## Complex Motion Verb Constructions in San Lucas Quiaviní Zapotec\*

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Certain constructions in natural language allow two event descriptions to combine into one. Across languages, these multi-verb constructions often involve deictic motion verbs.  $^1$  One such construction is the andative and venitive construction in San Lucas Quiaviní Zapotec, in which an andative or venitive marker on a verb expresses a motion event preceding the event of the second verb. In 1, for instance, the going event described by the andative marker precedes the cutting event described by rtyug 'cuts.'

1. Rata rsily r-i-tyug Lia Petr gyia.<sup>2</sup>
Every morning HAB-AND-cut Miss Petra flowers<sup>3</sup>
'Every morning Petra goes and cuts flowers.'<sup>4</sup>

Another kind of multi-verb construction involving motion verbs is so-called pseudo-coordination in English. In this case, the motion event precedes a getting event.

2. Sarah will go get her mask before the party.

These complex motion verb constructions are of interest not just because they are cross-linguistically common, but because the verbs combine at a low enough level that the event arguments are still available. Therefore, these constructions provide fertile ground for exploring semantic mechanisms for combining properties of events.

The semantic mechanisms available for combining event descriptions supplied by different verbs are not well-understood. Are the two events components of a larger event that is built up during semantic composition? What relation do the arguments of each verb have to each other, if any, and to the larger event, if there is one?

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<sup>&</sup>lt;sup>1</sup>Languages with similar constructions include Afrikaans (De Vos 2005); Khmer, Krio, Malayo-Portugese Creole, French (Schiller 1990); Marsalese Italian, Swedish (Cardinaletti & Giusti 2001); Modern Greek, and Modern Hebrew (Bjorkman 2016).

<sup>&</sup>lt;sup>2</sup>I use the orthography from Munro et al. (2006) throughout, which suppresses certain phonemic contrasts.

<sup>&</sup>lt;sup>3</sup>Abbreviations: 1, first person; 2, second person; 3, third person; AND, andative; HAB, habitual; NEG, negation; p, plural; PERF, perfective; POSS, possessive; PROG, progressive; PT, point; Q, question particle; s, singular; ST, stative; VEN, venitive.

<sup>&</sup>lt;sup>4</sup>Translations throughout this paper are my own.

This paper seeks to answer such questions by exploring the semantics of complex motion verb constructions. I focus on three complex motion verb constructions: two types of pseudo-coordination in English, the 'go get' construction (3) and the 'went and died' construction (4); and the andative and venitive construction in San Lucas Quiaviní Zapotec, an Otomanguean language spoken in the village of San Lucas Quiaviní, Oaxaca (5). Each of these constructions exhibits different semantic properties, and I propose a different method of combining event descriptions for each construction.

#### 3. English 'come get'/'go get' construction:

She will come get her bag after work.

#### 4. English adversative 'went and died' construction:

He went and spoiled all our plans.

## 5. San Lucas Quiaviní Zapotec andative/venitive construction:

Rata rsily r-i-tyug Lia Petr gyia. Every morning HAB-AND-cut Miss Petra flowers 'Every morning Petra goes and cuts flowers.'

Although I focus on three constructions in two languages, my aim is to explore the semantic strategies available for combining event descriptions in general. By examining micro-variation in the meaning of three such constructions, I show that natural language requires multiple strategies for event description combination. For the adversative construction, Event Identification is sufficient, because both verbs describe the same event. For the andative/venitive construction and the 'go get' construction, however, ordinary Boolean conjunction or Event Identification is not possible, because the events described by each verb are not the same. Instead, I propose an analysis for each construction that uses Non-Boolean Conjunction to build a macro-event encompassing the events described by both verbs (Krifka 1990). These latter two constructions differ, however, in the thematic roles associated with the macro-event. I argue that the 'go get' construction, unlike the San Lucas Quiaviní Zapotec andative and venitive, has an obligatorily agentive interpretation. I explore two ways of deriving this agentivity requirement, and ultimately argue for the existence of an Agent for the macro-event of 'go get' constructions.

## 1 Complex motion verb constructions

Complex motion verb constructions provide insight into the ways that natural language can combine event descriptions because they share what Bohnemeyer et al. (2007) terms the **macro-event property**: they describe a single event at the level of tense and temporal modification.

A construction has the Macro-Event Property if any time-positional operator, such as tense or a temporal adverbial, that locates one subevent entailed by the construction necessarily locates all other subevents in time (Bohnemeyer et al. 2007).

The three constructions that are the focus of this paper satisfy this requirement in different ways. The 'go get' construction does not allow any tense marking on either verb, or any temporal modifiers between the two verbs. The adversative construction allows tense marking, but requires that both verbs have the same tense. Finally, the andative / venitive construction in San Lucas Quiaviní Zapotec has overt aspect marking on just the first verb, but requires that the events described by each verb be interpreted with respect to that aspect marker.

#### 1.1 Pseudo-coordination without overt coordination

The term **pseudo-coordination** has been used for a family of constructions in English that violate the Coordinate Structure Constraint.

#### 3. Coordinate Structure Constraint: (Ross 1967:89)

In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.

- 4. \*What<sub>i</sub> did Herbert cook supper and wash  $\underline{\phantom{a}}_{i}$ ?<sup>5</sup>
- 5. What<sub>i</sub> did Herbert go and cook <sub>i</sub>?
- 6. What i did Herbert go cook i?

The ability of these constructions to violate the Coordinate Structure Constraint has been used as the defining characteristic of pseudo-coordination and has led to a line of work that argues pseudo-coordination is not true coordination: Shopen (1971), Carden & Pesetsky (1977), Jaeggli & Hyams (1993), Pollock (1994), and Ishihara & Noguchi (2000).

Pseudo-coordination includes one construction where the coordination is not overt, as in 6 and 7. Following Pullum (1990), I adopt the theory-neutral term 'go get' for this construction.

7. Esmeralda will go dress for dinner now.

Another well-known property of the 'go get' construction is that in Standard English,<sup>6</sup> there cannot be any inflectional morphology on either verb (Shopen 1971, Carden & Pesetsky 1977).

- 8. Elinor will come send the letters after work.
- 9. %Elinor came sent the letters before work.

In fact, the verbs in the 'go get' construction, as pointed out by Carden & Pesetsky (1977), must be morphologically bare, not just phonologically identical to bare verbs.

10. %Polly has come put a hat on the mannequin.

Thus, no tense marking can occur between the two verbs. In the past tense, both the motion event and the event of the second verb must have been completed, as in 11 below.

- 11. Context: Jeremy came to work intending to sign the papers, but got distracted and left without doing so.
  - (a) Jeremy did come to sign the papers.
  - (b) # Jeremy did come sign the papers.

Temporal modifiers cannot appear between the two verbs, and temporal adverbials like 'this afternoon' temporally locate the events of both verbs.

- 12. He will come (\*this morning) get her.
- 13. She will come (\*quickly) sign the papers slowly in her office.
- 14. Context: Herbert will drive over this morning and then sign the papers in the afternoon. #Herbert will come sign the papers this afternoon.

<sup>&</sup>lt;sup>5</sup>Throughout this paper, \* indicates ungrammaticality, while # indicates infelicity in the given context

<sup>&</sup>lt;sup>6</sup>See Pullum (1990) for an in-depth discussion of dialectal variation in the bare morphology condition on 'go get.'

As shown above, it is not possible to temporally modify the verbs independently of each other, and temporal adverbials locate both events. I take this as evidence that at the level that these modifiers compose semantically with the construction, the event descriptions associated with each verb have already been combined. Thus, the 'go get' construction has the Macro-Event Property described by Bohnemeyer et al. (2007).

#### 1.2 Adversative pseudo-coordination

The adversative construction is a kind of pseudo-coordination in English with overt coordination. As noted by Carden & Pesetsky (1971) and De Vos (2005), the 'go and get' construction has (at least) two distinct interpretations, with different truth conditions: one that requires actual motion, and one that entails that the second event is unfortunate or contrary to the wishes of the speaker. I call this second construction, which is illustrated below, the adversative construction. Unlike other pseudo-coordination constructions, it can only be formed with 'go.'

- 15. Context: The speaker's husband has been bedridden for many years, and did not physically move anywhere before dying.
  - (a) My husband went and died on me.
  - (b) #My husband came and died.

This construction has been called the 'counter-expectational' (De Vos 2005) or 'unexpected event' (Carden & Pesetsky 1977) reading. However, I present evidence in Section 3.1.1 that it is licensed by the speaker's judgment that the event associated with the second verb is adverse.

The adversative construction, unlike 'go get', allows overt tense marking, so long as both verbs receive the same tense. If the tense is varied between the two verbs in the adversative construction, the only possible interpretation is normal coordination: the adversative interpretation is lost.

- 16. Context: Basil has been sitting in a room with the speaker and addressee. The speaker does not like Basil's girlfriend, who Basil called and invited over.
  - (a) Basil went and invited the girl here.
- 17. Context: Basil has been sitting in a room with the speaker and addressee. The speaker does not like Basil's girlfriend, who Basil is going to call and invite over.
  - (a) #Basil went and will invite the girl here.

17 is infelicitous because in the context given, Basil did not move anywhere. However, since the two verbs have different tense values, the sentence can only be interpreted as ordinary coordination.

Moreover, the adversative does not permit separate temporal modification.

- 18. Context: Mary, Martha and John are collaborating on a project. John, who is working from home, accidentally corrupts their valuable data. Exasperated, Mary tells Martha:
  - (a) John went and screwed up our data.
  - (b) #John slowly went and quickly screwed up our data.
  - (c) #John went yesterday and screwed up our data this morning.

18b and 18c are infelicitous because the context does not involve any actual motion. However, once the verbs are modified separately, the adversative interpretation becomes unavailable, and the sentences must be interpreted as instances of ordinary coordination, which forces the motion verb

to be interpreted as involving actual motion. Thus, the adversative construction also exemplifies the Macro-Event Property, albeit trivially since both verbs describe the same event.

## 1.3 San Lucas Quiaviní Zapotec and ative and venitive constructions

The third construction that I discuss is found in San Lucas Quiaviní Zapotec (SLQZ), a Western Tlacolula Valley Zapotec language spoken in the village of San Lucas Quiaviní in Oaxaca, Mexico. SLQZ is endangered and underdocumented (Pérez Báez 2016). The data presented here are from elicitation sessions in San Lucas Quiaviní with eight speakers of various ages, as well as, where noted, textual sources such as Munro et al. (2006), Munro & Lopez (1999), and online writings of SLQZ speakers, such as tweets from the Voces de Valle project (see Lillehaugen (2016)).

SLQZ contains a complex motion verb construction called **andative** and **venitive** verb forms. Andative and venitive constructions are ones in which a motion verb, ried 'comes' or ria 'goes', is inserted between the aspect marker and another verb. In 19, I show an example of a venitive construction in SLQZ.

SLQZ verbs are composed of an aspect marker and a verb root, with the option of additional morphology such as encliticized subject pronouns or adverbial clitics. Normal word order is VSO, although SVO and OVS constructions are also possible with focus-fronting or topicalization (Lee 1999).

Example 20 shows a venitive construction with an encliticized first-person subject pronoun, a, and an encliticized adverbial, izy 'only.'

