ON EMAI VBI PHRASES

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We examine the distribution of Emai prepositional phrases and their NP complements relative to intransitive verbs. In canonical order constructions, vbi phrases follow a matrix verb as optional or obligatory constituents, or they follow the verb za in series before another matrix verb. In non-canonical order constructions, focused NP complements give rise to the verb za in series with only a subclass of intransitive verbs. Through lexical entry formats, we relate these distributional facts to distinct semantic roles and specific grammatical relations. Some vbi phrases show a complement relation for source and goal, but remaining phrases reflect inner locative complements or outer locative adjuncts, the latter signaled in focus constructions by za. We also comment on vbi prohibition outside the verb phrase and on its relationship to construal of affected object.

1. Introduction.

Recent study of West African languages has profiled the diachronic character of an oblique syntactic relation associated with a locative meaning. These locative markers have attracted attention primarily as end-state of a diachronic process whose initial-state was the category verb. Lord (1993), for instance, argues that
Yoruba’s contemporary preposition *nì* (1a) derives historically from a verb with locative significance, surviving today as a verb of possession with the sense ‘have’ (1b).

(1)  
\[ a. \quad \text{ó se isé nì ilè.} \]  
\[ \quad \text{he do work at house} \]  
\[ \quad \text{‘He worked at home.’} \]  

\[ b. \quad \text{ó nì owó.} \]  
\[ \quad \text{he have money} \]  
\[ \quad \text{‘He has money.’} \]  

Nonetheless, little synchronic investigation in West Africa has assessed the distributional character of locative-marked constituents across fundamental construction types. Putting aside a diachronic perspective, we explore the synchronic behavior of prepositional phrases with locative significance in Nigeria’s Edoid language Emai (Elugbe 1989, Williamson & Blench 2000). It is a relatively strict SVO language showing an oblique syntactic relation that has locative significance. As data, we engage material from on-going documentation involving oral narrative texts (Schaefer & Egbokhare 1999) as well as dictionary (Schaefer & Egbokhare in press) and grammar descriptions.

Emai’s locative prepositional phrases and their NP complements show a complex grammatical character. Phrases marked by the preposition *vbi* exhibit non-uniform distribution with intransitive verbs.\(^1\) They follow a matrix verb, or they follow the verb *za* in series before a matrix verb. In these positions *vbi* phrases are either optional or obligatory. *Vbi*’s NP complement also displays asymmetrical behavior. In focus position, it co-occurs with an added verb *za* in series with only a restricted set of intransitive verbs. To describe these distributional facts, we advance abbreviated verb entries that pair distinct semantic roles with complement or adjunct grammatical relations.

2. **Analysis of *vbi* Phrases.**

*Vbi* serves as head of a prepositional phrase with locative character and governs a following NP constituent. It occurs with intransitive verbs but not in a symmetri-

\(^{1}\) Attention is given only to intransitive verbs for reasons of practicality. Transitive verbs show quite similar behavior with respect to *vbi*, its NP complement and the occurrence of *za*. 


cal fashion. This becomes evident when constructions with canonical order $S \ V \ vbi \ NP$ are compared to those with non-canonical order where the NP complement of $vbi$ or its information question counterpart occupies focus position. The latter we take to be the leftmost slot in cleft ($NP \ li \ S$ ‘it is NP that $S$’) and information question constructions (i.e. $ébé’ \ S$ ‘where $S$’) (cf. Watters 2000). Through comparison of canonical order and focus constructions, four covert intransitive verb categories can be discerned; they differ as to the obligatory or optional status of the $vbi$ phrase in canonical order structures and the occurrence of the verb $za$ in cleft and information questions.

Category one intransitive verbs consist of activity verbs such as $la$ ‘run’ and $gabe$ ‘dance’. Each of these verbs appears in constructions as a bare intransitive (2).

(2) a. ōlí ọyvbèkàhàn ọ ọ lá.²
    the youth SC C run
    ‘The youth is running.’

    b. ōlí òkpo sö ọ ọ gbé.
    the woman SC C dance
    ‘The woman is dancing.’

Additionally, each can be followed by $vbi$ and its NP complement. In canonical order intransitive constructions for category one verbs, $vbi$-marked phrases appear in post-verbal position ($vbi \ égbóà ‘in the backyard’ (3a), $vbi \ ókhún mí ùhài ‘on top of the well’ (3b)).

² Orthographic conventions for Emai are consistent with those in Schaefer (1987), Schaefer & Egbokhare (1999), where $o$ represents a lax mid back vowel, $e$ a lax mid front vowel, and $vb$ a voiced bilabial approximant. Acute accent marks high tone, grave accent signals low, and acute accent followed by an apostrophe designates high downstep. Tone marking is for the most part grammatically conditioned by inflectional factors such as mood, aspect, polarity as well as syntactic position. This leads to variable tone marking on individual lexical items throughout a clause. We use the following abbreviations throughout this paper: APP=applicative, ASS=associative, C=continuous, CS=change of state, F=factative, H=Habitual, IND=indicative, LOC=locative, PF=positive focus, R=relator, SC=subject concord.
The NP complement of a *vbi* phrase in a canonical order construction may correspond to a focus constituent. Focus position immediately precedes *li* in clefts or occupies the *ébè* ‘where’ slot in information questions. In both cleft and question constructions with category one verbs, the verb *za* ‘be located’ is obligatory (4a-b), with *vbi* itself being disallowed in focus position as well as after the verbs *la* or *za* (4c). Non-canonical order cleft and question constructions with category one verbs thus exhibit the verb *za*, which is not overtly present in canonical order constructions.

