the past (see 3.6 below).

Importantly, the *ki*-form is a recurrent feature in references to pledges. The same verb 'take' also appears as *kī-māgīyē* 'we took' in 1YM/2: 63 and 2: 93 ("Remember when we took your pledge, and made (making [2: 63]) the mountain tower above you...") (Abdel

Haleem 2005: 9, 12). In 2ShK/2:93, the *ki*-form is also used with the verb *ḥaf* ‘raise’ in the same pledge statement, i.e. *ḥaf-ki-n-iyi* ‘we raised (above you)’.

3.5. *ki*-forms in adverbial constructions formed with the locative *n/nn*

The *ki*-forms also occur in temporal adverbial clauses introduced by the same Arabic adverb *iḏ* ‘when’, but not embedded as complements of ‘remember’. The verb phrase of the adverbial clause is marked by a locative marker *n/nn*. This is in contrast to the ‘when’-adverbials of complement clauses discussed in the preceding section where the direct object clitic *ka* is attached directly to the final element of the verb phrase — typically the last segment of the verbal inflection, as in (7). In some cases, there is double locative marking involved in the uses of the *ki*-forms in adverbial clauses (9) and it is not clear whether the first locative is conditioned by the *ki* category, as it seems the case in (3), or whether the first locative is part of the adverbial construction itself, which alone does not explain the double marking.

For example, the speech verb *gul* ‘say’, perception *faham* ‘hear’, and two verbs metaphorically expressing speech (*yām* ‘spread’) and hearing (*ḥabākīr* ‘receive’) are consistently given in *ki*-forms marked by the locative *n* in 1YM/24:12, 14, 15 and 16. This part of sura 24 describes the event of spreading the false rumours against Aisha, the Prophet’s wife. The acts of speaking, hearing and passing on (i.e. speaking) what was heard is plausibly construed as a durative process that was happening before the slanderers were condemned and gossipmongers reprimanded. At the same time, these events background the ensuing discourse on the matters of marriage. The examples below profile these uses of *ki*-forms in the context of the uttering-hearing discourse in substantial details, for this part of 1YM is an important piece of evidence supporting the suggested analysis of the aspectual and pragmatic characteristics of the *ki*-category.

(8) 1YM/24: 12, 14, 15, 16.

a. 1YM/24: 12&16 (Ar. PFV): “When you **heard** the lie, (12:) why did [they] not think... (16:) why did you not say, ‘We should not repeat this– God forbid!– It is a monstrous slander?’” (Abdel Haleem 2005: 221).

<i>kundūgō</i>	<i>nadīyi</i>	<i>tīka</i>	<i>faham-kī-n-iyu=n</i>
when	2PL.SBJ	this.DO	hear-ki-AUX-2PL.IPFV=LOC

‘When you heard (were hearing) it.’

b. 1YM/24 :14 “If it were not for God’s bounty and mercy towards you in this world and the next, you would already have been afflicted by terrible suffering for **indulging in such talk**.” (Abdel Haleem 2005: 221).

<i>alarō</i>	<i>nadīka</i>	<i>jarfandō</i>
COND	2PL.DO	2PL.APPL.find.3SG.AFP
<i>agō</i>	<i>nadīyi</i>	<i>yām-kī-n-iyu=gin</i>
thing	2PL.SBJ	spread-ki-AUX-2PL.IPFV=INE

<i>ṣaḏab</i>	<i>kambātmay</i>	<i>alarō</i>	<i>nadīka</i>	<i>jarfandō</i>
punishment	grave.SBJ	COND	2PL.DO	2PL.APPL.find.3SG.AFP

‘It would have afflicted you what you spread; a grave punishment would have afflicted you.’

c. 1YM/24:15 (Ar. IPFV). Context: “When you took it up [**receive**] with your tongues, and **spoke** with your mouths things you did not know... you thought it was trivial...” (Abdel Haleem 2005: 221).

