

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. Introduction¹

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:²

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: \acute{v} for High tone, \grave{v} for Low tone, \bar{v} for Downstepped High tone, and Downstepped Low tone is left blank.

- (1) òzò řu|é³ le èvàřé řē 'Ozo quickly cooked and ate'
Ozo quickly+Pt cook food eat
- (2) ířǎ lèlé azàří kpàá 'they left with Azari'
they followed Azari leave
- (3) ò dřgwe řìvyǎ ířǎ 'he knelt and begged them'
he knelt beg them
- (4) ò řyé řyó xe vế 'he reserved money for me'
he took money wait me
- (5) òzò yā ōwé kpoló 'Ozo swept with a broom'
Ozo used broom sweep

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 *kpèlú*, discussed in Lord [1973:280ff.], which synchronically functions as a verb, preposition, conjunction, and adverb as in (6-9) respectively:

- (6) *fémT kpèlú àwó ólè* (verb)
 Femi be-included among PL thief 'Femi is one of the thieves'
- (7) *mō wà níbè kpèlú ākT* (preposition)
 I be there with Akin 'I was there with Akin'
- (8) *fémT kpèlú ākT gé ērā* (conjunction)
 Femi with Akin cut meat 'Femi and Akin cut meat'
- (9) *fémT nT ōrúkō mī kpèlú* (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 identical 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 originated historically from a verb which has undergone grammaticalization and lexical 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. Examples (10-13) illustrate the former, while (14-17) illustrate compound verbs:

(10)	níyě̀ (v.)	<	nà ⁴ (v.)	+	ìyě̀ (n.)	'report'
			narrate		news	
(11)	mwègbé (v.)	<	mù (v.)	+	ègbé (n.)	'prepare'
			carry		body	
(12)	myésò (v.)	<	myè (v.)	+	èsò (n.)	'suffer'
			see		hardship	
(13)	mwóhù (v.)	<	mù (v.)	+	òhù (n.)	'be angry'
			carry		anger	
(14)	fyà̀rè (v.)	<	fyà̀ (v.)	+	ɽè (v.)	'bite'
			cut		eat	
(15)	mùhè (v.)	<	mù (v.)	+	hèè (v.)	'start, begin'
			carry		begin	
(16)	lègàá (v.)	<	lèé (v.)	+	gàá (v.)	'surround'
			flow		around	
(17)	yà̀ré (v.)	<	yà̀á (v.)	+	rè (part.)	'be more than enough'
			be		?	
			surplus			

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)	řyòré (v.)	<	řyò (v.)	+	rè (part.)	'wake up'
			rise		?up	
(19)	yèré (v.)	<	yè (v.)	+	rè (part.)	'remember, recall'
			recall		?up	
(20)	fùré (v.)	<	fù (v.)	+	rè (part.)	'be calm, peaceful'
			cool		?down	

⁴Verbs 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) | fyāgbé (v.) | < | fyā (v.) | + | gbè (part.) | 'bless' |
| | | | cut | | ?to | |
| (24) | kùgbè (v.) | < | kù (v.) | + | gbè (part.) | 'combine' |
| | | | join | | ?to | |
| (25) | bìgbé (v.) | < | bì (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 post-verbal free form. Compare, for example, (27) and (28) with the other sentences from (26) to (30):

