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Special Session

Approaches to the Syntax-Phonology Interface

Parasessions

Semantic Theory in Underdescribed Languages

Language, Inequality, and Globalization

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Foreword

This monograph contains 28 of the 51 talks given at the 40th Annual Meeting of the Berkeley Linguistics Society, held in Berkeley, California, February 7-9, 2014. The conference included a General Session, one Special Session entitled *Approaches to the Syntax-Phonology Interface*, and two Parasessions entitled *Semantic Theory in Underdescribed Languages* and *Language, Inequality, and Globalization*. It was planned and run by all then second-year graduate students in the Department of Linguistics at the University of California, Berkeley. The members of the Executive Committee were Sarah Bakst, Herman Leung, Auburn Lutzross, Jonathan Manker, Zachary O'Hagan, Orchid Pusey, Nicholas Rolle, and Katie Sardinha.

The papers contained herein were, upon first submission, edited principally for style by members of the Executive Committee. These edited versions were incorporated by Herman Leung and Zachary O'Hagan into a draft manuscript that was circulated among authors either for their approval or for further editing. Following resubmission, final versions of papers were incorporated by Zachary O'Hagan into the monograph found here. Our goal has been the speedy publication of these proceedings, and as such, certain aspects – e.g., the complete unification of formatting – have been sacrificed. It is our belief that this does not detract from the final publication in any way.

The Executive Committee
October 2014

Stative versus Eventive Predicates and *v*P-internal Structure

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1 Introduction

The proposal that constitutes the crux of this paper is that the *v*P-internal syntax of events is not the same as the *v*P-internal syntax of states (Noonan 1992, 1993; MacDonald 2009; Travis 2010).[2] 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 *v*P [$_{vP}$ ARG [$_{v}$ [$_{\text{INNER.ASPECT}}$ [$_{VP}$ V ARG]]]]
(2) STATE *v*P [$_{vP}$ ARG [$_{v}$ [$_{VP}$ V ARG]]]

The structural difference between event versus state *v*Ps 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 *v*P-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 *v*P-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 *v*P is a phase cross-linguistically (Chomsky 1995, 2000, 2001; Legate 2003) is that all extraction moves

[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 *v*P, defined as the specifier of *v*P.[3] 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 *$[_{YP}$ **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 *v*P versus a state *v*P. Since *v*P is a phase, VP extraction must transit through Spec,*v*P. As shown in Figure 1, with event *v*Ps, VP extraction is predicted to be licit, as the presence of Inner Aspect means that movement of VP to Spec,*v*P obeys anti-locality. However, as shown in Figure 2, with stative *v*Ps, movement of VP to Spec,*v*P violates anti-locality. This is because VP, the complement of *v*, moves to the local specifier Spec,*v*P. Since the only movement possible for VP in a state *v*P violates anti-locality, VP-movement with states is predicted to be impossible.

Figure 1: VP-movement out of event *v*P

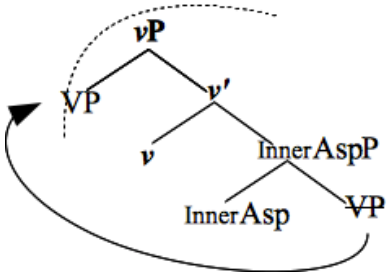
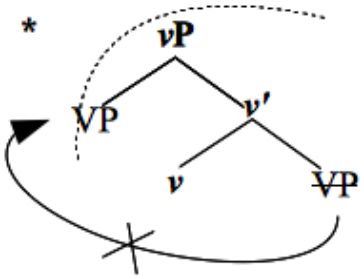


Figure 2: *VP-movement out of state *v*P



We test anti-locality in English and Javanese using diagnostics that target VP- or *v*P-movement. Anti-locality, in conjunction with the *v*P-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 *v*P-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 *v*P), 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 *v*P-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.

[3] This property of a phase is known as the Phase Impenetrability Condition (PIC; Chomsky 2000). Abels (2003) derives the PIC by assuming phase heads are universal attractors, and therefore universal intervenors.

2 State versus Event in English

We investigate the *v*P-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; *v*P 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 *v*P-fronting, and so are (predictably) licit with both states and events.