<i>kundūgō</i>	<i>nadīyi</i>	<i>tīka</i>	<i>ṯabākīr-gi-n-īyu=n</i>
when	2PL.SBJ	3SG.DO	receive-ki-AUX-2PL.IPFV=LOC

‘when you were receiving this’

<i>tlandū=n</i>	<i>ṯabākīr-ki-yubū=n</i>	<i>alarō</i>	<i>nadīka</i>
tongue.2PL=LOC	receive-ki-2PL.AG= LOC	COND	2PL.DO

jarfandō
2PL.APPL.find.3SG.AFP

‘You were receivers with your tongues, (and the punishment) would reach you.’

<i>nadīyi</i>	<i>gul-kī-n-iyu=n</i>		<i>kjīdū=n</i>
2PL.SBJ	say- <i>ki</i> -AUX-2PL.IPFV=LOC		mouth.2PL=LOC
‘you were saying (it) with your mouth’			
<i>agō</i>	<i>nadīro</i>	<i>θīku</i>	<i>buk=ka tin</i>
thing	2PL.IO	be.3SG.PST?	NEG=DO this.LOC
‘what for you was nothing in it’			
<i>ḥandī</i>	<i>θīgu</i>	<i>buk=ka</i>	<i>gul-kī-n-iyu=n</i>
1PL	be.3SG.PST?	NEG=DO	say- <i>ki</i> -AUX-2PL.IPFV=LOC
‘we (for us), there was nothing’, you were saying’			
<i>nadīyi</i>	<i>tika</i>	<i>gul-kī-n-iyu=n</i>	<i>kskēro</i>
2PL.SBJ	this.DO	say- <i>ki</i> -AUX-2PL.IPFV=LOC	easy.IO
‘(you thought what) you were saying was trivial’			
<i>tītī</i>	<i>ʔālagin</i>	<i>kamburuksikrē</i>	<i>niyu</i>
this.DET	God.INE	great.indeed	say.2PL.CNV
<i>gul-kī-n-iyu=n</i>			
say- <i>ki</i> -AUX-2PL.IPFV=LOC			
‘this is very grave with God (what) you were saying’			

Like the above examples of backgrounding (8a–c), the Qur’anic text in 1YM/3:48–52 establishes a discourse background for the engagement of the apostles in supporting Jesus’s mission. Starting from the *ki*-form of the verb ‘teach’ (derived from the root *dug* ‘know’) illustrated earlier in (3) (where ‘teach’ refers to an event in the future relative to the deictic centre of the utterance), Jesus’s preaching is also framed by *ki*-forms of the speech verb *gul-ki-n* ‘he said’. The preaching events ends with Jesus’s understanding (sometimes interpreted as gradual⁷) that the audience is not convinced. This is expressed by another *ki*-form, this time of the verb *dug* ‘know’ *ki-ndug* ‘he (having) realised’. Although it is arguable whether ‘he realised’ can be construed

⁷ See Abdel Haleem’s (2005: 38) translation (that follows a certain exegetical tradition) given with example (9) have the polarity *still* added in brackets: ‘When Jesus realized that they [still] did not believe...’. This suggests that the perception of the audience’s disbelief was not punctual but rather gradual.

as progressive in this case, it is not impossible, since there is a notion of gradual realisation of knowledge. Such a construal aligns with the context of the given preaching event where the utterances are introduced one by one, each with a purpose to convince (which proves unsuccessful). This speech event is spread in time and it is only after its completion that the new foreground information is given. The completion phase of the event is thus signalled by the adverbial clause ‘when he realised’.

(9) (1YM/3: 52) Context: Jesus was preaching to the Children of Israel that he was the messenger of God (3: 49–51) and “When Jesus realized that they [still] did not believe, he said, ‘Who will help me in God’s cause?’” (Abdel Haleem 2005: 38).

<i>nābi</i>	<i>Īsa</i>	<i>ki-ndug</i> = <i>n=gin</i>	
prophet	Jesus	<i>ki-know.3SG.IPFV?</i> = <i>LOC</i> = <i>INE</i>	
<i>nrđika</i>		<i>ki-ndug</i> = <i>nn</i>	<i>guljī</i>
disbelief.DO		<i>ki-know.3SG.IPFV?</i> = <i>LOC</i>	say.3SG.PFV

‘(when) prophet Jesus has realised their disbelief, he said’.

