Stative versus Eventive Predicates and vP-internal Structure

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1 Introduction

The proposal that constitutes the crux of this paper is that the vP-internal syntax of events is not the same as the vP-internal syntax of states (Noonan 1992, 1993; MacDonald 2009; Travis 2010).

Specifically, we hypothesize that events have an Inner Aspect projection, located between little v and V as in (1), while states lack this projection, as in (2).

(1) EVENT vP \[vP ARG [v [INNER.ASPECT [vp V ARG ]]]]
(2) STATE vP \[vP ARG [v [vp V ARG ]]]

The structural difference between event versus state vPs is predicted to have reflexes in different grammatical components including morphology, syntax, and semantics. For instance, within semantics, Inner Aspect regulates telicity with events, but not states (Travis 2010). Additionally, the little v of events introduces an Agent via the DO operator (Dowty 1979), while the little v of transitive states introduces an Experiencer via the HAVE operator (e.g., Noonan 1992, 1993). Here, we focus on the reflexes of the vP-internal structure of events and states relative to syntax and morphology in two unrelated languages, English (Germanic) and Javanese (Austronesian). In particular, we show that, consistent with anti-locality constraints on movement (Abels 2003), VP-fronting is possible with events, but not states. In English, this contrast can be detected via distinct ellipsis strategies; namely, do too and so do ellipsis (possible with states and events) versus do so ellipsis (possible only with events). In Javanese, the contrast is detectable via Voice morphology, which events have but states lack, as well as VP-topicalization and subject-auxiliary answers (possible only with events).

More broadly, the vP-internal structural difference between events and states has theoretical implications relative to the interaction of phase theory and locality theory. The predictions of this interaction are as follows. First, one consequence of the premise that vP is a phase cross-linguistically (Chomsky 1995, 2000, 2001; Legate 2003) is that all extraction moves

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1 For discussion and feedback thanks to Molly Babel, Mark Baltin, Henry Davis, Brian Hsu, Vera Lee-Schoenfeld, Ian Roberts, Martina Wiltschko, and the UBC Wednesday Research Seminar. Our deepest thanks is given to Javanese language consultants for sharing their language and culture: mbak Titis, mbak Fina, mbak Ulum, mbak Nunung, mbak Rohmah, mbak Haris, Mas Nasrul, Mas Faiz, Pak Farihi, Pak Khoim, Pak Khoiq. All errors are ours. The research presented here was supported in part by a SSHRC Postdoctoral Research Grant #756-2012-0648 (awarded to J. Vander Klok).

2 The following abbreviations are used: AV = actor voice, CIRC.POSS = circumstantial possibility, DEF = definite, DEON.POSS = deontic possibility, EXP.PERF = experiential perfect, FOC = focus, POL = polarity; RED = reduplication; Q = question marker.
through the edge of vP, defined as the specifier of vP. Second, following Abels (2003), we assume that anti-locality prohibits local movement. To see this, consider (3): movement is “anti-local” in that the complement XP of the head Y^0 cannot move to the local specifier, Spec,YP.

(3) **Anti-locality**

\[ *_{[vP ~ XP_j} [ Y \ ~ [XP \ t_j]] \]

Taken together, these two premises — phase theory and anti-locality — predict different possibilities for the extraction of VP in an event vP versus a state vP. Since vP is a phase, VP extraction must transit through Spec, vP. As shown in Figure 1, with event vPs, VP extraction is predicted to be licit, as the presence of Inner Aspect means that movement of VP to Spec, vP obeys anti-locality. However, as shown in Figure 2, with stative vPs, movement of VP to Spec, vP violates anti-locality. This is because VP, the complement of v, moves to the local specifier Spec, vP. Since the only movement possible for VP in a state vP violates anti-locality, VP-movement with states is predicted to be impossible.

We test anti-locality in English and Javanese using diagnostics that target VP- or vP-movement. Anti-locality, in conjunction with the vP-internal structure of events and states, predicts that VP-fronting is possible with events but not states. This prediction is confirmed by diagnostics that target VP-movement: *do* *so* ellipsis in American English (henceforth English) as well as VP-topicalization and subject-auxiliary answers to yes-no questions in Javanese. Our anti-locality analysis also predicts that, for diagnostics that target vP-movement, events and states will pattern in the same way, and both will undergo movement. This is straightforwardly confirmed in English with *so* *do* ellipsis and *do* *too* ellipsis, which are licit with both events and states. For Javanese, testing this prediction requires that we control for a contrast between events and states relative to voice-marking: while events are obligatorily marked for voice (analyzed as a VoiceP projection, dominating vP), states lack voice-marking. Once this is controlled for, we observe that VP-fronting with events predictably pied-pipes VoiceP, so that in Javanese, VP and vP-fronting is indistinguishable from VoiceP fronting. With these preliminaries in place, we consider how anti-locality operates in English in section 2, and then turn to Javanese in section 3.
2 State versus Event in English

We investigate the vP-internal structure of states compared to events in English through the following types of ellipsis: do so ellipsis, so do ellipsis, and do too ellipsis. We show that while do so ellipsis distinguishes states from events, so do and do too ellipsis do not. We argue that the presence versus absence of an event/state partition with ellipsis reflects which XP is extracting: VP with do so ellipsis; vP with do too and so do ellipsis. Crucially, in our analysis, ellipsis is derived by movement and so is regulated by anti-locality constraints, as summarized in Table 1. We argue for two points. First, do so ellipsis involves VP-fronting, and so is (predictably) only possible with events. Second, so do and do too ellipsis involve vP-fronting, and so are (predictably) licit with both states and events.

<table>
<thead>
<tr>
<th>WHAT MOVES?</th>
<th>VP</th>
<th>vP</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>EVENT</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DIAGNOSTIC</td>
<td>do so ellipsis</td>
<td>do too ellipsis; so do ellipsis</td>
</tr>
</tbody>
</table>

Before discussing these different types of ellipsis in English, we first motivate the claim that English do occurs in (at least) three distinct syntactic positions: C⁰, T⁰, and InnerAspect⁰.