Table 1: Anti-locality in English (Germanic)

WHAT MOVES?	VP	*v*P
STATE	✗	✓
EVENT	✓	✓
DIAGNOSTIC	*do so* ellipsis	*do too* ellipsis; *so do* ellipsis

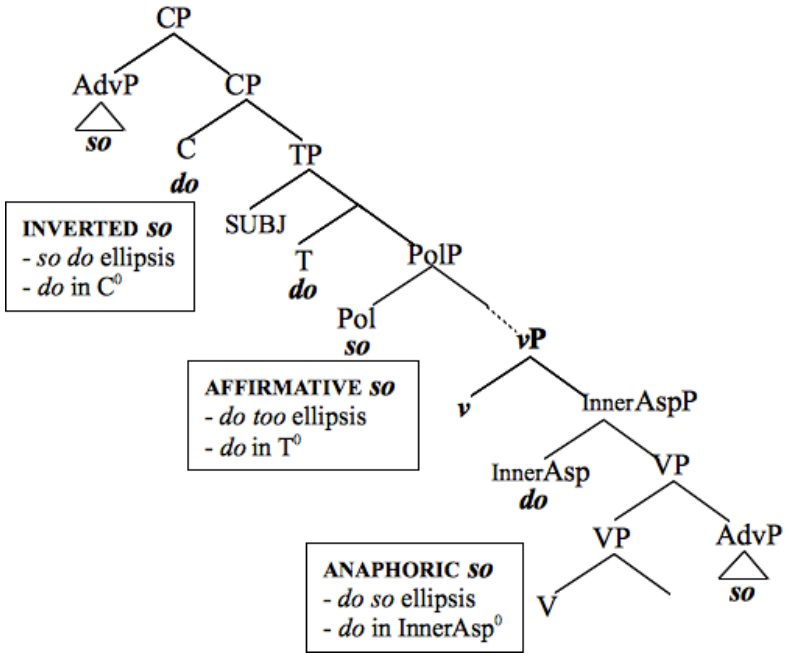
Before discussing these different types of ellipsis in English, we first motivate the claim that English *do* occurs in (at least) three distinct syntactic positions: C^0, T^0, and $InnerAspect^0$.

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 C^0; (ii) affirmative *so* in the TP domain, with *do* in T^0; and (iii) anaphoric *so* in the VP domain, with *do* in $InnerAspect^0$.[4]

[4] In our analysis, English *do* is always hosted by a Functional head, namely C^0, T^0 or $InnerAspect^0$. 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*.

Figure 3: Syntax of inverted *so*, affirmative *so,* and anaphoric *so*



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*** [$_C$ ***did***] Emily INVERTED *so*

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] PolarityP is located below TP, and *do* is in T^0. We argue that *do too* ellipsis recruits 'affirmative *so*', and exemplifies *do* within the TP domain.

(5) a. Emily did [$_{POL}$ **not**] see the Eiffel Tower AFFIRMATIVE *so*
b. Emily did [$_{POL}$ **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 *not*, as shown in (6). Since *do so* can occur below polarity, we conclude that *do* is merged with InnerAspect^0 and *so* is right-adjoined to VP, as illustrated in Figure 3 above.[6]

[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 adverbial. 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).

(6) a. Emily ate her dinner,
but Jane did [$_{POL}$ not] [$_{InnerAsp}$ **do** [[$_{VP}$ —] **so**]]. ANAPHORIC *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 *v*P-internal structure of events and states. This is because it targets a lower projection within *v*P 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 2: Distinguishing event versus state in English

	EVENT	STATE
MANNER ADVERB (e.g. *quickly*)	✓	✗
PROGRESSIVE ASPECT	✓	✗
IMPERATIVE	✓	✗

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

(8) STATE PREDICATES
a. *Emily knew the answer **quickly**. MANNER ADVERB
b. *Emily is know**ing** 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).[8] 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. *DO SO* ELLIPSIS
b. Emily opened a box and Jane **did so** too.
c. Emily washed her laundry and Jane **did so** too.

