Microvariation in verbal rather

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Abstract

This paper uses survey results and interactive mapping tools to analyze correlations across different versions of the non-standard verbal use of the word rather, in particular with participial morphology, as in rathered. Across numerous possible instantiations of the construction, there appear to be in fact a quite limited number of grammars, which are generated by an implicational hierarchy of functional heads, along with the availability of a silent verb HAVE. The overall picture supports several broader conclusions. First, silent verbs can be licensed by head-moving to a modal head in the extended projection. This movement is freely available, but silence demands recoverability, which limits its application only to certain verbs, and certain uses/meanings of those verbs. Second, bare-infinitive-selecting verbs are nearly "closed class" because they have special syntactic properties that go beyond semantic or even syntactic selection: they must license the temporal verbal features of the embedded verb, or else provide a structural context for such licensing. Third, in addition to previously known configurations for building parasitic participle constructions, movement of a lower verb to a higher verb can extend the phase of the lower verb and lead to its silence. Fourth, the distribution of *rather* suggests that volitional meaning is not a primitive, but is constructed from smaller primitives. Finally, microvariation reveals a tight connection among logically distinct functional heads, suggesting that they are not acquired independently of each other, but interact in significant ways.

Keywords

verbal rather, modals, microvariation, dialect syntax, m-merger, verbhood, silent verbs, volition, reverse agree, parasitic participles, morphology, syntax

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1. Introduction

Verbal *rather* refers to cases where the word *rather* seems to have some properties of a verb, such as the examples shown below in (1).

- (1) a. I would have **rathered slept** in a bed because,
 - in all honesty, his lap was not very comfortable.b. I would have rathered dance with my friends to these songs
 - than watch the performers do it.¹
 - c. I would **rather him** call me by my first name than be called Mom.
 - d. I would **rather** (that) he call me by my first name.

In (1a–b) *rather* looks like a verb in that it takes the participle *-ed* ending; in (1c) *rather* looks like a verb in that it appears to license an embedded subject under ECM, and that it cannot be omitted; and in (1d) *rather* looks like a verb taking a CP complement, and it cannot be omitted.

The use of verbal *rather* is subject to substantial variation. Its syntax and the variation around it goes beyond simple lexical variation; this isn't a verbal form of "*soda* vs. *pop* vs. *coke*"; it's not simply a matter of an ordinary verb existing in some dialects and not others. In fact, its syntactic properties are of substantial interest. Here I name just a few.

1.1 Licensing of silent verbs

Wood (2013) shows that there is reason to think that verbal *rather* in some uses licenses a silent light verb HAVE. That is, the attested sentence in (2a) really has a silent verb HAVE as indicated in (2b).

(2) a. Would you rather break up with someone... or have them break up with you? [...] I would rather him break up with me.²

¹https://www.yelp.com/biz/the-awesome-80s-prom-new-york

²http://answers.yahoo.com/question/index?qid=20100721222936AAy3sbz

b. Would you rather break up with someone... or have them break up with you? [...] I would rather HAVE him break up with me.

The conditions that allow silent HAVE thus contribute to a broader picture of the licensing of silent elements, verbs in particular (van Riemsdijk 2002; Harves 2008; Harves and Kayne 2012; Harves and Myler 2014; Tyler and Wood 2019; Kayne 2009, 2011, 2014).

1.2 (Nearly) "closed class" kind of verb in the first place

If *rather* is a verb, it is a verb that (in some cases) takes a bare infinitive complement—with no *to*—at least for some speakers. This is very restricted in English. For ECM verbs, there is a small set of verbs, such as:

- (3) a. Causative verbs: *have*, *make*, *let*, but not **cause* or **force*
 - b. Perception verbs: *see*, *hear*, *feel*, but not **detect* or **sense*
 - c. *help* but not **assist*, or **aid*

For non-ECM verbs, there is a small set, such as:

- (4) a. *help* but not **assist* or **aid*
 - b. The auxiliary *dare*

Other auxiliaries (even auxiliary *need*) are different, in that they cannot take inflection or be embedded under *have*.