Andative and venitive constructions cannot take the normal ca- progressive aspect marker. Instead, they use the special z-progressive aspect marker for motion verbs, just like ried 'come' and ria 'go' outside of andative/venitive constructions.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup>I follow the standard practice of citing Zapotec verbs in their habitual form, since it is the one of the more regular forms. The morphology of aspect markers in Zapotec is irregular, and bare forms of SLQZ verbs do not exist.

<sup>&</sup>lt;sup>8</sup>The existence of a special progressive form for motion verbs is widespread in Otomanguean languages, and it has been noted that the meaning of the z-progressive seems to differ from that of the ordinary progressive in a way that suggests they are not simply allomorphs (See Kuiper & Merrifield (1975), Pickett (1976), Speck & Pickett (1976), and Munro (2007)).

(b) zo-dauw=ën ZPROG.AND-eat=1p 'We are going and eating' (Munro et al. 2006).9

It is important to note that SLQZ tolerates a high degree of homophony: for instance, in 1st person conjugations, z-progressive aspect marked verbs are homophonous with definite future marked verbs, although these aspects are phonetically distinct in other forms.

Like English pseudo-coordination, andative and venitive constructions in SLQZ present only one event description at the level of tense and aspect marking and temporal modification. Andative and venitive constructions have only one aspect marker, which applies to both verbs.

22. B-yop-gya=ën
PERF-VEN-dance=1p
We came and danced.
\*B-yop-z-gya=ën

23. PERF-VEN-ZPROG-dance=1p Intended: We came and are dancing.

Perfective and ative and venitive constructions obligatorily entail the completion of both the motion event and the event of the second verb (Munro et. al 2002).

- 24. Context: Brook came to the market in order to buy a rug, but ended up buying shoes instead.
  - #Nai chi n-u=a logyia, b-ied-zi Brook teiby tapet.
  - Yesterday when ST-locate=1s market PERF-VEN-buy Brook one rug 'Yesterday when I was at the market, Brook came and bought a rug.'
  - (b) Yesterday when I was at the market, Brook came to buy a rug.

Furthermore, temporal modifiers can only apply to the whole construction. Modifiers are not permitted to come between the two verbs.

- 25. (a) Gu-to-ya Maria x-guan-ni.
  PERF.AND-sell-suddenly Maria POSS-bull=3s
  'Maria suddenly went and sold her bull.'
  - (b) \*Gu-ya-to Maria x-guan-ni.
    PERF.AND-suddenly-sell Maria POSS-bull=3s
    'Maria suddenly went and sold her bull.'

Temporal adverbials on the periphery are interpreted as applying to both verbs. The examples below are both infelicitous in the given contexts, because nai 'yesterday' must temporally locate both the coming event and the dancing event.

26. Context: Maria came yesterday but she danced today.

#B-ied-ya Maria nai.
PERF-VEN-dance Maria yesterday
'Maria came and danced yesterday.'

27. Context: Maria came the day before yesterday but danced yesterday.

<sup>&</sup>lt;sup>9</sup>With first person plural subjects, the z-progressive andative morpheme is zo- and the venitive is zyo-; because rau 'eat' is a D-base verb, all first person plural conjugations have a d before the verb base (Munro et. al 2006).

#B-ied-ya Maria nai.
PERF-VEN-dance Maria yesterday
'Maria came and danced yesterday.'

Temporal manner modifiers also must apply to both events. The example below is infelicitous in the given context because the eating event is not happening right away.

28. Context: Maria is coming over right away, but we will wait a few hours before eating.
#G-ied-tau-tag=ëng
IRR-VEN-eat-right.away=3s
'She will come eat right away.'

Thus, like English pseudo-coordination, the SLQZ and ative / venitive construction has the Macro-Event Property.

## 2 Previous approaches

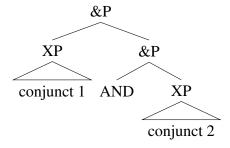
Much previous work on pseudo-coordination constructions has focused either on the violations of the Coordinate Structure Constraint or the bare morphology condition associated with the 'go get' construction in English (Bjorkman 2016, Carden & Pesetsky 1977, Cardinaletti & Giusti 2001, Ishihara & Noguchi 2000, Jaeggli & Hyams 1993, Pollock 1994, Pullum 1990, Shopen 1971, Zwicky 1969).

As I have shown, however, the unifying semantic property of these constructions is that they behave as if they describe only one event at the level of tense and aspect marking and temporal modification. De Vos (2005) is one account that takes this property to be central to the question of how to analyze such complex motion verb constructions. Because his analysis, which draws upon data from English and Afrikaans, aims to be cross-linguistically applicable, and because it is one of the most complete accounts, I use it to illustrate the syntactic structures that have been posited for complex motion verb constructions in previous work.

## 2.1 Syntax of complex motion verb constructions

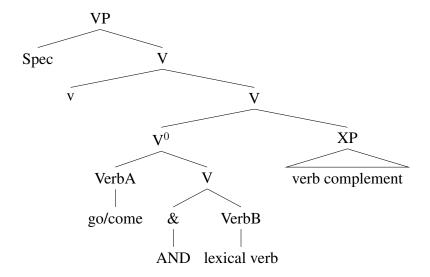
De Vos treats pseudo-coordination as Boolean conjunction, but at a sub-VP level. He adopts the asymmetrical structure of coordination posited by Ross (1967) and many subsequent authors.

#### 29. Asymmetrical coordination:



He posits that pseudo-coordination constructions consist of a complex V head derived syntactically.

30. Syntax of pseudo-coordination: (De Vos 2002)



De Vos (2005)'s approach accounts for the fact that no temporal modifiers can come in between the two verbs in pseudo-coordination constructions, since he combines the two verbs very low.

#### 2.1.1 Other approaches

De Vos (2005) is an example of a coordination approach, where the relationship between the two verbs is treated as conjunction. The difficulties faced by these accounts include the fact that complex motion constructions can violate the Coordinate Structure Constraint, and the fact that these constructions do not allow other coordinators to be substituted for 'and':

#### 31. Ordinary coordination:

- (a) Belle ate some cake and drank some tea.
- (b) Belle ate some cake or drank some tea.

#### 32. Pseudo-coordination:

Context: Belle is lying in a hospital bed after stomach surgery and is supposed to eat healthily.

- (a) Belle went and ate some cake.
- (b) #Belle went or ate some cake.

De Vos (2005) argues that his account explains the violations of the Coordinate Structure Constraint because the verbs combine low enough that they do not act as a blocking category. He does not account for the lack of substitutability of other coordinators.

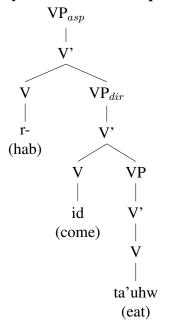
Other previous accounts can be divided into two main groups: vP or VP subordination and clausal subordination. I will touch upon the arguments for and against both kinds, but a fuller discussion of previous syntactic approaches can be found in De Vos (2005).

Subordination approaches at the vP or VP level view complex motion verb constructions as analogous to modal or auxiliary constructions. Approaches that fall into this category include Shopen (1971), Pullum (1990), Jaeggli & Hyams (1993), Cardinaletti & Giusti (2001), and Lee (1999), the only previous account of the andative/venitive construction in SLQZ.

Lee posits a Directional Phrase projection headed by the motion verb in order to have the structure of verbs in SLQZ obey the Mirror Principle (Baker 1985). She does not provide a semantics for

her accounts.

#### 33. Syntax of directional phrases: (Lee 1999)



Clausal subordination accounts, on the other hand, draw upon the similarities between pseudo-coordination constructions and infinitival or raising constructions. As noted as early as Carden & Pesetsky (1977), a direct relation between infinitival constructions and pseudo-coordination constructions fails on semantic grounds, as there is a truth-conditional difference between control constructions like 34 and pseudo-coordination constructions like 35.

- 34. Hilbert did go to buy cabbage, but there wasn't any left.
- 35. \*Hilbert did go buy cabbage, but there wasn't any left.

35 is contradictory, because 'go get' constructions entail both a going event and getting event, while the infinitival equivalent, 34, entails only a going event.

These approaches must explain what the subject of the subordinate clause is, as well as the problem faced by subordination accounts of how the subject fills the thematic roles of both verbs.

In summary, previous analyses of complex motion verb constructions fall into three categories: full coordination, vP/VP-level subordination, and clausal subordination. While most previous work has been motivated by the Coordinate Structure Constraint violation facts, the fact that the subject of the construction must satisfy thematic roles associated with both of the verbs is an obstacle that any successful account must address. In addition, few of these accounts other than De Vos (2005) take into account semantic properties, which, I argue, are crucial evidence about the internal structure of such constructions.

## 2.2 Semantics of complex motion constructions

There are two previous accounts of the semantics of pseudo-coordination in English, De Vos (2005) and Harris (2011). Although I ultimately argue that neither is sufficient once the semantic distinctions among complex motion verb constructions are taken into account, I review them briefly here.

#### 2.2.1 De Vos (2005)

De Vos (2005) takes the unique event property of pseudo-coordination to be central, and seeks a way to combine the two events into one by the level of modification, tense and aspect marking, and negation. De Vos proposes that the events are combined through ordinary coordination operating over ordered substages of events. He provides the chart below to show the association of aktionsarten of verbs with the kinds of substages they have.

	Aspectual class	Vendler class	Notation
36.	States	-PROCESS, -DEFINITE	[-]
	Achievements	-PROCESS, +DEFINITE	[ au]
	Accomplishments	+PROCESS, +DEFINITE	$[\varphi, \tau]$
	Activities	+PROCESS, -DEFINITE	$[\varphi]$

 $\varphi$  represents a non-punctual stretch of time that can in turn be subdivided into substages, while  $\tau$  represents an endpoint or culmination, which has no substages. The 'and' in pseudo-coordination conjoins any two of the same substages. De Vos's account rests on a restriction on the kinds of aktionsarten that can be conjoined: states cannot be conjoined with any other aktionsarten, since they have no substages.

However, it is not clear what it means to conjoin substages of events. Does it mean that the substages are the same? If so, how can a substage of a going event also be a substage of a getting event? De Vos (2005) does not provide a satisfactory description of the complete composition of the meaning of pseudo-coordination constructions.

In addition, the strong predictions about the aktionsarten of verbs in pseudo-coordination constructions that De Vos (2005) relies upon make it difficult to extend to other kinds of pseudo-coordination. His claim about the infelicity of stative verbs is true for the non-adversative pseudo-coordination constructions with overt coordination that he discusses; however, as I will show in Section 3.2, it is not true of all pseudo-coordination constructions.

#### 2.2.2 Harris (2011)

Harris (2011) proposes an analysis of pseudo-coordination in English using Non-Boolean Conjunction. He takes a coordination-deletion approach to pseudo-coordination, assuming that 'go get' is derived from omitting the coordination from 'go and get'. He uses Krifka (1990)'s Non-Boolean Conjunction to combine the events associated with each verb into a macro-event.