(10) STATE PREDICATES[9]

a. *Emily likes chocolate and Jane **does so** too. *DO SO* ELLIPSIS
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.[10] 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) $[_{\text{TopicP}}$ **XP** ...$[_{\text{TP}}$ SUBJ... $[_{\dots}$ [$\boldsymbol{t}_{\boldsymbol{XP}}$]]]]

(12) Madame Spanella claimed that... TOPICALIZATION

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))

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[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.

[10] See Aelbrecht and Haegeman (2012) for a counter-proposal to Johnson (2001).

(13) a. Madame S. ate carrots, but [~~eat carrots~~] H. wouldn't ***t***. ELLIPSIS
b. Madame S. has eaten carrots, but [~~eaten carrots~~] H. hasn't ***t***.
c. Madame S. is eating carrots, and [~~eating carrots~~] H. should be ***t***.
d. Madame S.'s eating carrots, but [~~eating carrots~~] H.'s not ***t***.
e. Madame S. ate carrots, and [~~eat carrots~~], Holly wants to ***t***.
(Johnson 2001:444, (18))

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, *v*P).[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) *DO SO* ELLIPSIS WITH EVENT PREDICATES
a. Though Madame S. drank wine, [$_{VP}$ ~~drink wine~~] H. wouldn't **do so** t_{VP}.
b. Though Madame S. has drunk wine, [$_{VP}$ ~~drunk wine~~] H. would not have **done so** t_{VP}
c. Madame S. is drinking wine, and even [$_{VP}$ ~~drinking wine~~] H. will be **doing so** t_{VP}.
d. Though Madame S. is drinking wine, [$_{VP}$ ~~drinking wine~~] H. is not **doing so** t_{VP}.
e. Madame S. drank wine, and [$_{VP}$ ~~drink wine~~], Holly wants to **do so** t_{VP}.

(15) *DO SO* ELLIPSIS WITH STATE PREDICATES
a. * Madame S. knows wine, but [$_{VP}$ ~~know wine~~] H. wouldn't **do so** t_{VP}.
b. * Madame S. has known wine, but [$_{VP}$ ~~known wine~~] H. hasn't **done so** t_{VP}.
c. * Madame S. is knowing wine, and [$_{VP}$ ~~knowing wine~~] H. should be **doing so** t_{VP} .
d. * Madame S is knowing wine, but [$_{VP}$ ~~knowing wine~~] H.'s not **doing so** t_{VP}.
e. * Madame S. knew wine, and [$_{VP}$ ~~know wine~~], Holly wants to **do so** t_{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 *v*P-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 *v*P is a phase, all elements must transit through its edge; Spec,*v*P. Because event *v*Ps have Inner Aspect, VP-movement to Spec,*v*P does not violate anti-locality, and *do so* ellipsis with events is correctly predicted to be well-formed. In contrast, state *v*Ps lack Inner Aspect, so VP-movement to Spec,*v*P violates anti-locality. This anti-locality violation cannot be avoided: there is no alternative strategy for VP-movement alone since *v*P is a phase, and by definition, all movement must first extract through Spec,*v*P. 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 *v*P.
[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".

Figure 4: VP-movement out of event *v*P

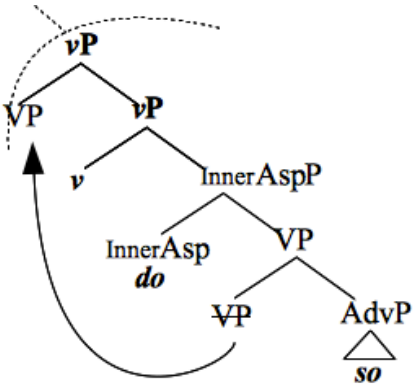
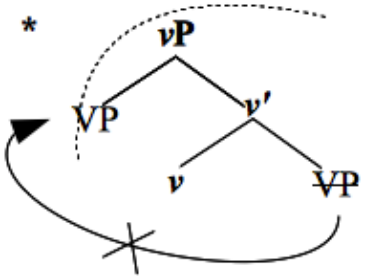


Figure 5: *VP-movement out of state *v*P



This approach predicts that other types of ellipsis that target *v*P, 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 *v*P and Show no Event/State Partition

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

(16) EVENT PREDICATES

a. Emily ate her dinner, and Jane **did too**. *DO TOO* ELLIPSIS
b. Emily opened a box, and Jane **did too**.
c. Emily washed her laundry, and Jane **did too**.