1.3 Parasitic participles

As seen in (1a), verbal *rather* constructions sometimes allow two participles with only one auxiliary *have*. This is (nearly) unique in English, to my knowledge, and for that reason alone, warrants further study. Moreover, this phenomenon is found in other varieties of Germanic, where it is known as a "parasitic participle" construction (Den Dikken and Hoekstra 1997):

(5)	Han har velat åkt	till Spanien.	
	he has wanted.PRF gone.PR	F to Spain	
	'He has wanted to go to Spain	ı.'	(Wiklund 2001:211) (Swedish)
(6)	Han hevði viljað lisið	bókina.	
	he had wanted.PRF read.P	RF book.the	
	'He would have wanted to rea	d the book.'	(Wiklund 2007:191) (Faroese)

Why doesn't English have parasitic participles more generally? The answer in Wurmbrand (2012b) is the following:

"A precondition for licensing [Parasitic Participles] is that the language allows constructions of the form AUX–MOD–V. Since these constructions are independently excluded in English (English modals can never be embedded), [Parasitic Participles] are not found in English." (Wurmbrand 2012b)

The prediction is that if English develops AUX–MOD–V constructions, parasitic participles become possible. Verbal *rather* appears to bear this out, if we understand *rather* to be an embedded modal. There is actually one other auxiliary that can take inflection and be embedded under auxiliary *have*, and that is *dare*.

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- (7) a. He dared not leave class early.
 - b. He didn't dare leave class early.
 - c. He wouldn't have dared leave class early.

The word order in (7a) shows that it is a modal (precedes negation, takes an infinitive complement without *to*), but in (7b), we see that it actually originates lower, and still takes the bare infinitive complement. (7c) shows that it can be embedded under yet another auxiliary, the perfect *have*. Even under *have* (or *do*), *dare* takes a bare infinitive complement, suggesting that it is still an auxiliary.

And in fact, consistent with Wurmbrand's prediction, parasitic participles are possible with *dare* as well, as illustrated by the following attested examples:

- (8) a. He wouldn't have **dared left** class early. (My judgment)
 - b. I don't think he would have **dared given** dad a hug six months ago,³
 - c. ... opening my eyes to things I wouldn't have **dared eaten** before⁴
 - d. ... and he would never have **dared left** a drink in her secret sanctum.⁵
 - e. I wouldn't have **dared left** Hallen at 4 months old, so I am feeling a twinge of guilt for leaving Hazel this early.⁶

Informal conversations with native speakers suggest that this parasitic participle construction with *dare* is widely accepted, but not at all universally. As far as I know, this phenomenon has not been researched before, and should be looked into further. I will, however, set aside *dare* for the time being, only noting that parasitic participle constructions do seem to be possible under the right conditions in English, but that they are rare, so verbal *rather* provides a rare opportunity to study them.

1.4 Restricted distribution

For many speakers, verbal rather is only possible in the context of another modal, usually would.⁷

- (9) a. I would rather them leave early.
 - b. I would {want / prefer} them to leave early.
- (10) a. * I generally rather them leave early.
 - b. I generally {want / prefer} them to leave early.
- (11) a. I would have rathered leave early.
 - b. I would have {wanted / prefered} them to leave early.
- (12) a. * In the past, I have always rathered leave early.
 - b. In the past, I have always {wanted / preferred} to leave early.

For such speakers, it shows that something special is going on. It is not as though *rather* is just another lexical verb meaning 'prefer'. This raises the question of what it means to "be a verb" in the first place.

³http://itre.cis.upenn.edu/~myl/languagelog/archives/004235.html

⁴http://itre.cis.upenn.edu/~myl/languagelog/archives/004235.html

⁵Dark Bites: A Short Story Collection By Sherrilyn Kenyon, retrieved on Google Books.

⁶https://www.dearnovemberdays.com/2017/06/26/spit-up-with-a-side-of-guilt/

⁷Some speakers allow *rather* to have a much wider distribution, and do not require a modal, a level of variation that I will set aside for now; see Wood (2013) for some discussion.

1.5 Microvariation

There is a lot of microvariation connected to each of the properties above. Thus, to the extent that those properties are interesting, verbal *rather* provides a way to refine our understanding of them. It also provides a chance to understand the dependence or independence of the microparameters responsible for this kind of variation. All of these properties show that verbal *rather* is not just a matter of lexical variation, where some speakers have a lexical verb *rather* which behaves like an otherwise ordinary verb. Instead, verbal *rather* has a rather unique set of properties that allow us to probe in a special way into the workings of several aspects of grammar. As a starting point, I will now turn to a discussion of the analysis of verbal *rather* proposed in Wood (2013).

