

The grammaticalization of tense markers : A pragmatic reanalysis

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1. Introduction

Grammaticalization is the process whereby lexical categories and constructions containing lexical material develop, in specific morphosyntactic contexts, into GRAMS, that is, members of functional categories, including tense and aspect markers¹. It is generally agreed that grammaticalization involves both structural and semantic change, and that semantic change either precedes structural change (Givón, 1991 ; Nicolle, 1998) or occurs in parallel with it (Bybee et al. 1994 : 106 ; Emanatian 1992 : 19)². To begin with, certain inferences frequently associated with the use of the grammaticalizing expression become conventionalized, and the expression undergoes ‘semantic bleaching’ (or ‘generalization’), in which components of meaning relating to perceivable events and relations between entities is lost. The expression typically also develops increased functional dependence on associated lexical material. Following these semantic changes, structural changes occur which result in increasingly restricted morphosyntactic distribution, and possibly affixation, together with corresponding phonetic reduction. This widely accepted model of grammaticalization is represented in (1) :

(1) change of use →→ change of meaning →→ change of form
 (pragmatic) (semantic) (syntactic + phonological)

It is this model that I wish to question through an analysis of GRAMMATICALIZATION CHAINS involving source constructions containing verbs of movement³.

¹ This is a definition of what Traugott (2002) refers to as “primary grammaticalization” ; I will not be concerned with ‘secondary grammaticalization’ which concerns an increase in the formal correlates of grammaticalization such as morphological fusion and phonetic erosion.

² For an alternative view, in which autonomous syntactic change precedes semantic change, see Lightfoot (1991), Warner (1993), and discussion in Hopper & Traugott (1993 : 68) and Nicolle (1998 : 15-16).

³ Traugott (2002) argues that ‘pragmatic polysemy’ in the form of Generalized Invited Inferences, rather than coded (semantic) polysemy, is the necessary pre-

A grammaticalization chain (or PATH) is a series of developments leading from a lexical construction to a gram (Heine et al. 1991 : 222 ; Heine 1992). It has been observed that many very similar grammaticalization chains occur in typologically, geographically and genetically distinct languages (Bybee et al. 1994 ; Heine et al. 1993 ; Koch 1999 ; Kuteva 2001). One of the most frequently cited grammaticalization chains is the development of constructions containing movement verbs into tense and aspect markers (Bybee et al. 1991 ; Emanatian 1992 ; Traugott 1978 ; Ultan 1978).

Before considering this kind of grammaticalization chain let us define what is meant by the term MOVEMENT VERB. A movement verb is defined here as a verb which expresses change of location on the part of the subject (as opposed to motion in a single location or movement of the object of the verb). All movement events are perceived as involving the semantic components path, manner, figure and ground (Talmy 1985), and most movement verbs incorporate at least one of these semantic components along with the notion of change of location ; this is termed CONFLATION. Path is most frequently conflated in movement verbs, followed by manner and then (rarely) figure (Thornell 1997 : 165). Conflation of path is expressed by the verbs *arrive*, *leave*, *enter*, *pass*, *descend* and *return*, conflation of manner by *walk*, *fly* and *swim*, and conflation of figure by *flow* (the figure must be a liquid). Finally, movement verbs may be deictic or non-deictic. In the case of deictic verbs such as *come* and *go*, the default source or goal (starting point or end point) of the motion event is the location of the speaker or (less often) the hearer, whereas this is not the case with non-deictic movement verbs such as *move*, *travel*, *leave* and *approach* (Radden 1996). The most common sources of tense and aspect markers are deictic movement verbs which involve conflation of path ; typically these are verbs corresponding to *come (to)* and *go (to)* in English⁴.

The development of movement verbs into tense and aspect markers typically has the following characteristics (based on Hopper & Traugott 1993 : 1-4) :

1. Constructions (containing certain lexemes as components) undergo grammaticalization rather than lexemes *per se*.
2. Lexical sources of grams are general in meaning.
3. Grammaticalization involves morphosyntactic reanalysis ; in particular, there is an increase in C-command scope.

requisite to grammaticalization ; in the light of the data presented below this claim also is too strong.

⁴ Verbs which indicate movement of the figure towards the ground are common sources for future tenses and prospective aspects, and verbs which indicate that the figure moves from the ground are common sources of pasts and perfects (Bybee et al. 1994 ; Demirdache & Uribe-Etxebarria 2000 : 181-2).