(17) STATE PREDICATES

a. Emily likes chocolate, and Jane **does too**. *DO TOO* ELLIPSIS
b. Emily knew the answer, and Jane **did too**.
c. Emily liked the movie, and Jane **did too**.

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: *v*P. Concretely, this means that the subject first raises out of Spec,*v*P, e.g., to Spec,TP (to value Nominative Case). The remnant *v*P is then fronted to Spec,TopicP, and subsequently deleted, as sketched in (18).

(18) a. Emily ate her dinner, and [$_{vP}$ ~~Jane~~ [$_{VP}$ ~~eat her dinner~~]] Jane **did** t_{vP} **too**.
b. Emily likes chocolate, and [$_{vP}$ ~~Jane~~ [$_{VP}$ ~~like chocolate~~]] Jane **does** t_{vP} **too**.

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. *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. *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 *so do* ellipsis to indicate a *v*P target:

(21) a. Emily ate her dinner, and [$_{vP}$ ~~Jane~~ [$_{VP}$ ~~eat her dinner~~]] **so did** Jane t_{vP}
b. Emily likes chocolate, and [$_{vP}$ ~~Jane~~ [$_{VP}$ ~~like chocolate~~]] **so does** Jane t_{vP}.

Importantly, the derivations for both *do too* and *so do* ellipsis with either events or states do not violate anti-locality as (i) the whole *v*P 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 *so do* ellipsis in Figures 6 and 7:

Figure 6: *v*P-movement with event *v*P

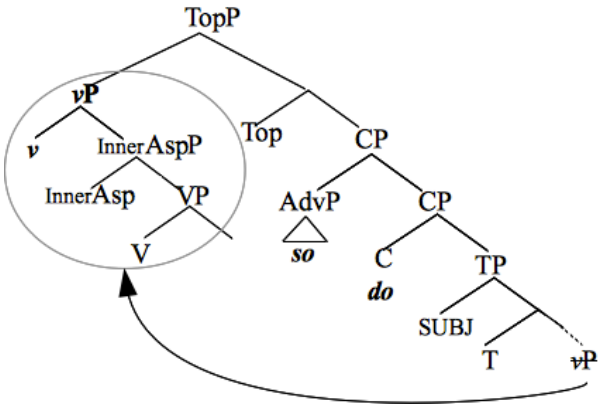
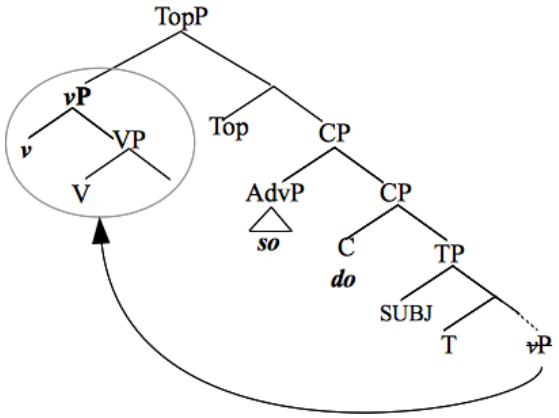


Figure 7: *v*P-movement with state *v*P



2.5 States, Events, and Anti-Locality in English

In sum, we have argued that the state/event partition found with English *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 *v*P predicts that VP-movement will be permitted, as it obeys anti-locality. This is because Inner Aspect is positioned between *v*P and VP, thereby allowing the VP to move to the specifier of the *v*P phase without violating anti-locality. Conversely, the absence of Inner Aspect with a state *v*P 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 *v*P, contravening anti-locality. Crucially, with states, there is no alternative way for VP to extract to by-pass an anti-locality violation since *v*P is a phase, requiring all movement to transit through its edge; Spec,*v*P.

(22) EVENT *v*P [$_{vP}$ ARG [$_{v}$ [$_{\text{INNER.ASPECT}}$ [$_{VP}$ V ARG]]]]
(23) STATE *v*P [$_{vP}$ ARG [$_{v}$ [$_{VP}$ V ARG]]]

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

Table 1: Anti-locality in English (Germanic)

WHAT MOVES?	VP	vP
STATE	✗	✓
EVENT	✓	✓
DIAGNOSTIC	*do so* ellipsis	*do too* ellipsis; *so do* ellipsis

3 State versus Event in Javanese

We now turn to state and event predicates in Javanese, and investigate their *v*P-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 *v*P phase head. With events, we show that Javanese differs from English with the inclusion of an additional projection, VoiceP, which dominates *v*P. 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.

