Emai Separation Verbs and Telicity

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1. Introduction

Two semantic components implicated in the organization and development of the verbal lexicon are manner and result. Levin and Rappaport Hovav (1995) note that manner and result verbs are often in complementary distribution. Others have noted that manner and result verbs differ in their argument realization patterns (Fillmore 1970). More recently, Rappaport Hovav and Levin (2010) have argued that verbs lexicalize either the manner of carrying out an action or the coming about of a result state.

A particular semantic domain where these components interact is events of separation. Hale and Keyser (1987) directed theoretical attention to the lexical encoding of the separation of material objects. Guerssel, Hale, Laughren, Levin, and White Eagle (1985), comparing the alternation behavior of separation verbs in four languages, highlighted two contrasting verb classes. While verbs in a BREAK class exhibited the causative ~ inchoative alternation, they did not participate in the conative alternation and did not entail use of an instrument. In contrast, verbs in a CUT class participated in the conative alternation, entailed use of an instrument but did not show the causative~inchoative alternation.

A relatively recent typological and experimental study investigated how speakers of nearly 30 languages representing over 13 language families coded video clips depicting instances of state change arising from actions of object separation, often caused by an agent but not necessarily (Majid, Bowerman, van Staden and Boster (2007)). This study was motivated in part by Talmy’s (1991, 2000) account of variation in how languages package events into verbs. Relative to separation events, for instance, English packages manner and change of state in one verb, Mandarin Chinese relies on a manner verb and a change of state verb in V-V compounds, and German employs a manner verb alongside a satellite prefix or particle expressing change of state. Study results identified two basic separation event types. One showed minimal material destruction of affected object, often a reversible condition with no change in object integrity, as with OPEN and PEEL events. A second showed more significant material destruction with nonreversible change in object integrity, CUT and BREAK events being prototypical. A highly schematic representation of event types identified by Majid, Bowerman, van Staden and Boster is the following:

\[
\begin{align*}
\text{SNAP} \\
\text{SLICE} \quad & \text{CHOP} \quad \text{SMASH} \\
\text{TEAR} \\
\text{PEEL} \sim \text{OPEN}
\end{align*}
\]

Within material destruction, a number of dimensions were isolated that appeared to guide speaker assignment of a CUT or BREAK verb to a video clip. Along one dimension, the predictability of a

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locus of separation in an acted-on object shifted from high to low, with SLICE events being high, CHOP events midway and SMASH events low. Along another, speaker assignment of verbs to video clips appeared to be guided by instrument type: whether separation occurred by a bladed instrument (CUT events), a sharp blow that resulted in a clean or messy fracture (BREAK events), or movement of the hands with no instrument or sharp blow (TEAR events). Within the low locus of separation dimension, affected object type and instrument interacted, since rigid objects struck with a sharp blow isolated SMASH events, whereas a long object pulled into two by the hands identified SNAP events.

Change predicates of the type shown by verbs of separation lead quite naturally to issues of result and end state. Traditional linguistic analysis assigns event completeness or boundedness to the aspatial property telicity. As Rothstein (2008) observed, however, telicity is not a well defined concept. At some level, telicity involves the measuring or counting out of an event. What is measured and how precisely it is measured continue to be debated. Nonetheless, this discussion has suggested that there may be a telicity divide in which some languages determine end state status compositionally, amalgamating verb with grammatical properties of associated arguments, while other languages do not, perhaps explicitly designating telicity with a grammatical marker. We take up this hypothesis in our conclusion.

With these sources as background, we investigate separation event coding in Emai, a West Benue Congo language within southern Nigeria’s Edoid group (Williamson and Blench 2000). Emai is SVO with lexical and grammatical tone but little inflectional morphology and few prepositions. It shows complex predicates consisting of verbs in series as well as verbs in construction with postverbal particles. Of particular relevance among the latter is what we have previously identified as the Change of State (CS) particle \( a \). Like other particles, CS \( a \) shows no affinity to any synchronic verb, exhibiting no typically verb behavior vis-à-vis functional categories and no argument selectional behavior. CS \( a \), however, is associated with the encoding of separation events where an affected entity, as grammatical subject or direct object, undergoes a change of material state or condition.

In the following, we analyze the distribution of CS \( a \) relative to a number of verbs in Emai’s separation domain. We ask whether CS \( a \) occurs with all change of state conditions coded by a given separation verb or with only a subset of those conditions and, if the latter, what principle guides its occurrence with some events but not others.