4. Grammaticalization involves phonological reduction, sometimes as a result of morphosyntactic reanalysis e.g. *going to* > *gonna*.
5. Various stages of grammaticalization may coexist; that is, grams may exhibit structural and phonological allomorphy. (The lexical source construction may also continue to be used concurrently with the gram that derives from it.)
6. Concrete meaning such as physical motion and directionality is lost when grammaticalization occurs.

Using verb-to-tense / aspect grammaticalization chains as a norm, I will evaluate other instances of linguistic change from English and Digo (a Bantu language spoken in East Africa) which take constructions involving verbs of movement (in particular the verbs *come* and *go*) as their starting points. I will demonstrate that the constructions in question behave structurally like tense / aspect markers but refer semantically to physical movement. Rather than being intermediate stages in grammaticalization chains leading ultimately to purely temporal markers, these constructions show no sign of developing temporal, aspectual or modal meanings. I will argue that the structural changes that have occurred in these constructions are the result of discourse-pragmatic factors rather than semantic change, which in turn suggests that the structural and semantic changes that typify grammaticalization are epiphenomena : symptoms rather than causes.

2. Grammaticalization without semantic change in English

The construction which I will discuss in this section has been referred to as a kind of ‘double-verb construction’ (Carden & Pesetsky 1977), the ‘quasi-serial verb construction’ (Pullum 1990) and ‘aspectual *come* and *go*’ (Jaeggli & Hyams 1993). In order to avoid the theoretical bias attached to these terms, I will follow Pullum (1990) and refer to the construction as *go get*. The *go get* construction has the form $V_{\text{movement}} V_{\text{main}}$ and is illustrated below.

- (2) Let’s go find the paragraph marker.
(Said whilst ‘moving’ through a document displayed on a computer screen.)
- (3) Come wave goodbye.

As stated in section 1, the aim of this paper is to demonstrate that certain constructions, including the movement verb in *go get*, behave syntactically as tenses whilst encoding non-temporal meaning which is identical to that of their source constructions (thereby demonstrating that grammaticalization need not involve semantic change). It is therefore necessary to show that *go* in *go get* behaves syntactically as a tense marker, and that it shares with its source construction the semantic component of physical movement. I will begin by arguing that *go get* derives diachronically

from fake coordination and shares with fake coordination the semantic component of physical movement. I will then argue that in finite clauses, *go* in *go get* is best analyzed syntactically as the head of TP, that is, as a tense marker.

2.1. Fake coordination as the source of *go get*

Fake coordination has the form V_{movement} *and* V_{main} as in (4) and (5), and occurs in all moods and tenses and with a number of movement verbs, all of which express conflation of path, except for *run* which expresses conflation of manner.

- (4) Professor Bright has agreed to come and speak to us this weekend.
 (5) Would you run and get some more milk ?

The *go get* construction on the other hand is restricted to the verbs *come* and *go* and does not occur with overt inflection, that is, in the past tense or third person singular non-past tense without auxiliary *do*.

- (6) a. Let's go watch the match.
 b. We go watch a match every week.
 (7) a. *We went watched a match. (OK : We went and watched a match.)
 b. Did they go watch a match ?
 (8) a. *She goes watches a match every week. (OK : She goes and watches a match every week.)
 b. Does she go watch a match every week ?

Visser (1969), Zwicky (1969) and Carden & Pesetsky (1977) suggest that *go get* derives from fake coordination by a process of *and*-elision, but this suggestion is rejected by Shopen (1971), Pullum (1990) and by Jaeggli & Hyams (1993)⁵. I will discuss the arguments against a source in fake coordination and show that none are convincing.

Shopen (1971), Pullum (1990) and Jaeggli & Hyams (1993) observe that verbs in fake coordination cannot stack as they can in *go get*; thus (9b) is only grammatical if interpreted as ordinary coordination. Stacking in *go get* is also unacceptable in finite clauses, as (9c) illustrates.

⁵ Jaeggli & Hyams (1990 : 317 fn. 4) do suggest that the construction in (i) in which the second verb is a participle which is phonologically identical with its base form may be derived from a coordinate structure. However, since (i) is only acceptable for some speakers, Jaeggli & Hyams do not pursue this analysis.

(i) Bill has come put a copy of his new paper on my desk.