[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**. EVENT
This cheese didn't cost a lot, but the other one might have **done**. STATE
(ii) John stole some money, and Ella might **do**. EVENT
?This cheese doesn't cost a lot, but the other one might **do**. STATE

[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)

WHAT MOVES?	VP	VoiceP
STATE	✗	(n/a)
EVENT	(n/a)	✓
DIAGNOSTIC	Topicalization	
	Subj-aux answers	

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.[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

	EVENT	STATE
MANNER ADVERB (e.g. *alon-alon* 'slowly')	✓	✗
PROGRESSIVE ASPECT (< *ewoh* 'busy')	✓	✗
ACTIVE VOICE MORPHOLOGY	✓	✗

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.']

[15] The imperative *'nang* VP' does not distinguish events from states in Paciran Javanese, different than English.

(25) a. mbak Risma iso **cepat** **njahit** rok EVENT
Miss Risma CIRC.POSS quickly AV.sew dress
'Risma can quickly sew a dress.'

b. *Pak Zaini (**cepat**) doyan rawon (**cepat**) STATE
Mr. Zaini quickly like.food *rawon* quickly
['Mr. Zaini (quickly) likes rice with spicy beef (quickly).']

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'.[16] 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')'.

(26) a. Dewi **ewoh** **numpak** sepeda montor EVENT
Dewi busy AV.ride bike motor
'Dewi is riding a motorbike.'

b. ?* Salsa **ewoh** **eling** cerita-ne mbah-e STATE
Salsa busy remember story-DEF grandfather-DEF
['Salsa is remembering her grandfather's story.']

A third non-structural test concerns the presence versus absence of active voice morphology on predicates.[17] 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[18], 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).

[18] A closed class of transitive verbs do not take Active Voice prefix, including *tuku* 'buy', *gawe* 'make' (Robson 2002:45 for Standard Javanese). In Paciran Javanese, *tuku* does not take AV, but *nggawe* ('AV.make') does.

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

EVENTS HAVE ACTIVE VOICE			STATES LACK ACTIVE VOICE	
***m**angan*	> N + *pangan*	'eat'	*doyan*	'like [food]'
***m**buka'*	> N + *buka'*	'open'	*eling*	'remember'
***m**oco*	> N + *woco*	'read'	*lali*	'forget'
***n**ulis*	> N + *tulis*	'write'	*ngerti*	'know'[19]
***ny**aberang*	> N + *saberang*	'cross'	*percoyo*	'believe'
***ny**ampur*	> N + *campur*	'mix'	*seneng*	'like, enjoy'
***ng**ombé*	> N + *ombé*	'drink'	*sengit*	'hate'
***ng**erajang*	> N + *rajang*	'slice'	*tresno*	'love' (KRAMA)
***ng**umbah*	> N + *kumbah*	'wash laundry'	*weroh*	'know, see'

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 *v*P and each has different functions in Javanese: the head of VoiceP houses voice morphology, while the head of *v*P introduces an external argument in its specifier. This is in line with proposals for the separation of VoiceP and *v*P 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 *v*P has both Voice and Inner Aspect projections, while the state *v*P has neither.

Figure 8: Structure of events in Javanese

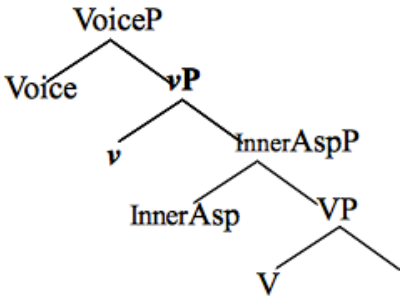
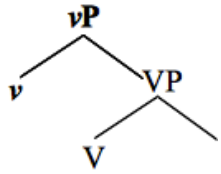


Figure 9: Structure of states in Javanese



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 *v*P; 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.[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?*
Can Jozina wear pants to the reciting of the Holy Qur'an?