2. Wood (2013)

As a starting point: assume that *rather* in its use as a volitional adverb occurs in the specifier of a volitional Modal head, Mod_{volition}, in the sense of Cinque (1999, 2006).



I take this configuration to be the basic starting point for verbal *rather*. Wood (2013) proposes two ways in which *rather* can start to act like a verb.

- (14) Verb-like properties of *rather*
 - a. Mod_{volition} licenses a silent verb HAVE.
 - b. Mod_{volition} assigns and/or receives verbal features.

In the first case, Mod_{volition} (and thus *rather*) may or may not 'be a verb' in some technical sense. In the second case, I argue, it must be. That is, we may call something a verb if it assigns or receives verbal features (in the specific sense below). In this way, verbhood is defined *configurationally*, not lexically.⁸

I assume that when Mod_{volition} assigns and/or receives verbal features, *rather* head-adjoins to Mod_{volition}. Diachronically, this looks like a case of spec-to-head reanalysis (van Gelderen 2004).

⁸This shift in thinking about verbhood is more than just terminological; the point is that independent of syntactic distribution, or the presence/absence of argument structure, we can identify a syntactically natural class of elements that assign and/or receive these features.



Beyond the two properties in (14), silent HAVE itself may assign and/or receive verbal features. Thus, we have at least five microparameters associated with verbal *rather*.

(16)	Head	Property		
Mod _{volition}		\pm licenses HAVE		
Mod _{volition}		\pm receive verbal features	\pm assign verbal features	
	HAVE	\pm receive verbal features	\pm assign verbal features	

However, Wood (2013) also proposes that Mod_{volition} doesn't technically "receive" verbal features at all. Verbal features of the relevant sort are a property of an inflectional functional head Asp. So really the parameters are (closer to):

(17)	Head	Property		
Mod _{volition}		\pm licenses HAVE		
Mod _{volition}		\pm combines with Asp	\pm assign verbal features	
	HAVE	\pm combines with Asp	\pm assign verbal features	

By "verbal features" I refer specifically to inflectional features like [Inf] and [Part], which determine whether a verb is realized as a bare infinitive or as a participle (Wurmbrand 2012a). For both HAVE and Mod_{volition}, the verbal features in question are [Inf]. So if a verb is [+Inf], it assigns the [Inf] feature to any lower head with an unvalued tense feature, notated as [uT:__]. Likewise, I will abbreviate a head H that can combine with Asp as H[+Asp], although this is really a statement about the combinatorial syntax rather than the feature content of that head.⁹ Thus, "fully" verbal *rather* in the absence of HAVE will have the following structure (omitting the subject):

 $^{^{9}}$ It could, for example, be thought of as a property of Asp rather than Mod_{volition}: Mod_{volition} is just on the list of elements that Asp may combine with.



(18) a. I would have rathered go to a small school.

The feature [Part] will be assigned to the higher Asp, and [Inf] will be assigned to the lower Asp. Parasitic participles arise if two heads project Asp, but the higher one does not assign any verbal feature. So if Mod_{volition} is not [+Inf], but projects Asp, the result will be:





In this case, the feature [Part] will be assigned to both Asp heads.

Now consider silent HAVE. I assume following Myler (2016) that the English verb *have* is the realization of a little v head in the context of a transitive Voice head. With ECM *have*, the vP embeds a VoiceP.¹⁰ I assume that this v also generally has a [+Inf] feature, and that Asp combines with VoiceP (see Johnson 2014:35ff. for support from Appalachian English).¹¹

(i) They had glasses **to** break (on them).

¹⁰Although in certain experiencer *have* constructions, according to Myler, v actually takes a FreeP complement, where Free is an Appl-like head that introduces experiencer semantics and takes a VoiceP complement.

¹¹Specifically, Johnson (2014:35ff.) discusses the fact that Appalachian English allows infinitival *to* in experiencer/causative *have* sentences:

Johnson (2014) argues that this *realizes* the Asp head, which is not pronounced in other varieties of English. Perhaps the verb head-moves to Asp in these other varieties, but not in Appalachian English.