The morphological composition of the *ki*-form in (9) is problematic because of the graphemic representation of the final segment *g* of the verb stem *dug*. If the *ki*-form was derived from the imperfective, one would expect either a final vowel or a change of *g* to *y* as in example (3). As such, the form looks more like a non-finite category converb and could be read as ‘having realised it he said’. Nevertheless, this *ki*-form is presented in this section due to its occurrence in the same locative construction that describes an anterior durative event with the bounded semantics of completed activity.

3.6. *ki*-forms in non-past/non-present irrealis events

The preceding examples of adverbial constructions (occurring both in complement clauses of ‘remember’ and in non-embedded adverbial clauses) profile the verbs in *ki*-forms that describe events (E) *before* a reference point (R) that itself is located in the past tense, i.e. *before*

a deictic centre (S) (E before R before S). This could suggest that the *ki*-category expresses both aspectual and temporal meaning and therefore represents a category similar to pluperfect (past in the past) that places the event before a reference point positioned in the past. On formal and semantic grounds however, this is not the case. As stressed before, the *ki*-forms tend to derive from imperfective stems, often containing the frozen *s** affix, rather than from perfective stems. Moreover, these forms occur in all three temporal domains of past (as in the preceding examples), present, as in (2) and future (3). In addition to future, the uses of the *ki*-forms with the predicates expressing irrealis events (i.e., those without a truth value at the time of reference) further illustrate the non-temporal nature of the *ki*-category. The examples which follow profile the *ki*-uses of the verbs ‘come out’ and ‘find’.

(10) *lūg* ‘come out’

(IYM/2: 149, 150) (Ar. PFV) Context: [Commands on the change of the orientation of prayer] “Wherever you may have **started out [come out]**, turn your face in the direction of the Sacred Mosque...” (Abdel Haleem 2005: 17)

krge *nīyī* *kī-lūgm=nn* (2:149) *ki-lūgm=nn* (2:150, diff. hand)
 wherever 2SG.SBJ *ki*-come.out.2SG.IPFV=LOC
 ‘wherever you come out’

To illustrate a distribution of *ki*-forms and non-*ki* forms in irrealis context according to grammatical and semantic parameters, the uses of the verb ‘find’ are presented below in an excerpt from a coherent set of glosses that translate a continuous discourse/situation and are written sequentially and close to each other, thus providing a well-controlled set of data that excludes possible interpolation by different scribes.

(11) *fand* ‘find’

(IYM/4: 91) (Ar. PFV) Context: “You will find others who wish to be safe from you, and from their own people, but whenever they are back in a situation where they are tempted [to fight you], they succumb to

it. So if they neither withdraw, nor offer you peace, nor restrain themselves from fighting you, seize and kill them **wherever you encounter them.**” (Abdel Haleem 2005: 59)

nadīye fugē θ-ir-fand-īyū
2PL future FUT-APPL-find-2PL.FUT

‘you will find (others)’

tandī nadīka jarutiyibūya
3PL 2PL.DO 2PL.APPL.leave.3PL.NEG.COND

‘if they do not leave you’

tandīye nadīro šulūka dbjargaybūya
3PL.SBJ 2PL.IO peace.DO offer.2PL.APPL.3PL.NEG.COND

‘if they do not offer peace to you’

tandīye muskujādīka dafθybūya
3PL.SBJ hand.3PL.DO restrain.3PL.NEG.COND

‘if they do not restrain their hands’

nadī tandīka kuwatenūgū nadī tandīka yenūgū
2PL 3PL.DO seize.2PL.IMP 2PL 3PL.DO kill.2PL.IMP

‘(then) seize them (and) kill them’

krgē nadī tandīka ki-r-fand-īyū=n₋
wherever 2PL 3PL.DO ki-APPL-find-2PL.IPFV=LOC

‘wherever you find them’

The adverbial conditional clauses in the above examples establish background for the consequent events expressed as instructions or statements. The predicates expressed in *ki*-forms are necessary preconditions for the subsequent events. The aspectual potential (lexical aspect) of the predicates used in these conditionals (‘come out’ and ‘find’) has both durative and punctive construals (cf. Croft 2012: 52 on the aspectual potential of English *find*) and the situations they describe may be construed as repetitive and persistive but transitory and bounded. These durative and bounded construals of the illustrated *ki*-forms in the irrealis context are similar to the *ki* uses in the past tense domain.