(4) a. égbóà  lí  ólí  óvbékhán  ó  ó  zá  là.
   backyard PF the youth SC H be.located run
   ‘It is in the backyard that the youth runs.’

b. *ébè'  ólí  óvbékhán  ó  ó  zá  là?*
   where the youth SC H be.located run
   ‘Where does the youth run?’

c. (*vbi) égbóà  lí  ólí  óvbékhán  ó  ó  zá  (*vbi) là  (*vbi).
   LOC backyard PF the youth SC H be.located LOC run LOC
   ‘It is in the backyard that the youth runs.’

Failure to include *za* in non-canonical order focus and question constructions with category one verbs is ungrammatical (5a-b), as is the inclusion of *za* in canonical order constructions (5c-d).
On Emai vbi Phrases

   backyard PF the youth SC H run
   'It is in the backyard that the youth runs.'

   b. *ébé' ólí óvbékhán ó ó lá?
      where the youth SC H run
      'Where does the youth run?'

   c. *ólí óvbèkhàn ó ó zà vbí égbòà là.
      the youth SC C be.located LOC backyard run
      'The youth is running in the backyard.'

   d. *ólí óvbèkhàn ó ó lá zà vbí égbòà.
      the youth SC C run be.located LOC backyard
      'The youth is running in the backyard.'

Similar patterns are revealed by clefts and questions related to canonical order constructions formed with the verb gbe 'dance.' Za does not surface in a canonical order structure with gbe (6a), but it is obligatory in corresponding clefts and information questions (6b-c).

(6) a. *ólí òkpòsò ó ó zà vbí ókhùnmí ù hàì gbe.
   the woman SC C be.located LOC top well dance
   'The woman is dancing on top of the well.'

   b. ókhùnmí ù hàì li ólí òkpòsò ó ó zà gbe.
      top well PF the woman SC H be.located dance
      'It was on top of the well that the woman danced.'

   c. ébé' ólí òkpòsò ó ó zà gbe?
      where the woman SC H be.located dance
      'Where does the woman dance?'

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3 The complementary distribution of forms across non-canonical and canonical order constructions is not limited to spatial expressions. For expressions of time, the verb re 'take' occurs in non-canonical information questions (éghè ójè ré hián ólí óràn [time Oje take cut the wood] 'When did Oje cut the wood?') but not in canonical declaratives (ójè hián ólí óràn òdè 'Oje cut the wood yesterday').
At this juncture, one might propose that *za* arises as a consequence of the focus construction (Goldberg 1995). *Za* could serve as a formal indicator of focus, much as intonation formally signals Emai polar questions. If so, *za* should be obligatory in focus constructions with other intransitive verbs. As we will see, this is not the case. When NP complements of *vbi* appear in focus position, intransitive verbs do not uniformly attract *za*.

Let us now consider the behavior of additional intransitive verbs. Their *vbi*-marked constituents show two distinct word order patterns. For category two and three verbs in canonical order constructions, we find the verb *za* with the latter, although only as a verb in series with a locative *vbi* phrase.

Among category two verbs we find *o* ‘enter’ (7a-b). Canonical order constructions with *o* show that it precedes an obligatory prepositional phrase consisting of *vbi* and its accompanying NP (e.g. *şkọ̀a* ‘room’).

(7) a. ūlọ́ ọ̀vbèkhàn ó ọ̀vbí șkọ̀a.
   the youth move.into LOC room
   ‘The youth entered the room.’

   b. *ūlọ́ ọ̀vbèkhàn ó.
   the youth move.into
   ‘The youth entered.’

Category three verbs are exemplified by *dianre* ‘come out.’ Canonical order constructions reveal *dianre* preceded by a *vbi*-marked phrase (*ūlọ́ șkọ̀a* ‘the room’ 8a) serving as complement of the verb *za* in series. *Za* and its *vbi* phrase

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4 Emai polar questions (*ūlọ́ ọ̀vbèkhàn ọ̀ là ọ̀vbí ęgbóà? [the youth SC C run LOC backyard] ‘Is the youth running in the backyard?’) through intonation upturn and raised pitch register, differ from declarative statements (*ūlọ́ ọ̀vbèkhàn ọ̀ là ọ̀vbí ęgbóà [the youth SC C run LOC backyard] ‘The youth is running in the backyard’).

5 The lexical form *dianre* appears to have a complex history. Morphologically, it could consist of the verbs *de* ‘reach,’ *re* ‘arrive’ and the deictic locative pronoun ẹ̀ăn ‘here.’ If so, elision of *de*’s vowel would be expected but the rise of *eăn*’s initial mid-vowel to high front position would have to be accounted for. *Dianre* might also derive from *dia* ‘sit’ and *re* ‘arrive’ with corresponding adjustment of *dia*’s meaning through grammaticalization or retention of an earlier sense, and addition of nasalization. At this time, there is no comparative or language internal evidence for either hypothesis, and native speakers treat *dianre* as a single, non-separable verb.
are optional (8b). The constituent order difference between category one and two is apparent: za, vbí and its complement NP precede rather than follow the verb.

(8) a. őlí óvbèkhàn zá vbí őlí ékóà diànré.
the youth be.located LOC the room come.out
'The youth came out of the room.'

b. őlí óvbèkhàn diànré.
the youth come.out
'The youth came out.'

The contrasting constituent order patterns for category two and three verbs cannot be reversed. O ‘enter’ does not accept a preceding za with its associated vbí phrase (9a). Dianre ‘come out’ does not permit a following vbí phrase (9b). Moreover, za cannot appear as the sole verb of a clause (9c); it is dependent on another verb in series.6

(9) a. *őlí óvbèkhàn zá vbí őlí ékóà ó.
the youth be.located LOC the room enter
'The youth entered the room.'

b. *őlí óvbèkhàn diànré vbí ékóà.
the youth come.out LOC room
'The youth came out of the room.'

c. *őlí óvbèkhàn zá vbí őlí ékóà.
the youth be.located LOC the room
'The youth moved from the room.'