2.1 The (Different) Syntax of do so Ellipsis

In the present analysis, the sensitivity of do so ellipsis to the event/state contrast reflects the syntactic position of do and the adverbial element so. Consider Figure 3 below. Following Déchaine (1994), we identify at least three different positions for so: (i) inverted so in the CP domain, with do in C⁰; (ii) affirmative so in the TP domain, with do in T⁰; and (iii) anaphoric so in the VP domain, with do in Inner Aspect⁰.⁴

⁴ In our analysis, English do is always hosted by a Functional head, namely C⁰, T⁰ or InnerAspect⁰. This is consistent with proposals such as Lobeck (1995), Rizzi (1990), and Merchant (2001), who argue on independent grounds that that the ellipsis site must always be licensed in some way. For the cases that we consider here, the ellipsis site is licensed by a Functional head occupied by do.
Positing three distinct positions for so is supported by the following evidence. First, subject-auxiliary inversion indicates that inverted so is in the CP domain, as shown in (4). Following standard assumptions that the subject in its final derived position is located in the specifier of TP in English, auxiliaries higher than the subject must have moved to C\(^0\). The adverbial so in this case is an adjunct to CP (cf. Figure 3).

(4) Jane saw the Eiffel Tower, and so [\textit{c did}] Emily

The second position for so locates it in the polarity paradigm, where affirmative so is in complementary distribution with negation, as illustrated in (5). This type of so is located in the head of Polarity within the TP domain.\(^5\) Polarity\(P\) is located below TP, and \textit{do} is in T\(^0\). We argue that \textit{do too} ellipsis recruits ‘affirmative so’, and exemplifies \textit{do} within the TP domain.

a. Emily did [\textit{POL not }] see the Eiffel Tower
b. Emily did [\textit{POL so }] see the Eiffel Tower

Evidence for a third position for so located below TP is that anaphoric so can co-occur with polarity so and \textit{not}, as shown in (6). Since \textit{do so} can occur below polarity, we conclude that \textit{do} is merged with InnerAspect\(^0\) and so is right-adjoined to VP, as illustrated in Figure 3 above.\(^6\)

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\(^5\) TP or IP (Inflectional Phrase) domain, or ‘extended verbal projection’ (Grimshaw 1991).
\(^6\) Our treatment of so as VP-adjoined is consistent with Bouton (1970) who argues that so is adverbal. In a related vein, see Landman (2006:92-97) and Landman and Morzycki (2003) for a semantic analysis of so as an event-kind anaphor. For relevant discussion, see Houser (2010).
a. Emily ate her dinner, 
   but Jane did [POL not] [InnerAsp do [[VP —] so]].

b. Q: You didn’t do the laundry did you? 
   A: I did [POL so] [InnerAsp do [[VP —] so]]!

Given the different syntax of do so ellipsis, we expect to find different results according 
to whether or not there is a partition between events and states.7 Specifically, we predict that only 
do so ellipsis (with anaphoric so) is sensitive to the vP-internal structure of events and states. 
This is because it targets a lower projection within vP for ellipsis: VP. Ellipsis that targets a 
higher XP such as so do or do too ellipsis, we predict, will not show an event/state partition.

2.2 Non-structural Tests of Event versus State in English

Before testing anti-locality constraints with VP-movement in English, we first use non-structural 
tests to identify states versus events. Non-structural diagnostics for distinguishing events from 
states in English are well-known (e.g., Smith 1997). For illustrative purposes, we focus on the 
following three tests: (i) co-occurrence with a manner adverb such as quickly; (ii) co-occurrence 
with progressive aspect; (iii) compatibility with the imperative. Each of these diagnostics are 
possible with events but not states. These diagnostics are summarized in Table 2, and illustrated 
with the event predicate eat in 0 and the state predicate know in (8) below.

<table>
<thead>
<tr>
<th>Table 2: Distinguishing event versus state in English</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVENT</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>MANNER ADVERB (e.g. quickly)</td>
</tr>
<tr>
<td>PROGRESSIVE ASPECT</td>
</tr>
<tr>
<td>IMPERATIVE</td>
</tr>
</tbody>
</table>

(7) EVENT PREDICATES
   a. Emily ate her dinner quickly. MANNER ADVERB
   b. Emily is eating her dinner. PROGRESSIVE
   c. Eat your dinner! IMPERATIVE

(8) STATE PREDICATES
   a. *Emily knew the answer quickly. MANNER ADVERB
   b. *Emily is knowing the answer. PROGRESSIVE
   c. *Know the answer! IMPERATIVE

7 One aspect of do so ellipsis which we do not discuss here is the fact that it can strand event-modifiers, as in (i). 
For discussion, see Lakoff and Ross (1976), Déchaine (1993, 1994), Culicover and Jackendoff (2005), and Sobin 
(2008).

(i) Emily answered the question slowly, but Lucy did so quickly.
2.3 English *do so* Ellipsis targets VP and Shows an Event/State Partition

We start with the observation that English *do so* ellipsis is licit with event predicates, but illicit with state predicates (Lakoff 1966). Examples in (9) illustrate the compatibility of *do so* ellipsis with events; examples in (10) show the incompatibility of *do so* ellipsis with states.

(9) **EVENT PREDICATES**
   a. Emily ate her dinner and Jane *did so* too.
   b. Emily opened a box and Jane *did so* too.
   c. Emily washed her laundry and Jane *did so* too.

(10) **STATE PREDICATES**
   a. *Emily likes chocolate and Jane *does so* too.
   b. *Emily knows the answer and Jane *does so* too.
   c. *Emily likes that movie and Jane *does so* too.

We analyze the event/state partition found with *do so* ellipsis as follows. Following Johnson (2001), we analyze VP-ellipsis as movement of VP to Spec,TopicP (11), with subsequent deletion of the VP. Accordingly, the only difference between VP-topicalization and VP-ellipsis is that the left-peripheral VP is maintained with the former (12), but deleted with the latter (13).

(11) \([\text{TopicP} \ X P \ldots [\text{TP} \text{ SUBJ} \ldots [\ldots [t_{XP}]]]]\)  

(12) Madame Spanella claimed that...
   a. eat carrots, Holly wouldn’t *t*.
   b. eaten carrots, Holly hasn’t *t*.
   c. eating carrots, Holly should be *t*.
   d. eating carrots, Holly’s not *t*.
   e. eat carrots, Holly wants to *t*.
   (Johnson 2001:444, (17))

---

8 That the relevant distinction for English *do so* ellipsis is a state/event partition has been challenged by Kehler and Ward (1999), who argue that eventivity is at play, and by Culicover and Jackendoff (2005) who argue that agentivity is at play. Houser (2010), on the basis of an extensive corpus analysis, concludes that stativity is the most apt descriptor. There remain a small set of cases — Houser identifies 37 in his sample of 994 — where *do so* is licit with states (i.e. 3.7%). However, almost all of these examples (75%, i.e. 27/37) involve infinitives, as in (i). (Note that the proportion of infinitives in the entire corpus is 57% (594/994).) Our hunch is that something about the syntax of infinitives neutralizes the event/state partition normally found with *do so*. We leave this to future research.