4. *ki* in non-finite forms

Almost all *ki*-forms attested in non-finite verbs derive from s*-stems.⁸ The non-finite forms presented in this section usually have reduced-vowel stems in their inflectional slots, some forms lacking person and number agreement markers (examples 14 and 15), and thus they belong in the converb category.

As for their aspectual meaning, the *ki*-converbs do not seem to clearly exhibit the set of semantic and pragmatic properties identified for the finite *ki*-forms. However, depending on lexical aspect, these forms show the same range of construal, such as *duration* and *antecedence/prerequisite relevant* for consequent events ('know'), *transitory states relevant for consequent situations* ('die' — see details under example 13 below) and *persistent processes with emphatic/emotive ('indeed')* reading ('flow' 'come out', 'fall down', 'bring out/take'). The predicates 'flow', 'come out' and 'fall down' describe the attributes of inanimate objects, such as stones that are used as standard of comparison with the hearts of disbelievers (i.e. 'the hearts of disbelievers are harder than stones, the latter being softer because they release water (i.e. water comes out from them) and they fall in fear of God'). The situations described by 'bring out/take' are compared to each other and have both emphatic and simultaneous meaning (i.e. '**God brings** the believers to light while **false gods take** the disbelievers to darkness'). These interpretations are discussed with each example below.

⁸ This consistency is remarkable compared to the finite *ki*-forms discussed before, which often do not have the s* element (some non-finite *ki*-forms also lack s*, but what conditions its absence is unclear). All such non-finite *ki*-s*-forms are used to translate either Arabic imperfective verb forms or perfective verb forms describing durative events. The consistency of *ki* / *s* covariance related to imperfective forms and progressive meaning in Arabic has resulted in grammaticalisation of the combination *ki*-*s* as a true imperfective in later development of OKb (Bondarev forthcoming).

4.1. ‘know’ in be(come)-constructions

(12) (Q.82: 12) (Ar. IPFV) Context: The angels constantly watching everyone to record people’s deeds for the assessment on the Day of Judgement. “Over you stand watchers, noble recorders who **know** what you do: the good will live in bliss, and the wicked will burn in the Fire” (Abdel Haleem 2005: 412)

a. 1YM/82: 12

ki-sanduku=ye tasikī agō nandiye sdwaka
ki-s.3PL.KNOW.CNV=SBJ be.3PL.PFV thing 2PL.SBJ do.2PL.CNV?.DO*
 ‘there are those who are being aware of what you are doing’

b. 2ShK/82: 12 (no vowel before SBJ -yi)

tandiyi ki-s-anduk=yi sikī
3PL.SBJ ki-s-3PL.KNOW.CNV=SBJ be.3SG.PFV*
 ‘There are those who know (are being aware of)’

The verb ‘know’ used in the *ki*-form of OKb translates a durative event that signals an antecedent and prerequisite situation for the consequent event of God’s judgement. Thus, ‘they know’ in this context means that ‘they are constantly watching you’ and such knowledge is a precondition for the Day of Judgement.

4.2. ‘die’ in be(come)-constructions and relative clauses

(13) a. (1YM/2: 28) (Ar. PFV) Context: “How can you ignore God when you **were lifeless** and He gave you life, when He will cause you to die, then resurrect you to be returned to Him?” (Abdel Haleem 2005: 6)

ki-s-ūnū-y=ro tadigīyu
ki-s-die.CNV=IO PST.be.2PL.AFP*
 ‘You [indeed] were dead.’ (lit.: ‘[you having died] [you were]’)

b. (1YM/2: 161) (Ar. PFV) Context: *ayas* 158–162 deal with rewards and punishment in the afterlife. “As for those who disbelieve and **die** as disbelievers, God rejects them, as do the angels and all people.” (Abdel Haleem 2005: 18)

tandīnī agrtbū=ḥalan tandī ki-s-ūnu-y=nī
3PL.DET.PL disbelievers=ADV 3PL ki-s-die.CNV=DET.PL*
 ‘Those who die while being disbelievers.’