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6 Emai dependent verbs fail to occur as the sole verb of a matrix clause, follow immediately an auxiliary or preverb constituent and reflect the tonal pattern of their accompanying matrix verb. In the case of za, it precedes the locative preposition vbí (only verbs precede this preposition), immediately follows auxiliary and preverb (gho ‘too/also’) constituents (őjé ghó zá vbí őlí ékóà diànré ‘Oje came out of the room too’) and in canonical order constructions reflects the tonal pattern of the matrix verb (zá and initial high tone of diànré). Another dependent verb is re, which in series with another verb conveys a range of English meanings (‘cause/make,’ ‘use/take,’ ‘give/provide,’ and ‘bring’), but it never occurs as sole predicate of a transitive clause (*őjé řé îkhùnmi ‘Oje took medicine’).
Category two and category three verbs also behave differently with respect to \textit{za} in non-canonical order constructions. Consider NP constituents in focus position that correspond to \textit{vbi} complements in canonical order structures with \textit{o} and \textit{dianre}. When NP complements of \textit{vbi}-marked phrases associated with \textit{o} appear in focus position, \textit{o} is the sole verb in the matrix clause (10a-b). \textit{Za} in cleft and information questions with \textit{o} is excluded (10c-d).

\begin{enumerate}
\item [(10)]
\begin{enumerate}
\item \textit{ólí} \textit{ékóá} nà \textit{lí} \textit{ólí} \textit{óvbékhán} ó -ì.
\textit{the room} this \textit{PF} the \textit{youth} \textit{enter} -\textit{F}
\textit{‘It was this room that the youth entered.’}
\item \textit{ébé'} \textit{ólí} \textit{óvbékhán} ó -ì?
\textit{where the youth} \textit{enter} -\textit{F}
\textit{‘Where did the youth enter?’}
\item *\textit{ólí} \textit{ékóá} \textit{lí} \textit{ólí} \textit{óvbékhán} zá \textit{ò}.
\textit{the room} \textit{PF} the \textit{youth} \textit{be.located} \textit{enter}
\textit{‘It was this room that the youth entered.’}
\item *\textit{ébé'} \textit{ólí} \textit{óvbékhán} zá \textit{ò}?
\textit{where the youth} \textit{be.located} \textit{enter}
\textit{‘Where did the youth enter?’}
\end{enumerate}
\end{enumerate}

Now consider \textit{dianre}. When the NP complement of its \textit{vbi}-marked phrase corresponds to a focus position constituent in clefts or information questions, the matrix clause reveals only a single \textit{za} (11a-b). Cleft and information questions do not allow an additional \textit{za} form in the verb phrase (11c-d). They retain only the single \textit{za} found in canonical order \textit{dianre} constructions.

\begin{enumerate}
\item [(11)]
\begin{enumerate}
\item \textit{ékóá} mè \textit{lí} \textit{ólí} \textit{óvbékhán} zá \textit{díànré}.
\textit{room} my \textit{PF} the \textit{youth} \textit{be.located} \textit{come.out}
\textit{‘It was from my room that the youth came out.’}
\item \textit{ébé'} \textit{ólí} \textit{óvbékhán} zá \textit{díànré}?
\textit{where the youth} \textit{be.located} \textit{come.out}
\textit{‘From where did the youth come out?’}
\end{enumerate}
\end{enumerate}
c. *ékóá mè lì ólí óvbékhán zá zà diànré.
   room my PF the youth be.located be.located come.out
   ‘It was from my room that the youth came out.’

d. *ébé' ólí óvbékhán zá zà diànré?
   where the youth be.located be.located come.out
   ‘From where did the youth come out?’

Other verbs that exhibit behavior similar to o and dianre, respectively, are se ‘reach, move as far as’ and raale ‘move away.’ Like its category two counterpart o, se exhibits a postverbal vbi phrase in canonical order structures (12a); it does not allow a preceding constituent consisting of za followed by a vbi phrase (12b).

(12) a. ólí óvbèkhàn sè vbi édà.
    the youth reach LOC river
    ‘The youth reached the river.’

b. *ólí óvbèkhàn zá vbi édà sè.
    the youth be.located LOC river reach
    ‘The youth reached the river.’

When se’s canonical order construction is compared to its non-canonical order focus construction, one finds se as the only matrix verb (13a-b). As well, NP complements of vbi in canonical order constructions do not pair with focus position constituents in cleft and question constructions that co-occur with both za and se. Za is disallowed (13c-d).

(13) a. ólí édá nà lí ólí óvbékhán sè -ì.
    the river this PF the youth reach-F
    ‘It was this river that the youth reached.’

b. ébé' ólí óvbékhán sè -ì?
   where the youth reach-F
   ‘Where did the youth reach?’
c. *ólí édá nà lí ólí óvbékhán zá sè.
   the river this PF the youth be.located reach
   ‘It was this river that the youth reached.’

d. *ébé’ ólí óvbékhán zá sè?
   where the youth be.located reach
   ‘From where did the youth reach?’

The verb raale ‘move away’ exhibits behavior similar to the category three verb dianre. In canonical order constructions, raale is preceded by a constituent consisting of the verb za and its vbi phrase (14a). It also occurs without za and its vbi phrase (14b), but it does not permit a following vbi phrase (14c).

(14) a. ólí óvbèkhàn zá vbi ̀iwè ráálè.
   the youth be.located LOC house move.away
   ‘The youth has moved away from the house.’

   b. ólí óvbèkhàn ráálè.
   the youth move.away
   ‘The youth has moved away.’

   c. *ólí óvbèkhàn ráálè vbi ̀iwè.
   the youth move.away LOC house
   ‘The youth has moved away from the house.’