#### 37. Non-Boolean Conjunction:

Given a function  $f_{\langle \epsilon, t \rangle}$  and a function  $g_{\langle \epsilon, t \rangle}$ , Non-Boolean Conjunction produces a function  $h_{\langle \epsilon, t \rangle}$ :  $f_{\langle \epsilon, t \rangle} \quad g_{\langle \epsilon, t \rangle} \quad \Rightarrow \quad \lambda e''. \exists e, e'[e'' = e \oplus e' \land [f(e) \land g(e')]]$ 

He gives the denotation in 39 for a pseudo-coordination construction like 38: go and eat denotes the set of events e'' for which there are two subevents e, e' that partition e'' such that e is a going event and e' is an eating event.

- 38. Sam will go and eat at the diner.
- 39. [[go and<sub>NB</sub> eat]] =  $\lambda e''$ . $\exists e, e'[e'' = e \oplus e' \land [go(e) \land eat(e')]]$

Non-Boolean Conjunction allows us to combine the two event descriptions into a macro-event

prior to aspectual modification and negation, capturing the unique event property that is a defining characteristic of complex motion constructions.

However, Harris (2011) can be improved upon in several respects. His account does not distinguish the adversative interpretation from other pseudo-coordination constructions, and therefore cannot explain differences in the meanings of different kinds of complex motion constructions.

Furthermore, since he does not provide a syntactic structure for pseudo-coordination, his account does not make predictions for the relationship between the subject of the complex motion verb construction and the events expressed by each verb. Harris (2011) does not make it explicit whether Non-Boolean Conjunction applies after each event has saturated a thematic role of its own, or whether the subject is associated with a thematic role of the macro-event only. Non-Boolean Conjunction provides a way of building a macro-event from two events, but it does not address what happens to the thematic roles of each argument.

My analysis follows in the footsteps of both De Vos (2005) and Harris (2011) by taking the problem of event description combination to be central to the analysis of complex motion constructions. Like Harris (2011), I use Non-Boolean Conjunction to combine event descriptions in my analysis of the SLQZ andative/venitive construction. However, my proposal extends Harris's work to look at such constructions from a cross-linguistic perspective in order to account for the micro-variation in meaning that is found among complex motion verb constructions.

In the next section, I explore three semantic properties that vary between complex motion verb constructions. These properties are critical pieces of evidence about how the event descriptions contributed by verbs can be combined in multi-verb constructions. In Section 4, I use these properties to argue for the existence of different semantic mechanisms for event combination, as well as variation in the argument structure of complex motion verb constructions.

## 3 Semantic variation in complex motion verb constructions

Pseudo-coordination is not a unified phenomena, but a family of constructions with distinct semantic properties. By paying attention to the small differences in meaning among complex motion verb constructions, we can develop a semantic typology to guide an exploration of the methods that natural language provides for combining the event descriptions contributed by two verbs into one by the level of tense, aspect, and modification.

Because of the morphosyntactic focus of previous analyses, authors have generally not distinguished between the multiple meanings of 'go and get', relying primarily on extraction from the second conjunct as a diagnostic to distinguish pseudo-coordination from true coordination (Bjorkman 2016, Cardinaletti & Giusti 2001, Harris 2011, Ishihara & Noguchi 2000, Pollock 1994). Since I am interested in complex motion verb constructions as a way of exploring semantic mechanisms for event description combination, I focus instead on semantic diagnostics for separating out constructions of interest.

The three constructions that I discuss display semantic differences with respect to three properties: whether the motion verb expresses real motion; whether the aktionsart of the second verb is restricted; and whether there is an agentivity entailment.

#### 3.1 Motion entailment

The adversative construction differs from the andative/venitive and 'go get' constructions because it does not involve physical movement. The 'go get' construction always entails real motion, rendering the examples below infelicitous in their given contexts.

- 40. Context: Alfred is about to die after being confined to his hospital bed for weeks. #Alfred will go die in the hospital.
- 41. Context: Albert sold his valuable doll collection at his own yard sale.
  #I didn't think he would go through with it, but Alfred did go sell his doll collection for mere pennies.

By contrast, the adversative construction does not involve actual motion.

#### 3.1.1 The motionless adversative

In the adversative construction, the motion verb no longer conveys any actual motion. In 42, for instance, Albert does not need to actually move anywhere, since the yard sale was held at his own house. Rather, the meaning of the motion verb is to express that the sale is judged unfortunate from the perspective of the speaker.

42. Albert went and sold his valuable doll collection at his yard sale for mere pennies.

Furthermore, while 'go get' and the andative/venitive constructions can use either coming or going verbs based on the event's spatial relation to the deictic center, the adversative construction has no 'come' equivalent. In 43 below, we would expect 'come' to be used, given that the speaker, who is often the perspective holder that licenses 'come', was necessarily located near the addressee at event time. Nevertheless, 'go' is used.

- 43. 'You say one thing, then you go and hook up with me' (Spencer 2017).
- 44. #Don't say one thing, then go hook up with me!
- 45. Don't say one thing, then come hook up with me!

By contrast, the use of 'go' in a 'go get' construction is infelicitous in this context, since it is not logically possible for the addressee in 43 to have moved away from the speaker in order to hook up with her.

The physical motion component of the meaning of 'go' has been bleached from the adversative construction. Examples from the Corpus of Contemporary American English reveal that the action described is unfortunate from the perspective of the speaker. In 46, for instance, Hornsby presumably does not feel that there is anything wrong with wearing turtlenecks, but the speaker does.

46. "You know why I wanted you here?" Hornsby asked, adjusting his glasses up over the bump of his broken nose. Billy didn't like the guy, but he'd never have been able to trust him if it weren't for that nose. Men who'd never broken their noses shouldn't lead men who barely had cartilage left in their faces. It was a rule. But then the guy went and ruined that broken nose with turtlenecks. Tonight it was a black one under a gray coat. Made him look like a sissy' (O'Keefe 2013).

Similarly, the subject of the construction in 47 did not feel that bringing home Carla was unfortu-

nate or perverse, but the narrator, adopting Libby's point-of-view through free indirect discourse, describes it negatively.

47. 'Even her father, after his two-week binge, had scaled back drinking and staying late at the garage. He'd been spending time with the twins, with Libby, and there was something about it that felt like family [...]. But Dad went and disrupted that when he brought Carla home. Now Libby felt like a stranger in the house' (Manning Jr. 2014).

Thus, the events described by the adversative construction do not need to be adverse from the point-of-view of the subject of the construction.

Corpus data also shows that the adversity of the event can be judged at utterance time. For instance, the speaker in 43, renumbered as 48 below, did not feel that the romantic encounter was unfortunate at the time, but does at UT. The example, from the reality television show Married at First Sight, is spoken just after the speaker's new husband says that he is no longer romantically interested in her; in it, the speaker is complaining about her new husband's emotional inconsistency in first pushing her away, then creating intimacy with her, and now retracting his romantic overtures.

48. 'You say one thing, then you go and hook up with me' (Spencer 2017).

In sum, the motion verb in the adversative construction no longer conveys actual motion, but rather that the speaker judges the event of the second verb to be unfortunate or perverse at utterance time.

#### 3.1.2 Andative/venitive motion entailment

There are some examples of andative/venitive constructions that do not involve real motion. Consider 49, taken from Munro & Lopez (1999), which describes a situation in which water is being boiled.

49. Z-ied-dica=dihzy nyis ndaa chi b-siuw=a zhaa nyis. ZPROG-VEN-appear=just water hot when PERF-extinguish=1s under water. 'The hot water had just appeared when I turned off the heat under it' (Munro & Lopez 1999).

Speakers felt that the water in this scenario did not need to be physically moving; the sentence can describe a situation where the water is in a pot on the stove and speaker turns the burner off just as they see the water start to boil.

However, such examples that do not involve actual motion are quite restricted in range. All of the examples that I have been able to elicit involve a change of state, and they can only be formed with the venitive marker. For instance, in a scenario where a bamboo kitchen shed is leaning like it is going to fall down, only the venitive form is appropriate.

- 50. Z-ied-yahb yuu.de ZPROG-VEN-fall kitchen
  - 'The kitchen is coming and falling.'

Comment: "It's not really falling, but it's leaning. It's going to fall down."

- Z-i-yahb yuu.de
  - ZPROG-AND-fall kitchen

'The kitchen is going and falling.'

Comment: "It's moving—get out of the way before it collapses."

In addition, such non-actual motion examples only appear in the progressive aspect. Perfective forms of these change-of-state uses are judged infelicitous.

52. B-iahb yuu.de.
PERF-fall kitchen
'The kitchen fell down.'

#B-ied-yahb yuu.de

53. PERF-VEN-fall kitchen

'The kitchen came and fell down.'

Comment: "It's odd; you would just say it fell."

54. #B-i-yahb yuu.de

<sup>34.</sup> PERF-AND-fall kitchen

'The kitchen went and fell down.'

Comment: "It would have to be a person."

Other than the change-of-state uses of the venitive construction, the motion must always be real. For instance, although it is possible to use the progressive venitive form of rro 'grows' to describe that a child is growing up (55), the perfective and ative form cannot be used unless the person actually goes somewhere (56).

Uas nguel z-ied-ro=ëng.

Very fast ZPROG-VEN-grow

'He's growing up very fast.'

Comment: "If you see a kid and you're like, wow, he's really growing up fast."

#Gu-ro=ëng.

56. (a) PERF.AND-grow=3s

'He went and grew up.'

Ladi gu-ro=ëng.

(b) Other.side PERF.AND-grow=3s

'He went and grew up in the States.'

Similarly, although and ative and venitive constructions can be formed with racxuw 'gets sick', they must involve real motion.

57. Queity ch-u lo nahld n-aa queity ch-i-gac.xuw=u NEG IRR-be in cold ST-be NEG IRR-AND-get.sick=2s

'Don't go out in the cold and go and get sick!'

58. Context: A kid is just sitting around his room.

#Gu-gac.xuwëng

PERF.AND-get.sick=3s

'He went and got sick.'

59. Context: A man gets sick because his room is so cold; he is there the whole time.

#Nahld lainy x-cuart=ëng gu-gac.xuwëng ric'.

cold in POSS-room=3s PERF.AND-get.sick=3s there

'His room was so cold he went and got sick there.'

Except for the change-of-state readings of progressive venitive constructions, then, the SLQZ andative and venitive construction requires actual motion.

#### 3.2 Aktionsarten

The restrictions on the aktionsarten of the second verb is another point of variation between the three constructions. The 'go get' construction does not allow stative verbs, while the adversative and andative/venitive constructions do.

As measured by Wulff (2006) in a corpus-based study, the 'go get' construction requires an eventive second verb. For instance, 60 can only be used to command someone to vomit elsewhere, not to ask them to move away from the speaker and commence feeling ill.

60. Go be sick over there, Grace!

Wulff (2006) claims that statives are also not possible in pseudo-coordination with overt coordination. However, she does not distinguish between adversative and non-adversative constructions. In my own search of the Corpus of Contemporary American English, I found many examples of stative second verbs in adversative constructions, including 61 below.