Here, transitive Voice licenses the embedded subject. The lower Asp head is assigned [Inf] by v (=*have*), while the higher Asp will be valued [Past] by T. Naturally, this structure can be embedded under verbal *rather*, generating either of the following:

- (21) I would have rathered have him go to a small school.
- (22) I would have rathered had him go to a small school.

However, this *have*[+Inf] can also be silent. I proposed that this is when *have* raises by head-movement to Mod_{volition}.

(23) a. I would have rathered him go to a small school.



Here, even though *have* is silent, it may assign the [+Inf] feature to the lowest AspP. Note that I will not always show the complex head structure in what follows, but I assume that it holds when silent HAVE is present. We will discuss this movement, and why "have" is special, further below. First, consider one more aspect of HAVE that is special: unlike its overt counterpart, it may lack

the [+Inf] feature. Without the [+Inf] feature, if Mod_{volition} also lacks the [+Inf] feature, Perf may assign [+Part] to all three Asp heads.

(24) a. I would have rathered him gone to a small school.



3. The present study

The present study is based on a recent survey of the Yale Grammatical Diversity Project (YGDP) (Zanuttini et al. 2018). Like other YGDP surveys, this was administered on Qualtrics through Amazon Mechanical Turk, entirely online. In this survey, speakers judged the following sentences:

- (25) a. I would have **rathered go** to a small school.
 - b. I would have rathered sleep on the couch.
 - c. We would have rathered stay in bed.
- (26) a. I would have **rathered gone** to a small school.
 - b. I would have rathered slept on the couch.
 - c. We would have rathered stayed in bed.
- (27) a. I would have **rathered him** go to a small school.
 - b. I would have rathered him sleep on the couch.
 - c. We would have rathered him stay in bed.
- (28) a. I would have **rathered him** gone to a small school.
 - b. I would have rathered him slept on the couch.
 - c. We would have rathered him stayed in bed.

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- (29) a. I would have **rather go** to a small school.
 - b. I would have rather sleep on the couch.
 - c. We would have rather stay in bed.
- (30) a. I would have **rather gone** to a small school.
 - b. I would have rather slept on the couch.
 - c. We would have rather stayed in bed.
- (31) a. I would have **rather him go** to a small school.
 - b. I would have rather him sleep on the couch.
 - c. We would have rather him stay in bed.
- (32) a. I would have **rather him gone** to a small school.
 - b. I would have rather him slept on the couch.
 - c. We would have rather him stayed in bed.

For each speaker, I calculated their median judgment of the three sentences for each construction. So if we say a speaker found a sentence "acceptable", it means that they judged at least two sentences of the three sentences to be a 4 or a 5 (on a scale of 1–5). If we say a speaker rejects a sentence, it means they judged at least two of the three sentences as a 2 or 1. The discussion below will be based entirely around the (a) sentences as representative of their class. Thus, the microvariation studied in this survey revolves entirely around the eight constructions represented by the following eight sentences:

- (33) a. I would have rathered go to a small school.b. I would have rathered gone to a small school.
 - c. I would have rathered him go to a small school.
 - d. I would have rathered him gone to a small school.
- (34) a. I would have rather go to a small school.
 - b. I would have rather gone to a small school.
 - c. I would have rather him go to a small school.
 - d. I would have rather him gone to a small school.

The results were imported to the YGDP mapping tool, so that the distribution of different grammatical systems and correlations could be studied. The full distribution of 578 participants (who passed the controls) is shown here in Figure 1.

4. Microvariation and the parameter space

To review, there are basically five parameters doing the work to derive the constructions above:

(35)	Head	Property		
Mod _{volition}		\pm licenses HAVE		
Modvolition		\pm combines with Asp	\pm assign infinitive	
	HAVE	\pm combines with Asp	\pm assign infinitive	



Figure 1. Full distribution

Note that " \pm " is not being used in a technical sense above. It can be read as "has (=+) or lacks (=-)" the property in question. Though the parameters are distinct we must consider whether these parameters independent of each other, or if there dependencies among them. Certain parametric combinations may be more attested in the grammars of individual speakers than others. In principle, we could imagine that they are independent. Each setting corresponds to an independent functional item that a speaker could possess. There would thus be eight varieties of Mod_{volition} and four varieties of HAVE.

