GO GET, COME SEE

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1 Introduction

- This talk is about the construction in (1), and what it has to tell us about English verbal inflection.
- a. Go get a coffeeb. Come see me again next week.
 - I'll call this construction the **Go-Verb Construction**. Its properties have been catalogued in Zwicky (1969); Shopen (1971); Carden and Pesetsky (1977); Pullum (1990); a summary of the properties pertinent for this discussion is given in §2.
- Why the Go-Verb construction is interesting: We're used to thinking of English verbal inflection as being a nice cascading series of **one-to-one dependencies**; each element determining the morphology on exactly one element further down, and we have frameworks that work very well for this: Affix Hopping (or morphological merger), Probe-Goal Agree relationships.
- (2) The cake should have been being served by now.
 - I argue (in §2) that the Go-Verb construction, in contrast to sentences like (2), instantiates a **one-to-many** relationship between morphology-determining and morphology-expressing heads, and that current models of English verbal inflection are inadequate to account for the particulars of the morphology of the Go-Verb construction.
 - I propose a different model of verbal morphology, based on Matushansky (2008)'s approach to Case Theory, in which heads assign features to their phrasal complements, and these features percolate downwards, potentially being expressed on multiple terminals within that complement.

Roadmap:

- 1. Properties of the Go-Verb Construction
- 2. Current theories of morphosyntax and the morphology of Go-Verb
- 3. A different approach to verbal morphology
- 4. How the new approach works for the Go-Verb Construction
- 5. Some other data
- 6. Conclusion

2 Properties of the Go-Verb Construction

- The Go-Verb construction, in which a motion verb (go or come) is immediately followed by a second verb, was earliest discussed in Zwicky (1969); Shopen (1971); Carden and Pesetsky (1977):
- (3) a. *imperative:* Come visit us next week.
 - b. *subjunctive:* Her supervisor demanded that she go buy a replacement.
 - c. to-infinitive: I want to go take a nap.
 - d. modal complement: Birds will come play in your birdbath.
 - Its most striking property involves a morphological restriction on its occurrence it can only occur in environments that license a **bare** or **uninflected** form of the verb, as in (3) and (4):

- (4) non-3rd-sg present: I/you/we/they go get the paper every morning.
 - The Go-Verb construction is impossible, however, with any overtly inflected verb form, including the 3rd-singular-present.¹
- (5) a. present 3rd-sg: *He/she goes gets the paper every morning. (also *go gets / *goes get)²
 - b. *past:* *The delivery person came left the package on the doorstep. (also *came leave / *come left)
 - c. *perfect:* *He has gone bought the newspaper already. (also *go bought / *gone buy)
 - d. *progressive:* *Susan is coming having lunch with us (also *come having / *coming have)
 - It's really the case that *both* verbs must be homophonous to their bare forms the construction is ungrammatical *throughout* the present tense with second-verb *be*, whose uninflected form is not homophonous to *any* of its present-tense forms:³
- a. I go *am/*be cheerful once a week at my grandmothers.
 b. Every weekend, we/you/they come *are/*be loud right outside at our favourite restaurant.
 - Furthermore, the Go-Verb construction is bad in the perfect even with the motion verb *come*, whose perfect participle is homophonous to its bare form (Carden and Pesetsky, 1977),⁴ as seen in (7). **But** when the second verb is *also* a verb whose perfect participle is exceptionally homophonous to its bare form, the perfect examples improve (reported in Pullum (1990), shown in (8)):
- (7) *Come* followed by a regular perfect participle:
 - a. *Alex has come knock on my door three times.
 - b. *Jacob has come bought a paper every day this week.
 - c. *Helen has come visited her grandmother only twice.
- (8) *Come* followed by a perfect participle that is homophonous to that verb's bare form:
 - a. Alex has come hit the pinata three times.
 - b. Jacob has come shut the door.
 - c. Helen has come put the vase on the stand.
 - We can divide the morphological restriction into two halves (following Pullum (1990)'s terminology):

The Inflection Condition: The Go-Verb construction is only possible in environments that license a bare form of the verb.

The Identity Condition: The Go-Verb construction requires both verbs to bear the *same* inflection.

- (i) a. Subject-Aux Inversion Does she go get the newspaper every morning?
 - b. Negation The delivery person didn't come leave the package on the doorstep.

¹This generalization is separately proposed in all of Zwicky (1969); Shopen (1971); Carden and Pesetsky (1977), and the judgments provided in this section conform to the judgments separately given in those paper. Note, however, that some English speakers accept some or all inflected forms in the Go-Verb construction. I am such a speaker, for example.