61. 'How disgusting of the poor darling to go and be a girl' ("The Culture Top 10" 2010).<sup>10</sup>

Not all verbs in SLQZ can freely occur in andative/venitive constructions. Of the 252 verbs listed in the conjugation chart in Munro et al. (2006), 116 are listed with andative/venitive forms; 54 are listed as lacking andative/venitive forms; and 82 as status unknown. I have been able to elicit andative and venitive forms for 12 of the unclassified verbs and 6 of the verbs listed as lacking andative and venitive forms. I confirmed only one of the unclassified verbs as lacking an andative and venitive form: rdiareiny 'establish a separate household from his parents (of a man who marries)'. My consultant rejected attempts to create an andative or venitive construction with this verb, noting that the verb already describes motion.

Whether or not aktionsarten restrictions are responsible for the fact that some verbs lack andative and venitive forms is unclear. Like other semantic topics, the aktionsarten of verbs in SLQZ is poorly documented. The SLQZ andative/venitive construction allows a wide variety of verbs, including seemingly stative verbs like rzhilo 'is amazed at', ru 'is located', and ryulaz 'loves'.

More work on the lexical semantics of verbs in SLQZ is necessary in order to draw firm conclusions, for two reasons. First, without further study, the classification of SLQZ verbs as stative is difficult. Some SLQZ equivalents of prototypical stative verbs, like runybe 'knows', have progressive forms, and therefore fail a common stativity diagnostic (Lakoff 1966). Second, many SLQZ verbs have both seemingly stative and non-stative meanings. For instance, racxuw can mean either 'be sick' or 'get sick'; in the andative/venitive examples that it occurs in, it seems to have the latter meaning.

62. Queity ch-i-gac.xuw=u antes a ch-e=u europa NEG IRR-AND-get.sick=2s before already IRR-go=2s Europe 'Don't go and get sick before you go to Europe!'

This change-of-state meaning is predicted given the temporal ordering of the two events in the andative/venitive construction: since the event described by the second verb (here 'be sick') fol-

<sup>&</sup>lt;sup>10</sup>A note received upon the birth of Nancy Mitford, a successful writer best known for *Love in a Cold Climate* and the eldest of six (in)famous sisters.

lows the motion event, the natural interpretation will be that the sickness starts after the motion ends— in other words, a state change.

In summary, the 'go get' construction cannot be formed with a stative second verb, while there are no aktionsarten restrictions on the second verb of an adversative construction. Although the andative/venitive has some restrictions on the kind of second verb it allows, it allows stative verbs with a change-of-state interpretation.

## 3.3 Agentivity

Shopen (1971) observes that there is an agentivity requirement for the 'go get' construction in English. A sentence like 63 is odd because it sounds as if Marie intentionally plans to contract the flu.

63. Marie will come get the flu.

This property must come from the 'go get' construction itself, since it holds even when neither verb is itself agentive. 'Come' and 'go' are unaccusative, yet, when combined with another unaccusative verb, such as 'fall', the entire construction has an obligatorily agentive interpretation.

64. Context: Eve has set a trap that will cause Jenny to fall down the stairs when she arrives. #Jenny will come fall down the stairs.

Because of the agentivity requirement, inanimate subjects are generally not accepted in the 'go get' construction.

- 65. The rain came at 10pm last night.
- 66. The rain froze into sleet.
- 67. #The rain will come freeze into sleet.

In fact, the following sentences adapted from Shopen (1971) show that 'go get' is truth-conditionally distinct from 'go and get' due to its agentivity entailment.

- 68. (a) Pieces of drift wood will come and wash up on the shore.
  - (b) \*Pieces of drift wood will come wash up on the shore.

No such agentivity requirement exists for the adversative construction, as illustrated in the corpus example below, where the subject of the construction is an inanimate object.

69. 'We got a problem with the horse prop. Ten freakin' minutes before curtain and this thing goes and busts on me' (Hart 2014).

The andative/venitive construction also does not entail agentivity. Although the construction requires animate subjects except in the change-of-state uses of the venitive discussed in Section 3.1, the construction does not require that the subject purposefully performs the action.

- 70. Z-ied-cha zhyet ni=a per queity r-acbe=di=ëng ZPROG-VEN-warm cat feet=1s but NEG HAB-know=PT=3s ca-cha=ëng ni=a PROG-warm foot=1s
  - 'The cat is coming and warming my feet but it doesn't know that it warms my feet.'
- 71. The cat will come warm my feet. #It won't know that it is warming my feet.

Even human subjects do not need to be acting intentionally. In 72, an andative form of the verb rza'll 'drop' to express an unintentional dropping of the book.

- 72. Context: Juan comes over and puts his book down somewhere in our house. Some time later, he realizes that he has lost it.
  - (a) B-ied-nity Jwany x-li'ebr=ni PERF-VEN-lose Juan POSS-book=3s 'Juan came and lost his book.'
  - (b) #John did come lose his book.

The English 'go get' equivalent of this sentence, shown in 73, is only felicitous if Kitt is understood as intentionally losing her notes, perhaps as part of a spy mission.

73. Context: Kitt is a spy who is supposed to drop her notes for another agent in the airport. Kitt will go lose her notes in the airport.

A non-agentive interpretation of the adversative construction, on the other hand, is possible.

74. Context: Kitt is a toddler who often loses things.

Kitt will go and lose her mittens if we don't tie them together.

The adversative and andative/venitive constructions may also be used in contexts where the subject is acting intentionally, but is mistaken about what they are doing. For instance, in 75, the subject (in his dream state) intends to be eating, but does not mean to be eating soap.

- 75. Context: Juan is sleepwalking and thinks he is eating an apple, but it's really a bar of soap.
  - (a) Gu-tauw Jwany teiby bi-xtil
    PERF.AND-eat Juan one soap-Castilian
    'Juan went and ate a bar of soap.'
    Comment: "You can use that even if he doesn't know he's eating a bar of soap."
  - (b) John went and ate a bar of soap because he thought it was an apple.
  - (c) #John did go eat a bar of soap.

I conclude that neither the adversative nor the andative/venitive constructions entail agentivity, while the 'go get' construction does even when formed with two unaccusative verbs.

## 3.4 Summary

A picture of the semantic variation found in complex motion verb constructions has begun to emerge. While all three constructions describe a single event at the level of tense, aspect, and modification, they diverge with respect to restrictions on the aktionsart of the second verb, whether the motion verb entails real motion, and whether the construction requires an agentive interpretation.

#### **Properties of Motion Verb Constructions**

Property	'Go get'	Andative/Venitive	Adversative
Scopes under tense/aspect	<b>✓</b>	✓	✓
Real motion requirement	✓	✓	X
Aktionsarten restrictions	✓	X	X
Agentive requirement	✓	X	X

Thus, any theory of event description combination must speak not only to the ways the event descriptions themselves combine, but to the combinations of the aktionsarten and thematic roles of the two verbs, as well as to the possibilities of semantic bleaching in constructions like the adversative, which carry their own distinct interpretation beyond what motion verbs usually mean.

## 4 Three strategies for event combination

In following sections, I explore the kinds of strategies that are available for combining properties of events in natural language. Throughout this paper, I have focused on three constructions involving deictic motion verbs: the English 'go get' construction, the English adversative 'went and died', and the San Lucas Quiaviní Zapotec andative and venitive constructions. I use these complex motion verb constructions to represent points in a cross-linguistic space of possibilities for such constructions, where each corresponds to a particular bundling of semantic properties.

The adversative construction does not involve actual motion, but entails that the speaker judges the event described by the second verb to be unfortunate. Furthermore, it has no agentivity entailment or restrictions on the aktionsart of the second verb. The andative and venitive involves real motion, but has no agentivity entailment. The 'go get' construction requires real movement; an obligatorily agentive interpretation, even when constructed out of two non-agentive verbs; and eventive verbs.

While all three constructions involve a single event at the level of tense/aspect marking and modification, I propose that the different semantic properties of each of these three constructions necessitate different mechanisms for combining the event descriptions contributed by their verbs and relating the thematic roles of each event to each other and to the macro-event.

## 4.1 The adversative: a single event

All three constructions involve a single event at the level of tense, aspect and modification. However, the adversative construction involves just one event throughout, since the motion verb does not entail a motion event. Instead, what the motion verb contributes is perspective: the event described by the second verb is presented as unfortunate from the point-of-view of the speaker.

Barlew (2017) argues that deictic motion verbs are **perspectival**: they describe motion towards or away from the perspective holder in a sentence. The perspective holder **anchors** the motion, serving as the reference point for the direction of the motion. While the speaker is usually the anchor for deictic motion verbs, since they are generally the most salient perspective holder, addressees and attitude holders under embedded speech or attitude verbs can also serve as anchors.<sup>11</sup>

#### 76. Speaker-anchored: You will come here tonight.

1. Context: Speaker and addressee are not with Arjun.

R-rilo Arjun a bets=ëng a z-e-gan laëng. HAB-think Arjun already brother=3s already ZPROG-AND-see 3s 'Arjun thinks his brother is going and seeing him.'

2. Context: Speaker and addressee are with Arjun.

R-rilo Arjun a bets=ëng a z-ied-gan laëng. HAB-think Arjun already brother=3s already ZPROG-VEN-see 3s 'Arjun thinks his brother is coming and seeing him.'

<sup>&</sup>lt;sup>11</sup>This is a point of cross-linguistic variation: for instance, SLQZ does not allow attitude holders to anchor *ried* 'come':

- 77. Addressee-anchored: Vera will come to your house tonight.
- 78. Attitude-holder-anchored:

Context: Alicia was and is in Rome, the speaker was and is in Berlin.

Alica said that Vera came to see her last night.

In the case of the adversative construction, I posit that while the motion contribution of 'go' has been eroded, the perspectival contribution remains. Instead of describing motion anchored to the perspective of the speaker, the motion verb in the adversative construction describes the perspective holder's judgment of the event associated with the second verb: namely, that it is unfortunate or contrary to the speaker's wishes.

That is, 79 below can be paraphrased with 80.

- 79. Umberto will go and spend all his money if you let him.
- 80. Unfortunately, Umberto will spend all his money if you let him.

In the adversative construction, the first verb contributes a judgment on the fortuitousness of the event described by the second verb. The meaning of 'go' has undergone semantic extension, and is no longer the same as the ordinary meaning of 'go'.

## 4.2 Combining multiple descriptions of the same event

Both of the verbs in the adversative construction describe the same event. The motion verb describes it in relation to the perspective holder's judgment, while the second verb describes what kind of event it is. Thus, an ordinary Boolean conjunction approach is appropriate, since the event described by each verb is the one and the same.

One remaining issue is the treatment of thematic roles. The motion verb, with its grammaticalized meaning of unfortunateness in the adversative construction, is presumably of type  $\langle \epsilon, t \rangle$ , since it describes an event. In order to conjoin the motion verb with both transitive and unaccusative verbs, I posit that Event Identification is used to combine the two event descriptions at the V level.