When the NP complement of vbi in canonical order raale constructions corresponds to the focus position constituent in clefts or information questions, only a single za form occurs; no additional za attributable to the focus construction appears. A single za, also found in the corresponding canonical order construction, is paired with raale in the verb phrase (15a-b).

(15) a. íwè mè lí ólí óvbékhán zá (*zà) ràálè.
   house my PF the youth be.located be.located move.away
   ‘It was from my room that the youth moved away.’

   b. ébé’ ólí óvbékhán zá (*zà) ràálè?
   where the youth be.located be.located move.away
   ‘From where did the youth move away?’
Let’s take stock of the verb categories in these various constructions by articulating abbreviated lexical entries. For the latter, we specify syntactic subcategorization frame (e.g. \(< \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ PP>\)), semantic role (e.g. \(<\text{goal}>\)), optional status of a frame or role with “\(\{ \}\)”, and possible indexing relations between frame elements. First, consider the verbs \(o\), \(dianre\) and \(za\).

The verb \(o\) takes a subject argument linked to the semantic role theme. It also requires a prepositional phrase linked to the semantic role goal, where goal refers to the point to or toward which an entity moves (Blake 2001). Its lexical entry assumes the shape in Figure 1.

**Figure 1.**

\[
\begin{array}{l}
\text{o 'move into, enter}\\
<\_ PP>\\
<\text{theme, goal}>\\
\end{array}
\]

The lexical entry for \(dianre\) has a somewhat different syntactic and semantic character. It requires a grammatical subject linked to the role theme, but no other syntactic relation with accompanying semantic role is obligatory. \(Vbi\) phrases in \(dianre\) constructions are complements of the verb \(za\), the entire \(za\ vbi\ NP\) constituent being optional. \(Dianre\)’s lexical entry is shown in Figure 2.

**Figure 2.**

\[
\begin{array}{l}
\text{dianre 'move out'}\\
<\text{theme}>\\
\{<\text{V1 } \_ > ; \text{V1= za}\}\\
\end{array}
\]

As for the verb \(za\), its lexical entry is distinct. As grammatical subject, \(za\) takes a noun phrase linked to the semantic role theme. As complement, it takes a prepositional \(vbi\) phrase linked to the semantic role source, with source referencing the point from which an entity moves (Blake 2001). Moreover, \(za\) and its prepositional phrase must precede verbs like \(raale\) and \(dianre\) in series.
When we turn to category one verbs like la ‘run’ and gbe ‘dance,’ none of the three preceding lexical entry types appears adequate. Since la and gbe do not refer to displacement of an entity, they do not exhibit the semantic role source (like za with dianre) or goal (like o). They also do not manifest an obligatory prepositional phrase. Instead, la and gbe show an optional vbi phrase specifying the location at which an activity occurs. Their associated vbi phrase is linked to the semantic role locative, where locative refers to a spatial position (Blake 2001). La and gbe would thus reflect a lexical entry with subject linked to a theme role and an optional prepositional phrase linked to the semantic role locative, as indicated in Figure 4.

Summarizing to this point, we have concentrated on vbi-marked phrases, assessing their syntactic status and the semantic role of their NP complement. For vbi phrases, we identified three semantic role types and three syntactic position types: locative with optional postverbal position (la, gbe), goal with obligatory postverbal position (o, se), and source with an obligatory preverbal position within a dependent verb phrase headed by za (dianre, raale).

Now we turn to a fourth verb category and its vbi-marked phrases. This category is most clearly illustrated by the verb ri ‘be located.’ In canonical order constructions it has an obligatory postverbal phrase marked by vbi (16a-b).
(16) a. őlí ővbèkhán řì vbi ıšıkùù.
   the youth be.located LOC school
   ‘The youth is at school.’

   b. *őlí ővbèkhán řì.
   the youth be.located
   ‘The youth is. / The youth exists.’

Ři permits cleft and information question constructions where the NP of its vbi phrase corresponds to a focus position constituent (17a-b).

(17) a. ıšıkùù mè li őlí ővbèkhán řì.
   school my PF the youth be.located
   ‘It is my school that the youth is at.’

   b. ébé’ őlí ővbèkhán řì?
   where the youth be.located
   ‘Where is the youth?’

Important for our investigation is the fact that focus constructions with ři reject za. Inclusion of za in the matrix clause with ři is ungrammatical (18a-b).

(18) a. *ıšıkùù mè li őlí ővbèkhán zá řì.
   school my PF the youth be.located be.located
   ‘It is my school that the youth is at.’

   b. *ébé’ őlí ővbèkhán zá řì?
   where the youth be.located be.located
   ‘Where is the youth?’

Other verbs in the ři category include muzan ‘stand,’ mehen ‘lie’ and dia ‘sit.’ These verbs with their posture sense are followed by a locative vbi phrase (19a-c), although the latter is not obligatory (20a-c).
(19) a. ọlì ọmọ múzáin -ì vbí ékọà.
The child stand -F LOC room
‘The child stood in the room.’

b. ọlì ọmọ méhèn -ì vbí éwàà.
the child lie -F LOC mat
‘The child lay on the mat.’

c. ọlì ọmọ ìjá vbí ékọà.
the child sit LOC room
‘The child sat in the room.’

(20) a. ọlì ọmọ múzáin -ì.
the child stand -F
‘The child stood.’

b. ọlì ọmọ méhèn -ì.
the child lie -F
‘The child lay.’

c. ọlì ọmọ ìjá.
the child sit
‘The child sat.’

NP complements of vbi phrases associated with posture verbs can correspond to focus position constituents. When they do, the accompanying matrix clause contains only the posture verb muzan, mehen or dia (21a-c).

(21) a. èbè’ ọlì ọmọ múzáin -ì?
   where the child stand -F
   ‘Where did the child stand?’

b. èbè’ ọlì ọmọ méhèn -ì?
   where the child lie -F
   ‘Where did the child lay?’
Focus constructions with posture verbs do not allow za. Inclusion of za in these constructions is ungrammatical (22a-c).