(i) I should have had a husband and kids by now. I have no idea how I failed to *do so*.
   (Houser 2010:51, (34n) via PXNatter07-6)

9 We abstract away from cases where a canonically stative verb (e.g. like) is coerced into an activity predicate (e.g. I’m liking this more and more), in which case it tolerates *do so* ellipsis.

Our friendly amendment to the “topicalization plus deletion” analysis is that what is traditionally described as “VP” ellipsis can in fact target at least two distinct XPs: the lower part of the verbal projection (that is, VP), or the upper part of the verbal projection (that is, vP).\(^{11}\) We claim that *do so* ellipsis targets the lower VP, with the VP moving to the left edge and then deleting.\(^{12}\) This is shown in (14) with events and in (15) with states.

(14) \(\text{DO SO ELLIPSIS WITH EVENT PREDICATES}\)

a. Though Madame S. drank wine, \([_{\text{VP}} \text{drink wine}]\) H. wouldn’t *do so* \(t_{\text{VP}}\).

b. Though Madame S. has drunk wine, \([_{\text{VP}} \text{drunk wine}]\) H. would not have *done so* \(t_{\text{VP}}\).

c. Madame S. is drinking wine, and even \([_{\text{VP}} \text{drinking wine}]\) H. will be *doing so* \(t_{\text{VP}}\).

d. Though Madame S. is drinking wine, \([_{\text{VP}} \text{drinking wine}]\) H. is not *doing so* \(t_{\text{VP}}\).

e. Madame S. drank wine, and \([_{\text{VP}} \text{drink wine}]\), Holly wants to *do so* \(t_{\text{VP}}\).

(15) \(\text{DO SO ELLIPSIS WITH STATE PREDICATES}\)

a. *Madame S. knows wine, but \([_{\text{VP}} \text{know wine}]\) H. wouldn’t *do so* \(t_{\text{VP}}\).

b. *Madame S. has known wine, but \([_{\text{VP}} \text{known wine}]\) H. hasn’t *done so* \(t_{\text{VP}}\).

c. *Madame S. is knowing wine, and \([_{\text{VP}} \text{knowing wine}]\) H. should be *doing so* \(t_{\text{VP}}\).

d. *Madame S is knowing wine, but \([_{\text{VP}} \text{knowing wine}]\) H.’s not *doing so* \(t_{\text{VP}}\).

e. *Madame S. knew wine, and \([_{\text{VP}} \text{know wine}]\), Holly wants to *do so* \(t_{\text{VP}}\).

As for what accounts for the event/state partition with *do so* ellipsis, this is where we see the interplay between anti-locality and vP-internal syntax. Consider Figures 4 and 5 below. By hypothesis, *do so* ellipsis involves VP-movement; that is, movement of the lower portion of the verbal projection. Since vP is a phase, all elements must transit through its edge; Spec,vP. Because event vPs have Inner Aspect, VP-movement to Spec,vP does not violate anti-locality, and *do so* ellipsis with events is correctly predicted to be well-formed. In contrast, state vPs lack Inner Aspect, so VP-movement to Spec,vP violates anti-locality. This anti-locality violation cannot be avoided: there is no alternative strategy for VP-movement alone since vP is a phase, and by definition, all movement must first extract through Spec,vP. Thus, *do so* ellipsis with states is correctly predicted to be ill-formed.

\(^{11}\) See Sailor (*In progress*), among others, who argue that ‘VP’-ellipsis can target an inflectional head above vP.

\(^{12}\) Our analysis of ellipsis as involving fronting followed by deletion is consistent with that of Hankamer and Sag (1976) who treat both *do too* ellipsis and *do so* ellipsis as “surface anaphora”.

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12 Our analysis of ellipsis as involving fronting followed by deletion is consistent with that of Hankamer and Sag (1976) who treat both *do too* ellipsis and *do so* ellipsis as “surface anaphora”.

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This approach predicts that other types of ellipsis that target vP, rather than VP, will be insensitive to the state/event contrast. This prediction is borne out with English *do too* and *so do* ellipsis, to which we now turn.

### 2.4 English *do too* and *so do* Ellipsis target vP and Show no Event/State Partition

Consider the following examples of *do too* ellipsis, which is licit with both events and states:

\[(16) \text{ EVENT PREDICATES} \]
\[
\begin{align*}
\text{a.} & \quad \text{Emily ate her dinner, and Jane did too.} \\
\text{b.} & \quad \text{Emily opened a box, and Jane did too.} \\
\text{c.} & \quad \text{Emily washed her laundry, and Jane did too.}
\end{align*}
\]

\[(17) \text{ STATE PREDICATES} \]
\[
\begin{align*}
\text{a.} & \quad \text{Emily likes chocolate, and Jane does too.} \\
\text{b.} & \quad \text{Emily knew the answer, and Jane did too.} \\
\text{c.} & \quad \text{Emily liked the movie, and Jane did too.}
\end{align*}
\]

We understand the insensitivity of *do too* ellipsis to the event/state contrast as indicating that the relevant ellipsis site is the upper portion of the verbal projection: vP. Concretely, this means that the subject first raises out of Spec,vP, e.g., to Spec,TP (to value Nominative Case). The remnant vP is then fronted to Spec,TopicP, and subsequently deleted, as sketched in (18).

\[(18) \]
\[
\begin{align*}
\text{a.} & \quad \text{Emily ate her dinner, and [}_{vP} \text{Jane [}_{vP} \text{eat her dinner]} \text{ Jane did } t_{vP} \text{ too.}} \\
\text{b.} & \quad \text{Emily likes chocolate, and [}_{vP} \text{Jane [}_{vP} \text{like chocolate]} \text{ Jane does } t_{vP} \text{ too.}}
\end{align*}
\]

As with *do too* ellipsis, *so do* ellipsis is insensitive to the event/state contrast. Thus, *so do* ellipsis is equally applicable to event predicates (19), and to state predicates, (20).
(19) **EVENT PREDICATES**
   a. Emily ate her dinner, and so did Jane.  \textit{SO DO ELLIPSIS}
   b. Emily opened a box, and so did Jane.
   c. Emily washed her laundry, and so did Jane.