- | | | | | | | |
|------|---------------|------------|---------|------|----------------------------------|--------------------------------|
| (26) | òzó řeřé | řyɔrè | òwýè | 'nà | 'Ozo woke up early this morning' | |
| | Ozo early+Pt | wake up | morning | this | | |
| (27) | òzó yē | enì | v'è | rē | 'Ozo remembered my name' | |
| | Ozo recalled | name | my | ?up | | |
| (28) | èkó | fū | ozò | ègbé | rē | 'Lagos is comfortable for Ozo' |
| | Lagos | made | cool | Ozo | body ?down | |
| (29) | òzó twòrè | v'è | í | bà | 'Ozo descended from the slab' | |
| | Ozo descended | at | slab | | | |
| (30) | òv'è | yāre | n'è | | '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 lā ūgbó rē 'Ozo came through the farm'
Ozo passed farm come
- (32) òzó lelé azàṛí rē 'Ozo came with Azari'
Ozo followed Azari come
- (33) òzó lā Ƨmótò rē 'Ozo came in a car'
Ozo entered car come
- (34) òzó yā ōwé 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) ò tyé ozó rē 'he summoned Ozo'
he called Ozo come
- (36) ò dé emyówō ré 'he bought some meat here (to speaker)'
he bought meat come
- (37) ò gbé ēhè ré 'he caught some fish here (to speaker)'
he caught fish come
- (38) ò 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):

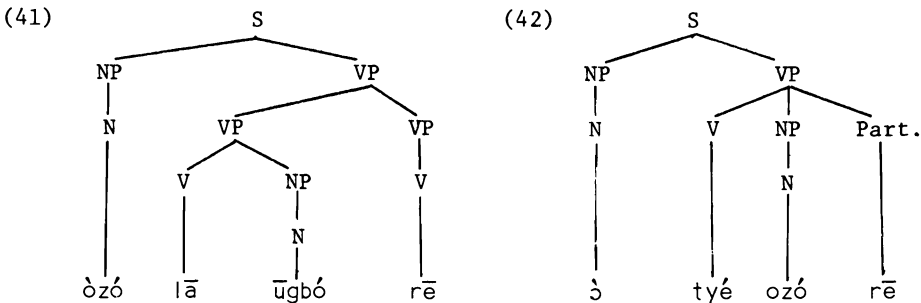
(39) a. òzó lā ūgbó rē = òzó lā ūgbó + òzó rēè
 Ozo passed farm Ozo came
 'Ozo crossed the farm + Ozo came'

b. òzó lelélé azàrí rē = òzó lelélé azàrí + òzó v̄ē azàrí rēè
 'Ozo followed Azari + Ozo and Azari came'

but for (35) we have:

(40) ò tyé ozó rē = ò tyé - rē òzó⁵
 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-

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. òzó rī eṽàǝǝé 'Ozo ate (some food)'
Ozo ate food
- b. òzó gyēégyē rì èṽàǝǝé 'Ozo hurriedly ate (some food)'
Ozo quickly+Pt eat food
- (44) a. òzó lōṽié 'Ozo lay down'
Ozo lie
- b. òzó fēkò lōṽié 'Ozo lay down gently'
Ozo gently+Pt lie

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

- (45) a. òzó gyēégyē là úgbó rē 'Ozo quickly came through the farm'
Ozo quickly+Pt pass farm come
- b. òzó lā ūgbó gyēégyē rē 'Ozo arrived quickly through the farm'
- (46) a. òzó kā lelé àzàǝí rē 'Ozo previously came with Azari'
Ozo first+Pt followed Azari come
- b. òzó lelé azàǝí kà ré 'Ozo came previously with Azari'
- (47) a. òzó kā la ímótò ré 'Ozo first came in a car'
Ozo first+Pt enter car come
- b. òzó lā ímótò kà ré 'Ozo first came in a car'
- (48) a. òzó fēkò yà ówè ré 'Ozo carefully came by foot'
Ozo carefully+Pt use foot come
- b. òzó yā ówè fēkó rē '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. ò ǝǝǝé tye òzó rē 'he summoned Ozo early'
he early+Pt call Ozo come
- b. *ò tye òzó ǝǝǝé ré
- (50) a. ò ǝǝǝé de èmyówò ré 'he bought meat over early'
he early+Pt buy meat come
- b. *ò dé emyówò ǝǝǝé ré

⁶The only exceptions to this rule are ideophonic adverbs, which occur only post-verbally.