#### 81. Event Identification: (Kratzer 1996)

Given a function  $f_{\langle \epsilon, t \rangle}$  and a function  $g_{\langle e \langle \epsilon, t \rangle \rangle}$  Event Identification produces a function  $h_{\langle e \langle \epsilon, t \rangle \rangle}$ :  $f_{\langle \epsilon, t \rangle} \quad g_{\langle e \langle \epsilon, t \rangle \rangle} \quad \Rightarrow \quad \lambda x \lambda e_{\epsilon}[f(e) \land g(x)(e)]$ 

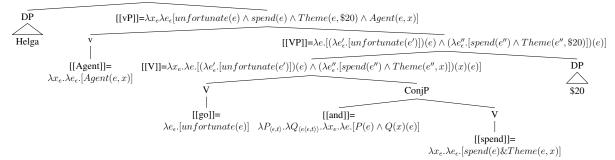
82. Adversative 'and': [[and<sub>adv</sub>]] = 
$$\lambda P_{\langle \epsilon, t \rangle} . \lambda Q_{\langle e \langle \epsilon, t \rangle \rangle} . \lambda x_e . \lambda e . [P(e) \wedge Q(x)(e)]$$

In the case of transitive verbs, the motion event will be identified with the second event prior to the saturation of the Theme argument. An Agent argument will be merged higher, after the saturation of the Theme argument by the direct object. I use unfortunate here as shorthand for the meaning of the motion verb.

- 83. Helga went and spent twenty bucks.
  - (a) [[Helga go and spend \$20]]

```
= \lambda e_{\epsilon}[unfortunate(e) \land spend(e) \land Theme(e, \$20) \land Agent(e, Helga)]
```

 $[[VP]] = \lambda e_{\epsilon}[unfortunate(e) \land spend(e) \land Theme(e, \$20) \land Agent(e, Helga)]$ 

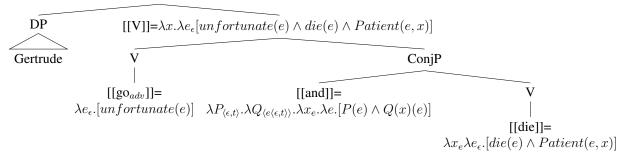


This may explain the intuition of some speakers that the adversative sometimes sounds as though the speaker is blaming the subject of the construction, as noted by Schmerling (1975), which notes that "One senses that the speaker is trying to convey the notion, 'It was her fault'" (Schmerling 1975:218).

In the case of unaccusative verbs, the motion event will be identified with the event of the second verb before its Patient argument is saturated.

#### 84. Gertrude went and died.

 $\hbox{\tt [[VP]]=} \lambda e_{\epsilon}. [unfortunate(e) \wedge die(e) \wedge Patient(e,G)]$ 



The remaining issue is the actual contribution of 'go'. The motion verb in the adversative construction is not exactly equivalent to evaluative adverbs like *unfortunately*. 'Unfortunate' can be part of the at-issue content, while the adversative component of 'went and got' is not.

- 85. (a) It's unfortunate that Hector spent all his money.
  - (b) On the contrary, since I'm a local shop-owner, I think it is excellent.

In the dialog in 85, the unfortunateness of Hector spending his money is denied by the shopkeeper. The same cannot be done in 86, where the unfortunateness is conveyed by the adversative construction.

- 86. (a) Hector went and spent all his money.
  - (b) #On the contrary, since I'm a local shop-owner, I think it is excellent.

One possible way to treat the adversative component of 'go' would be as a conventional implicature along the lines of Potts (2003)'s analysis of expressive content. Rather than being part of the atissue content of the sentence, then, the motion verb of the adversative construction contributes a conventional implicature, a comment upon the at-issue meaning from the perspective of the

speaker. However, I leave further exploration of the semantic contribution of the motion verb in adversative constructions for future work.

Using Event Identification at the V level, we can correctly account for all cases of adversative constructions. There is no actual motion entailment, because the meaning of the motion verb has been bleached; instead of expressing actual motion from the perspective of the speaker, like 'go' normally does, in the adversative, it expresses some kind of judgement from the speaker's perspective on the event described by the second verb. Furthermore, there is no agentivity entailment, because there is no Agent projection for unaccusative verbs under a V-level Event Identification analysis.

#### **4.2.1** Event Identification is too restrictive for other constructions

Although an Event Identification analysis captures the properties of the adversative construction, it cannot work for the other two constructions.

Both the andative/venitive and 'go get' constructions require real motion, which means that their motion verbs contribute motion events. By nature, a motion event cannot be the same as a getting event. However, the approach pursued above for the adversative identifies the event of the motion verb and the event of the second verb—that is, it says they are the same event.

Another piece of evidence that the motion event cannot be identified as the same event as the event described by the second verb is the fact that there they do not occur in the same timespan. In the 'go get' construction', the motion event strictly precedes the time of the event described by the second verb. Therefore, an Event Identification or Boolean coordination analysis cannot work.

#### Combining descriptions of different events: Non-Boolean Con-5 junction

The SLQZ andative/venitive and the English 'go get' construction differ from the adversative in that each of their verbs describes properties of a distinct event. Thus, any account of the semantics of these constructions must involve some way of combining descriptions of distinct events into the description of one complex event for the purposes of aspect/tense marking and modification.

I build upon Harris (2011) by using Non-Boolean Conjunction for this purpose. As I argued above, Boolean conjunction fails for the andative/venitive and 'go get' constructions because the event described by the motion verb cannot be identical to the event described by the second verb. Yet, at the level of tense/aspect marking, only one event description, encompassing both motion and the meaning of the second verb, is available. Non-Boolean Conjunction provides a way of building a description of a complex event out of descriptions of two distinct events.

#### 87. **Non-Boolean Conjunction**: (Krifka 1990)

Given a function  $f_{\langle \epsilon, t \rangle}$  and a function  $g_{\langle \epsilon, t \rangle}$ , Non-Boolean Conjunction produces a function  $h_{\langle \epsilon, t \rangle}$ :  $f_{\langle \epsilon, t \rangle}$   $g_{\langle \epsilon, t \rangle}$   $\Rightarrow$   $\lambda e'' . \exists e, e' [e'' = e \oplus e' \land [f(e) \land g(e')]]$ 

However, just specifying that the events combine through Non-Boolean Conjunction is not sufficient. Non-Boolean Conjunction does not stipulate how the thematic roles of the two events relate to those of the macro-event. Yet, as we have seen, this is a point of cross-linguistic variation: the English 'go get' construction entails agentivity, while the SLQZ and ative/venitive does not. Furthermore, the identification of the subject with both the Patient of the unaccusative motion verb and the Patient or Agent of the second verb is not ensured by Non-Boolean Conjunction alone.

A full analysis of each complex motion verb construction must answer three questions about thematic roles: what syntactically represented thematic roles, if any, does the macro-event have; what syntactically represented thematic roles do the events of the two verbs have; and how does the subject manage to saturate them?

## 5.1 The andative/venitive and heterogenous thematic roles

The critical difference between the andative / venitive construction in SLQZ and the English 'go get' construction is that 'go get' has an obligatorily agentive interpretation of the macro-event. In the case of the andative and venitive in SLQZ, there is no kind of agentivity entailment for the macro-event. The andative and venitive allows the unaccusative motion verb to combine either with an agentive verb, as in 88, or with another unaccusative verb, such as raty 'dies' in 89.

- 88. B-ied-si Brook teiby tapet.

  PERF-VEN-buy Brook one carpet

  'Brook came and bought a carpet.'
- 89. R-ied-gaty Jwany HAB-VEN-die Juan 'Jwany comes and dies.'

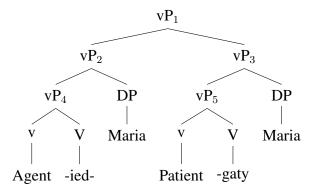
The first question to answer is whether the macro-event has a syntactically represented thematic role of its own. In the case of the andative/venitive, however, since there is no agentivity entailment for the whole construction, there is no evidence for a syntactically represented Agent argument for the macro-event.

The next question to address is that of the thematic roles associated with the event of each verb. The simplest solution is to assume that the thematic roles of the verbs are just what they would be outside of the andative/venitive construction. This ensures that the subject has the right relationship to each verb. However, we also need to decide at what point the event descriptions are combined: prior to merging thematic roles, after the thematic roles are merged but before they are saturated, or after the thematic roles are saturated.

First, consider a theory in which the thematic roles of the event descriptions are saturated before the event descriptions are combined.

90. b-ied-gaty Maria PERF-VEN-die Maria 'Maria came and died.'

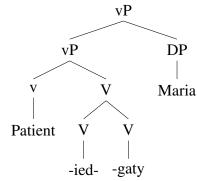
 $<sup>^{12}</sup>$ The evidence that raty 'dies' is unaccusative comes from the fact that is part of a transitive alternation pair with rguty 'kills'. SLQZ has a non-productive -gw- causative marker that is grammaticalized in many such pairs (Munro 2015). Another example is the pair ru 'is located', and rgu 'puts something into, deposits', which are both found in andative/venitive constructions (Munro et al. 2006).



This is problematic, because it involves merging the subject twice.

Second, consider a theory in which the event descriptions are coordinated before merging their thematic roles.

91. b-ied-gaty Maria PERF-VEN-die Maria 'Maria came and died.'



This is problematic because there is no way of associating the subject with a thematic role of each verb. Under this analysis, we might predict that 92 or 93 would be felicitous, since there is a coming event followed by a dying event. Without a thematic role of rgaty 'dies' that is saturated by the subject, Maria's relationship to the individual coming and dying events is unspecified.

92. Context: Maria went and killed someone else.

#Gu-gaty Maria PERF.AND-die Maria 'Maria went and died.'

93. Context: Someone came and killed Maria.

#Gu-gaty Maria PERF.AND-die Maria 'Maria went and died.'

*Biedgaty Maria* was deemed infelicitous in both of these contexts, and not just because it is not maximally informative; speakers found it acceptable to describe a killing using an andative-marked 'die' verb, so long as the subject is the person who both comes and dies.

94. Context: Someone kills Juan in the US.

Ladi gu-gaty Jwany Other.side PERF.AND-die Jwany 'Juan went and died in the US.'

Comment: "It's OK if someone kills him, but someone might ask for more information."

A successful account of the andative/venitive should predict infelicity of *Biedgaty Maria* in contexts where the subject is not both the Patient of the motion event and the Patient of the dying event (or the Agent in the case of a transitive second verb).

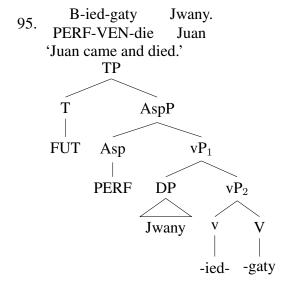
Given the problems discussed above, it is necessary to combine the event descriptions at the point where they have unsaturated thematic roles.

## 5.2 Syntactic proposal for the andative/venitive

I propose that the andative/venitive marker is an overt v-projection, which combines with an event description of type  $\langle e, \epsilon t \rangle$  via Non-Boolean Conjunction.

Andative/venitive constructions can only be formed with two verbs. Thus, positing that these verbs are in fact pieces of inflection should not be troubling. Moreover, as I argued above, in order to ensure that the subject is associated with a thematic role of each verb, it is necessary for the motion verb description to combine with the event description of the second verb before the thematic roles of each event are saturated.

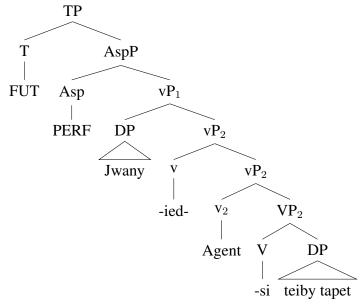
In the case of an unaccusative second verb such as rgaty 'dies', neither verb has a syntactically represented external argument, because they are both unaccusative. <sup>13</sup> In this case, the andative/venitive marker is the only v projection.