(36)	a.	$Mod_{volition} \{[+HAVE], [+Asp], [+Inf]\}$	e.	Mod _{volition} {[+Asp],[+Inf]}
	b.	Mod _{volition} {[+HAVE],[+Asp]}	f.	Mod _{volition} {[+Asp]}
	c.	$Mod_{volition} \{[+HAVE], [+Inf]\}$	g.	Mod _{volition} {[+Inf]}
	d.	$Mod_{volition} \{[+HAVE]\}$	h.	Mod _{volition} { }
(37)	a.	HAVE {[+Asp],[+Inf]}	c.	HAVE {[+Inf]}
	b.	HAVE {[+Asp]}	d.	HAVE { }

For now, we set aside the fact that this system of heads cannot operate independently. They are active when *rather* is in SpecMod_{volition}P, but not necessarily with just anything there (e.g. *preferably*; though see below on *sooner*). So some of the Mod_{volition} heads must be sensitive to what is in their specifier. But here again we must ask if they are independent or bundled. In fact, we find at least three generalizations, leading me to propose the four grammars in (39).

(38) Generalizations

- A grammar with Mod_{volition}[+Inf] has Mod_{volition}[+Asp]
- A grammar with Mod_{volition}[+Asp] has Mod_{volition}[+HAVE].
- A grammar with any HAVE has all of them.

- (39) Sets of grammars
 - a. **Grammar A**: HAVE{([+Asp]([+Inf]))}, Mod_{volition}{([+HAVE])}
 - b. **Grammar B**: HAVE{([+Asp]([+Inf]))}, Mod_{volition}{([+HAVE]),([+Asp])}
 - c. Grammar C: $HAVE\{([+Asp]([+Inf]))\}, Mod_{volition}\{([+HAVE]), ([+Asp]([+Inf]))\}\}$
 - d. Mod_{volition}{}

$\textbf{4.1 Mod}_{volition}[\textbf{+Inf}] \rightarrow \textbf{Mod}_{volition}[\textbf{+Asp}]$

We can diagnose the presence of Mod_{volition}[+Inf] whenever *rather* takes a bare infinitive complement *outside* and ECM setting, as in (40) below.

- (40) a. I would have rathered go to a small school.
 - b. I would have rather go to a small school.

If speakers' grammar allowed Mod_{volition}[+Inf] without also having Mod_{volition}[+Asp], we would expect that all forms of *rathered* would be rejected, and that (40b) would be judged acceptable. he map in (41) shows the speakers who accepted (40b). Of them, however, very few rejected all forms of *rathered*, as shown in (42).

(41) \checkmark I would have rather go to a small school.





(42) \checkmark I would have rather go to a small school.

Even among these speakers, few fully accepted (40b) (judging it as a 5), as shown in (43); among the speakers in (43), still fewer fully rejected all *rathered* (as a 1), as shown in (44).

(43) $\checkmark \checkmark \checkmark$ I would have rather go to a small school.



* All rathered



(44) $\checkmark \checkmark$ I would have rather go to a small school.

** All rathered

At the very least, there is a very strong tendency for speakers who accept (40b) to not reject *rathered*. Assuming this reflects their grammars, this means that speakers who have Mod_{volition}[+Inf] also have Mod_{volition}[+Asp]. Thus, more speakers accept (40a) than (40b).



(45) \checkmark I would have rathered go to a small school.

I tentatively propose that this is because the [+Inf] feature cannot occur in the absence of [+Asp], since if [+Inf] occurred without [+Asp], it would not be embeddable under further verbal structure. Rather, it would create a root infinitive, which is perhaps deviant for a variety of reasons. This raises the question of why a number of speakers in my survey actually accepted *I would have*

rather go to a small school. I propose that the morphological form is misleading, and that either *rather* or the verb is actually in a participial form.

