VERB SERIALIZATION AND LEXICAL REANALYSIS:
THE CASE OF COMPOUND VERBS IN EDO

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This paper examines a category of compound verbs which features a particular kind of affix morpheme, with a view to determining the nature of the relation between this affix and other homophonous forms in the language which synchronically belong to different grammatical categories. In line with findings from similar studies of serial verb constructions in languages such as Mandarin Chinese and Yoruba, we have shown through our Edo data not only that certain verbs undergo grammaticalization and lexical re-analysis historically in the context of serial constructions to become prepositional case markers and adverbs synchronically, but also that some of these grammaticalized forms do undergo further lexical reanalysis and semantic depletion and ultimately become incorporated as affixal morphemes in compound verbs.

1. Introduction

Verb serialization, or the serial verb construction, is a common and widely attested syntactic characteristic of Kwa languages. It is a construction in which the predicate of the sentence/clause consists of two or more verbal elements realizing different kinds of functional relationships. The Edo sentences below feature varieties of this construction type:

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1Edo language belongs to the North-Central branch of the Edoid group of Kwa [Greenberg 1963] or Benue-Kwa [Elugbe and Williamson 1977].

2For all Edo texts used in this paper, tone is marked as follows: † for High tone, ‡ for Low tone, ¨ for Downstepped High tone, and Downstepped Low tone is left blank.
Various aspects of the serial verb phenomenon have constituted the subject of study in the past decade and a half [Stalke 1970; Hyman 1971; Awobuluyi 1973; Bamgbose 1973, 1974; Li and Thompson 1973, 1974; Lord 1973, 1975, 1977, 1984; Givon 1975; Ekundayo and Akinnaso 1983]. Issues addressed in these various studies include the question of the historical derivation of the construction and problems of its syntactic analysis and semantic interpretation synchronically. Some studies attribute the development of verb serialization to the reduction of inflectional or "grammatical" morphology [Li and Thompson 1974; Givon 1975], while others trace its origin to a consecutive type of coordination [Hyman 1971]. Synchronically, the underlying syntactic structure(s) assigned to serial verb constructions have ranged from coordination and subordination [Li and Thompson 1973; Bamgbose 1973] to coordination only [Hyman 1971; Awobuluyi 1973].

A recurrent topic in verb serialization analysis is the question of the categorial status of the so-called "serial verbs" or "co-verbs", especially in relation to their homophonous full verbs. Typical in languages with verb serialization is the situation whereby a single phonological form synchronically functions as a verb, preposition, adverb, etc. in different grammatical con-

3Most of the non-ideophonic manner adverbials in Edo derive historically from verbs and so retain certain verbal characteristics, among which is the ability to mark tense, mainly tonally.
texts. Consider, for example, the Yoruba word kpẹlú, discussed in Lord [1973:280ff.], which synchronically functions as a verb, preposition, conjunc-
tion, and adverb as in (6-9) respectively:

(6) fẹmT kpẹlú ọwọ ọlè (verb)
    Femi be-included among PL thief 'Femi is one of the thieves'

(7) mọ wà níbè kpẹlú ọkT (preposition)
    I be there with Akin 'I was there with Akin'

(8) fẹmT kpẹlú ọkT ẹrẹ (conjunction)
    Femi with Akin cut meat 'Femi and Akin cut meat'

(9) fẹmT nT ọrụkọ mì kpẹlú (adverb)
    Femi FOCUS name my also 'Femi is my name too' (as well as
    someone else's)

As Lord convincingly argues, all four categorial variants of the word are
traceable historically to a single original comitative verb which has undergone
grammaticalization in different syntactic contexts. Thus, what may appear to
be a synchronic oddity is seen to conform to some regularity in a diachronic
process.

The present study similarly aims to show how certain phonologically identi-
cal but synchronically diverse units functioning as verb, preposition/adverb,
and verbal affix may be shown to be historically related. In particular, it
will be shown that the verbal affix in a variety of compound verbs in Edo origi-
nated historically from a verb which has undergone grammaticalization and lex-
ical re-analysis in contexts including serial verb constructions.