In the case of transitive second verbs like rsi 'buy', there is an additional v projection in order to merge an Agent argument, since the second verb receives an agentive interpretation. I propose that the Agent argument is merged prior to andative/venitive v projection. This structure is shown in 96 below.

<sup>&</sup>lt;sup>13</sup>I am not committed to this view of unaccusatives; a syntactically represented external Patient argument would not cause any problems for my account, since they could be handled in the way I propose for agentive verbs.

96. B-ied-si Brook teiby tapet.
PERF-VEN-buy Brook one carpet
'Brook came and bought one carpet.'



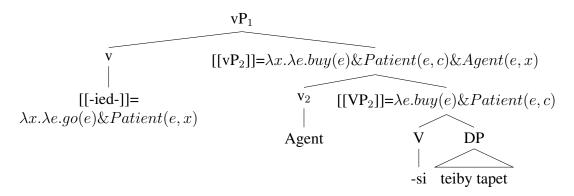
The semantic composition motivates the structure proposed above, because if the transitive verb does not project an Agent argument before coordination, it will be of a different type than the motion verb, which, as an unaccusative verb, will have an unsaturated Patient argument. Thus, an approach where the transitive verb does not project an Agent argument prior to coordination will fail for reasons of type mismatch, since both have to be of type  $\langle e, \epsilon t \rangle$ .

Furthermore, it is important that the Patient argument of the motion verb is identified with the Agent argument of the second verb, because they must both be satisfied by the subject of the construction.

#### 5.2.1 Modified Non-Boolean Conjunction

There is one issue with the syntax proposed above: it is not compatible with Non-Boolean Coordination. Non-Boolean Coordination combines two event descriptions of type  $\langle \epsilon, t \rangle$ , but the conjuncts in 96 are of type  $\langle e \langle \epsilon, t \rangle \rangle$ .

97. B-ied-si Brook teiby tapet.
PERF-VEN-buy Brook one carpet
'Brook came and bought one carpet.'



I propose a modified version of Non-Boolean Coordination that combines conjuncts of type  $\langle e\langle \epsilon,t\rangle\rangle$ . With this small change to Non-Boolean Coordination, we can account for the andative/venitive construction in a straightforward way.

#### 98. Modified Non-Boolean Conjunction:

Given a function  $f_{\langle e\langle\epsilon,t\rangle\rangle}$  and a function  $g_{\langle e\langle\epsilon,t\rangle\rangle}$ , Non-Boolean Conjunction produces a function  $h_{\langle e\langle\epsilon,t\rangle\rangle}$ :

$$f_{\langle e\langle\epsilon,t\rangle\rangle} \quad g_{\langle e\langle\epsilon,t\rangle\rangle} \quad \Rightarrow \quad \lambda x.\lambda e''.\exists e,e'[e''=e\oplus e'\wedge f(x)(e)\wedge g(x)(e')]$$

The advantage of this approach is that it allows us to compose the descriptions of two events regardless of the thematic role that the subject plays. It correctly identifies the Patient argument of the motion verb with the Agent or Patient argument of the second verb, depending on the kind of thematic role that is left unsaturated in the second verb.

An example derivation for a venitive construction with a transitive second verb is shown below.

99. B-ied-si Brook teiby tapet. PERF-VEN-buy Brook one carpet 'Brook came and bought one carpet.'

#### 100. Biedsi Brook teiby tapet.

- (a) [[-si teiby tapet]] =  $\lambda e_{\epsilon}$ .[buy(e)  $\wedge$  Patient(e, c)]
- (b)  $[[Agent]] = \lambda x_e . \lambda e_{\epsilon} . [Agent(e, x)]$
- (c)  $[[VP_2]] = \lambda x_e . \lambda e_{\epsilon} . [buy(e) \wedge Patient(e, c) \wedge Agent(e, x)]$
- (d)  $[[-ied-]] = \lambda x_e.\lambda e_{\epsilon}.[come(e) \wedge Patient(e, x)]$
- (e) [[-iedsi teiby tapet]] =  $\lambda x_e \cdot \lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land come(e) \land Patient(e, x) \land buy(e') \land Patient(e', c) \land Agent(e', x)]$

(f) [[Brook -iedsi teiby tapet]] = 
$$\lambda e''_{\epsilon}$$
.  $\exists e_{\epsilon}, e'_{\epsilon}$ .  $[e'' = e \oplus e' \land come(e) \land Patient(e, B) \land buy(e') \land Patient(e', c) \land Agent(e', B)]$ 

The transitive verb merges its Agent prior to combining with the venitive marker via Modified Non-Boolean Conjunction.

In the case of an unaccusative second verb, the derivation proceeds as shown in 101.

```
101.  \begin{array}{ll} \text{B-ied-gaty} \quad \text{Jwany.} \\ \text{PERF-VEN-die} \quad \text{Juan} \\ \text{'Juan came and died.'} \\ \text{(a)} \quad [[\text{-gaty}]] = \lambda x_e.\lambda e_\epsilon.[die(e) \wedge Patient(e,x)] \\ \text{(b)} \quad [[\text{-ied-}]] = \lambda x_e.\lambda e_\epsilon.[come(e) \wedge Patient(e,x)] \\ \text{(c)} \quad [[\text{-iedgaty}]] = \lambda x_e.\lambda e_\epsilon''.\exists e_\epsilon, e_\epsilon'.[e'' = e \oplus e' \wedge come(e) \wedge Patient(e,x) \wedge die(e') \wedge Patient(e',x)] \\ \text{(d)} \quad [[\text{Jwany -iedgaty}]] = \lambda e_\epsilon''.\exists e_\epsilon, e_\epsilon'.[e'' = e \oplus e' \wedge come(e) \wedge Patient(e,J) \wedge die(e') \wedge Patient(e',J)] \\ \end{array}
```

This approach is unusual in that for transitive verbs, the Agent is introduced prior to the combination of the verbs, but saturated afterwards. Leaving the Agent unsaturated is critical for this analysis, because it ensures that the Patient argument of the motion verb and the Agent argument of the second verb will both be satisfied by the subject.

Once we accept this step, Modified Non-Boolean Conjunction correctly accounts for both the unaccusative and transitive second verb cases of andative/venitive constructions and captures the semantic identity of the Patient of the motion verb and the Agent or Patient of the second verb in a straightforward way.

This analysis accounts for the real motion interpretation, since the motion verb retains its usual semantics. It also accounts for the lack of an agentivity requirement for the andative/venitive construction, since the motion verb itself assigns the subject a Patient thematic role. In the unaccusative case, there is no Agent argument at all; while in the transitive case, there is an Agent argument for the transitive verb, but not for the macro-event.

In addition, if temporal restrictions are added to the Non-Boolean Conjunction event summation operator such that the first event must strictly precede the second event, the change-of-state readings for stative second verbs falls out naturally. Since the onset of the state must occur after the conclusion of the motion event, the only possible interpretation of a stative second verb is that of state change.

#### **5.2.2** Restricting Non-Boolean Conjunction

A concern with using Non-Boolean Conjunction is that it is not the case that any two verbs in SLQZ can form a complex verb construction. I do not want to propose that in general, SLQZ verbs can embed a vP. However, in the case of the andative/venitive, there is evidence that the motion verbs are on their way to being grammaticalized as inflectional markers.

Some SLQZ speakers<sup>14</sup> can preface an andative/venitive construction with another motion verb, <sup>15</sup> without any change in meaning. <sup>16</sup>

```
B-ied
                   Maria
                                 b-ied-ya
                                                    nai.
102.
      PERF-come Maria PERF-VEN-dance=3s yesterday
     "Maria came and danced yesterday."
     (Lit.: 'Maria came and she came and danced yesterday.')
      Rata
              zhi
                      r-ied
                                Lia
                                       Petra
                                                r-ied-tyug
                                                              gyia.
103.
      Every day HAB-come Miss Petra HAB-VEN-cut flower
     'Every day Miss Petra comes and cuts flowers.'
     (Lit.: 'Every day Miss Petra comes and comes and cuts flowers.')
         Z-e=ëng
                         z-e-cudyag=ëng
                                              musc.
104.
      ZPROG-go=3s ZPROG-AND-listen=3s
                                              music
     'She is going to listen to music.'
     (Lit.: 'She is going and going and listening to music.')
```

These examples involve just one motion event, which is described by both the motion verb and the andative or venitive marker, which suggests that for certain speakers, the motion verbs in the andative and venitive constructions have become grammaticalized. We can therefore posit that Non-Boolean Conjunction is only licensed for verbs that have become pieces of inflection, and is not available as a combination mechanism for any two verbs.

#### 5.2.3 Discussion

This approach makes the unusual stipulation that the Agent argument is introduced prior to coordination, but saturated afterwards. Given this step, the account correctly handles both transitive and unaccusative second verb instances without entailing anything about the thematic roles of the macro-event. Although Non-Boolean Conjunction is in general unconstrained, in the case of the SLQZ andative/venitive, there is evidence that the motion verbs are becoming pieces of inflection, which explains why the syntactic structure I propose is limited to motion verbs.

In sum, Modified Non-Boolean Conjunction is the correct approach for the andative and venitive

Note that the adversative construction can be preceded by either 'come' or 'go', since the deictic value of the motion verb in the construction has been lost along with its actual motion sense:

3. 'What the hell is this shit, taking peoples' letters. I'm a working man, trying to make a living, and kids like you come around and just go and take my letters' (Felt 2012).

<sup>&</sup>lt;sup>14</sup>This style of andative/venitive construction occurs more frequently in the speech of the youngest two of my consultants, although other sociolinguistic factors may be in play.

<sup>&</sup>lt;sup>15</sup>This is only possible with a motion verb of the same deictic value, i.e. *ria* before *i*, *ried* before *ied*.

<sup>1.</sup> B-ied Maria b-ied-ya nai. PERF-come Maria PERF-VEN-dance=3s yesterday

<sup>&</sup>quot;Maria came and danced yesterday."

<sup>(</sup>Lit.: 'Maria came and she came and danced yesterday.')

<sup>2. #</sup>Gw-e Maria b-ied-ya nai. PERF-go Maria PERF-VEN-dance=3s yesterday

<sup>&</sup>quot;Maria went and she came and danced yesterday."

Comment: "She's either going or coming."

<sup>&</sup>lt;sup>16</sup>The use of another motion verb before an andative/venitive construction does not entail duration or iteration like the reduplicative pseudo-coordination constructions (*She wrote and wrote*) discussed in De Vos (2005).

construction because the andative and venitive allows descriptions of two distinct events, contributed by heterogenous verb types, to combine without any kind of agentivity entailment for the macro-event.

## 6 'Go get': agentivity and event combination

The English 'go get' construction diverges from the andative/venitive construction because it entails that the macro-event has an agentive interpretation. It is similar to the andative/venitive, however, in requiring real motion, which means that Boolean conjunction is not a viable strategy for combining the events of its verbs, as discussed in Section 4.2.1.