To gain a clearer impression of Emai encoding of separation events, we consider verb behavior in particular grammatical frames. For each verb, we determine its possible co-occurrence with CS \( a \), as well as verb and CS \( a \) distribution relative to transitivity, thereby testing for causative and inchoative structures (NP1 V NP2 \( \sim \) NP2 V), instrument/means structures marked by the verb \( re \) and its nominal complement in series (NP1 \( re \) INST V NP2), partitivity (akin to English conative) in which preposition \( vbi \) precedes an erstwhile direct object (NP1 V \( vbi \) NP2), quantized separation, as a weak form of predictable locus of separation, requiring the Change of Location (CL) postverbal particle \( o \) followed by preposition \( vbi \) and a complement headed by a numeral such as \( èvá \) ‘two’ (NP1 V NP2 \( o \ vbi èvá \)).

Emai verbs of separation across these frames show a great deal of variability in their co-occurrence with CS \( a \). CS \( a \) does not correlate with separation type identified at the level of minimal versus maximal destruction. At the more specific level of OPEN versus CUT and BREAK, correlations begin to appear, but even within subtypes of CUT and BREAK, CS \( a \) frames are not consistently associated with some verbs, while being obligatory across all frames with others.

To proceed with our analysis of Emai’s separation domain we consider minimal destruction verbs and then those of maximal destruction. Relative to these broad types, we will examine frames for OPEN and PEEL followed by BREAK and CUT. Additional separation events related to these will also be assessed to gain a more complete distributional impression.

2. Separation Verbs and their Syntactic Frames

OPEN verbs show two classes. One class requires CS \( a \). The verb forms \( vuye \) and \( khuye \) co-occur with CS \( a \) in intransitive and transitive frames.
These verbs, along with CS a, optionally take the instrument marking verb re and its complement in series.

Regardless of CS a presence, however, class one OPEN verbs reject the partitive frame, where preposition vbí precedes the erstwhile direct object, and the quantized locus of separation frame marked by the CL particle Ô and a numeral as complement within a preposition vbí phrase. Neither of these frames accepts CS a.

OPEN verbs of a second class illustrated by ghaye require CS a in intransitive and transitive frames.

These verbs reject not only the instrument verb re and its complement in series but also preposition vbí identifying a partitive direct object. In addition to occurrence in a CS a frame, however, ghaye type verbs appear in the quantized locus of separation frame marked by postverbal particle Ô, preposition vbí and a numeral complement.

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1 Orthographic conventions for Emai reflect Schaefer and Egbokhare (2007), where Ô represents a lax mid back vowel, Ô a lax mid front vowel, and vb a voiced bilabial approximant. As for tone, acute accent marks high, grave signals low, and acute followed by an apostrophe designates high downstep. Abbreviations for grammatical morphemes used in this paper include: C=continuous, CL=change of location, CS=change of state, F=factative, LOC=locative, R=relator, SC=subject concord.
PEEL verbs reflect a single class but exhibit behavior distinct from minimal destruction OPEN verbs. PEEL verbs like *bolo* in transitive frames optionally take CS *a*; they do not show an intransitive frame.

(6) a. òjè bólo ólì ògèdè.
    Oje peel the plantain
    ‘Oje peeled the plantain.’

b. òjè bólo ògèdè á.
    Oje peel plantain CS
    ‘Oje peeled the rind off the plantain.’

The verb *bolo*, absent CS *a*, takes the instrument/means verb *rg* and its complement in series. However, *bolo* rejects the partitive frame, where preposition *vbi* precedes an erstwhile direct object, and quantized separation frames marked by particle *o*, preposition *vbi* and a numeral complement.

(7) òjè ré èhìén bólo ólì ògèdè.
    Oje take fingernail peel the plantain
    ‘Oje used his fingernail to peel the plantain.’

Maximal destruction verbs exhibit contrasting patterns. BREAK essentially divides semantic space between SMASH and SNAP events. Relevant verbs thus reveal two classes. Verbs of the SMASH class represented by *gbe* ‘smash, break’ require CS *a*, regardless of intransitive or transitive frame. They code complete destruction of an affected entity.

(8) a. ólì ákhè gbé á.
    the pot break CS
    ‘The pot smashed / broke into pieces.’

b. òjè gbé ólì ákhè á.
    Oje break the pot CS
    ‘Oje smashed / broke into pieces the pot.’