(20) **STATE PREDICATES**
   a. Emily likes chocolate, and so does Jane. \textit{SO DO ELLIPSIS}
   b. Emily knew the answer, and so did Jane.
   c. Emily liked the movie, and so did Jane.

We take the absence of an event/state partition with \textit{so do} ellipsis to indicate a \textit{vP} target:

(21) a. Emily ate her dinner, and \( [vP \text{ Jane} [vP \text{ eat her dinner}]] \) so did Jane \( t_{vP} \)
   b. Emily likes chocolate, and \( [vP \text{ Jane} [vP \text{ like chocolate}]] \) so does Jane \( t_{vP} \).

Importantly, the derivations for both \textit{do too} and \textit{so do} ellipsis with either events or states do not violate anti-locality as (i) the whole \textit{vP} phase moves to a position higher than its local specifier; namely to Spec,TopicP and (ii) this movement is not constrained by any phase boundaries. This is shown for events and states with \textit{so do} ellipsis in Figures 6 and 7:

Figure 6: \textit{vP}-movement with event \textit{vP}          Figure 7: \textit{vP}-movement with state \textit{vP}

\[\text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet}\]

2.5 States, Events, and Anti-Locality in English

In sum, we have argued that the state/event partition found with English \textit{do so} ellipsis diagnoses VP-fronting. This contrast is predicted in a phase-based theory of movement, combined with the claim that events have Inner Aspect (22) but states do not (23), and that movement is subject to anti-locality. The presence of Inner Aspect with an event \textit{vP} predicts that VP-movement will be permitted, as it obeys anti-locality. This is because Inner Aspect is positioned between \textit{vP} and VP, thereby allowing the VP to move to the specifier of the \textit{vP} phase without violating anti-locality. Conversely, the absence of Inner Aspect with a state \textit{vP} predicts that VP-movement will be blocked, as it violates anti-locality. This is because VP-movement with states necessarily
involves movement of the complement (VP) to the specifier of vP, contravening anti-locality. Crucially, with states, there is no alternative way for VP to extract to by-pass an anti-locality violation since vP is a phase, requiring all movement to transit through its edge; Spec,vP.

(22)  EVENT vP: [vP ARG [v [INNER.ASPECT [vP V ARG ]]]]

(23)  STATE vP: [vP ARG [v [vP [VP V ARG ]]]]

This approach correctly predicts that if vP is fronted — rather than VP — there will be no state/event partition, and this precisely what happens with English do too and so do ellipsis. Our findings are summarized in Table 1, repeated from above.13

<table>
<thead>
<tr>
<th>WHAT MOVES?</th>
<th>VP</th>
<th>vP</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>EVENT</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DIAGNOSTIC</td>
<td>do so ellipsis</td>
<td>do too ellipsis; so do ellipsis</td>
</tr>
</tbody>
</table>

### 3 State versus Event in Javanese

We now turn to state and event predicates in Javanese, and investigate their vP-internal syntax through the lens of VP-topicalization and subject-auxiliary answers.14 We show that these diagnostics differentiate states from events, with only events being grammatical. We argue that states are ungrammatical due to the same reasons as for English do so ellipsis, where VP-movement is constrained by anti-locality under the vP phase head. With events, we show that Javanese differs from English with the inclusion of an additional projection, VoiceP, which dominates vP. We argue that event predicates involve VoiceP-topicalization in which VP-fronting pied-pipes the VoiceP in Javanese. A preview of this section is summarized in Table 3.

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13 Also relevant to our proposal is the behavior of British English (B.E.) do (C.L. Baker 1984, Haddican 2007, Baltin 2012), illustrated in (i) and (ii). Although B.E. do is often described as being insensitive to the state/event contrast, preliminary work with a small number of B.E. speakers suggests there is a subtle difference between do as an aspectual auxiliary (have done) as in (i), and do as a tense auxiliary (might do) as in (ii). For some speakers, the latter shows weak sensitivity to the event/state partition. We put this aside for further research.

(i) John stole some money, and Ella might have done.

(ii) John stole some money, and Ella might do.

14 Javanese is a Western Malayo-Polynesian language of the Austronesian family spoken by over 90 million speakers in Indonesia. Javanese is well-known for its speech levels: ngoko ‘Low Javanese’, madya ‘Mid Javanese’, and krama ‘High Javanese’ (Errington 1985, 1988). The data discussed here are from a dialect spoken in Paciran, East Java, and are primarily in ngoko ‘Low Javanese’, the everyday speech in Paciran.
Table 3: Anti-locality in Javanese (Austronesian)

<table>
<thead>
<tr>
<th>WHAT MOVES?</th>
<th>VP</th>
<th>VoiceP</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>✗</td>
<td>(n/a)</td>
</tr>
<tr>
<td>EVENT</td>
<td>(n/a)</td>
<td>✓</td>
</tr>
<tr>
<td>DIAGNOSTIC</td>
<td>Topicalization</td>
<td>Subj-aux answers</td>
</tr>
</tbody>
</table>

3.1 Non-structural Tests of Event versus State in Javanese

Before testing anti-locality constraints in states versus events with VP-movement in Javanese, we first want to establish which predicates are states and which are events using non-structural tests. We have identified three non-structural diagnostics that distinguish states and events in Javanese, as summarized in Table 4.\textsuperscript{15} The first two diagnostics are the same as in English where only events can co-occur with a manner adverb or progressive aspect. The third diagnostic is specific to Austronesian languages. We find that, in Javanese, only events obligatorily have active voice morphology. We give examples of each of these diagnostics in turn.