The *ki*-forms in both examples (13a–b) have transitory interpretation of the state ‘being dead’. In (13a) ‘being dead’ is bound to the subsequent state of resurrection and in (13b) ‘dying while disbelieving’ is a condition for the act of punishment, the latter taking place after the state of being dead has terminated. Thus, both uses of the *ki*-form express a transitory process and presuppose the same result: being brought to life at the Day of Judgement.

4.3. ‘flow’, ‘come out’, ‘fall down’ in be(come)-construction with emphatic reading

The *ki*-converbs of these verbs describe persistive processes which serve to put emphasis on the quality of the stones depicted as being softer than the hearts of disbelievers. Thus, the stones release water and split open to let water come out:

(14) *θrθr* ‘flow’, *lūg* ‘come out’, *jb* ‘fall down’

(1YM/2: 74) (Ar. IPFV) “Then your hearts became hardened after that, being like stones or even harder. For indeed, there are stones from which **rivers burst forth**, and there are some of them that split open and **water comes out**, and there are some of them that fall down for fear of Allah. And Allah is not unaware of what you do.” (Sahih)

kāwθurunh *θrθr-ki-s=yih* *θīgī*
stone.inside flow-*ki-s**=SBJ be.3SG.PFV

tikan *būrm=yih tī* *kāw θuron* *yi* *θīgī*
3SG.ABL river=SBJ 3SG stone inside water be.3SG.PFV

tikanh *yi* *ki-s-ūlūg=ye* *θīgī*
3SG.ABL water *ki-s**-come.out=SBJ be.3SG.PFV

agō jb-ki-s=y *θīgī*
thing come.down-*ki-s**=SBJ be.3SG.PFV

‘There are rivers streaming from the stones; there are rivers and water inside the stones; there is water coming from there and coming down therefrom.’

4.4. ‘bring out’ in adverbial construction with emphatic and persistive reading

The events expressed by the *ki*-converbs of the verb *tūlūg* (*tulūg*) ‘bring out/take’ exemplified in (15) have emphatic and persistive reading. The events are contrasted to each other and construed as simultaneous (God bringing people to light and false gods to darkness). These contrasted events have relevance for the subsequent situation — the Judgment Day. That is, those brought to light will be returned to God, and brought to darkness will dwell in hell.

(15) (1YM/2: 257) (Ar. IPFV) “God is the ally of those who believe: He **brings them out of the depths of darkness and into the light**. As for the disbelievers, their allies are false gods who **take them from the light into the depths of darkness**, they are the inhabitants of the Fire, and there they will remain.” (Abdel Haleem 2005: 29, 30)

<i>ʔālatī</i>	<i>gurnuma</i>	<i>tandī</i>	<i>sāsraybi</i>
God.DET	protector	3PL	believe.3PL.PFV.GEN
<i>tandīka</i>	<i>ki-s-ūtūlūg=ħalan</i>		
3PL.DO	<i>ki-s*-bring.out.CNV=ADV</i>		

‘God is protector of those who believe, (by) bringing them out...’