Verbs like *gbe* in construction with CS *a* optionally take the instrument verb *rg* and its complement in series. However, *gbe* rejects the partitive frame, where preposition *vbi* precedes an erstwhile direct object, and quantized frames marked by CL particle *o*, preposition *vbi* and a numeral complement.

(9) òjè ré údò gbé ólì ákhè á.
    Oje take stone break the pot CS
    ‘Oje used a stone to break the pot.’

Verbs of a second class code SNAP events. Represented by *guoghó* ‘break, snap’ they optionally take CS *a* in intransitive and transitive frames.

(10) a. ólì úkpórán guoghó-i.
    the stick break-F
    ‘The stick broke / snapped.’

b. òjè guoghó ólì úkpórán.
    Oje break the stick
    ‘Oje broke / snapped the stick.’

c. ólì úkpásánmi guoghó ā gbègbéi.
    the cane break CS totally
    ‘The cane broke / snapped apart totally.’
d. òjè gúóghó úkpásánni á gbègbéi.
Oje break cane CS totally
‘Oje broke / snapped the cane apart totally.’

These verbs with obligatory CS a take the instrument verb re and its complement in series.

(11) òjè ré àwè gúóghó úkpásánni á.
Oje take feet break cane CS
‘Oje used his feet to break / snap the cane apart.’

In addition, class two SNAP verbs show the quantized separation frame marked by CL o, preposition vbi and a numeral complement, which precludes CS a. Nonetheless, SNAP verbs in this second class do not allow the partitive frame, where preposition vbi precedes an erstwhile direct object.

(12) òjè gúóghó ólí úkpásánni ó vbi èvá.
Oje break the cane CL LOC two
‘Oje broke / snapped the cane in two.’

Maximal destruction TEAR verbs exhibit even more variation with regard to frame patterns than BREAK verbs. TEAR verbs show three classes. One class, represented by nyaghan ‘rip’ requires CS a in intransitive and transitive frames.

(13) a. ólí ìkpà nyághán à.
the bag rip CS
‘The bag ripped apart / open.’
b. òjè nyághán ólí ìkpà à.
Oje rip the bag CS
‘Oje ripped apart / open the bag.

Verbs of the nyaghan type in construction with CS a take the instrument verb re and its complement in series. However, TEAR verbs of this first class reject the partitive frame, where preposition vbi precedes an erstwhile direct object, and the quantized separation frame where particle o and preposition vbi precede a numeral complement.

(14) òjè ré úvbiágháè nyághán ólí ìkpà à.
Oje take knife rip the bag CS
‘Oje used a knife to rip the bag apart / open.’

TEAR verbs of a second class represented by taza ‘shred’ require CS a. But these verbs only occur in transitive frames. They are further restricted, since they reject the instrument verb re and its complement in series, partitive marking vbi preceding an erstwhile direct object and quantized marking particle o preceding preposition vbi and a numeral complement.

(15) ólí ìkpòsò tázá ólí úkpùn á.
the woman shred the cloth CS
‘The woman shredded / tore up the cloth.’

TEAR verbs of a third class illustrated by soo ‘tear’ optionally take CS a in transitive frames. In intransitive frames, CS a is obligatory.

(16) a. òjè sóó ólí úkpùn á.
Oje tear the cloth CS
‘Oje tore the cloth end to end.’
b. òjè ó ó sóó ólí úkpùn.
Oje SC C tear the cloth
‘Oje is tearing cloth.’
Verbs of the *soo* type, along with CS *a*, take the instrument verb *re* and its complement in series.

(17) òjè ré ishé soo úkpùn mè á.
    Oje take nail tear cloth my CS
    ‘Oje tore my cloth end to end with a nail.’

The verb *soo* without CS *a* appears in the partitive frame, where preposition *vbi* precedes an erstwhile direct object. However, verbs like *soo* reject the quantized locus of separation frame marked by particle *o* and a following numeral embedded in a *vbi* phrase.

(18) òjè sóó vbi òlí úkpùn.
    Oje tear LOC the cloth
    ‘Oje tore from the cloth.’

CUT verbs also exhibit considerable variation with respect to their acceptance of separation relevant frames. They fall into three classes. CUT verbs of one class reject CS *a* and restrict transitivity. Verbs such as *gueghe* ‘slice,’ *kalo* ‘trim,’ and *benno* ‘chop’ show only transitive frames, never appearing in intransitive frames.