(22) a. *ébé' ólí ómó zá mùzàn?
   where the child be.located stand
   ‘Where did the child stand?’

b. *ébé' ólí ómó zá mèhèn?
   where the child be.located lie
   ‘Where did the child lay?’

c. *ébé' ólí ómó zá diá?
   where the child be.located sit
   ‘Where did the child sit?’

Verbs of category four thus exhibit a vbi phrase that occurs in postverbal position. They do not attract za in constructions where vbi’s NP complement corresponds to a focus position constituent. Category four verbs appear to behave like the verbs of category two, o ‘enter’ and se ‘reach.’ The generally similar distributional behavior of their vbi phrases leads one to the initial hypothesis that category four and category two verbs should collapse into a single covert lexical category. Both show a vbi phrase that follows the verb, and both disallow za in focus constructions. Suppose we then specify the lexical entry for ri as we did for o. As subject, ri accepts a noun phrase linked to theme. Its obligatory prepositional phrase would be linked to the semantic role goal.

Figure 5.
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[ ]
ri ‘be located at’
<__ PP>
< theme, goal>
[ ]
```
We find Figure 5 inadequate, however, since it links ri’s prepositional phrase to the semantic role goal. As our earlier definition indicated, goal assumes a directional schema encompassing spatial positions of onset and termination, i.e. displacement of an entity in space. However, ri, muzan, mèhen and dia do not express displacement from one position to another. Category four verbs refer to stative positions in space, not dynamic repositioning of entities. They also reject Emai’s continuous aspect (23a-d), consistent with the rejection of progressive aspect crosslinguistically for stative events (Van Valin and LaPolla 1997). Assigning the semantic role goal to the vbi phrase of ri and category four verbs is thus untenable.

(23) a. *óñi ovbèkhàn ò ò riì vbi ¨isikùù.
   the youth SC C be.located LOC school
   ‘The youth is being in school.’

   b. *óñi ómò ò ò mùzàn vbi ékóà.
   the child SC C stand LOC room
   ‘The child is standing in the room.’

   c. *óñi ómò ò ò méhèn vbi éwàà.
   the child SC C lie LOC mat
   ‘The child is lying on the mat.’

   d. *óñi ómò ò ò dià vbi ékóà.
   the child SC C sit LOC room
   ‘The child is sitting in the room.’

One could persist by noting, as several investigators have (Jackendoff 1990, Croft 1991, Frawley 1992 and Talmy 2000), that grammatical resources expressing physical motion also convey real world stative extent. While physical motion goal could then be retained for stative goal and applied to category four verbs, this directional resource hypothesis is still inadequate. Spatial extent (24a) in Emai is expressed by verbs (za ‘be located’ and se ‘reach’) that otherwise convey physical motion (24b) and retain their semantic roles. However, category four verbs do not convey physical motion, and they are not used to express spatial extent. They denote positional and posture states.
(24) a. ótṓ mè zá vbí áfúzé’ sé vbí ókè.
   land my be.located LOC Afuze reach LOC Oke
   ‘My land extended from Afuze to Oke.’

   b. ólí óyvbèkhàn zá vbí áfúzé’ lá sé vbí ókè.
   the youth be.located LOC Afuze run reach LOC Oke
   ‘The youth ran from Afuze to Oke.’

As an alternative hypothesis, recognizing that source is as problematic as goal, we could assign ri’s vbi-marked NP to the semantic role locative. We might then develop a lexical entry for category four verbs that is similar to the category one verbs la and gbe, as in Figure 6.

Figure 6.

```
[ rí ‘be located at’
   < theme>
   {< __ PP>}
   {< theme, locative>}
]
```

Figure 6 as a lexical entry for ri (and category four in general) is problematic. It posits an optional prepositional phrase linked to the semantic role locative. However, the behavior of vbi phrases for category four (ri, muzan, mehen and dia) and category one (la and gbe) verbs are dissimilar. For the former, vbi phrases are obligatory or optional, whereas for the latter they are exclusively optional. And vbi phrases for ri, muzan, mehen and dia do not lead to za in focus constructions, as they do for la and gbe. The two verb categories contrast with respect to occurrence of za. The entry in Figure 6 would miss a significant generalization distinguishing the two verb categories. A lexical entry for category four must specify a vbi-marked phrase with the semantic role locative and it must preclude the co-occurrence of its vbi-marked phrase with za in focus constructions. The crucial difference between category four (ri / muzan / mehen / dia) and category one (la / gbe) is the occurrence of za in focus constructions. A vbi phrase whose NP is assigned the locative role is syntactically obligatory for ri, optional for muzan, mehen and dia, and optional for la and gbe. However this locative role in focus position co-occurs with za only in the case of la and gbe. The semantic role locative must have two distinct syntactic realizations. Our interpretation is
that za’s complementary distribution accords with the traditional syntactic distinction between adjunct (for la and gbe) and complement (for ri, muzan, mehen and dia). Adjunct vbi phrases following category one verbs serve an outer locative semantic role, while complement vbi phrases associated with category four verbs serve an inner locative role (Andrews 1985).

This leads us to the entry in Figure 7. It specifies that ri’s prepositional phrase is obligatory and that it is linked to the semantic role inner locative.

Figure 7.

```
ri 'be located at'
<__PP>
<theme, inner locative>
```

For the posture verbs muzan, mehen and dia, their lexical entry would appear somewhat different. Using muzan to illustrate, its optional vbi phrase complement would be linked to the semantic role inner locative.

Figure 8.