- (9) a. Come go eat with us.
 b. *Come and go and eat with us.
 c. *They come go eat with us every week.

This observation simply shows that *go get* and fake coordination have different syntactic structures, which is obviously true (see (7a) and (8a) above). It is irrelevant as far as the claim that *go get* derives from fake coordination is concerned since this claim does not entail that (9a) is derived from (9b). Stacking is a synchronic property of *go get* which need not be a property of its source construction. The authors mentioned above fail to mention (and therefore explain) that although stacking is acceptable in imperatives, it cannot occur in finite clauses (see (9c)).

Pullum (1990 : 226) suggests that another syntactic distinction is that the first verb in fake coordination can take a complement whereas *go* in *go get* cannot. The extraction in (10c) is intended to demonstrate that (10b) is a case of fake rather than ordinary coordination.

- (10) a. Go and read something.
 b. Go away and read something.
 c. What do you want me to go away and read ?
 d. What do you want me to go away and read ?
 e. *What do you want me to go away read ?

Leaving aside the fact that grammaticalization occurs in specific morphosyntactic contexts (e.g. complement-less ones) and so one need not expect *go get* to take complements, and the fact that *go away* differs semantically from *go* just as *throw away* differs from *throw*, Pullum's extraction argument is not sound. (11a) is not a case of fake coordination (the ordinary coordination reading should be ignored) and neither is (11b), and yet (11c) is acceptable.

- (11) a. *Walk and read something.
 b. Walk away and read something.
 c. What do you want me to walk away and read ?

Jaeggli & Hyams (1993 : 320) note that coordination allows various verbs in V1 position whereas *go get* is restricted to *go* and *come* (although they fail to distinguish fake from ordinary coordination, and the example they provide is one in which three verbs are stacked and so is ungrammatical with *go get* for independent reasons). This is also irrelevant, since grammaticalization often involves certain lexemes but not others. There is no more reason why all of the verbs which occur in V1 position in fake coordination should grammaticalize in the same way that *go* and *come* have than that all the verbs

that occur with the progressive aspect and allative *to* should grammaticalize as *go* has in the *be going to* future construction.

Visser (1969 : 1399) states that fake coordination but not *go get* “already occurs in (late) Old English, which seems to indicate that ‘go see’ developed from ‘go and see’ by elision of the conjunction.” Pullum (226, fn. 9) claims that this is implausible “since *go get* did not take over from *go & get* but rather proceeded to coexist with it for a clear six or seven centuries.” This is irrelevant ; structural and phonological allomorphy are common features of grammaticalizing constructions, as noted in section 1 above (point 5 in the list based on Hopper & Traugott 1993).

The authors who argue against a source in fake coordination all note that non-agentive (or non-volitional) subjects occur in fake coordination but not in *go get* constructions. What they fail to mention is that when a non-agentive subject occurs with fake coordination the utterance receives either an unexpected event reading with *go* as in (12b), or it should be interpreted as a case of genuine coordination (13b, c). The unexpected event reading is also possible (but not obligatory) with *go* (but not *come*) and an agentive subject ; in (12c, d) a sense of disappointment or disapproval of the subject’s actions is conveyed as well as the unexpected nature of the event. Note, however, that with an unexpected event reading, physical movement need not be conveyed. For this reason I view fake coordination and *go get* with an unexpected event reading as distinct constructions from those denoting physical movement.

- (12) a. *The bottle may go break.
 b. The bottle went and broke.
 c. John went and broke the bottle.
 d. Did John go break the bottle ?
- (13) a. *Pieces of driftwood come wash up on the shore.
 b. Pieces of driftwood come and wash up on the shore.
 c. Pieces of driftwood come in on the tide and wash up on the shore.