Table 4: Distinguishing event versus state in Javanese

<table>
<thead>
<tr>
<th>EVENT</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANNER ADVERB (e.g. alon-alon ‘slowly’)</td>
<td>✓</td>
</tr>
<tr>
<td>PROGRESSIVE ASPECT (&lt; ewoh ‘busy’)</td>
<td>✓</td>
</tr>
<tr>
<td>ACTIVE VOICE MORPHOLOGY</td>
<td>✓</td>
</tr>
</tbody>
</table>

With respect to the first non-structural test, similar to English, events in Javanese can co-occur with a manner adverb, while states cannot. Manner adverbs can occur sentence finally or in between the subject and predicate in Javanese. The difference in compatibility with manner adverbs is illustrated in (24): the event mangan ‘eat’ is felicitous with alon-alon ‘slowly’ but not the state eling ‘remember’. Another example is given in (25) with the manner adverb cepat ‘quickly’. Here, the event njahit ‘sew’ is felicitous, while the state doyan ‘like [food]’ is not.

(24) a. Kana tau mangan bubur alon-alon EVENT
    Kana EXP.PERF AV.eat rice.pudding RED-slowly ‘Kana once ate rice pudding slowly.’

    b. *Salsa eling cerita-ne mbah-e alon-alon STATE
    Salsa remember story-DEF grandfather-DEF RED-slowly [‘Salsa remembered her grandfather’s story slowly.’]
A second non-structural test that distinguishes events from states in Javanese concerns the co-occurrence with progressive aspect. Parallel to English, events are felicitous with progressive aspect but states are not. In Paciran Javanese, progressive aspect can be marked with *ewoh ‘busy’.* As shown in (26), progressive aspect *ewoh ‘busy’* is compatible with events such as *numpak ‘ride’,* but not with states such as *eling ‘remember’. Infelicity with *ewoh ‘busy’* is also seen with state predicates *ngerti ‘understand’, seneng ‘like’, doyan ‘like [food], percoyo ‘believe’, lali ‘forget’, tresno ‘love (*Krama ‘High Javanese’)*.

A third non-structural test concerns the presence versus absence of active voice morphology on predicates. Similar to many Austronesian languages, in Javanese voice morphology indicates the status of the external argument. Active voice, which indicates that the external argument is an agent, is marked by a homorganic nasal prefix (N) and is obligatorily present with transitive event predicates, but obligatorily absent with state predicates. We illustrate this distinction in Table 5 with a number of different predicates; this list is non-exhaustive.

---

16 *Ewoh ‘busy’* is homophonous with *ewoh ‘difficult’* in Paciran Javanese. Another marker (*la*)*gek* is often glossed as ‘*PROG*’ (e.g. Robson 2002), but in the Paciran Javanese dialect (*la*)*gek* also marks inceptive aspect, and so cannot be used as a diagnostic for event vs. state predicates.

17 The voice contrast between event and state predicates is also found in other Austronesian languages, including Malay (Soh and Nomoto 2009, 2011; Nomoto 2013) and Madurese (Davies 2010:158-160).

Table 5: Transitive events versus transitive states in Javanese (Horne 1961; our diagnostics)

<table>
<thead>
<tr>
<th>EVENTS HAVE ACTIVE VOICE</th>
<th>STATES LACK ACTIVE VOICE</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><strong>mangan</strong></em> &gt; N + <strong>pangan</strong> ‘eat’</td>
<td><strong>doyan</strong> ‘like [food]’</td>
</tr>
<tr>
<td><em><strong>mbuka’</strong></em> &gt; N + <strong>buka’</strong> ‘open’</td>
<td><strong>eling</strong> ‘remember’</td>
</tr>
<tr>
<td><em><strong>moço</strong></em> &gt; N + <strong>woco</strong> ‘read’</td>
<td><strong>lali</strong> ‘forget’</td>
</tr>
<tr>
<td><em><strong>nulis</strong></em> &gt; N + <strong>tulis</strong> ‘write’</td>
<td><strong>ngerti</strong> ‘know’19</td>
</tr>
<tr>
<td><em><strong>nyaberang</strong></em> &gt; N + <strong>saberang</strong> ‘cross’</td>
<td><strong>percoyo</strong> ‘believe’</td>
</tr>
<tr>
<td><em><strong>nyampur</strong></em> &gt; N + <strong>campur</strong> ‘mix’</td>
<td><strong>seneng</strong> ‘like, enjoy’</td>
</tr>
<tr>
<td><em><strong>ngombé</strong></em> &gt; N + <strong>ombé</strong> ‘drink’</td>
<td><strong>sengit</strong> ‘hate’</td>
</tr>
<tr>
<td><em><strong>ngerajang</strong></em> &gt; N + <strong>rajang</strong> ‘slice’</td>
<td><strong>tresno</strong> ‘love’ (KRAMA)</td>
</tr>
<tr>
<td><em><strong>ngumbah</strong></em> &gt; N + <strong>kumbah</strong> ‘wash laundry’</td>
<td><strong>weroh</strong> ‘know, see’</td>
</tr>
</tbody>
</table>

An important implication of this diagnostic concerns the structural make-up of event predicates compared to states: only event predicates have VoiceP. We conclude that VoiceP is a separate projection that dominates vP and each has different functions in Javanese: the head of VoiceP houses voice morphology, while the head of vP introduces an external argument in its specifier. This is in line with proposals for the separation of VoiceP and vP in related languages such as Malay, Acehnese, and Sudanese (see Sukarno 2003, Alexiadou et al. 2006, Son 2006, Son and Cole 2008, Cole et al. 2008, Ko 2009, Legate 2012, Kurniawan 2013).20

The syntactic difference between events and states in Javanese is illustrated in Figures 8 and 9: the event vP has both Voice and Inner Aspect projections, while the state vP has neither.

Figure 8: Structure of events in Javanese

Figure 9: Structure of states in Javanese

We have shown three independent, non-structural diagnostics that distinguish event from state predicates in Javanese. The first two tests are applicable in both English and Javanese: in both languages, the ability to co-occur with a manner adverb and with progressive aspect is possible only with events. The third test, which concerns the presence or absence of voice morphology, is specific to Javanese, and sheds light on the structure of events versus states.

19 Though nasal-initial, **ngerti** ‘know’ has no internal morphological structure, and so cannot be analyzed as having active voice morphology; i.e. it cannot be parsed as *ng-erti* (AV-know). This is confirmed by the absence of a passive form *di-erti* (PASS-know), which establishes that erti does not exist as a base form.

20 See Sato (2012) for an alternative proposal wherein Javanese only has vP; however, states are not discussed.
Events, which obligatory occur with active voice morphology in Javanese, have a VoiceP projection. States lack a VoiceP projection, and concomitantly lack voice morphology.