```
muzan 'stand'
<theme>
{<__PP>}
{<theme, inner locative>}
```

These behavioral differences regarding intransitive verbs and their vbi phrases lead to the syntactic and semantic conclusions summarized in Table 1. Syntactically, vbi phrases with category four verbs (ri, muzan, mehen and dia) are inner locative complements, while those with category one verbs (la and gbe) are outer locative adjuncts. Vbi phrases with these verb categories contrast with those associated with verbs from category two (o, se) and category three (dianre, raale). With the latter, vbi phrases are complements of za, which serves as an optional verb in series, and they express the semantic role source. As for category two verbs, their vbi phrases are complements that follow the verb and express the semantic role goal.
Table 1. Properties of vbi Phrases with Intransitive Verb Categories.

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>la, gbe</td>
<td>o, se</td>
<td>dianre, raale</td>
<td>ri, muzan</td>
</tr>
<tr>
<td>vbi optional</td>
<td>vbi obligatory</td>
<td>vbi obligatory</td>
<td>vbi optional/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in za phrase, za</td>
<td>obligatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>phrase optional</td>
<td></td>
</tr>
<tr>
<td>vbi after matrix verb</td>
<td>vbi after matrix verb</td>
<td>vbi before matrix verb in za phrase</td>
<td>vbi after matrix verb</td>
</tr>
<tr>
<td>za in focus</td>
<td>no za in focus</td>
<td>no za in focus</td>
<td>no za in focus</td>
</tr>
<tr>
<td>adjunct</td>
<td>complement</td>
<td>complement</td>
<td>complement</td>
</tr>
<tr>
<td>outer locative</td>
<td>goal</td>
<td>source</td>
<td>inner locative</td>
</tr>
</tbody>
</table>

3. Discussion.

We now probe some details of the preceding analysis. Contrary to our analysis of category one verbs, one could propose for la, gbe and similar verbs, which do not inherently specify a locative role, that vbi phrases in their lexical entry need not be designated as optional. We could assume that outer locative vbi phrases, being determined by pragmatic, contextual factors rather than a verb's inherent lexical properties, could be assigned by a default lexical rule. In that case, a wide array of Emai intransitive verbs should accept a vbi phrase. However, this proposal conflicts with the behavior of two additional verb categories.

Physical property verbs of the type bin ‘be dark’ and da ‘become high’ reject outer locative vbi phrases (25b and 25d).7

---

7 Other verbs in this category include rere ‘become long,’ gba ‘become big,’ vbee ‘become wide,’ ime ‘become deep,’ vbae ‘be red,’ and fuan ‘be white.’
(25) a. ólí úkpùn bí n -ì.
   the cloth be.dark-F
   ‘The cloth is dark.’

   b. *ólí úkpùn bí n -ì vbi ékóá mè.
   the cloth be.dark-F LOC room my
   ‘The cloth is dark in my room.’

   c. ólí órán dá -ì.
   the tree become.high-F
   ‘The tree became high.’

   d. *ólí órán dá -ì vbi ímé mè.
   the tree become.high-F LOC farm my
   ‘The tree became high on my farm.’

To retain the default lexical strategy, one could analyze the vbi phrases in ungrammatical bin and da constructions (25b and 25d) as instances of extraposition from the subject noun phrase and make the further assumption that such extraposition in Emai is disallowed. English translation of these constructions suggests that the content of vbi phrases serves to modify attributively the subject noun (e.g. ímé mè ‘my farm’ as modifier of ólí órán ‘the tree’). And English allows paraphrase expressions where this attributive relation is explicit: The sheet is white on my bed and The sheet on my bed is white.

Following this logic, the vbi phrase in (25b) and (25d) would be grammatically related to an underlying subject phrase where postverbal extraposition had not occurred. However, as indicated in (26a), the corresponding non-extraposed structure in Emai is also ungrammatical. What is grammatical is a head noun modified by an immediately adjacent relative clause (within which a vbi phrase serves as complement of the category four verb ri) (26b), not a head noun modified by an extraposed relative clause (26c). Furthermore, notice that there is not a general Emai constraint on extraposition of an entire NP, only a constraint on constituent extraposition from NP, since in (26d) the sentential complement khi clause is the logical subject of the verb hunme ‘be fortuitous.’ As a consequence, no formal evidence exists supporting an “extraposed from NP” analysis that would account for (25b) and (25d) and that would allow for a default lexical rule to specify constraints on vbi phrase distribution.
(26) a. *óli úkpún vbí ékóá mè bín -i.
   the cloth LOC room my be.dark-F
   ‘The cloth in my room is dark.’

  b. óli úkpún li ó ri vbí ékóá mè bín -i.
   the cloth R it be.located LOC room my be.dark-F
   ‘The cloth that is in my room is dark.’

  c. *óli úkpún bín -i li ó ri vbí ékóá mè.8
   the cloth be.dark-F R it be.located LOC room my
   ‘The cloth is dark that is in my room.’

  d. ò hùnmé khi óli òkpòsò gbé óli ényè.
   it be.fortuitous IND the woman kill the snake
   ‘It is fortuitous that the woman killed the snake.’

Restrictions on vbi occurrence are not limited to intransitive property verbs. The verb re ‘arrive’ also does not allow a vbi phrase, even though its inherent, lexically-specified argument serves as goal of a location change and might therefore be expected to receive vbi marking.

(27) a. óli èvbòò ré (*vbi) ègùàì.
   the villagers arrive LOC court
   ‘The villagers arrived at court.’

  b. óli ómòhè ré (*vbi) ìjóòbù.
   the man arrive LOC job
   ‘The man arrived at his job.’

Accounting for the non-occurrence of a vbi phrase by recourse to an extrapo­sed constituent is even less tenable with re since its postverbal noun phrase does not reflect a place property, as was the case with bin ‘be black’ and da ‘become high’. Re’s postverbal argument specifies end place or goal of location change.