Jaeggli & Hyams (1993 : 321) propose that (13b) is acceptable because *come* is a main verb and therefore does not impose selectional restrictions on its subject, whereas *come* in (13a) selects an agentive subject ; that is, it assigns a ‘secondary’ θ -role to the subject NP (ibid. 325). This argument fails to rule out fake coordination as the source of *go get* for two reasons. First, if fake coordination is the source of *go get* it does not necessarily follow that the two constructions must assign identical θ -roles. Grammaticalization occurs in specific morphosyntactic contexts but the resulting construction may subsequently generalize to other contexts (for example, the *be going to* future originated in clauses containing subjects capable of physical movement, but subsequently generalized to contexts with other kinds of

subject). I would tentatively suggest that *go get* is derived from fake coordination involving agentive subjects (as for example in imperative clauses) and has retained this selectional restriction. Second, main verbs are predicates, but *go* and *come* in fake coordination do not behave like typical predicates. This can be seen by comparing the behaviour of *go / come* in fake coordination with the *go get* construction and also with *go / come* before infinitival *to*. In the examples below, fake coordination patterns the same as *go get* (where, according to Jaeggli & Hyams, *go* is NOT a main verb) and differently from *go* with infinitival *to* (where *go* is a main verb). Only (14c) can be felicitously answered by (15) since the main event in (14a) and (14b) is the act of buying, whereas in (14c) it is the act of going.

- (14) a. Did she go buy apples ?
 b. Did she go and buy apples ?
 c. Did she go to buy apples ?
 (15) Yes, but there weren't any.

Unfortunately no alternative source for the *go get* construction is proposed in any of the accounts that reject fake coordination. Although Pullum (1990 : 227) notes the similarity between serial verb constructions and coordination, he rejects the idea that there is any diachronic connection between them in English. This means that the symmetry between V1 and V2 as regards overt morphological marking must be stipulated in his analysis rather than independently motivated.

Having looked at the evidence against treating fake coordination as the source of *go get*, let us look at the evidence in favour. Circumstantial evidence comes from the fact that *try and get* and *be sure / certain and get* pattern syntactically exactly like *go get*, as noted by Carden & Pesetsky (1979)⁶. This suggests that *go get* may also have had a source in *go and get* but whilst *and*-elision occurred with *go get*, the corresponding constructions with *try* and *be sure / certain* developed without *and*-elision. However, the strongest evidence in favour of viewing fake coordination as the source of *go get* is simply that (with the exception of the unexpected event reading (12b)) the two constructions are virtually synonymous, as (14a) and (14b) demonstrate.

If we accept that *go get* derives from fake coordination, this development exhibits almost all the typical characteristics of grammaticalization. It involves a limited set of general movement verbs (typical source constructions for tense markers) in a particular syntactic frame ; *go get* exhibits phonological reduction in comparison with fake coordination ;

⁶ Contrary to what is claimed by Pullum (1990 : 224), Carden & Pesetsky do not equate the *go and get* and *try and get* constructions.

allomorphy applies because we see *go get* constructions, fake coordination and genuine coordination co-occurring in contemporary English ; and *go get* constructions exhibit syntactic reanalysis (lack of overt inflection, ability to stack). The only typical characteristic of grammaticalization that is missing is the loss of concrete semantic content, specifically physical motion and directionality. Thus, despite exhibiting all the structural characteristics of a gram, *go get* encodes the same semantic content as its source construction suggesting that semantic change is not a necessary prerequisite for formal grammaticalization to occur.

2.2. A syntactic analysis of *go get*

In section 2.1 I suggested that *go get* derives from fake coordination involving agentive subjects (as for example in imperative clauses). In this section I will elaborate this proposal and argue for an analysis of *go get* with a single semantic content and phonological realization but two underlying syntactic structures, dependant on the morphosyntactic context in which it occurs.

My hypothesis is that *go get* originated in some kind of infinitival fake coordination : imperatives, subjunctives, or infinitival complements (bare infinitives with modals or *to*-infinitives following verbs such as *remember*). Given the subjective nature of both *go get* and fake coordination (see section 2.3 below) and the fact that *go get* requires agentive subjects, imperatives are the most likely source ⁷. Imperative *go get* can be derived from *go and get* by *and*-elision, and can be described synchronically as a serial verb construction (Baker 1989 ; Pullum 1990) ⁸. I hypothesize that the resultant non-finite serial verb construction was extended to other non-finite clauses without the need for any further syntactic reanalysis. However, it is not obvious how (or indeed whether) a serial verb analysis can explain the use of *go get* in simple declarative clauses in which the ‘no overt morphology’ rule applies. Pullum (1990 : 235) admits as much when he concludes, “I am not yet ready to

⁷ Jaeggli & Hyam (1993 : 322) note that *go get* does not occur with stative verbs, since the subject of a stative clause cannot be agentive. Unfortunately their examples involve stative verbs in imperative clauses, which are infelicitous in any case, and the same restriction applies to fake coordination :

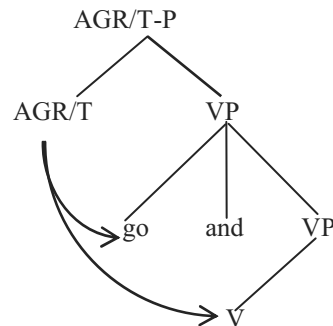
- (i) ? Did she come know the answer ?
- (ii) ? She came and knew the answer.