With these non-structural tests as a baseline, we now investigate further the contrast between events and states in Javanese using structural tests. In the following section, we examine VP-topicalization as a first diagnostic in distinguishing events and states.

3.2 VP-topicalization is Constrained by Anti-locality in Javanese

In Javanese, VP-topicalization partitions events and states: it is licit with events, but illicit with states.\(^\text{21}\) Consider first VP-topicalization with event predicates, which is well-formed, as exemplified with *nganggo* ‘wear; use’ in (27), *nggotong* ‘lift’ in (28), and *mangan* ‘eat’ in (29).

(27) **CONTEXT**: *Opo mbak Jozina oleh nganggo celono reng ngaji?*

*nganggo* celono reng ngaji, Jozi oleh
*AV.*wear pants to *ngaji, Jozi* DEON.POSS
‘Wear pants to the reciting of the Holy Qur’an, Jozi is allowed to.’
(Vander Klok 2012:152)

(28) *nggotong* watu-ne, cak Kholiq iso
*AV.*lift rock-DEF Mr. Kholiq CIRC.POSS
‘Lift the stone, Kholiq can.’ (Vander Klok 2012:153)

(29) *mangan* es krim, Salsa gelem
*AV.*eat ice cream Salsa willing
‘Eat ice cream, Salsa is willing.’

However, VP-topicalization is ungrammatical with states such as *ngerti* ‘understand’ in (30), *eling* ‘remember’ in (31), and *seneng* ‘like’ in (32).

(30) **CONTEXT**: *Opo Pak Bambang tau ngerti boso cino?*

*ngerti* boso cino, pak Bambang tau
understand language China Mr. Bambang EXP.PERF
[‘Understood Chinese, Mr. Bambang once did.’]

\(^\text{21}\) In Paciran Javanese, VP-topicalization (along with subject-auxiliary answers, and auxiliary fronting in yes-no questions) is licit with a syntactic class of “low” auxiliaries, but not with a syntactic class of “high” auxiliaries. The low auxiliaries in Paciran Javanese include *tau* ‘EXP.PERF’, *oleh* ‘DEON.POSS’, *iso* ‘CIRC.POSS’, and *gelem* ‘willing’. On the distinction between high versus low auxiliaries in Javanese, see Vander Klok (2012; under revision) for a parallel analysis to the current one based on successive-cyclic movement and anti-locality.
Opo Mas Adi iso eling ceritone mbohe Adi?
‘Could Mas Adi remember his grandfather’s story?’

*eling cerito-ne mbah-e Adi, mas Adi iso
remember story-DEF grandfather-DEF Adi Mr. Adi CIRC.POSS
[‘Remember the story of Adi’s grandfather, Mr. Adi could.’]

Opo mbak Ndayu oleh seneng mbek gurune?
‘Is Miss Ndayu allowed to like her teacher?’

* seneng mbek guru-ne, mbak Ndayu oleh
like with teacher-DEF, Miss Ndayu DEON.POSS
[‘Like her teacher, Miss Ndayu is allowed to.’]

The event/state partition found with Javanese XP-topicalization can be understood in terms of anti-locality effects. By definition, topicalization requires movement of some XP to the specifier of TopicP in the CP domain, as in (33).

(33)  [TopicP  XP  …[TP  SUBJ… [LowAUXP  AUX [ tXP ]]]]

If XP-topicalization targets the lower part of the verbal projection, namely VP, then we expect topicalization to be possible for events, but not for states. Accordingly, the event/state partition is due to the interaction of phase-based movement with anti-locality theory. As schematized in (34) below, Javanese transitive states have a vP shell that dominates a VP while Javanese transitive events have two additional positions: (i) a VoiceP projection dominating vP; and (ii) an Inner Aspect projection dominating VP. The structure of events in Javanese differs from their English counterparts in that Javanese events have VoiceP; we show below that this difference results in an alternative strategy for movement.

(34)  a.  STATE vP  [vP  ARG [v  [VP  V ARG ]]]
      b.  EVENT vP  [VoiceP  [vP  ARG [v  [INNER.ASPECT  [VP  V ARG ]]]]]

We first discuss how the ungrammaticality of VP-topicalization with states is derived before turning to how the grammaticality of VP-topicalization with events is derived in Javanese.

We propose that the ungrammaticality of states with VP-topicalization in Javanese is due to the same theoretical principles that account for why states are ungrammatical with do so ellipsis in English. That is, ungrammaticality of VP-topicalization with a state predicate is due to anti-locality effects under the vP phase head, as illustrated in Figure 10. By hypothesis, XP-topicalization involves VP-movement. Accepting the postulate that vP is a phase cross-linguistically, vP requires all extraction to land first at its edge, the specifier of vP. However, with state predicates, VP-movement to Spec,vP violates anti-locality, which prohibits the complement of a head from moving to the specifier of the same head. Further, because vP is a phase, VP cannot move to a higher projection to avoid violating anti-locality. VP is in effect frozen under the vP phase head.
Turning now to why VP-topicalization is grammatical with event predicates in contrast to states in Javanese, we show that Javanese (predictably) employs a strategy that differs from English, which permits VP-movement with events in the form of *do so* ellipsis. A first possible analysis for Javanese, which we ultimately reject, would be that the VP moves to Spec,TopicP, located in the CP domain. Parallel to English, the VP would be able to extract from vP without violating anti-locality due to the richer vP-internal structure available in event vPs, namely the presence of Inner Aspect. This hypothetical analysis is shown in Figure 11:

However, language-internal properties of Javanese indicate that this analysis is not correct. We know that the VoiceP must front with events in Javanese because active voice morphology is obligatorily present in VP-topicalization of events. This is illustrated in (35), where the topicalized verb must have the active voice form *mangan*, with active voice morphology indicated by the homorganic nasal prefix.