²The contrast between (4) and (5a) is really morphological, not a semantic restriction against third-singular subjects – Where Do-support is independently triggered (by negation, subject-aux inversion, etc), it uniformly 'rescues' the ungrammatical examples in (5).

 $^{^{3}}$ Zwicky (1969); Shopen (1971). Some speakers find that the examples with uninflected *be* improve. I ignore this variability here.

⁴The complete list of verbs with exceptional bare/perfect-participle homophony, as reported by Pullum, is: *bet, bid, burst, cast, come, cost, cut, fit, hit, hurt, let, put, quit, rid, run, set, shed, shut, slit, spit, split, spread, thrust, wed, wet.*

3 Current theories of morphosyntax and the morphology of Go-Verb

In this section: Broadly speaking, there are two current approaches to English verbal inflection: affix hopping (/morphological merger under adjacency), and a purely Agree-based approach. In this section, I take each in turn and show that they encounter problems with the morphological restrictions on the Go-Verb construction.

3.1 Affix hopping

- The attraction of affix hopping is that it expresses the strong intuition that English verbal affixes *start out* on the head that determines them, subsequently moving downward to appear in their surface position. (Chomsky, 1957; Halle and Marantz, 1993; Bobaljik, 1994; Lasnik, 1999)
- The mechanisms of affix hopping do not provide a way to derive the Identity Condition.
- **But** if we assume the Identity Condition, we can derive (almost all) the effects of the Inflection Condition.

Consider the tree in (9) (which ignores movement of the subject):

(9) I go buy a coffee (every morning)



- Because there is a single affix, it will only lower onto the motion verb (it won't reach the other verb).
- Because $go + \emptyset$ spells out as go, the result satisfies the Identity Condition

Were T past, however, we would have go + -ed, which would spell out was *went*. Buy would still spell out as a bare verb, though (no affixes lower onto it), and so the the result will *violate* the Identity Condition, and would correctly be ungrammatical. This gets the basic effect of the Inflection Condition.

Problems:

- The Identity Condition is one of the things in need of explanation.
- This predicts that bare verbs will always be possible as the second verb. But recall:
- (10) a. *I go be unpleasant whenever I'm unhappy.

b. *Alex has come eat the cake.

Conclusion: Affix hopping cannot account for the morphological facts of the Go-Verb construction.

3.2 Agree

- The theory discussed in this section is the fully lexicalist approach to verbal inflection from Chomsky (1995).⁵
- In this framework, verbs enter a derivation with full morphological inflection, but bearing uninterpretable features that must be checked by higher projections.
- (11) She laughed.
 - The Identity Condition is easily derived using Agree:
 - a. The lower verb in a Go-Verb construction will be inserted with uninterpretable features.
 - b. The next verb up (the motion verb) will be inserted with a set of *identical* uninterpretable features. Upon merger, it will probe the lower verb and Agree with its features
 - c. This Agree relation identifies (though it does not check) the uninterpretable features of the two verbs. They now contain two instances of a single set of (uninterpretable) features.
 - d. When a higher auxiliary is merged, it will probe and find the higher motion verb. By checking/valuing the features on that verb, it will simultaneously check/value the features of the lower verb.
- (12) I go buy a coffee



⁵I have uppermost in mind also the developments of this approach in Pesetsky and Torrego (2001, 2006, 2007)

It is the Inflection Condition that presents difficulty under this approach.

- Assume that go and come are tense tantum verbs, in a sense they can only be inserted into a derivation bearing particular syntactic features.
- Among the features available to *come* will be features appropriate to a perfect participle. Even if we give *go* and *come* defective paradigms, the paradigm for *come*, for example, will contain a perfect participle.
- If *come* can enter a derivation as a perfect participle, though, it should be able probe and Agree with *any* following perfect participle. This incorrectly predicts (13) to be grammatical:
- (13) *Alex has come knocked on my door three times.

Saying that go and come are featurally-restricted is therefore inadequate – they need to be able to enforce their own restrictions on the lower verb.

- This restriction, however, is a limitation to superficially bare forms. So we need a (syntactic) feature like [bare] that *go* and *come* are forced to check on a following verb, and we need to say that the past participles of verbs like *hit* and *come* bear this feature, while the past participles of most other English verbs don't.
- What is this feature [bare]? This is a very strange formal feature to propose but it must be a formal feature, in an Agree-based model, in order for the restriction to be forced by *go* or *come* on the next verb down.

Because it's not clear what this feature is, we should be dubious about any syntax that requires its presence.