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?*
'Did Pak Bambang once learn Chinese?'

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

[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.

(31) CONTEXT: *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.']

(32) CONTEXT: *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) $[_{\text{TopicP}}$ **XP** ...$[_{\text{TP}}$ SUBJ... $[_{\text{LowAuxP}}$ AUX [$\boldsymbol{t_{XP}}$]]]]

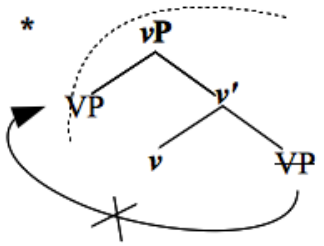
If XP-topicalization targets the lower part of the verbal projection, namely VP, then we expect topicalization to be possible for events, but not for states. Accordingly, the event/state partition is due to the interaction of phase-based movement with anti-locality theory. As schematized in (34) below, Javanese transitive states have a *v*P shell that dominates a VP while Javanese transitive events have two additional positions: (i) a VoiceP projection dominating *v*P; 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 *v*P $[_{vP}$ ARG $[_{v}$ $[_{VP}$ V ARG]]]
b. EVENT *v*P $[_{VoiceP}$ $[_{vP}$ 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.

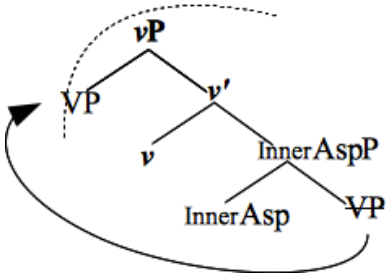
We propose that the ungrammaticality of states with VP-topicalization in Javanese is due to the same theoretical principles that account for why states are ungrammatical with *do so* ellipsis in English. That is, ungrammaticality of VP-topicalization with a state predicate is due to anti-locality effects under the *v*P phase head, as illustrated in Figure 10. By hypothesis, XP-topicalization involves VP-movement. Accepting the postulate that *v*P is a phase cross-linguistically, *v*P requires all extraction to land first at its edge, the specifier of *v*P. However, with state predicates, VP-movement to Spec,*v*P violates anti-locality, which prohibits the complement of a head from moving to the specifier of the same head. Further, because *v*P is a phase, VP cannot move to a higher projection to avoid violating anti-locality. VP is in effect frozen under the *v*P phase head.

Figure 10: *VP-movement with Javanese states



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 *v*P without violating anti-locality due to the richer *v*P-internal structure available in event *v*Ps, namely the presence of Inner Aspect. This hypothetical analysis is shown in Figure 11:

Figure 11: Possible analysis of VP-movement with events in Javanese



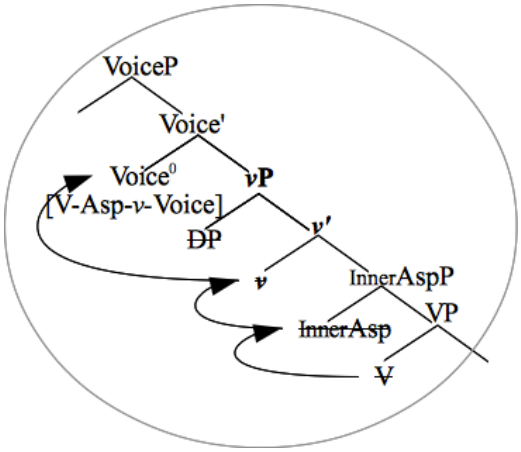
However, language-internal properties of Javanese indicate that this analysis is not correct. We know that the VoiceP must front with events in Javanese because active voice morphology is obligatorily present in VP-topicalization of events. This is illustrated in (35), where the topicalized verb must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

(35) **mangan/*pangan** **es** **krim**, Salsa gelem
AV.eat eat ice cream Salsa willing
'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 *v*P 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 *v*P 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 *v*P 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 *v*P (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[22], 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

[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.

(40) A: opo mas Adi iso **eling** cerito-ne mbah-e Adi?
Q Mr. Adi CIRC.POSS remember story-DEF grandfather-DEF Adi
'Can Mr. Adi remember his grandfather's story?'