8 A pause immediately before relator li, leading to a downturn in the intonation contour, could make (26c) acceptable in narrative discourse. But the postverbal relative clause would then not be integrated into the intonation contour of the clause, as it is in English, and instead would have an “afterthought” character.
Change of location verbs like re and physical property verbs show that \(vbi\) phrases and their linked semantic roles must be specified in lexical entries. \(Vbi\)-marked phrases linked to outer locative will need to be specified as optional for verbs like \(la\) and \(gbe\) but remain unspecified for verbs like \(bin\) and \(da\).

Our analysis also revealed that \(vbi\) phrases, regardless of associated semantic role, never occurred as the initial element in focus position or as a stranded element in postverbal position (28a). \(Vbi\) is prohibited from focus position (28b) and from stranded position relative to either verb in series (28c-d).

(28) a. \(\text{ókhúnmí ùhài lì őlí \ókpó só ó ó zá gbè.}\)
\(\text{top well PF the woman SC H be.located dance}\)
‘It was on top of the well that the woman danced.’

b. *\(vbi\) \(\text{ókhúnmí ùhài lì őlí \ókpó só ó ó zá gbè.}\)
\(\text{LOC top well PF the woman SC H be.located dance}\)
‘It was on top of the well that the woman danced.’

c. *\(\text{ókhúnmí ùhài lì őlí \ókpó só ó ó zá gbè vbi.}\)
\(\text{top well PF the woman SC H be.located dance LOC}\)
‘It was on top of the well that the woman danced.’

d. *\(\text{ókhúnmí ùhài lì őlí \ókpó só ó ó zá vbi gbè.}\)
\(\text{top well PF the woman SC H be.located LOC dance}\)
‘It was on top of the well that the woman danced.’

It is possible in narrative discourse for \(vbi\) to occur as an emphatic element within a focused constituent, as in (29a-b). But \(vbi\) can never head a constituent in focus position nor can it be stranded. Constraints on preposition stranding are a frequent topic of discussion in the linguistic literature (Haegeman & Guéron 1999, Huddelston & Pullum 2002). Exclusion from both focus and stranded positions seems a less frequent topic.

\[\text{\(^9\) Incorporated \(vbi\) phrases of this nature seem highly constrained since they only attach to place nouns and only admit as complements a deictic locative pronoun like \(évbó\). They are most natural in narrative discourse where they appear to serve an emphatic function, i.e. ‘the ground right there.’}\]
(29) a. ọlị óvbékhán ụn ọlị Ọbara ọbụọ ọtọọ ọbụ ọvbo. 
the youth pull the pin LOC ground LOC there
'The youth pulled the pin from the ground yonder.'

b. ọtọọ ọbụ ọvbo ị ọlị óvbékhán zá ụn ọlị Ọbara. 
ground LOC yonder PF the youth be.located pull the pin
'It was from the ground there that the youth pulled the pin.'

Relative to the stranded condition, vbi differs from other preposition-like forms in Emai. The latter, which include applicative li/ni and change of location ọ, appear in focus constructions as postverbal stranded forms (30a-c and 31a-c).10

(30) a. ọlị ọkpọsọ nwụ ọlị ọmà ọ ọbụ ọtębu. 
the woman take.hold the yam CL LOC table
'The woman put the yam onto the table.'

b. ọtębu mè ị ọlị ọkpọsọ nwụ ọlị ọmà ọ. 
table my PF the woman take.hold the yam CL
'It was my table that the woman put the yam on.'

c. *ọ ọbụ ọtębu mè ị ọlị ọkpọsọ nwụ ọlị ọmà. 
CL LOC table my PF the woman take.hold the yam
'It was on my table that the woman put the yam.'

(31) a. ọlị ọkpọsọ shén ọmà ị ọnwime. 
the woman sell yam APP farmer
'The woman sold yam to the farmer.'

b. ọlị ọnwime nà ị ọlị ọkpọsọ shén ọmà ní. 
the farmer this PF the woman sell yam APP
'It was this farmer that the woman sold the yam to.'

---

10The postverbal forms li and ọ show no affinity to extant verbs in Emai and appear to play a significant function relative to Aktionsart and the expression of event structure. Another postverbal Aktionsart element expressing change is the form a. It occurs in canonical order declaratives (ọlị óvbékhán gbé ọlị ákhè ạ [the youth break the pot CS] 'The youth broke the pot') and remains in postverbal position in non-canonical order cleft constructions (ọlị ákhè li ọlị óvbékhán gbé ạ [the pot PF the youth break CS] 'It is the pot that the youth broke').
c. *lí ólí ónwímé nà lí ólí ókpósó shén émà.
   APP the farmer this PF the woman sell yam
   ‘It was to this farmer that the woman sold yam.’

Why does vbi not exhibit similar behavior? One hypothesis is to assume that vbi is the only true preposition in Emai. Li / ni and ọ could be analyzed as postverbal particles central to expression of lexical aspect or Aktionsart (Schaefer & Egbokhare 2006). If one assumed that a syntactic sanction absolutely constrained prepositions from focus and from a stranded position, prohibitions on vbi distribution would be accounted for.

Still, one is puzzled by the incompatibility of vbi and focus position. Probing further, one could hypothesize that focus position and vbi marking exhibit contrasting information values: focus as new, foregrounded information and vbi as given, backgrounded information. If so, the two would conflict. However, excluding vbi only from focus position and its new information value is insufficient. NP constituents from vbi-marked phrases also occur in topic position, where given, not new, information is registered (Levinson 1983). Nonetheless, vbi itself never occurs in topic position (32a-c).

(32) a. ólí óvbèkhàn ó vbi ékọà.
   the youth enter LOC room
   ‘The youth entered the room.’

b. ólí ékọà, ólí óvbèkhàn ó vbi ọ.
   the room the youth enter LOC it
   ‘As for the room, the youth entered it.’

c. *vbí ólí ókọà, ólí óvbèkhàn ó -i.
   LOC the room the youth enter -F
   ‘As for the room, the youth entered it.’

A broader constraint, perhaps associated with pre-matrix clause (complement) position must exist that excludes vbi-headed phrases from focus and topic position. For that matter, vbi-marked phrases are also excluded from subject position (33a-b). Vbi-headed phrases only occur in positions internal to a verb phrase. Our putative syntactic sanction, except under emphatic conditions, must thus preclude vbi from positions outside the verb phrase.