(35)  
\[
\text{mangan/}*pangan \quad \text{es} \quad \text{krim}, \quad \text{Salsa} \quad \text{gelem} \\
\text{AV.eat} \quad \text{eat} \quad \text{ice cream} \quad \text{Salsa} \quad \text{willing} \\
\text{‘Eat ice cream, Salsa is willing.’}
\]

We propose that Javanese employs a different strategy for VP-topicalization of events, which equally avoids anti-locality violations. Taking our cue from the fact that active voice morphology is obligatory with VP-topicalization of events, we propose that Javanese topicalization of events also probes for a VP, but because of the obligatory voice morphology found on event predicates, VP-movement pied-pipes VoiceP. In this analysis, as illustrated in Figure 12 below, VoiceP movement to Spec,TopicP pied-pipes the entire verbal projection,
including the vP phase (which necessarily includes the lower VP). Following proposals for the related languages of Acehnese (Legate 2012) and Sundanese (Kurniawan 2013), the surface morphology is derived by head-movement of V-Asp-v-Voice. Crucially, this analysis does not violate anti-locality, as pied-piping of the VoiceP along with the vP phase to the CP domain does not involve movement from a complement to the specifier of the same head.

Figure 12: VoiceP-movement with Javanese events

In sum, we showed that VP-topicalization partitions events and states in Javanese, with topicalization applying to events but not states. We argued that, in a phase-based theory where vP is a phase, the ungrammaticality of topicalizing state predicates is naturally explained by anti-locality effects, where VP is the goal for movement with states. Moreover, in our analysis, the ungrammaticality of VP-topicalization with states in Javanese is due to the same theoretical principles that derive the ungrammaticality of states with do so ellipsis in English. In addition, we argued that VP-topicalization of events in Javanese involves a derivation that is distinct from English do so ellipsis with events. While English do so ellipsis with events involves VP-movement, Javanese VP-topicalization with events also targets VP, but for morphological reasons VoiceP undergoes movement, bringing the vP (and hence VP) along with it. Our analysis predicts that other VP-preposing constructions will exhibit a state/event partition in Javanese. In the next section, we argue that this prediction is borne out with subject-auxiliary answers.

3.3 Subject-Auxiliary Answers are Also Constrained by Anti-locality in Javanese

In Javanese, subject-auxiliary answers to yes-no questions show the same restrictions as VP-topicalization: they are licit with event predicates, but illicit with state predicates. Each of the following examples are first introduced by a yes-no question which indicates the predicate that the subject-auxiliary answer is associated with. As shown in (36)-(38), subject-auxiliary answers

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22 Parallel to VP-topicalization, Javanese subject-auxiliary answers are grammatical with event predicates only with low auxiliaries. See footnote 21 above.
are possible answers when the yes-no question has an event predicate: *ngelangi* ‘swim’ in (36), *tuku* ‘buy’ in (37), and *lungo* ‘go’ in (38).\(^{23}\)

(36) A: Dewi iso *ngelangi* toh?
   Dewi CIRC.POSS AV.swim FOC
   Can Dewi swim?’

   B: Iyo, Dewi iso
   yes Dewi CIRC.POSS
   ‘Yes, Dewi can.’ (Vander Klok 2012:166)

(37) A: Salsa oleh *tuku* rok anyar toh?
   Salsa DEON.POSS buy dress new FOC
   ‘May Salsa buy a new dress?’

   B: ?Iyo, Salsa oleh
   yes Salsa DEON.POSS
   ‘Yes, Salsa may.’ (Vander Klok 2012:166)

(38) A: mbak Nunung tau *lungo* reng Jakarta toh?
   Miss Nunung EXP.PERF go at Jakarta FOC
   ‘Has Miss Nunung ever gone to Jakarta?’

   B: ?Iyo, Nunung tau
   yes Nunung EXP.PERF
   ‘Yes, Nunung has.’ (Vander Klok 2012:166)

Although subject-auxiliary answers are judged to be slightly degraded, all speakers accept these types of answers. The slight hesitation for these types of answers is due to speakers’ preference to answer a yes-no question with only the auxiliary itself or with a full sentence. Crucially, when we compare the subject-auxiliary answers with events to those with states, there is a clear difference in grammaticality judgments. The following examples with state predicates — *ngerti* ‘understand’ in (39), *eling* ‘remember’ in (40) and *seneng* ‘like’ in (41) — are all judged as ungrammatical in contrast to the examples with the event predicates above.

(39) A: opo pak Bambang tau *ngerti* boso cino?
   Q Mr. Bambang EXP.PERF understand language China
   ‘Did Mr. Bambang ever understand Chinese?’

   B: ?*Iyo, pak Bambang tau
   Yes, Mr. Bambang EXP.PERF
   [‘Yes, Mr. Bambang once has.’]

---

\(^{23}\) *tuku* ‘buy’ and *lungo* ‘go’ are two examples of a closed class of predicates in Javanese which do not take overt active voice morphology as mentioned in footnote 18 above. However, they behave as event predicates with respect to non-structural tests; that is, compatibility with manner adverbs and progressive aspect.
Thus, the prediction that, in Javanese, contexts other than VP-topicalization will also exhibit an event/state partition is borne out: subject-auxiliary answers are possible with events but not states. The rest of this section describes our analysis of subject-auxiliary answers as in fact involving VP-preposing. We show below in section 3.4 that our analysis presents a new, alternative strategy for deriving answer fragments that is distinct from the mechanism invoked in Merchant’s (2004) influential study.

We analyze subject-auxiliary answers as requiring VP-movement to Spec,TopicP just as with VP-topicalization.24 The derivation of subject-auxiliary answers additionally involves phonological deletion of the VP in its preposed position. On this view, the derivation of subject-auxiliary answers and VP-topicalization differs minimally in that the preposed VP in Spec,TopicP is overtly pronounced in VP-topicalization, but not in subject-auxiliary answers. This minimal difference is sketched in the derivations in (42):

(42) a. VP-TOPOICALIZATION  
    [TopicP VP →[TP SUBJ... [LowAuxP AUX →[tvp]]]]

b. SUBJECT-AUXILIARY ANSWERS  
    [TopicP VP →[TP SUBJ... [LowAuxP AUX →[tvp]]]]

Because of this parallel derivation, the contrast between events and states with subject-auxiliary answers is analyzed in the same way as VP-topicalization, involving the interaction of phase-based movement with anti-locality.

Parallel to VP-topicalization with states, subject-auxiliary answers with states are ungrammatical in Javanese because of anti-locality violations due to the position of VP as a complement to the phase head vP. Specifically, Topic probes for a VP goal; the lower portion of the verbal projection. The VP must first extract from the vP phase via its edge; Spec,vP.

24 More specifically, we show in this section that with events, VoiceP is pied-piped with VP-movement in Javanese, just as with VP-topicalization.
banned because it violates anti-locality, as illustrated in Figure 13. Because of the impossibility of VP-extraction, derivations that require VP-preposing with states result in ungrammaticality.