(19) a. òjè gúéghé ólì èfó.
    Oje slice the vegetables
    ‘Oje sliced the vegetables.’

b. òjè káló étò.
    Oje trim hair
    ‘Oje trimmed his hair.’

c. òjè ó ó bènnò éràn.
    Oje SC C chop trees
    ‘Oje is chopping trees.’

Each of these verbs takes the instrument verb *re* and its complement in series. But they are further restricted, since they reject partitive marking *vbi* preceding an erstwhile direct object and quantized marking particle *o* preceding preposition *vbi* and a numeral complement.

(20) a. òjè ré úvbiágháé li ọgbón gúéghé étò.
    Oje take knife R new slice vegetables
    ‘Oje used a new knife to slice vegetables.’

b. òjè ré àmúgá káló mè étò.
    Oje take scissors trim my hair
    ‘Oje used my scissors to trim his hair.’

c. òjè ó ó ré úghámá bènnò éràn.
    Oje SC C take ax chop trees
    ‘Oje is using an ax to chop trees/wood.’

CUT verbs of a second class take CS *a* optionally. The verb *khaa* ‘carve’ appears in transitive frames with or without CS *a*. Regardless of CS *a* presence, *khaa* never occurs in an intransitive frame.

(21) a. òjè kháá úháí úkpà.
    Oje carve arrow point
    ‘Oje carved / shaved the arrow to a point.’

b. òjè kháá úháí úkpà á.
    Oje carve arrow point CS
    ‘Oje carved / shaved off the arrow’s fine point.’
Verbs like *khaa* take the instrument verb *re* and its complement in series but not with CS *a*. In addition, *khaa*-like verbs reject partitive function *vbi* preceding an erstwhile direct object and the quantized locus of separation function of CL *a* preceding *vbi* and a numeral complement.

(22) òjè rē úvbiághàè kháá úháí úkpà.
    ‘Oje used a knife to carve the arrow to a point.’

Verbs of a third and final class coding CUT optionally take CS *a* in a transitive frame. In an intransitive frame, they require CS *a*. Such is the pattern with *hian* ‘cut.’

(23) a. òjè híán ólí úì.
    Oje cut the rope
    ‘Oje cut the rope.’

b. òjè híán ólí úì á.
    Oje cut the rope CS
    ‘Oje cut the rope off.’

c. ólí úì híán á.
    the rope cut CS
    ‘The rope got cut off.’

Verbs like *hian* without CS *a* take the instrument verb *re* and its complement in series.

(24) òjè rē úvbiághàè híán ólí úì.
    ‘Oje used a knife to cut the rope.’

In addition, *hian* type verbs without CS *a* show the partitive frame, where preposition *vbi* precedes an erstwhile direct object, and the quantized locus of separation frame marked by particle *a*, preposition *vbi* and a following numeral complement.

(25) a. òjè híán vbi ólí úì.
    Oje cut from the rope
    ‘Oje cut from the rope.’

b. òjè híán ólí úì á vbi èvá.
    Oje cut the rope CL LOC two
    ‘Oje cut the rope into two.’

3. Conclusion

As the verb frame examples have revealed, the distribution of CS *a* across the Emai domain of object separation is highly variable. How does CS *a* marking relate to separation event types? The following list provides an overview of CS *a* co-occurrence, delineated as rejected, optional or obligatory, with verbs reflecting distinct separation event types.

<table>
<thead>
<tr>
<th>rejected</th>
<th>optional</th>
<th>obligatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLICE/TRIM/CHOP</td>
<td>CARVE/CUT</td>
<td>RIP/SHRED</td>
</tr>
<tr>
<td>TEAR</td>
<td>SNAP</td>
<td>SMASH</td>
</tr>
<tr>
<td>PEEL</td>
<td></td>
<td>OPEN</td>
</tr>
</tbody>
</table>

Assuming that the various separation events assessed reflect a change in material integrity or state, CS *a* is clearly not associated with encoding all events expressing change of material state. Similarly, CS *a* distribution does not correlate with the distinction between events of minimal or maximal destruction, since within maximal destruction it is obligatory with SMASH verbs but not SNAP verbs, and within minimal destruction it is obligatory with OPEN verbs but not PEEL verbs.
At a microlevel, one might ask whether CS $a$ correlates with any features advanced in the event separation literature? For instance, does CS $a$ correlate with a transitivity type, which is to say with agentive transitive events or agentless intransitive events, with conativity or the initiation of a separation event that does not achieve a result state, with reversibility of a separation event, thus negating an end state through manner redirection, with presence of a bladed or non-bladed instrument in the manner of achieving an end state, or with a quantized locus of separation leading to end state multiples? In fact, CS $a$ does not co-occur with separation verbs in quantized locus of separation (NP1 V $v$ $v_b$ evá) frames or partitive frames (NP1 V $v_b$ $v_P$ NP2), where manner of separation is exercised without achieving end state completeness. CS $a$ does correlate with reversibility in the case of some OPEN events; however, it does not correlate positively or negatively with any other feature.