The verb phrase restriction on *vbi raises another facet of its character. Thus far *vbi has marked oblique syntactic relations for arguments assigned goal, source or (inner/outer) locative semantic roles. These roles are often referred to as peripheral or as belonging to a thematic tier (Jackendoff 1990). One could naturally assume that *vbi is restricted exclusively to arguments expressing peripheral semantic roles. Additional data from Emai shows this generalization to be too restrictive. Under specifiable semantic conditions, *vbi also marks lexically specified arguments expressing core or action tier roles, in particular the affected entity in the patient role. More broadly stated, Emai predicates reflect an inverse correlation between *vbi marking and the semantic condition affectedness.

Affectedness is widely recognized as a semantic factor influencing the selection of a verb argument for the grammatical relation direct object (Jackendoff 1990, Dowty 1991, Levin 1993, Van Valin & LaPolla 1997). In the locative alternation pair *John loaded hay onto the wagon and John loaded the wagon with hay, wagon as direct object in the latter is more completely affected (i.e. filled) compared to wagon as oblique in the former. In a similar fashion, *vbi marking is inversely correlated with argument affectedness. Presence of *vbi signals attenuation of a verb’s prototypic affectedness condition. For example, the verb da ‘drink’ prototypically takes a non-*vbi marked argument (óli ényò ‘the wine’) as direct object (34a). When this argument is not completely affected by the drinking event (i.e. only some wine is consumed), the erstwhile direct object is marked by *vbi (34b). A similar shift in grammatical relations from core direct object to peripheral oblique occurs with the verb e ‘eat’ (34c-d).\[1\]

11 Note also that transitive verbs like da ‘drink’ and e ‘eat,’ do not assume a bare intransitive shape (*óli óvbékhán ó ó dá [the youth SC H drink] ‘The youth drinks.’).
(34) a. ólí óvębèkhàn dá ólí ényò.
   the youth drink the wine
   ‘The youth has drunk the wine.’

   b. ólí óvębèkhàn dá vbi ólí ényò.
   the youth drink LOC the wine
   ‘The youth drank from the wine.’

   c. ólí óvębèkhàn é ólí émà.
   the youth eat the yam
   ‘The youth has eaten the yam.’

   d. ólí óvębèkhàn é vbi ólí émà.
   the youth eat LOC the yam
   ‘The youth ate from the yam.’

In like fashion, the absence of vbi in constructions where it prototypically occurs signals augmentation of the verb’s affectedness condition. Verbs which prototypically mark their inherent argument as oblique with vbi appear in constructions where their lexically specified argument is not marked by vbi. This occurs only under conditions deviating from prototypic affectedness. Recall that the category two verb o ‘enter’ marks its goal argument as oblique with the preposition vbi (7). In constructions expressing abstract emotional conditions, where an experiencer argument is affected by the emotional condition, o does not render its inherent argument as an oblique. Instead, the experiencer argument is realized as a direct object (òhì 35a-b). Vbi marking of the experiencer argument is ungrammatical (35c). Just as with transitive verbs, intransitive verbs show that vbi marking is inversely correlated with affectedness: direct object expression of event argument, i.e. non-vbi marking, correlates with increased affectedness.

(35) a. úéén ísì òjè ò ó rè èkhòì ò òhì.
   behavior ASS Oje SC C make shame enter Ohi
   ‘The behavior of Oje is making Ohi ashamed.’

   b. èkhòì ò òhì.
   shame enter Ohi
   ‘Ohi is ashamed.’
The preposition \textit{vbi} thus interacts in an inverse fashion with lexical arguments and their construal as affected entities. Under attenuated conditions, \textit{vbi}'s presence shifts arguments out of the core grammatical relation direct object. Its absence, where otherwise expected, shifts arguments into this core grammatical relation, provided that affectedness relative to prototypic conditions is augmented. Obviously more investigation into possible grammatical alternations employing \textit{vbi}-phrases and lexical prohibitions on \textit{vbi} marking are required, but these tentative findings serve again to remind us that locative constructions hold more than diachronic interest.

4. Conclusion.

This paper has examined the distributional character of Emai prepositional phrases and their NP complements relative to intransitive verbs. \textit{Vbi}-marked prepositional phrases exhibit non-uniform distribution with intransitives. In canonical order constructions, a \textit{vbi} phrase follows a matrix verb or follows the verb \textit{za} in series before a matrix verb. In these positions, \textit{vbi} phrases are optional or obligatory. NP complements of \textit{vbi} also exhibit asymmetrical behavior. In non-canonical order constructions, focused NP complements with a subclass of verbs lead to the verb \textit{za} in series in the matrix clause. We articulate these patterns in minimally specified lexical entries for four verb categories, linking semantic roles to syntactic relations. \textit{Vbi} phrases with the semantic roles source or goal (the former as a constituent of a \textit{za} verb phrase in canonical order constructions) reflect complement relations. Remaining locative role phrases, in non-canonical order focus constructions, show complementary distribution of the verb \textit{za} in series. Outer locative adjuncts require \textit{za}, while inner locative complements prohibit \textit{za}. Finally, we commented on broader syntactic properties of \textit{vbi}, considering its prohibition from syntactic positions outside the matrix verb phrase and its role in the expression of grammatical relations for lexical arguments under contrasting conditions of affectedness.
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