Figure 13: *VP-movement with states in Javanese

Subject-auxiliary answers with events are grammatical in Javanese. As argued for VP-topicalization with events in Javanese, Topic probes for a VP, but obligatory active voice morphology on event predicates forces VoiceP to be pied-piped. Movement of VoiceP to Spec,TopicP in the CP domain does not violate anti-locality because this movement is not to the specifier of its immediately dominating projection (Spec,AuxP; within the IP domain). VoiceP-movement takes along its complement vP and all syntactic material within vP, as in Figure 14 below. Once in its preposed position, the derivation of subject-auxiliary answers differs from VP-topicalization only in that the string is phonologically deleted once sent to Spell-Out. As a consequence, the preposed VoiceP is not overtly pronounced as it is in VP-topicalization.

Figure 14: VoiceP-movement with events in Javanese

3.4 VP-movement and VP-Deletion: Implications for the Analysis of Fragments

The phase-based anti-locality analysis predicts that other instances of VP-movement in Javanese will show the same restrictions found with VP-topicalization. This prediction is borne out with subject-auxiliary answers, which are grammatical with events, but not states. In our analysis, the derivation of subject-auxiliary answers differs minimally from that of VP-topicalization: both
involves VP-movement, but once the VP is in its preposed position, subject-auxiliary answers involve an additional step of phonological deletion.

This analysis also presents a new strategy for deriving fragment answers, different from the kind of analysis argued for in Merchant (2004). Although Merchant (2004) does not discuss subject-auxiliary fragments, the answer fragments that he does discuss involve DP, VP, or AdvP constituents, as in (43)-(45) respectively:

(43) a. Who did you see?  
   b. [DP John]  

(44) a. What does Bush want to do to Iraq?  
   b. [VP Attack it]  

(45) a. When did he leave?  
   b. [AdvP After the movie ended]  

Merchant (2004) proposes that these fragment answers involve movement of the fragment itself to the CP-domain (possibly Focus), followed by ellipsis of the remaining clause. For instance, to derive the DP answer fragment in (43)b, Merchant argues that the DP John has moved to the specifier of a functional head in the CP-domain. An E feature on F triggers non-pronunciation of TP. (See Merchant (2004:675) for details.)

(46) [FP [DP John] F_E [FP the saw DP]]  

The analysis that we advocate here is opposite to that proposed in Merchant (2004) in the sense that it is the constituent that is not pronounced — the topicalized VP — which moves to the CP domain, and the answer fragment that is pronounced — the subject-auxiliary sequence — remains in situ. In other words, the comment is pronounced, whereas the topic is phonologically deleted. A full-fledged comparison of these different approaches to fragments is beyond the scope of this paper, but is a promising avenue for future research.

4 Conclusion

We have argued that, in unrelated languages, VP-internal structural differences between state and event predicates can be detected in contexts that involve VP-fronting. In particular, the absence of Inner Aspect with state vPs means that VP-fronting is illicit because it violates anti-locality. Our anti-locality analysis predicts that VP-fronting will display a state/event partition, but that vP-fronting will not. This provides an elegant account of the state/event partition found with English do so ellipsis (which we analyze as VP-fronting), and the absence of a state/event partition with English so do and do too ellipsis (which we analyze as vP-fronting). Our findings are summarized in Table 1, repeated from above.
Table 1: Anti-locality in English (Germanic)

<table>
<thead>
<tr>
<th>ELLIPSIS TYPE</th>
<th>WHAT MOVES?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VP</td>
</tr>
<tr>
<td>STATE</td>
<td>✗</td>
</tr>
<tr>
<td>EVENT</td>
<td>✓</td>
</tr>
<tr>
<td>EXAMPLE</td>
<td>do so ellipsis</td>
</tr>
</tbody>
</table>

Our analysis also successfully accounts for the deployment of VP-topicalization in Javanese, which also shows a state/event partition. Once voice morphology is taken into account, we observe that states (which lack voice marking) predictably fail to undergo VP-topicalization, while events (which have obligatory voice marking) undergo VoiceP topicalization (where VoiceP is pied-piped by VP). In addition, our analysis captures the fact that the state/event partition generalizes to subject-auxiliary answers, which we argued involve VP-topicalization and subsequent deletion. Table 3, repeated from above, summarizes our findings.

Table 3: Anti-locality in Javanese (Austronesian)

<table>
<thead>
<tr>
<th>WHAT MOVES?</th>
<th>VP</th>
<th>VoiceP</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>✗</td>
<td>(n/a)</td>
</tr>
<tr>
<td>EVENT</td>
<td>(n/a)</td>
<td>✓</td>
</tr>
<tr>
<td>DIAGNOSTIC</td>
<td>Topicalization</td>
<td>Subj-aux answers</td>
</tr>
</tbody>
</table>

In closing, we draw attention to three consequences of this analysis. First, we observe that the same operation — “VP” topicalization — can target VP or vP. More generally, cross-linguistically, the same movement operation may target different XPs. Specifically, we have argued that “VP-topicalization” targets: (i) VP (states in Javanese and English); (ii) vP (events and states in English); (iii) VoiceP (events in Javanese).

A second consequence of our analysis is that the same language can target VP or vP. That is, within one language, the same mechanism may target different XPs. “VP”-ellipsis in English targets either (i) VP (do so ellipsis) or (ii) vP (so do, do too ellipsis). This converges with earlier studies which, on independent grounds, have argued that “VP”-ellipsis targets either vP (Johnson 2004; Aelbrecht 2010; Merchant 2013) or a higher inflectional head (Sailor, in progress).

Third, the idea that events have a richer structure than states do has proven useful for the analysis of ellipsis, of topicalization, and of yes/no questions. We anticipate that paying closer attention to the syntactic factors that give rise to event/state partitions in different languages will uncover previously unnoticed patterns, as well as improve the empirical coverage and granularity of analyses.25

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25 See Rouveret (2012) for a phase-based analysis of how the state/event partition presents itself in Welsh.
5 References


Lakoff, George. 1966. Stative adjectives and verbs in English. In *Mathematical linguistics and automatic translation; report to the National Science Foundation 17*, Computational Laboratory, Harvard University.


Sailor, Craig. In progress. The Size of Silence: On the Fine Structure of VP Ellipsis, UCLA.