2. The Compound Verb

In this study, a distinction is made between bi- and multi-morphemic verbs
which are the result of Verb-Noun combination on the one hand and those which
are composed of two verbal morphemes or a verb and particle/formative. The
former are regarded as complex verbs, while the latter are compound verbs. Ex-
amples (10-13) illustrate the former, while (14-17) illustrate compound verbs:
The concern of this paper is with compound rather than complex verbs.

There are two kinds of compound verbs, depending on whether they are made up of Verb+Verb or of Verb+Particle. In this study, we shall be concerned with the latter category. Example 17 above represents a typical example of the verb+particle type of compound verb. Other examples of this morphological type are illustrated by the following:

(18) ṣyòré (v.) < ṣyò (v.) + rè (part.) 'wake up'
(19) yèré (v.) < yè (v.) + rè (part.) 'remember, recall'
(20) fùré (v.) < fù (v.) + rè (part.) 'be calm, peaceful'

Verbs in Edo have grammatical rather than lexical tone. The tone marked on these forms represents the imperative mood.
(21) *twòré (v.)* < *twò (v.) + rè (part.)* 'descend, dismount'
   *drop down*

(22) *yàré (v.)* < *yà (v.) + rè (part.)* 'brighten (of the sun)'
   *shine out*

(23) *fyàgbé (v.)* < *fyà (v.) + gbè (part.)* 'bless'
   *cut to*

(24) *kùgbè (v.)* < *kù (v.) + gbè (part.)* 'combine'
   *join to*

(25) *bìgbé (v.)* < *bl (v.) + gbè (part.)* 'shut'
   *push against*

Morphologically, these verbs each consist of two morphemes, a root and an affix. The root morpheme is the free verb from which the compound verb derives its meaning. The affix morpheme generally has no precise meaning, but typically conveys a vague deictic or prepositional meaning.

Syntactically, the root morpheme retains its transitivity value in some contexts of occurrence. Thus, in certain clausal constructions, it is immediately followed by its Object NP, and this leaves the affix isolated as a postverbal free form. Compare, for example, (27) and (28) with the other sentences from (26) to (30):

(26) *òzò rèré rèyòrè òwòyè 'nà* 'Ozo woke up early this morning'
   *Ozo early+Pt wake up morning this*

(27) *òzò yè enè vè rè* 'Ozo remembered my name'
   *Ozo recalled name my ?up*

(28) *èkò fù òzò ègbé rè* 'Lagos is comfortable for Ozo'
   *Lagos made cool Ozo body ?down*

(29) *òzò twòré òfè ìbà* 'Ozo descended from the slab'
   *Ozo descended at slab*

(30) *òvè yàre è nè* 'the sun is out already'
   *sun brightened already*

3. **Re as Verb and Co-verb/Adverb**

3.1. **Functions of re**. The surface structure NP V NP re of (27) and
(28) shows remarkable similarity to the surface form of one variety of serial verb construction:

(31) òzó lē ụgbó rē 'Ozo came through the farm'  
Ozo passed farm come

(32) òzó lelé azàrí rē 'Ozo came with Azari'  
Ozo followed Azari come

(33) òzó lā Tmọtọ rē 'Ozo came in a car'  
Ozo entered car come

(34) òzó yā ọwé rē 'Ozo came on foot'  
Ozo used foot come

Examples (31-34) represent a variety of modality serialization in which the first verb in the series is interpreted as modifying the second verb. The second verb, re, is homophonous with the particle in (26-30), but from the meanings of (31-34) it is clear that the re in the latter set is a full-fledged verb. There are a number of significant differences between the type of sentences of (26-30) and that of (31-34), but it would be instructive to consider first a third kind of construction in which yet another variety of re occurs:

(35) ọ tyé ozó rē 'he summoned Ozo'  
he called Ozo come

(36) ọ dé emyówó rē 'he bought some meat here (to speaker)'  
he bought meat come