4 The Proposal

- The approach to verbal inflection here is directly inspired by Matushansky (2008)'s version of Case Theory.
- Matushansky proposes that morphological case does not result from the valuing of abstract Case features in the course of ϕ -Agreement, but rather results from a local head-complement relationship, in which a head can assign features to its sister, features that are then inherited by all the daughters of that sister:



• The most interesting thing about this approach is not in the relationship proposed between heads and their complements, but in its predictions about feature distribution: it predicts that a single feature can be realized on multiple terminals (**Case spreading**), and that multiple features can be realized on a single terminal (**Case stacking**).

Suppose that verbal inflection works the same way.

That is, suppose that the dependencies of verbal inflection result from verbal heads assigning features to their complements which effect the eventual spell-out of lower verbs.

- For illustration, consider the sentence in (14) (as above, I ignore subject movement):
- (14) Alex will have eaten the cake.
 - a. EAT is merged lacking any features that would determine its eventual form.
 - b. HAVE, upon merger, assigns a bundle of features to its complement, including [Perfect]. These features end up on VP (sister to HAVE) and on the V head EAT.
 - c. WILL, upon merger, assigns no features to its complement. (it could equally well assign a [Infinitive] feature)
 - d. At Lexical insertion, all terminals are spelled out in a manner consistent with their feature composition.



- (15) Spell-out of verbs at the end of the derivation:
 - a. HAVE $\longrightarrow have$
 - b. EAT [Perfect] \longrightarrow eaten.
 - In a more complex example, multiple heads will be assigning features downward:
- (16) The cake will have been being eaten.
 - a. Again, we start with EAT. When passive BE is merged, it will assign the (morphological) feature [Passive] to its complement.
 - b. When progressive BE is merged, it assigns [Progressive] to its complement. This straightforwardly is inherited by passive BE, which will eventually be spelled out as progressive *being*.
 - (i) Is [Progressive] also inherited by EAT?
 - (ii) NO. For reasons that will become clear later, it will be important to control when a head allows feature percolation through it. For now, assume that feature-assigners *block* further feature percolation.
 - c. When HAVE is merged, it assigns [Perfect] downwards. This feature ends up on progressive [be], but no further down.
 - d. Modals, as per the above assumptions, assign no features in English (resulting in their complements being spelled out as bare/non-finite forms).
 - Final spell out:
 - a. $EAT[Passive] \longrightarrow eaten$
 - b. $BE[Progressive] \longrightarrow being$
 - c. $BE[Perfect] \longrightarrow been$
 - d. Have $\longrightarrow have$

5 Applying head-complement relations to Go-Verb

- This model of verbal morphology is like Affix-Hopping, but with the possiblity of realizing the morphology determined by a head on *multiple* terminals within its complement.
- The Go-Verb construction requires the following assumptions:
 - 1. GO and COME are merged without environment-specific features, just like any other verb. To account for their morphological limitations, we can again assume that they are tense-tantum verbs they are merged always bearing a feature that limits them to forms homophonous to their bare form. Call this [Infinitive].⁶
 - 2. In addition to entering the derivation *bearing* [Infinitive], they also assign this feature to their complement. This is exceptional behaviour other verbs do not express the feature they assign to their complement.
 - 3. Unlike other verbs, they **do not block** the percolation of a feature assigned to them by their complement (perhaps because they already bear a feature that's been assigned to their complement).

1.	+ 2. produce the Inflection Condition.	
3.	produces the Identity Condition .	

Recal: A (verbal) terminal that bears multiple features must be able to realize those features with a **single lexical item** – that is, there must be a cell in a paradigm that spans all those features.⁷

- Here's how this works:
- (17) Alex will have come hit the pinãta.



- (19) a. COME[Infinitive] [Perfect] $\longrightarrow come$ b. HIT[Infinitive] [Perfect] $\longrightarrow hit$
 - What happens if we replace the verb HIT with a verb like EAT?

⁶I actually think [Imperative] would be a better choice, but there isn't room here to argue for that.

⁷This assumes something about the organization of English paradigms – that speakers who accept (15) regard the homophony between infinitive and perfect *hit* as expressing a single form that serves two functions (rather than two accidentally homphonous paradigm entries). This point is made independently of any morphosyntactic theory by Zwicky (1969).

- We get the same derivation, up to the point of lexical insertion:
- (20) Alex will have come eaten the cake.



(22) a. $COME[Infinitive] [Perfect] \longrightarrow come$ b. $EAT[Infinitive] [Perfect] \longrightarrow ??? \leftarrow Crash$

6 Other Phenomena

If verbal inflection really works in the manner described above, we expect to find phenomena where we get verbal features spread out among multiple heads, without the quirky restrictions seen with the Go-Verb construction.