- (51) a. ò ǝ̀ǝ̀é gbe éhǝ̀ ré 'he caught some fish here early'
 he early+Pt catch fish come
 b. *ò gbé ǝ̀hǝ̀ ǝ̀ǝ̀é ré
- (52) a. ò ǝ̀ǝ̀é gbǝ̀ èbé rǝ̀ 'he wrote a letter here early'
 he early+Pt write letter come
 b. *ò gbǝ̀ èbé ǝ̀ǝ̀é ré

The restriction of adverbs from occurring before *re* in the above sentences confirms the non-verbal status of *re* 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 *re* 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 *re* in (35-38) can be said to have developed historically from the verb *re*, 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 categorial 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. òtá (n.) | 'speech' |
| (54) a. gyè (v.) | 'laugh' | b. ògyé (n.) | 'laughter' |
| (55) a. vǎ (v.) | 'shout' | b. àvǎ (n.) | 'thunder' |
| (56) a. fùré (v. intr.) | < fù + rè | 'be calm, peaceful' | |
| b. ófùré (n.) | | 'peace' | |
| (57) a. fyǎgbé (v.) | < fyǎ + gbè | 'bless, increase' | |
| b. àfyǎgbē (n.) | | 'blessing' | |
| (58) a. kùgbé (v.) | < kù + gbè | 'unite, combine' | |
| b. àkùgbē (n.) | | 'unity' | |
| (59) a. sìkòkó (v.) | < sì + kòkó | 'gather, collect' | |
| b. àsíkòkó (n.) | | 'assembly, gathering' | |
| (60) a. dègbé (v.) | < dè + gbè | 'hit' | |
| b. òdègbé (n.) | | 'collision' | |
| (61) a. yèré (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. òzó yē ení ímà ré 'Ozo remembered our name'
 Ozo recalled name our up
 b. *òzó yēre ení ímà
- (63) a. òzó sT Tγó ímà kòkò 'Ozo assembled our money'
 Ozo pulled money our together
 b. *òzó sTkòkó íγó ímà

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. òzó yē ευè nè í xáma áçè ré
 Ozo recalled matter Rel I told him up
 'Ozo remembered what I told him'
 b. òzó yēre, ευè nè í xáma áçè
 Ozo remembered matter Rel I told him
 'Ozo remembered what I told him'
- (65) a. òzó sT ibìékà `hyá négyèçè nè ì ré evá, nè í má
 Ozo pulled children all little Rel cli. be there Rel cli. Neg
 hé rì èvàçé kokó pron. pron.
 yet eat food together
 'Ozo assembled all the little children who were there who had not
 yet eaten'
 b. òzó sTkokó, ibìékà `hyá négyèçè nè ì ré evá, nè í
 Ozo assembled children all little Rel cli. be there Rel cli.
 má hé rì èvàçé⁷ pron. pron.
 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)

<i>Historical Stages</i>	<i>Distributional Contexts</i>	<i>Examples</i>
I: Full verb	(i) As main verb in a minimal sentence	òzó rē owà v'è Ozo came house my 'Ozo came to my house'
	(ii) As main verb in a serial construction	ò yá owè ré he used foot come 'he came on foot'
II: Co-Verb/ Adverb	As a modifying verb in a serial construction	òzó voxó èřá rē ozo bent tree come 'Ozo bent the tree over'
III: Verbal affix	In a compound verb	òzó řγōre n'è Ozo woke up already 'Ozo has already woken up'

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)

<i>Historical Stages</i>	<i>Distributional Contexts</i>	<i>Examples</i>
I: Full verb	(i) As main verb in a minimal sentence	òzó gbē azàǹí Ozo hit Azari 'Ozo hit Azari'
	(ii) As main verb in serial construction	òzó yā eǹǹá gbe àzàǹí Ozo used stick hit Azari 'Ozo hit Azari with a stick'
II: Co-Verb/ Preposition	As a serial verb in a serial construction	òzó bī ēkhù gbè àzàǹí Ozo pushed door hit Azari 'Ozo pushed the door against Azari'
III: Verbal affix	In a compound verb	èxù bígbe gbè àzàǹí ówè door shut hit Azari foot 'the door shut against Azari's foot'

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.

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