(37) ọ gbé ọhè rē 'he caught some fish here (to speaker)'  
he caught fish come

(38) ọ gbé ebé rē 'he wrote a letter here (to speaker)'  
he wrote letter come

Again, with the same surface structure of NP V NP re, it would seem that there is no structural difference between (31-34) on the one hand and (35-38) on the other, especially as the literal gloss of re in the latter set has been given as 'come'. However, semantically, the re in (35-38) expresses an adverbial rather than verbal meaning, and it functions as a deictic modifier of the first verb, which is also the main verb in the series. Thus, whereas (31-
34) would be analysed underlyingly as constituting two conjoined clauses, (35-38) are underlyingly single clause constructions in which the second surface verb is in fact a verbal particle. This is supported by the paraphrase values of the sentences, shown in (39a,b):

(39) a. ďozó la ūgbó rē = ďozó la ūgbó + ďozó rēēe  
Ozo passed farm       Ozo came  
'Ozo crossed the farm + Ozo came'

b. ďozó lelé azàtī rē = ďozó lelé azàtī + ďozó vē azàtī rēēe  
'Ozo followed Azari + Ozo and Azari came'

but for (35) we have:

(40) ď tyē ozo rē = ď tyē - rē ďzdō5  
he called       come Ozo  
'he summoned Ozo'

Diagrammatically, the synchronic underlying structures of (31) and (35) may be represented roughly as (41) and (42) respectively:

Further justification for the above analysis derives from the different occurrence possibilities for adverbs in the two kinds of sentences. Normally, adverbial modifiers occur in the immediate pre-verb position in clauses with-

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5This, however, does not occur as an acceptable surface form, even though it paraphrases accurately the sense of (37). The particle always occurs after the Object NP in sentences of this nature; but see section 3.2.
out modal constituents,\(^6\) as is illustrated in (43) and (44) below:

(43) a. Ozo ate food

\(\text{Ozo ate (some food)'}\)

b. Ozo quickly+Pt eat food

\(\text{Ozo hurriedly ate (some food)'}\)

(44) a. Ozo lie

\(\text{Ozo lay down}’\)

b. Ozo gently+Pt lie

\(\text{Ozo lay down gently}’\)

Accordingly, semantically appropriate adverbs may occur before either of the two verbs in (31-34) to yield grammatical sentences:

(45) a. Ozo quickly+Pt pass farm come

\(\text{Ozo quickly came through the farm}’\)

b. Ozo arrived quickly through the farm

(46) a. Ozo first+Pt followed Azari come

\(\text{Ozo previously came with Azari}’\)

b. Ozo came previously with Azari

(47) a. Ozo first+Pt enter car come

\(\text{Ozo first came in a car}’\)

b. Ozo came first in a car

(48) a. Ozo carefully+Pt use foot come

\(\text{Ozo carefully came by foot}’\)

b. Ozo carefully came by foot

However, in the case of (35-38), adverbs may occur only before the first verb and not re to yield acceptable sentences. This accounts for the ungrammaticality of the (b) sentences below:

(49) a. he early+Pt call Ozo come

\(\text{he summoned Ozo early}’\)

b. *he early+Pt call Ozo come

(50) a. he early+Pt buy meat come

\(\text{he bought meat over early}’\)

b. *he early+Pt buy meat come

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\(^6\)The only exceptions to this rule are ideophonic adverbs, which occur only post-verbally.
(51) a. ṣọ ṛẹ̀ẹ̀ gbé èhè ré  
    'he caught some fish here early'
    he early+Pt catch fish come

   b. *ọ gbé èhè ṛẹ̀ẹ̀ ré

(52) a. ṣọ ṛẹ̀ẹ̀ gbé èbé rẹ  
    'he wrote a letter here early'
    he early+Pt write letter come

   b. *ọ gbé èbé ṛẹ̀ẹ̀ ré

The restriction of adverbs from occurring before ṛẹ̀ẹ̀ in the above sentences confirms the non-verbal status of ṛẹ̀ẹ̀ in such constructions. This further shows that sentences like (35) have only one underlying verb and are therefore structurally distinct from those like (31) which have two underlying verbs. The former type belongs to the category of construction which has been designated in the literature as the co-verb sentence, in which one of the two surface verbs is identified variously as a "co-verb", "verb in series", "serial verb", "prepositional case marker", etc. [Li and Thompson 1974; Lord 1973; George 1975]. As has been argued above, whereas ṛẹ̀ẹ̀ in (31-34) is an underlying verb, in (35-38) it is not. Syntactically, it is an adverb which semantically expresses a deictic meaning.