A potentially more fruitful direction for analysis emerges from assessing the distribution of CS $a$ relative to separation subevents. That is in the instance of hian, what distinguishes an event coded by CUT from one coded by CUT + CS $a$? Similarly for TEAR, PEEL and SNAP, all of which are coded by optional CS $a$. From there, one can also assess what distinguishes PEEL from OPEN, and SLICE/CHOP from CUT + CS $a$.

Temporally speaking, PEEL encompasses two kinds of subevents: a simple subevent of separation, of which there may be multiples, as well as a subevent of separation beyond which there is no further separation. Object separation for PEEL events thus consists of a sequence of subevents. All but one of those subevents are homogeneous with respect to end state as they iterate over time. However, there is a PEEL subevent beyond which no further peeling activity can take place. That is, one can construe PEEL as reaching a terminal end state. It is this final state that engages CS $a$ and is apparent in the English translation ‘peel off.’

Iterativity and temporal point of cessation delineate the internal temporal dimension of a separation event. As such, they bear on aspect. Consider SLICE; its Emai exponent is compatible with iterativity, with subevents of equivalent construal. It does not acknowledge a point of cessation. It also does not take CS $a$. At another pole, consider OPEN; its exponents are incompatible with iterativity, so far as event lexicalization is concerned. CS $a$ is required. Similar conditions hold for Emai verb exponents of SMASH relative to SNAP; SNAP lexicalization allows for iterativity, while SMASH does not.

How does obligatory coding of CS $a$ correlate with Emai grammatical expression of event internal temporal contour, i.e. grammatical aspect? Emai events that are temporally bounded are distinguished from those that are temporally unbounded through imperfect and imperfect continuous aspect, respectively. Imperfect continuous aspect, i.e. unbounded and so compatible with iterativity but not temporal point of cessation, is realized by subject concord and the continuous marker, i.e. $òò$.

Separation verbs with obligatory CS $a$ are incompatible with imperfect continuous aspect. (26) a. *òjè $òò$ vuyè $òlì$ $ògò$ à.
   Oje SC C open the bottle CS
   ‘Oje is opening the bottle.’
   b. *òjè $òò$ gbè $òlí$ ákhé à.
   Oje SC C break the pot CS
   ‘Oje is smashing / breaking the pot.’

Separation verbs rejecting CS $a$, however, are compatible with continuous aspect (27a-b), while continuous and CS $a$ are mutually exclusive for separation verbs where CS $a$ was optional (27c).

(27) a. òjè $òò$ guèghè $òlí$ éfò.
   Oje SC C slice the vegetables
   ‘Oje is slicing the vegetables.’
   b. òjè $òò$ hìàn $òlí$ ûù.
   Oje SC C cut the rope
   ‘Oje is cutting the rope.’
   c. *òjè $òò$ hìàn $òlí$ ûù à.
   Oje SC C cut the rope CS
   ‘Oje is cutting the rope off.’
What do events of OPEN, SMASH, and SHRED with obligatory CS a share with optional CS a events of PEEL, SNAP and CUT? The former share a terminal or ultimate condition on object separation that is integral to their respective events, whereas the latter are compatible with object separation that has not reached an ultimate bound. CS a marks events that have in common a particular event construal whereby the temporal contour of separation has reached a terminal point beyond which no further separation is acknowledged.

In this respect, CS a is a marker of telicity for events in which objects undergo a change in their material integrity or material condition. If so, CS a has its focus exclusively on event termination with little regard for the amalgamation of feature properties from event verb and associated direct object, as outlined for telicity in Rothstein (2008). Assuming absence of the latter condition, it would appear that Emai may reflect a telicity type distinct from that in Average Standard European languages, which employ amalgamation strategies.

References


Majid, Asifa, Melissa Bowerman, Miriam van Staden and James S. Boster. 2007 The semantic categories of “cutting and breaking” events across languages. *Cognitive Linguistics* 18.2.133-152.