⁸ Jaeggli & Hyams (1993) analyze *go* and *come* as auxiliary verbs. However, they behave differently from other auxiliary verbs in various ways and Jaeggli & Hyams require a number of stipulations in order to maintain their account, so I will not discuss their analysis further.

provide a formal account of the phonological, morphological, and syntactic aspects of the inflection condition” (that is, the ‘no overt morphology’ rule).

Simple declarative clauses with *go get* are not tenseless (the semantic interpretation is of non-past tense) and so they must contain a T(ense) projection. The question is why no overt morphology can occur under TP. If we adopt the minimalist account of tense and aspect proposed in Giorgi & Pianesi (1997), fake coordination can be represented with the structure in (16). The functional head AGR/T⁹ checks agreement and assigns a T-role within a VP, and since both verbs must express the same person and tense morphology, the conjoined phrase is governed by a single AGR/T node (illustrated by the arrows from AGR/T).

(16)

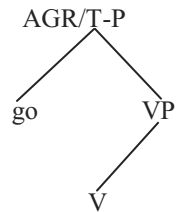


In the *go get* construction however, no overt morphological marking is possible on either verb, as examples (7) and (8) illustrated. In Nicolle (2002) I accounted for this by suggesting that the movement verb *go* or *come* functions as the head of the AGR/T projection. Since the AGR/T node has been filled by *go* or *come*, there can be no phonologically realized person or tense morphology on the following verb. This is illustrated in (17).

⁹ Giorgi & Pianesi (1997) argue for the composite category AGR/T in English (in contrast to the Split-Infl hypothesis which posits separate AGR and T heads) because either tense or agreement, but not both, can be morphologically marked on a verb in English :

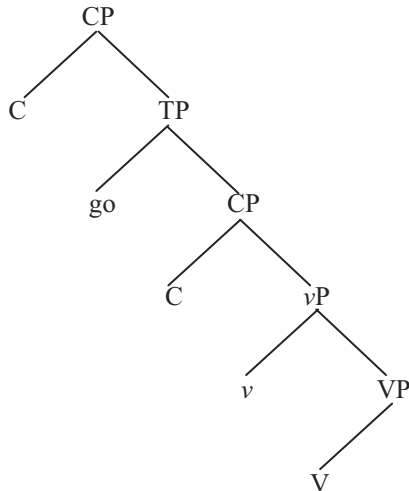
(i) He loves/loved/*loveds

(17)



In more recent versions of minimalism (Butler 2004 ; Stowell in press) AGR is no longer used and T alone occurs as a head. Following Butler (2004) for example, the structure in (17) would be represented as follows :

(18)



The analysis of *go get* as head of TP is not applicable when *go get* occurs in non-finite clauses such as (19) and (20) below. According to Butler (2004), when a modal takes T within its scope only epistemic readings are allowed, and when a modal occurs within the scope of T only deontic readings are allowed. This same claim is made in Role and Reference Grammar (Van Valin & La Polla 1997) where epistemic modality is termed 'status' and takes tense operators within its scope, whilst (deontic) modality operators must occur within the scope of tense. (19) is ambiguous between an epistemic reading ('it is possible that the subject will buy some apples') and a deontic reading ('the subject is permitted to buy some apples'), which suggests that *may* does not occupy a fixed position relative to T. This can be explained by assuming that there is no T node. If *may* is replaced by *must*,

(19) can only receive a deontic interpretation ('the subject is required to buy some apples'), therefore *go* could not be the head of TP in this clause even if TP existed. Similarly, in (20) the verb *remember* takes a non-finite complement which means that *go* cannot be the head of TP, either because there is no T-node in infinitives (*pace* Butler 2004) or because the position of head of TP is occupied by infinitival *to* (Roberts 1993 ; Giorgi & Pianesi 1997 : 82).

- (19) She may go buy some apples.
 (20) She remembered to go buy apples.