However, on the basis of the phonological identity and semantic similarity of the two forms, one cannot but infer the possibility of a historical link between them in line with the kind of historical relationship that has been postulated between co-verbs functioning as prepositional case markers, on the one hand, and their homophonous verbal counterparts, on the other, in languages such as Yoruba, Igbo, and Mandarin Chinese. Thus, the co-verb ṛẹ̀ẹ̀ in (35-38) can be said to have developed historically from the verb ṛẹ̀ẹ̀, the latter having undergone a process of grammaticalization and lexical reanalysis in the particular constructional context in which it does not function as the main verb of the sentence.

The process of lexical re-analysis has both semantic and syntactic dimensions. It entails a reduction in its original semantic content and scope as a verb, while syntactically, it means a loss of distributional independence, having become incorporated into the categorical scope of the verb as a particle in a phrasal verb formation.
3. The compound verb context. A subsequent stage in the grammaticalization process is reflected in the compound verb context (cf. (18-25) above), in which the verb and particle coalesce to yield a single lexical unit. At this stage, the original verbal particle, with its deictic meaning, combines with its governing verb. Its identity as a separate morpheme is preserved only in its phonological form which remains invariant.

The strongest evidence of the lexicalization of the verb + particle structure is the ability of the new form to combine with vowel prefixes to form derived nouns, in the same way that nouns are derived from simple monosyllabic (CV) verbs. Compare (53-55) below with (56-61):

(53) a. tà (v.) 'say'  
   b. ṣtā (n.) 'speech'

(54) a. gye (v.) 'laugh'  
   b. ọgye (n.) 'laughter'

(55) a. vā (v.) 'shout'  
   b. àvā (n.) 'thunder'

(56) a. fùré (v. intr.) < fù + rè 'be calm, peaceful'  
   b. ṣfùré (n.)  
   'peace'

(57) a. fyàgbe (v.) < fyà + gbè 'bless, increase'  
   b. àfyàgbè (n.)  
   'blessing'

(58) a. kùgbè (v.) < kù + gbè 'unite, combine'  
   b. àkùgbè (n.)  
   'unity'

(59) a. sìkòkò (v.) < sì + kòkò 'gather, collect'  
   b. àsìkokò (n.)  
   'assembly, gathering'

(60) a. dègbè (v.) < dè + gbè 'hit'  
   b. òdègbè (n.)  
   'collision'

(61) a. yèrè (v.) < yè + rè 'remember'  
   b. àyèrè (n.)  
   'remembrance'

The point must be made, however, that the development of the above kind of compound verbs in Edo is yet at an incipient stage. Hence, unlike the case in Igbo, for example (cf. Lord [1975, 1977]), there are indeed very few examples of compound verbs readily attestable in Edo. Besides, many of the forms be-
have rather unstably as lexical units, especially in syntactic contexts. For example, many combinations involving transitive verbs always split to accommodate the Object NP of the verb immediately after it, thereby isolating the particle as a separate word:

(62) a. òzò yē eni ìmà ré
Ozo recalled name our up
'Ozo remembered our name'
b. *òzò yēre eni ìmà

(63) a. òzò sT Yó ìmà kòkò
Ozo pulled money our together
'Ozo assembled our money'
b. *òzò sTìkòkò ígò ìmà

However, it is also the case that when the Object of the verb is a complex NP, i.e. involving one or more relative clauses, rather than a simple phrase, the verb and its particle may occur together as a single word, with the Object NP following:

(64) a. òzò yē èvè nè i xáma ákè ré
Ozo recalled matter Rel I told him up
'Ozo remembered what I told him'
b. òzò yēre, èvè nè i xáma ákè
Ozo remembered matter Rel I told him
'Ozo remembered what I told him'