Christina Tortora (p.c.) stresses to me that apparently "bare" forms used as participles are far more widespread than we generally assume. See, for example, Johnson (2014:93ff.), in which forms such as the following are discussed:

(46) Appalachian English (Johnson 2014:94)

a.	We eat cornbread	and soup	beans every	Thursday.	(Present)
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- b. We eat combread and soupbeans two hours ago. (Past)
- c. We had eat all the combread and soupbeans before y'all got here. (Participle)

This would predict that many speakers who accept (40b) would reject *I* would have rather be there.¹²

In sum, we have evidence that speakers who allow $Mod_{volition}$ to assign [Inf] generally also allow $Mod_{volition}$ to project Asp. I have proposed that this is because the [Inf] feature can only be assigned by something that projects Asp, within a given derivation. If this is right, it entails that some speakers project Asp syntactically without Asp being realized as a distinct, overt morphological form.

4.2 $Mod_{volition}$ [+Asp] $\rightarrow Mod_{volition}$ [+HAVE]

We diagnose the presence of Mod_{volition}[+HAVE] in a speaker's grammar when that speaker allows the ECM "use" of verbal *rather*. (47) shows the participants who rejected all such uses.





 12 On the assumption that *be* is one of the very few verbs that is not used as a participle. For speakers who use *rather* itself as a participial form, it is not clear what predictions we make, although see the next subsection for one possibility.

We diagnose the presence of Mod_{volition}[+Asp] in a speaker's grammar when that speaker allows the participle *rathered*. The maps in (48)–(49) show the participants who accepted the two non-ECM uses of the participle *rathered*.



(48) \checkmark I would have rathered go to a small school

(49) \checkmark I would have rathered gone to a small school



If a speaker's grammar allows Mod_{volition}[+Asp] without allowing Mod_{volition}[+HAVE], then some form of *rathered* should be acceptable, but all ECM uses unacceptable. The next maps in

(50) and (51) show the participants who accepted one of the two non-ECM uses of the participle *rathered*, but rejected all ECM uses of verbal *rather*.

(50) \checkmark I would have rathered go to a small school.

* I would have rather(ed) him go(ne) to a small school.



(51) ✓ I would have rathered gone to a small school.
* I would have rather(ed) him go(ne) to a small school.

As we can see, very few participants had this judgment pattern. Moreover, neither of the participants in (50) fully rejected all ECM (as a 1) and only two of the participants in (51) fully rejected all ECM (as a 1). Thus, we see that by and large, speakers who have $Mod_{volition}[+Asp]$ (accept *rathered*) also have $Mod_{volition}[+HAVE]$ (accept ECM).¹³ If this is true, it bears on the question in the previous section as well, where I proposed that speakers who accept *I would have rather go*... have a participle in the structure not reflected in the morphology. If so, we predict that these speakers, too, accept ECM uses: and this turns out to be generally true. In (52) we see that almost no one who accepted *I would have rather go*... rejects the ECM uses of *rather*.

(52) \checkmark I would have rather go to a small school.

* I would have rather(ed) him go(ne) to a small school.

In the context of the present analysis, the correlations established so far indicate that as soon as Mod_{volition} projects Asp (i.e., becomes a verb), silent HAVE is immediately available. Why is this the case? What is the connection between these two properties? The answer, I propose, comes from a combination of the syntactic combinatorics and the licensing of silent elements. Suppose that Mod_{volition} takes an AspP complement in all verbal *rather* cases embedding a verb phrase.

go(ne) to a small school

To say that Mod_{volition} "is" [+Asp] is to say that it projects AspP, which is to say that Mod_{volition}P combines with an Asp head and hence that the grammar allows Merge(Mod_{volition},Asp). Without

¹³As for the exceptions, it is hard to say much when the numbers are so small, but we might speculate, based on some anecdotal evidence, that some speakers judge the ECM cases as degraded because they prefer finite CP complements, which were not considered in this study.

saying any more, we expect that the head of the AspP complement can head-move to Mod_{volition}. Before the higher Asp head merges, Merge(Mod_{volition},Asp) can apply to the lower Asp head. This, in principle, means that the lexical verb (which raises to Asp) could raise to Mod_{volition}, forming a complex head such as the following:

Now suppose that if Asp adjoins to $Mod_{volition}$, it cannot be pronounced. There are several possible explanations for this. Perhaps the generalized doubly-filled COMP filter (when *rather* is in SpecMod_{volition}P). Perhaps a PF constraint against multiple prosodic words within a single complex X-head. Perhaps it is trapped in a "phasal blindspot" where spellout cannot see it (Kayne 2006). Perhaps it is not linearizable when *rather* is already adjoined to Mod_{volition}. Whatever the reason, we say that if Asp raises to Mod_{volition}, any verb that raised to Asp cannot be pronounced. As far as we can tell, however, this result is generally ungrammatical: nothing in the syntax or semantics suggests that lexical verbs can generally be non-overt with verbal *rather*: possibly just *have*.