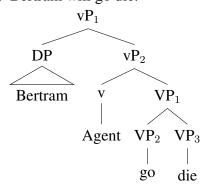
The 'go get' construction is agentive even if neither of its verbs are, as I showed in Section 3.3. Thus, the agentivity entailment must arise from something specific to the construction. There are two possible sources for the agentivity entailment, and I will sketch an account for each. First, the agentivity entailment could come from a special Agent projection for the macro-event. I discuss this approach in Section 6.1. Second, the agentivity entailment could be a result of a special semantics for the motion verb. I explore this kind of account in Section 6.2. In Section 6.3, I build up a diagnostic to decide between the two analyses using agent-oriented adverbials, and ultimately argue in favor of the first approach.

## 6.1 Non-Boolean Conjunction for 'go get'

One possible source for the agentivity entailment in the 'go get' construction is a v projection above the level at which the two event descriptions combine. That is, there could be an Agent argument of the macro-event that is projected just after the combination of the two events.

The example below shows how such a derivation would proceed in the case of an unaccusative second verb.

#### 105. Bertram will go die.



#### 106. Bertram will go die.

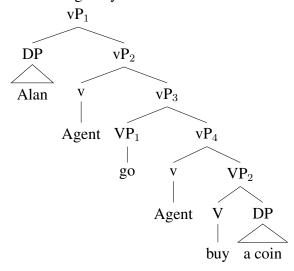
- (a)  $[[die]] = \lambda x_e . \lambda e_{\epsilon} . [die(e) \wedge Patient(e, x)]$
- (b)  $[[go]] = \lambda x_e . \lambda e_{\epsilon} . [go(e) \wedge Patient(e, x)]$
- (c)  $[[go die]] = \lambda x_e . \lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land go(e) \land Patient(e, x) \land die(e') \land Patient(e', x)]$
- (d)  $[[Agent]] = \lambda x_e . \lambda e_{\epsilon} . [Agent(e, x)]$
- (e)  $[[Agent \text{ go die}]] = \lambda x_e . \lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land go(e) \land Patient(e, x) \land die(e') \land Patient(e', x) \land Agent(e'', x)]$

(f) [[Bertram go die]] = 
$$\lambda e''_{\epsilon}$$
. $\exists e_{\epsilon}, e'_{\epsilon}$ . $[e'' = e \oplus e' \land go(e) \land Patient(e, B) \land die(e') \land Patient(e', B) \land Agent(e'', B)]$ 

This would lead to an agentive interpretation of the macro-event: the subject will voluntarily perform a complex event involving both motion and dying.

In the transitive second verb case, the second verb will need to project an Agent prior to coordination, in order to make the semantic types of each conjunct the same, since go has an unsaturated Patient argument.

#### 107. Alan will go buy a coin.



108. Alan will go buy a coin.

- (a)  $[[Agent \text{ buy a coin}]] = \lambda x_e . \lambda e_{\epsilon} . [buy(e) \land Patient(e, c) \land Agent(e, x)]$
- (b)  $[[go]] = \lambda x_e . \lambda e_{\epsilon} . [go(e) \wedge Patient(e, x)]$
- (c) [[go buy a coin]] =  $\lambda x_e . \lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land go(e) \land Patient(e, x) \land buy(e') \land Patient(e', c) \land Agent(e', x)]$
- (d) [[Agent go buy a coin]] = [[Agent]] & [[go buy a coin]]
- (e)  $[[Agent \text{ go buy a coin}]] = \lambda x_e . \lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land go(e) \land Patient(e, x) \land buy(e') \land Patient(e', c) \land Agent(e', x) \land Agent(e'', x)]$
- (f) [[Alan go buy a coin]] =  $\lambda e''_{\epsilon} . \exists e_{\epsilon}, e'_{\epsilon} . [e'' = e \oplus e' \land go(e) \land Patient(e, A) \land buy(e') \land Patient(e', c) \land Agent(e', A) \land Agent(e'', A)]$

The interpretation is, again, that the macro-event is Agentive: the subject intends both to go and to buy a coin. In the transitive case, there is some redundancy in having two Agent projections, since the Agent argument for the macro-event ensures that all sub-events of the macro-event are also agentive. However, the lower Agent argument is necessary for type-theoretic reasons, since the event description of the second verb will otherwise not be able to combine via Modified Non-Boolean Conjunction with the motion verb event description. In the next section, I propose an alternate view of the 'go get' construction that does not require both a high and low Agent argument projection for transitive second verbs.

#### **6.2** Mediated combination

Another possible kind of analysis for the 'go get' construction is a lexical extension approach. In this type of analysis, the meaning of the motion verb in the 'go get' construction is different than in its ordinary use. The agentivity entailment springs from semantic bleaching of the destination component of the motion verb. The source of the agentivity requirement is a semantically bleached lexical entry for the motion verb rather than the grammar.

Motion verbs generally have a Goal or Destination argument that specifies the endpoint of the motion.

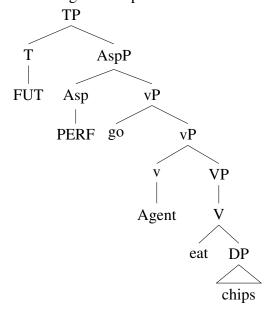
```
109. [[John is coming home.]] = \exists e[come(e) \land Patient(e, J) \land Goal(e, home)]
110. [[Maria is going to school.]] = \exists e[go(e) \land Patient(e, M) \land Goal(e, school)]
```

Perhaps the meaning of the motion verb in the 'go get' construction has been extended so that it has an Agent, rather than a Patient, and so that the Goal specifies an event rather than a physical location. Just as in the adversative construction, the meaning of the motion verb has been bleached or generalized, under this view, the motion verb in the 'go get' construction has changed to allow the destination to be an event rather than a physical location. In other words, the motion verb has been adapted to express the goal of a volitional agent.

111. 
$$[[come]] = \lambda P_{\langle e(\epsilon,t) \rangle} \cdot \lambda x \cdot \lambda e \cdot \exists e' \cdot [P(e')(x) = T \land move(e) \land Agent(e,x) \land Goal(e,e')]$$

The motion verb identifies its own Agent argument with the unsaturated argument in the second verb, and takes the event of the second verb as the Goal of its motion event. If the motion verb is agentive, the second verb will become so indirectly as the goal of the agentive motion verb.

#### 112. Sam will go eat chips.

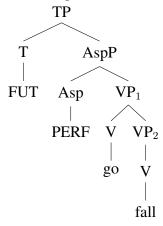


- 113. [[eat chips]] =  $\lambda e.[eat(e) \wedge Patient(e, c)]$
- 114.  $[[Agent \ eat \ chips]] = \lambda x. \lambda e. [eat(e) \land Patient(e,c) \land Agent(e,x)]$
- 115. [[come eat chips]] =  $\lambda x. \lambda e. \exists e'. [eat(e') \land Patient(e', c) \land Agent(e', x) \land move(e) \land Agent(e, x) \land Goal(e, e')]$

The literal meaning of the sentence is that Sam moves with a Goal of eating chips, but the natural interpretation is that Sam intends to eat the chips— otherwise, why would he perform a motion with that event as the Goal?

In the case of an unaccusative second verb, the motion verb takes the VP as an argument. The Goal of the motion is a falling event. Although the falling event in itself is not agentive, it will receive an agentive interpretation because it is a Goal of the agentive motion event.

#### 116. Sam will go fall.



117. [[fall]] = 
$$\lambda x.\lambda e.[fall(e) \land Patient(e, x)]$$
  
118. [[come fall]] =  $\lambda x.\lambda e.\exists e'.[fall(e') \land Patient(e', x) \land move(e) \land Agent(e, x) \land Goal(e, e')]$ 

Since the event expressed by the second verb has become the goal of the motion, the entire construction receives an agentive interpretation. The Patient of the falling event is correctly identified as the subject by positing that the motion verb takes an argument of type  $\langle e\langle\epsilon,t\rangle\rangle$ , an event description with an unsaturated thematic role.

This account treats 'go get' along the lines of the adversative, in positing that the motion verb in the construction does not have the same lexical meaning as in ordinary uses. In the case of the adversative, the motion component of the lexical meaning has been bleached away, and the perspectival component has been extended into a conventional implicature. In the 'go get' account described above, the motion verb retains its motion component, but the destination of the motion has been extended into a Goal argument.

## **6.3** Comparing accounts

I have sketched two ways of accounting for the agentivity entailment of the 'go get' construction. In the first account, the agentivity entailment stems from an Agent argument for the macro-event, and the composition of the event descriptions of the two verbs is by Modified Non-Boolean Conjunction. In the second account, the agentivity entailment comes from a change in the lexical meaning of the motion verb, where instead of selecting a location as a Destination argument, the motion verb now selects an event as a Goal, and the subject serves as an Agent rather than a Patient of the moving event.

The major difference between these two analyses is whether there is an syntactically represented external argument for the macro-event, as in the first account, or whether the agentivity entailment

comes about indirectly. In the next section, I will build up an argument that the first analysis is correct in positing the existence of a syntactically represented Agent for the macro-event.

#### **6.3.1** Diagnosing the presence of syntactically represented external arguments

I have presented evidence that 'go get' constructions are agentive even when formed from two unaccusative verbs. Distinguishing a semantic requirement for volitionality from a syntactic requirement for a syntactically represented Agent, however, is not trivial. One available diagnostic is found in Baker, Johnson, and Roberts (1989), which argues that verbal passives require a syntactically represented external argument because they do not allow a self-action interpretation.

- 119. Context: David is dressing the children so that they look good for picture day at school.
  - (a) The children are dressed.
  - (b) The children are being dressed.
- 120. Context: The children are being allowed to dress themselves for picture day at school.
  - (a) The children are dressed.
  - (b) #The children are being dressed.

Adjectival passives are ambiguous between a self-action interpretation, and one in which someone else acts. In 121, from Kratzer (2003), the climbers may have secured themselves, or they may have been secured by someone else. Similarly, the children in 122 may have been combed by someone else, or they may have combed themselves.

- 121. The climbers are secured with a rope.
- 122. The combed children sat in a line.

Kratzer (2003) argues on the basis of these facts that adjectival passives do not require a syntactically represented external argument. Reduced relatives have a similar ambiguity.

123. The man dressed in silk was wearing a mask.

The man may have dressed himself, or may have been dressed by someone else.

Thus, the resolution of ambiguity between a self-action and a non-self-action interpretation provides a diagnostic for the presence of a syntactically represented external argument.

#### **6.3.2** Agent-oriented adverbs

Adverbs like 'intentionally' and 'purposefully' have been called **agent-oriented** because they seem to convey something about the intentions of the subject of the sentence. They are not compatible with non-human subjects, perhaps because non-humanity entities cannot have intentions.

- 124. Ofelia intentionally broke the basket.
- 125. #The basket intentionally broke.
- 126. #The wind intentionally broke the basket.

These adverbs do not seem to require a syntactically represented Agent (Ernst 2002), given that they are compatible with unaccusatives.

- 127. Dave intentionally died.
- 128. Ofelia fell on purpose.
- 129. Karen sneezed intentionally.