B: ?*Iyo, mas Adi iso
Yes, Mr. Adi CIRC.POSS
['Yes, Mr. Adi can.']

(41) A: opo mbak Ndayu oleh **seneng** mbek guru-ne?
Q Miss Ndayu DEON.POSS like with teacher-DEF
'Can Miss Ndayu like the teacher?'

B: ?*Iyo, mbak Ndayu oleh
Yes, Miss Ndayu DEON.POSS
['Yes, Miss Ndayu is allowed to.']

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-TOPICALIZATION $[_{\text{TopicP}}$ VP ...$[_{\text{TP}}$ SUBJ... $[_{\text{LowAuxP}}$ AUX ...[t_{VP}]]]]
b. SUBJECT-AUXILIARY ANSWERS $[_{\text{TopicP}}$ ~~VP~~ ...$[_{\text{TP}}$ SUBJ... $[_{\text{LowAuxP}}$ AUX ...[t_{VP}]]]]

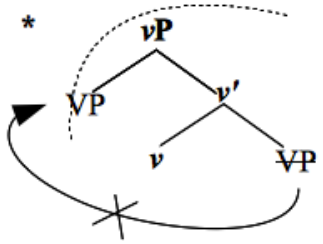
Because of this parallel derivation, the contrast between events and states with subject-auxiliary answers is analyzed in the same way as VP-topicalization, involving the interaction of phase-based movement with anti-locality.

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 *v*P. Specifically, Topic probes for a VP goal; the lower portion of the verbal projection. The VP must first extract from the *v*P phase via its edge; Spec,*v*P. However, this precise movement — moving a complement of a head to its local specifier — is

[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.

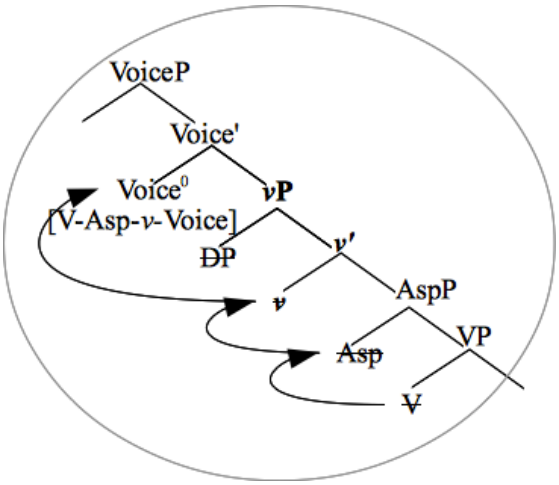
banned because it violates anti-locality, as illustrated in Figure 13. Because of the impossibility of VP-extraction, derivations that require VP-preposing with states result in ungrammaticality.

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 *v*P and all syntactic material within *v*P, 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

involve 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] (Merchant 2004: 673, (37))

(44) a. What does Bush want to do to Iraq ?
b. [$_{VP}$ Attack it] (Merchant 2004: 673, (39))

(45) a. When did he leave ?
b. [$_{AdvP}$ After the movie ended] (Merchant 2004: 673, (38))

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 [~~$_{TP}$ she saw t_{DP}~~]] cf. Merchant (2004:675, (44))

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 i*s* 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, *v*P-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 *v*Ps 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 *v*P-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 *v*P-fronting). Our findings are summarized in Table 1, repeated from above.

Table 1: Anti-locality in English (Germanic)

	ELLIPSIS TYPE	
WHAT MOVES?	VP	*v*P
STATE	✗	✓
EVENT	✓	✓
EXAMPLE	*do so* ellipsis	*do too* ellipsis; *so do* ellipsis

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)

WHAT MOVES?	VP	VoiceP
STATE	✗	(n/a)
EVENT	(n/a)	✓
DIAGNOSTIC	Topicalization	
	Subj-aux answers	

In closing, we draw attention to three consequences of this analysis. First, we observe that the same operation — "VP" topicalization — can target VP or *v*P. 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) ***v*P** (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 *v*P. 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) ***v*P** (*so do, do too* ellipsis). This converges with earlier studies which, on independent grounds, have argued that "VP"-ellipsis targets either *v*P (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]

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

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