<i>nūfurbi</i>	<i>nīnmkan</i>	<i>klīslāmbi</i>	
paganism.GEN	darkness=ABL	faith.GEN	
<i>nūrro</i>	<i>tandīka</i>	<i>ki-s-ūtūlūg=ħalan</i>	<i>gūrnuma</i>
light.IO	3PL.DO	<i>ki-s*-bring.out.CNV=ADV</i>	protector

‘he is the protector (by way of) bringing them from the darkness of paganism to the light of faith’

<i>tandī</i>	<i>āgrsānī</i>	<i>gurnumajā</i>	<i>sadīkiya</i>	<i>kaʿb-lāšrafmitī</i>
3PL	disbelieve.DET	protector.3PL	be.3PL.COND	false-god.DET

‘those who disbelieve, their protector is false god’

<i>tandīye</i>	<i>tandīka</i>	<i>ki-s-ūtūlūg=ħalan</i>		
3PL.SJ	3PL.DO	<i>ki-s*-bring.out.CNV=ADV</i>		

<i>klīslāmbi</i>	<i>nūrkan</i>	<i>nūfurbi</i>	<i>nīnmro</i>
faith.GEN	light.ABL	paganism.GEN	darkness.IO

‘They (false gods) are their (disbelievers’) protectors (by) bringing them from the light of faith to the darkness of paganism.’

5. Summary and conclusion

The illustrated syntactic environment, aspectual semantics and discourse status conveyed by the *ki*-forms are summarised as follows. The *ki*-forms rarely occur in main clauses, but when they do, they are expressed as locative constructions (3). The example in (3) ‘teach’ profiles *gradual process* that establishes *background/relevance* for consequent situations. Some usages of the *ki*-forms may marginally be considered as predicates of the main clause, e.g. ‘believe’ and ‘plot’ in direct reported speech (4), although these clauses are expressed as speech-verb complements rather than locative construction. The *ki*-forms in (4) express *transitory* (for ‘believe’) and *durative* (for ‘plot’) semantics and indicate *relevance of prior event* to the current situation.

In adverbial ‘when’-clauses which are complements of ‘remember’, the *ki*-forms of speech verb ‘say’ (5)–(6) express a *transitory process* and *set up background* for a more salient (foregrounded) situation. A similar construal in the same syntactic environment is attested in *ki*-forms of ‘take’ and ‘do’ (7) which establish an important reference point for all subsequent (related) events.

The *ki*-forms in adverbial constructions which are translations of the Arabic ‘when’-clauses have been illustrated with the speech and auditory verbs ‘say’, ‘hear’, ‘spread (by saying)’, ‘receive (by hearing)’. These forms introduce *durative processes in antecedent situations* that *set background* for consequent situations and ensuing discourse (8). The *ki*-form of the verb ‘teach’ in the same adverbial construction (9) describes a speech event with *durative* meaning upon *completion* of which the new foreground information is introduced.

In adverbial conditional clauses (‘wherever’) the uses of the *ki*-forms (10)–(11) are exemplified with the irrealis (non-past/non-present) events in order to demonstrate that the *ki*-category operates beyond the past tense domain — the property of the *ki* corroborated by the uses of *ki* in present (2) and future (3). The events encoded by *ki* in (10)–(11) and similar ‘wherever’ clauses have *durative* meaning (repetitive or persistent) and are *necessary precondition* for the consequent situations.

Finally, the non-finite *ki*-forms (converbs in be(come)-constructions, relative and adverbial constructions) — depending on lexical aspect — show the same range of construal as in the finite *ki*-forms, such as *duration* and *antecedence/prerequisite relevant* for consequent events ('know' in (12)), *transitory states relevant for consequent situations* ('die' in (13)) and *persistent processes with emphatic/emotive* ('indeed') reading ('flow', 'come out', 'fall down' in (14)), with some occurrences having *simultaneous* meaning ('bring out/take' in (15)).

All these uses of the *ki*-forms may thus be subsumed under a unifying description: *a relevance backgrounding marker with progressive-completive semantics*. Given that the antecedent and conditional semantics can also be expressed by the conditional verbal category (e.g. example (11)) and the progressive/simultaneous meaning by the imperfective (examples (1) and (2)), it is reasonable to suggest a discourse factor that activates the use of *ki*. Since the background information introduced by *ki* has a specific *importance* for the discussed situations, *emphatic* reading may be present in most of the examples.