There are therefore two syntactic structures underlying a single phonological realization of *go get*. In non-finite clauses, *go get* can be analyzed as a serial verb construction, but in finite clauses *go* is the head of TP (= AGR/T-P or tense operator in RRG). This analysis explains why stacking of movement verbs is acceptable in imperatives but not in finite clauses, as illustrated in (9) above. It is also consistent with saying that morphosyntactically *go get* is fully grammaticalized in finite clauses, as tense is clearly a grammatical category. This can be confirmed by applying the C-command scope test (Tabor & Traugott 1998), which states that the C-command scope of a gram (in this case *go get*) must be greater than the C-command scope of its source (in this case fake coordination) in the same syntactic context. However, *go get* still encodes physical movement as part of its semantic content rather than the temporal meanings characteristic of tense and aspect markers. In short, the structural changes associated with grammaticalization have occurred in the *go get* construction without semantic change.

2.3. A pragmatic analysis of *go get*

I have proposed that *go get* developed from fake coordination involving the verbs *come* and *go* in the context of imperative clauses (hence with agentive subjects). In this section, I will briefly describe what I take to be the motivation behind the grammaticalization of *go get*.

Whenever *go get* or fake coordination involving *come* or *go* is used in an utterance, it contributes to what in cognitive grammar (Langacker 1990) is termed 'subjectification'. Subjectification occurs when the perspective of the 'viewer' or 'conceptualizer' of an event (typically the speaker) is incorporated into the description of that event. Now, all deictic movement verbs have the effect of "providing the deictic anchoring of a situation with respect to the speaker or the hearer" (Radden 1996 : 431), hence whenever a deictic movement verb is used, the event being described is subjectively construed. Similarly, when a deictic movement verb is linked with another

verb by coordination or juxtaposition, the result is a subjectified construal of both the action of moving and the other event. As frequency of use diminishes the force of the deictic movement verb, the perspective of the conceptualizer becomes incorporated into the description of the event described by the main verb, whilst less prominence is given to the act of physical movement. So, in an utterance of ‘Come and eat’ or ‘Come eat’ the pragmatically most salient verb is *eat*, and *come* expresses the speaker’s perspective (the eating is to be done where the speaker is situated – physically or conceptually – and not somewhere else). Thus the function of the deictic movement verb has changed whilst its semantic content remains unchanged¹⁰.

Frequency of use and pragmatic weakening of the movement verb would also contribute to phonological erosion (Bybee 2003) leading to *and*-elision, thereby beginning the process of formal grammaticalization which eventually resulted in syntactic reanalysis of *go get* in finite clauses (as described in section 2.2).

3. Grammaticalization without semantic change in Digo ¹¹

In this section I will discuss grammaticalized constructions in Digo which share some of the characteristics of *go get* and fake coordination in English. Like *go (and) get*, these constructions express physical movement in relation to a deictic centre, and hence contribute to a subjectified construal of associated events. Some of them behave morphosyntactically exactly like tenses (similar to *go get* in finite clauses) while others exhibit behaviour which is both verb-like and tense-like, (similar to fake coordination and *go get* in non-finite clauses).

Grammaticalized constructions which encode physical movement and direction as their semantic content (termed ‘movement grams’ in Nicolle 2002) seem to be widespread in Bantu languages. Movement grams are distinct from itive and ventive markers ¹², which express direction towards

¹⁰ This is in contrast to other subjectified expressions such as *He came round slowly*, *I have come to appreciate modern jazz* and *They came to blows*, in which physical movement is no longer part of the intended meaning (see Radden 1996).

¹¹ Digo is a Bantu language spoken near the coast in Kenya and Tanzania and classified as E.73 (Guthrie 1967-71) or North-East Coast (Nurse 1999). Research into Digo was conducted in Kenya under Research Permit No. OP.13/001/17 C 180/20 issued by the Government of Kenya. For an overview of Digo grammar see Nicolle (2004).

¹² These are the terms employed in, for example, Dimmendaal (1983) and Bourdin (2000). The terms ‘andative’ and ‘allative’ are sometimes used for ‘itive’, and

and away from a point of reference respectively. Although itive and ventive markers are often derived from verbs meaning ‘go’ and ‘come’, they must be accompanied by a motion verb such as ‘jump’, ‘move’, ‘throw’ or ‘drive’ (Heine et al. 1993 : 103-108), whereas movement grams encode both direction and movement and can co-occur with most verbs. Of the five movement grams in Digo, I will discuss just three : *edza* (‘movement towards the deictic centre’), *enda* (‘movement away from the deictic centre’) and *cha* (‘action occurs at a distance from the deictic centre’).