(65) a. òzò sT iblékà 'hyá négyèìè nè i ré èvu, nè i má
Ozo pulled children all little Rel cli. be there Rel cli. Neg pron. pron.
hé rì èvàìè kokò
yet eat food together
'Ozo assembled all the little children who were there who had not yet eaten'
b. òzò sTìkòkò, iblékà 'hyá négyèìè nè i ré èvà, nè i má
Ozo assembled children all little Rel cli. be there Rel cli. pron. pron.
má hé rì èvàìè
Neg yet eat food
'Ozo assembled all the little children who were there who had not yet eaten'

7In fact, in a sentence such as this, the (b) version is preferred to its
The re-ordering of constituents in the (b) sentences seems to be pragmatically motivated, as it not only eliminates the otherwise increased distance between the verb and its particle, thereby reinforcing their semantic unity, but, by having the complex Object NP moved to the end of the clause, it also facilitates its processing. More importantly, this sentence type does constitute important evidence of the transitional process from the verb + particle stage to the compound verb stage.

The tables below summarize the historical stages in the transition from a full-fledged verb to a grammaticalized verbal affix, using re and gbe as examples.

Table 1: re (v.) 'come' > -re (affix)

<table>
<thead>
<tr>
<th>Historical Stages</th>
<th>Distributional Contexts</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Full verb</td>
<td>(i) As main verb in a</td>
<td>òzó rē  owà  ŋé</td>
</tr>
<tr>
<td></td>
<td>minimal sentence</td>
<td>Ozo came house my</td>
</tr>
<tr>
<td></td>
<td>(ii) As main verb in a</td>
<td>ò yá  ówè  rē</td>
</tr>
<tr>
<td></td>
<td>serial construction</td>
<td>he used foot come</td>
</tr>
<tr>
<td>II: Co-Verb/</td>
<td>As a modifying verb in a</td>
<td>òzó voxó  èรกá  rē</td>
</tr>
<tr>
<td>Adverb</td>
<td>serial construction</td>
<td>ozo bent tree come</td>
</tr>
<tr>
<td>III: Verbal affix</td>
<td>In a compound verb</td>
<td>òzó  ṣyṣre  nē</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ozo woke up already</td>
</tr>
</tbody>
</table>

corresponding (a) form. It is also worth noting that in the (b) sentences above, there is usually a pause after the compound verb (marked here by the comma), and the intonation pattern up to this point is comparable to that used for an intransitive clause, i.e. as though no Object is anticipated. The eventual addition of the complex Object NP comes with noticeable force, probably intended to sustain its complex structure, as well as to compensate for its "displacement" by the particle.
Table 2: *gbe* (v.) 'hit' > *-gbe* (affix)

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>I: Full verb</td>
<td>(i) As main verb in a minimal sentence</td>
<td>òzọ <em>gbe</em> azàrà</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'Ozo hit Azari'</td>
</tr>
<tr>
<td></td>
<td>(ii) As main verb in serial construction</td>
<td>òzọ <em>yà</em> eřa <em>gbe</em> azàrà</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'Ozo hit Azari with a stick'</td>
</tr>
<tr>
<td>II: Co-Verb/Preposition</td>
<td>As a serial verb in a serial construction</td>
<td>òzọ bT ēkhù <em>gbe</em> azàrà</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'Ozo pushed the door against Azari'</td>
</tr>
<tr>
<td>III: Verbal affix</td>
<td>In a compound verb</td>
<td>èxù bigbe <em>gbe</em> azàrà òwè door shut hit Azari foot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'the door shut against Azari's foot'</td>
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</tbody>
</table>

4. Conclusion

In this paper, we examined a category of compound verbs in Edo which features a particular kind of affix morpheme, with a view to determining the nature of the relation between this affix and other homophonous forms in the language which synchronically belong to different grammatical categories. In line with findings from the study of serial verb constructions in languages such as Mandarin Chinese and Yoruba, we have shown through our Edo data not only that certain verbs undergo grammaticalization and lexical reanalysis historically in the context of serial constructions to become prepositional case markers and adverbs synchronically, but also that some of these grammaticalized forms do undergo further lexical reanalysis and semantic depletion and ultimately become incorporated as affixes to the main verbs with which they occurred as co-verbs in serial constructions, at an earlier stage.
REFERENCES