I suggest that the reason only "have" can do this likely due to some notion of recoverability. For a verb to be silent, it must be possible to recover from surrounding structure what verb it is. "Have" is special in this sense: it is generally considered to be a meaning component of volition, and it is frequently proposed that transitive "want" contains a silent "have" in its complement (Harves 2008). As a bonus, we might also explain why ECM "have" gets only the experiencer reading, and not the causative or engineer reading: only stative uses of "have" are possible, and the experiencer reading is helped along by the fact that Mod_{volition} already has an experiencer meaning. If "have" is overt, the engineer or causer reading becomes available, along with any other lexical verb.

In sum, as soon as Mod_{volition} can combine with Asp, the head of its AspP complement can raise to it. This, however, leads to the embedded verb being silent, which is only acceptable when its content is recoverable. In the context of volition, only *have* is recoverable. This is consistent with proposals according to which transitive verbs of volition contain a silent "have" in their meaning generally: *rather* is essentially a verb of volition, and behaves like other verbs of volition in this respect.

4.3 If you HAVE one you HAVE all the HAVEs

Recall that there are four syntactically distinct varieties of silent HAVE, shown in (57).

(57)	a.	HAVE {[+Asp],[+Inf]}	c.	HAVE {[+Inf]}
	b.	HAVE {[+Asp]}	d.	HAVE { }

Since HAVE is silent, we cannot directly detect the presence or absence of the [+Asp] property. We cannot, for example, detect whether it is a silent infinitive HAVE or a silent participle HAD. We can, however, tell whether [+Inf] is present or not, on the basis of the morphosyntactic properties of its complement. [+Inf] is unambiguously missing in sentences like (58); if it were present, the embedded verb would have to be *go*, not *gone*.

- (58) HAVE without [+Inf]
 - a. I would have rathered HAD him gone to a small school.
 - b. I would have rather HAD him gone to a small school.

(59) shows the people who accepted the sentences in (58); (60) shows the people who rejected them. The people who reject (58) would seem to lack HAVE{} (with no [+Inf])—which might make sense, given that overt *have* always has the [+Inf] feature.

(59) \checkmark I would have rather(ed) HAD him gone to a small school.

(60) * I would have rather(ed) HAD him gone to a small school.

At first glance, these maps seem to indicate that a lot of speakers lack HAVE{}. However, these maps are misleading. To know that these speakers really lack HAVE{}, we have to know that they have silent HAVE in the first place. That is, in order for participants to "count" as speakers who lack HAVE{} in a meaningful sense, they have to accept one of the ECM sentences in (61).

- (61) HAVE without [+Inf]
 - a. I would have rathered HAD/HAVE him **go** to a small school.
 - b. I would have rather HAD him **go** to a small school.

This requirement reduces the number of speakers substantially. When we restrict our search to speakers who accept one of these sentences, but reject (58), we find very few speakers indeed, as shown in (62)–(63).

(62) * I would have rather(ed) HAD him **gone** to a small school.

(63) * I would have rather(ed) HAD him gone to a small school.
 ✓ I would have rather HAD/HAVE him go to a small school.

Even among these speakers, there is mostly some uncertainty in the judgments. Very few of them "fully" reject (as 1) (58), and "fully" accept (as 5) (61). This is shown in (64) and (69).

- (64) ** I would have rather(ed) HAD him gone to a small school.
 - $\checkmark \checkmark$ I would have rathered HAD/HAVE him **go** to a small school.

(65) ** I would have rather(ed) HAD him gone to a small school.

 $\checkmark \checkmark$ I would have rather HAD/HAVE him **go** to a small school.