3.1. Movement towards and away from the deictic centre : *edza* and *enda*

Edza (and its variant *kpwedza*) means ‘come (to)’ and can function both as a main verb and as a movement gram. When it functions a main verb, it is preceded by a tense / aspect prefix or infinitive prefix, and occurs word finally. This is illustrated in example (21), in which the two occurrences of *edza* used as a main verb are underlined. In the first occurrence, *edza* is preceded by a locative noun class prefix (*ku-*) and a past tense prefix (*a-*) which combine to form *kpwa-*; its function here is to introduce new participants (*atu* ‘people’) into the story. In the second occurrence, the arrival of the men-folk is treated as a separate event which is encoded by the predicate *edza* preceded by a third person plural noun class prefix (*a-*) and a perfective aspect prefix (*ka-*, which reduces to *k-* before a vowel).

- (21) *Kukacha, KPWA-KPWEDZA atu a-na-taka ku-heka madzi,*
 Early.morning there.PST-come people 3p.PROG-want INF-draw water
a-ri-pho-tsungurira a-ona mutu. A-chi-lungb-wa alume,
 3p.PST-REL-peep 3p.PST-see person 3p-NAR-fetch-PAS men
hinyo alume A-K-EDZA, a-amb-wa,
 these men 3p-PF-come 3p.PST-tell-PAS
 “*Sino hu-ka-ona mutu a-im-ire mo chisima-ni.*”
 we 1p-PF-see person 3s-stand-PF inside well-LOC
 ‘Early in the morning there came people wanting to draw water. When they looked (into the well) they saw a person. The men-folk were called, and when they had come they were told, “We have seen someone standing in the well.”’

The same form, with the same basic meaning, also occurs in constructions in which it is preceded by a tense / aspect marker or infinitive prefix (therefore behaving like a main verb) but immediately precedes a different main verb (therefore behaving like a tense / aspect marker, most of which occur as

‘venitive’ is sometimes used for for ‘ventive’ (see Bourdin 1992 for a discussion).

verbal prefixes). In this construction, *edza* functions as a movement gram, as illustrated in example (22) from the same story as (21) above. The women again come to the well to draw water, but this time their arrival is treated as incidental and *edza* functions as an auxiliary preceding the main verb *heka* ‘draw (water)’¹³.

- (22) *Ligundzu achetu a-k-EDZA-heka madzi.*
 morning women 3p-PF-COME-draw water
 ‘In the morning the women came and drew water.’

Digo also has a movement gram *enda* (with a variant *kpwendu*) meaning ‘go (to)’. Although *enda* does not occur as a main verb in Digo (the lexical verb ‘go’ is *phiya*), it is almost certain that it did in the past. There are two main reasons for this assumption : First, a verb *enda* is found in related languages with the same meaning. Second, (mono-syllabic) preverbal tense / aspect markers in Bantu languages can almost always be traced to (bi-syllabic) main verbs, and the future tense in Digo is *nda-* ; since movement verbs are typical sources of future tenses, it is highly probable that *nda-* derives from *enda*.

From a semantic perspective, some uses of *enda* and *edza* as movement grams (as opposed to lexical verbs) are redundant, as they accompany other explicit indicators of physical movement and direction. This kind of redundancy is also characteristic of tense and aspect markers ; for example, a future tense can co-occur with the temporal adverbial *tomorrow*. In the following example *enda* is preceded by the verb *phiya* (‘go’)¹⁴.

- (23) *atu osi kala a-ka-PHIYA mzuka-ni*
 people all be.PST 3p-PF-go shrine-LOC
kpw-ENDA-voya mikoma ili a-jali-w-e.
 INF-GO-pray ancestral.spirits so.that 3p-bless-PAS-SUB
 ‘all the people had gone to the shrine to (go and) pray to the ancestral spirits so as to be blessed.’

Although there is no change of meaning when *enda* and *edza* occur as movement grams rather than as main verbs, their function in discourse is to express a subjectified construal of the event described by the main verb, in a

¹³ To distinguish *edza* functioning as a movement gram and as a predicate, I have glossed it as ‘COME’ and ‘come’ respectively.