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Abbreviations

1, 2, 3 – 1, 2, 3 person	DET – determiner
ABL – ablative	DEM – demonstrative
ADV – adverbial (operator)	DO – direct object
AFP – argument focus perfective	FUT – future tense
AG – agent noun	GEN – genitive
APPL – applicative	INE – inessive
AUX – auxiliary	IPFV – imperfective
CNV – converb	IMP – imperative
COND – conditional	IO – indirect object

OKb – Old Kanembu	ShK – the “Shetima Kawo” manuscript
OBJ – object marker	SG – singular
LOC – locative	SBJ – subject marker
NEG – negative	SBJV – subjunctive
PST – past tense	TAG – tag question
PL – plural	YM – the “Yerima Mustafa” manuscript
PFV – perfective	2: 72 etc. chapter and verse of the Qur’an

References

- Abdel Haleem, Muhammad. 2005. *The Qur’an: a new translation*. Oxford: Oxford University Press.
- Bickel, Balthasar. 1997. Aspectual scope and the difference between logical and semantic representation. *Lingua* 102. 115–131.
- Bickmore, Lee. 2007. *Cilungu phonology*. Chicago: University of Chicago Press. (Stanford Monographs in African Languages.)
- Bondarev, Dmitry. 2020. Absolute-relative tense in Old Kanembu: foregrounding by posterior taxis. *Language in Africa* 1(4). 226–244.
- Bondarev, Dmitry. Forthcoming. *Old Kanembu: A Saharan language of Qur’anic glosses*.
- Bybee, Joan L. & Perkins, Revere D. & Pagliuca, William. 1994. *The evolution of grammar: tense, aspect and modality in the languages of the world*. Chicago: University of Chicago Press.
- Comrie, Bernard. 1981 [1976]. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- Croft, William. 2012. *Verbs: Aspect and causal structure*. Oxford: Oxford University Press.
- Decker, Ken. 2013. *The song of Kriol: A grammar of the Kriol Language of Belize*. SIL: Electronic Editions.
- Eads, Domenik & Persson, Maria. 2013. Aktionsart, word form and context: On the use of the active participle in Gulf Arabic dialects. *Journal of Semitic Studies* 58(2). 343–367.
- Frawley, William. 1992. *Linguistic semantics*. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.

- Güldemann, Tom. 1998. The relation between imperfective and simultaneous taxis in Bantu: late stages of grammaticalization. In Fiedler, Ines & Griefenow-Mewis, Catherine & Reineke, Brigitte (eds.), *Afrikanische Sprachen im Brennpunkt der Forschung*, 157–177. Cologne: Rüdiger Köppe.
- Johanson, Lars. 1996. Terminality operators and their hierarchical status. In Devriendt, Betty & Goossens, Louis & van der Auwera, Johan (eds.), *Complex structures: A functionalist perspective*, 229–258. Berlin: Mouton de Gruyter.
- Pennington, Ryan. 2012. *Aspect in Ma Manda: preliminary observations*. https://www.academia.edu/4783102/Aspect_in_Ma_Manda_Preliminary_observations
- Plungian, Vladimir A. 2003. *Obščaja morfologija: vvedenie v problematiku*. [General morphology: An introduction to concepts and problems]. Moscow: Editorial URSS.
- Plungian, Vladimir A. 2004. K diskursivnomu opisaniju aspektual'nyx pokazatelej [On a discourse-based description of aspectual markers]. In Volodin, Aleksandr P. (ed.), *Tipologičeskie obosnovanija v grammatike: K 70-letiju professora V.S. Xrakovskogo* [Typological grounds in grammar: To the 70th anniversary of Professor V.S. Xrakovskij], 390–411. Moscow: Znank.
- Sahih International: <https://quran.com>.
- Souag, Lameen. 2013. *Berber and Arabic in Siwa (Egypt): A study in linguistic contact*. Köln: Rüdiger Köppe.
- Timberlake, Alan. 2007. Aspect, tense, mood. In Shopen, Timothy (ed.), *Language typology and syntactic description*. Vol. 3. *Grammatical categories and the lexicon*. 2nd edn., 280–333. Cambridge: Cambridge University Press.
- Ziegeler, Deborah. 1999. Agentivity and the history of the English progressive. *Transactions of the Philological Society* 97. 53–101.