However, using the ambiguity resolution test discussed above, it can be shown that they do diagnose syntactically represented external arguments. As shown by Kratzer (2003), certain kinds of adverbs resolve the ambiguity between the two interpretations of adjectival passives by eliminating the self-action interpretation. Agent-oriented adverbs like 'intentionally' rule out the self-action interpretation, for both adjectival passives (130 and 131) and reduced relatives (132 and 133).

- 130. Context: The children have been allowed to comb their own hair for picture day.
  - (a) The combed children sat in a line.
  - (b) #The intentionally combed children sat in a line.
- 131. Context: The children's father has carefully combed their hair before picture day.
  - (a) The combed children sat in a line.
  - (b) The intentionally combed children sat in a line.
- 132. Context: A man has been abducted and drugged to use in an arcane ritual. He has been carefully dressed for the rites.
  - (a) The man dressed in silk was wearing a mask.
  - (b) The man intentionally dressed in silk was wearing a mask.
- 133. Context: A man dresses himself well for a costume party.
  - (a) The man dressed in silk was wearing a mask.
  - (b) #The man intentionally dressed in silk was wearing a mask.

Because agent-oriented adverbs like 'intentionally' resolve the ambiguity of sentences like 130a-133a, they require a syntactically represented external argument. Thus, we can use the acceptability of agent-oriented adverbs to test whether or not a given construction contains a syntactically represented external argument.

#### **6.3.3** Adverb scope in multi-verb constructions

In order to utilize this diagnostic, however, we also need to understand the scope of adverbs in the 'go get' construction. Since both proposals allow for the presence of syntactically represented external arguments for the second verb, it is necessary to test whether the agent-oriented adverbs can scope over the macro-event itself.

In order to test the scope of adverbs in the construction, we can select an adverb that is not compatible with a motion event (or with a complex event that involves motion). For instance, 'truthfully' or 'slanderously' are infelicitous with motion events; they require some sort of speech act.

- 134. John will slanderously accuse my mother.
- 135. # John will slanderously go to the store.

There are three possible positions for the adverb in the 'go get' construction: to the left of both verbs, in the middle of the verbs, and to the right of both verbs. As noted in Section 1, modifiers that come between the two verbs are generally judged as degraded by speakers.<sup>17</sup>

- 136. #John will slanderously go accuse my mother.
- 137. %John will go slanderously accuse my mother.
- 138. John will go accuse my mother slanderously.

Speech act modifiers like 'slanderously' and 'truthfully' are infelicitous when placed to the left of

<sup>&</sup>lt;sup>17</sup>Although the degree of unacceptability may vary dialectally.

both verbs in the 'go get' construction, which indicates that in this position, modifiers scope over the macro-event.

'Slanderously' is acceptable to the right of both verbs, which indicates that in this position, the modifier scopes only over the event of the second verb.

#### 6.3.4 Diagnosis

If there is a syntactically represented external argument for the macro-event, agent-oriented adverbials should be acceptable to the left of both verbs in 'go get' constructions, since in this position, they scope over the macro-event.

- 139. John will intentionally go insult my mother.
- 140. John will go intentionally insult my mother.
- 141. John will go insult my mother intentionally.

Of the thirteen native speakers I consulted, none found 139 infelicitous, although several found 140 marginal. Furthermore, some speakers provided comments indicating that they noticed a difference in meaning between 139 and 141 corresponding to the difference in adverbial scope.

- "The conduct is more premeditated in 139. He got in his truck, drove halfway across the state, just to insult my mother."
- "139 is more about the act of going, 140 and 141 about insult."
- "141 is more like 140."

This suggests that there is, in fact, a syntactically represented external argument for the macroevent in the 'go get' construction. Thus, the argument presented above is in favor of the first analysis for the 'go get' construction.

#### 7 Discussion

While the existence of complex motion verb constructions is widespread among natural languages, the properties of such constructions differ in significant ways. Previous work on the topic of pseudo-coordination has focused on the syntactic properties of such constructions, such as violations of the Coordinate Structure Constraint, to the neglect of critical differences in meaning between constructions. These properties are important pieces of evidence not just for the semantics of complex motion verb constructions, but also for their syntax.

The meaning of complex motion verb constructions vary along several dimensions. In this paper, I have explored three: whether real motion is entailed; whether the construction receives an obligatorily agentive interpretation; and whether there are restrictions on the aktionsarten of the verbs involved.

By focusing on these semantic points of variation, I have shown that natural language contains multiple strategies for combining event descriptions. Constructions that do not entail actual motion, like the adversative construction in English, can combine their event descriptions using Event Identification or ordinary predicate conjunction. Constructions with actual motion interpretations, like the SLQZ andative/venitive, require a more complex mechanism for event description combination, such as Non-Boolean Conjunction.

This work is innovative because it takes the semantic properties of complex motion verb constructions to be guiding principles for both syntactic and semantic accounts. While cross-linguistic variation has been noted by previous work (Bjorkman 2016, Cardinaletti & Giusti 2001, De Vos 2005), the same semantics has been proposed for all kinds of pseudo-coordination. I have shown that the semantic variation found in complex motion verb constructions, both cross-linguistically and among various constructions within the same language, necessitates multiple strategies for combining event descriptions. Exploring other points of semantic variation might reveal still more strategies for event combination.

## 7.1 Thematic roles in complex verb constructions

My exploration of the semantics of complex motion verb events revealed a thicket of issues around thematic role relations. While alternate analyses for the andative/venitive and 'go get' construction are possible, any such analysis must explain how the subject of the construction is identified with a thematic role of each verb. My account of the andative/venitive construction used a modified form of Non-Boolean Conjunction that combines events with an unsaturated thematic role. In the case of transitive second verbs, this required accepting that an external argument could be introduced prior to event description combination, and saturated afterwards. Despite these non-standard assumptions, my account explains how the thematic roles of two verbs can be saturated by the subject, an improvement over Harris (2011) and De Vos (2012).

The complexity of diagnosing and constructing the relationships of the thematic roles of the events described by each verb to each other and to the macro-event indicates that the interaction of event description combination and thematic role relations is an important issue for any analyses of multiverb constructions. It is clear that languages of many families contain constructions that involve relationships between the event descriptions of multiple verbs. I have proposed that the most important trait of complex motion verb constructions is the fact that they describe one event at the level of tense, aspect, and modification. Perhaps a fruitful way to group multi-verb constructions is by just such a semantic categorization. If so, the questions raised in this paper about the ways in which the thematic roles of the various events interact should be explored for other kinds of multi-verb constructions.

#### 7.2 Deictic motion verbs

Another topic that merits further exploration is the cross-linguistic prevalence of semantic extensions of deictic motion verbs. 'Come' and 'go' are cross-linguistically common targets of semantic bleaching: they have become grammaticized as tense and aspect markers (Haßler 1999, Hooper 2002), modals (Bourdin 1999, Mauri & Sansó 2014), valence changers (Dragomirescu & Nicolae 2014), and discourse markers (Carlson 2014). Why are complex verb constructions involving motion verbs so common? Why are deictic motion verbs so frequently grammaticalized? My exploration of the semantic extension of 'go' in the case of the adversative construction suggests that it is not the simplicity of such verbs, but rather their complexity that makes them such good candidates for semantic extension.

The adversative construction provides suggestive, although not definitive, evidence in the debate over whether going motion verbs are really perspectival. While many analyses of deictic motion verbs posit a deictic meaning for both 'come' and 'go' (Fillmore 1997[1971], Barlew 2017), some accounts have challenged the idea that 'go' is deictic (Talmy 1973, Wilkins 1995). In these analy-

ses, 'go' simply entails motion, and the infelicity of using 'go' when there is an anchor available for 'come' stems from the existence of a more informative alternative. As I have shown, however, 'go' in the adversative construction retains a speaker-oriented meaning even though its motion component has been eroded, suggesting that 'go' is indeed perspectival.

The meaning of deictic motion verbs in even the most basic sentences is notoriously difficult to pin down, and new analyses of 'come' and 'go' are still being developed. Despite their complications, complex motion verb constructions can provide insight into the basic lexical meaning of deictic motion verbs.

#### 7.3 Conclusion

The study of complex motion verb constructions illuminates new directions for the study of deictic motion verbs and multi-verb constructions. I have shown that careful individuation of cases of pseudo-coordination and other complex motion verb constructions on the basis of semantic properties can lead to better explanations of their semantic and syntactic structures. In addition, the cross-linguistic variation in the meaning of such constructions provides insight into the kinds of strategies for event description combination found in natural language.

## **Appendix: 'Both' Modification**

The 'go get' construction and the andative/venitive construction demonstrate an interesting incompatibility with certain modifiers that are acceptable for ordinary predicate coordination constructions. As pointed out by Schmerling (1975), 'both' modification is not possible in the 'go get' construction.

- 142. Herman will both dance and sing.
- 143. \*Herman will both go get her.
- 144. Context: Herman passed away after being bedbound for several years. #Herman both went and died.

Similarly, 'respectively' cannot modify 'go get' constructions, even though it is grammatical with ordinary verbal coordination.

- 145. Ordinary coordination:
  - (a) Letty will sing and dance in the morning and the night.
  - (b) Letty will sing and dance in the morning and the night respectively.
- 146. 'Go get' construction:
  - (a) Letty will go sing in the morning and the night.
  - (b) #Letty will go sing in the morning and the night respectively.
- 147. Adversative construction:

Context: Letty gambles her money away with her poker buddies who play at her house.

- (a) Letty went and spent all her money this month and last month.
- (b) #Letty went and spent all her money this month and last month respectively.

While the speakers I consulted could not find an equivalent of 'respectively' in SLQZ, examples with ropta 'both' and agza 'also' suggest that only one event is available at the level of modification in SLQZ as well. The adverbial agza 'also' is encliticized to a verb to contrast with another verb. Although 149 shows that and ative and venitive forms of verbs are acceptable hosts

for agza, 150 was rejected, because there was no other action to provide a contrast, suggesting that the andative and venitive form expresses only one event.

- R-ied-zi=a lo.gyia chiru r-to=u=agza tapet.

  HAB-VEN-buy=1s at.market but HAB-sell=1s=also carpet

  'I come and buy at the market but I also sell carpets.'
- R-i-zi=a manzan chiru r-i-zi=u=agza nax.
  HAB-AND-buy=1s apple but HAB-AND-buy=1s=also chocolate
  'I go and buy apples but I also go and buy chocolate.
- \*R-ied-zi=u=agza

HAB-VEN-buy=1s=also

Intended: 'I come and I also buy.'

Comment: "It has to be two things."

Similarly, *ropta* 'both' can occur in sentences with two separate verbs, but not in sentences containing just a single andative or venitive construction.

- Maria ropta b-zi=ëng cafe chiru b-dauw=ëng manzan.

  Maria both PERF-buy=3s coffee and PERF-eat=3s apple

  'Maria both bought a coffee and ate an apple.'
- \*Maria ropta b-ied-zi teiby tapet.

  Maria both PERF-VEN-buy one carpet
  Intended: 'Maria both came and bought a carpet.'

  Comment: "There needs to be another action."

Perhaps such modifiers require the presence of two events, and are blocked by the fact that the events in each of these constructions are combined into one event by the level of modification. However, without a more precise theory of what such modifiers do, it is not clear why they are ungrammatical with pseudo-coordination constructions.

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