¹⁴ The following abbreviations are used : 1s = 1st person singular ; 3p = 3rd person plural ; 3s = 3rd person singular ; CON = Conditional ; DIS = Distal marker ; INF = Infinitive ; LOC = Locative ; NAR = Narrative (sequential) tense ; PAS = Passive ; PF = Perfective aspect ; POS = Possessive ; PROG = Progressive ; PST = Past tense ; REL = Relative marker ; SUB = Subjunctive.

similar way to *go (and) get* in English. In (23) the narrator did not go to the shrine, so the praying took place away from the narrator's vantage point, which is the deictic centre. Emphasizing this through the use of *enda* has the added effect of reinforcing the narrator's disassociation of himself from this event.

In (24) below, the subject is described as having gone to his brother (using the main verb *phiya*) to beg for food. In the final clause he is described as eating the food at home with his family; this is the deictic centre of the narrative, that is, the notional location of the narrator (or conceptualizer). The use of *edza* ('come') makes it clear that the subject has moved back to the deictic centre (where his family are located) rather than being joined by his family at his brother's place or somewhere else. However, the most salient action is the eating rather than the moving which preceded it.

- (24) *Sambi yuya mchiya kala a-chi-phiya kpwa ndugu-ye*
 Now that poor.man be.PST 3s-NAR-go to brother-3s.POS
a-CHA-voya chakurya; a-ka-he-wa na a-k-EDZA-rya
 3s-DIS-beg food 3s-PF-give-PAS and 3s-PF-COME-eat
na mche-we na ana-e.
 with wife-3s.POS and children-3s.POS
 'Now that poor man had gone to his brother and begged for food (there); he was given some and (came and) ate with his wife and children.'

3.2. Action at a distance from the deictic centre : *cha*

Example (24) also illustrates the use of the prefix *cha* which indicates that movement away from the deictic centre has occurred prior to the action described in the main verb. Unlike *enda* and *edza*, *cha* occurs in the tense / aspect 'slot' in the verbal complex (immediately prior to the verb or incorporated argument if there is one) and cannot itself be preceded by another tense marker. (Unlike some other Bantu languages, Digo only allows one tense or aspect prefix per verb.) It therefore behaves morphosyntactically like a typical tense / aspect marker. Like the narrative tense marker *chi* in the first line of (24), *cha* is temporally dependent, in that temporal reference must be established by a preceding finite verb. The past tense copular *kala* establishes the temporal reference for both the act of going (marked with *chi*) and the act of begging (marked with *cha*).

3.3. Summary

In this section I have briefly described three constructions in Digo which exhibit typical morphosyntactic characteristics of grams without having undergone corresponding semantic change. They give rise to a subjectified

construal of the event described by the associated verb phrase, in so far as the notional location of the conceptualizer (that is, the deictic centre of the narrative) is made explicit. In the case of *enda* and *edza*, movement away from or towards the deictic centre respectively is incorporated into the description of the event described, and in the case of *cha*, the event is viewed as occurring at a distance from the deictic centre. Movement grams differ from their lexical counterparts in that physical movement is a less salient aspect of the meaning of the clause as a whole than the action described by the main verb.

4. Conclusion

When a movement verb becomes a tense marker through the process known as grammaticalization it undergoes structural and semantic change. Structurally, it may become more closely linked to the main verb which it modifies, even losing its own inflections and becoming a verbal affix, and it may undergo phonological reduction. Semantically, meaning relating to the physical movement of an entity relative to the deictic centre develops into meaning relating to temporal relations between events and reference times. It has generally been assumed that structural and semantic changes necessarily co-occur during grammaticalization. In this paper, however, I have described constructions in English and Digo which derive from movement verbs and behave syntactically like tense markers in these languages, but which describe physical movement (or more rarely location) rather than temporal relations. This suggests that the structural changes that characterize grammaticalization need not result from (or be accompanied by) semantic change.

This is not to say that the constructions I have described exhibit the same discourse-pragmatic functions as their lexical sources. All deictic movement verbs help anchor a situation with respect to the deictic centre (that is, they make the speaker's perspective explicit), but in the constructions I have described, this secondary function has become primary. This is an example of subjectification, and it is subjectification rather than semantic change which underlies grammaticalization in these cases.

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