IDENTITY effects – multiple verbs with the same spell-out

We also expect phenomena where single verbs are subject to multiple featural requirements, without being spread out among multiple heads.

INFLECTION effects – verbs that are limited by having to spell out multiple features.

This section briefly surveys some possible instantiations of each.

6.1 Some Identity effects

6.2 Lardil

Lardil is an endangered non-Pama-Nyungan language from the Tangkic family of northern Australia. The data below are drawn from Richards (2009).

In this language, future morphology will spread throughout a VP, appearing on adjuncts and arguments as well as on the main Verb:

(23) Ngada nguthunguthu-r warnawu-thur dulnhuka-r beerr-uru-r nyith-urur I slowly-FUT cook-FUT month.fish-FUT ti-tree-INSTR-FUT fire-INSTR-FUT "I will slowly cook the month fish on a fire of ti-tree wood"

• This is soenthing that's expected to occur (at least sometimes) in a model where verbal inflectional features can be assigned to a whole VP, and are only prevented from being spelled out on all leaves of the tree by the existence of blockers, or by the lack of ways to spell out certain features on certain kinds of terminals (no way to spell out [FUT] on N, for example).

6.3 Marsalese

- The data in this section are drawn from Cardinaletti and Giusti (2001).
- Some southern Italian dialects, among them Marsalese, have a construction that looks very much like the Go-Verb construction: the motion verbs *iri* 'go', *viniri* 'come', *passari* 'come by', and *mannari* 'send' can be followed by a second verb bearing the same inflection. (The two verbs are separated by *u* (glossed as *to* by Cardinaletti & Giusti):
- In this construction, unlike in the English cases, both verbs can surface with a wide range of inflection.
- (24) a. Vaju a pigghiu u pani. (I) go-1SG to fetch-1SG the bread
 - b. Vai a pigghi u pani. (you) go-2sg to fetch-2sg the bread
 - c. Va a pigghia u pani. ((s)he) go-3sG to fetch-3sG the bread
 - d. Vannu a pigghianu u pani (they) go-3PL to fetch-3PL the bread
- (25) a. Va pigghia u pani go-IMP-2SG buy-IMP-2SG the bread

This Marsalese construction does have a morphological restriction, but it is limited to the first verb: the construction is possible only with verb forms for which *iri* takes the 'unmarked' verb stem va-, rather than the marked/irregular stem *i*-/*e*-.⁸ This stem-based restriction doesn't restrict the second verb, though, unlike in English.

6.4 SVCs with Concordant Tense

One of the characteristic properties of Serial Verb Constructions (SVCs) is supposed to be that, if the verbs in a series carry TAM morphology, all the verbs in that series carry the same morphology.

Examples of SVCs with this property appear below:⁹

- (26) Konda (Steever, 1988, 71–73)
 - vā-n-a sū-n-ap come-NONPAST-1PL.exc see-NONPAST-1PL.exc 'We will come and see'
- (27) Lango (Noonan, 1992, 211–12)
 ácwé áló rwót
 1sg-fat-HAB 1sg-exceed-HAB king
 'I am fatter than the kind' (lit. I-fat I-exceed king)

⁸ Veniri shows the same stem alternation. Passari doesn't show stem alternations, but shares the distributional restriction. ⁹I have these examples not from their original sources, but from Aikhenvald and Dixon (2007).

(28) Saramaccan (Byrne, 1990, 152)
a (bi) féfi dí wósu (bi) kabá he TENSE paint the house TENSE finish 'He had painted the house already.'

6.5 An Inflection Effect

A potential example can be found in English verbal agreement with coordinated subjects:

The following facts are reported in Pullum and Zwicky (1986):

- (29) a. Either they or I $\{*are/*am/*is\}$ going to have to go.
 - b. Either you or they are going to have to go.
 - c. Either they or I sing better than he does.

Pullum and Zwicky cast this as a restriction on the coordinated subject – it can only occur if both of its conjuncts could appear with that verb independently, but we could also see this as a case when a sentence is good just in case its verb is such that there is a cell of its paradigm that satisfies all of the features its assigned.

7 Conclusion

This talk has been about a construction in English that defies the usual approaches to English verbal inflection.

To deal with it, I've adopted a theory of feature percolation as it relates to case assignment, developed by Matushansky (2008), in which heads assign features to their entire complements, such that those features are expressed on every terminal of the complement (barring blockers).

I've also pointed to some phenomena from other languages that exhibit expected patterns, given this theory. These include Tense spreading in Lardil, a construction similar to Go-Verb in Marsalese, and multiple Tense expression in SVCs.

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