For now, we will say that most participants who accepted any ECM sentences allowed HAVE{} (with no [+Inf]). We will return to the exceptions below. Turning to HAVE[+Inf], we can see that [+Inf] is unambiguously present in sentences like (66); if it weren't present, the embedded verb would have to be *gone*, not *go* (assuming *...*would have rather go*...).

(66) HAVE with [+Inf]

I would have rather HAD him go to a small school.

Sentences like (67) are ambiguous; the infinitive could come from Mod_{volition} or from HAVE.

(67) HAVE ambiguous, may or may not have [+Inf]

I would have rathered HAVE/HAD him go to a small school.

However, for speakers who do not allow Mod_{volition} to assign [+Inf], (67) unambiguously involves HAVE[+Inf]. (68) shows the speakers who accepted both ECM sentences with a bare infinitive; (69) shows the speakers who rejected them.

- (68) \checkmark I would have rather HAD him go to a small school.
 - \checkmark I would have rathered HAVE/HAD him go to a small school.

(69) * I would have rather HAD him go to a small school.

Once again, we need to look at the subset of (69) that accepts at least some ECM sentence. When we do this, in (70) and (71), we find that among these speakers, only two people "fully" accepted (as a 5) the ECM sentence, and those two speakers did not "fully" reject (as a 1) the starred sentences. For now, we will say that most participants who accepted any ECM sentences allowed HAVE[+Inf]. Once again, we will return to the exceptions below. Combined with the generalization from above, it appears that most speakers either allow both HAVE{} and HAVE[+Inf], or they allow neither. This is striking, especially in that we do not (to my knowledge) see overt ECM *have* without [+Inf].

- (70) * I would have rather(ed) HAVE/HAD him go to a small school.
 - \checkmark I would have rathered HAD him gone to a small school.

(71) * I would have rather(ed) HAD him go to a small school.

 \checkmark I would have rather HAD him gone to a small school.

Why is it that once it is possible to license HAVE, all of the subvarieties of HAVE are available, even those that are not available with overt *have*? We can start with the following observation:

(72) "Have" can lack the [+Inf] feature only when it is silent.

Given what we said above, this can be restated as follows:

(73) "Have" can lack the [+Inf] feature only when it raises to Mod_{volition}.

But why? Perhaps without a +Inf feature, is defective in some way, and must incorporate to be licensed? This seems unlikely: overt verbs lack this feature cross-linguistically without any problem.

It has been claimed that the "parasitic" property (in the present context, this is understood as a verb lacking [+Inf]) is a feature of restructuring constructions. Suppose that lacking [+Inf] isn't enough: the higher and lower verb must somehow be in the same phase domain in order to be valued by the same head. By head-moving to Mod_{volition}, the phase of HAVE is extended (Den Dikken 2006; Wood and Sigurðsson 2014). Without such movement, the higher Perf head would arguably be too far away to value the lower Asp. Wurmbrand (2015) in fact proposes that a special restructuring Voice head head-raises up to the higher v. This puts the lower VoiceP in the higher VoiceP's domain, and forces a control-like relation between the two predicates. My tentative proposal is that overt *have* could perfectly well lack the [+Inf] feature, except that if it did, the lower predicate would not have its verbal feature valued. If overt *have* could occur with Wurmbrand's restructuring Voice, it would be fine—but English does not generally use this option. Therefore, instead, the whole lower verb has to raise, leading to its silence.

In sum speakers have all the HAVEs because from a grammatical standpoint, they have all the overt *haves* too. However, the "have" without the [+Inf] feature is only usable if the phase is extended, which requires head-movement, which causes "have" to be silent. The consequence is that "have" without the [+Inf] feature is only possible when "have" is silent.

5. A note on *sooner*

An interesting point of variation with verbal rather is the use of sooner in sentences like:

- (74) a. I'd **sooner them** make sure it's perfect than release buggy software.¹⁴
 - b. I'd **sooner them police** the Apps better than make it a free for all.¹⁵
 - c. Nothing will compensate me for losing this house. I'd **sooner them keep** the money. It's my house.¹⁶

These clearly resemble the ECM uses of *rather*, and have the same kind of "experiencer *have*" interpretation. However, as far as I know, *sooner* never takes verbal morphology:¹⁷

(75) * I would have soonered {go / gone} to a small school.

This suggests that *sooner* can occupy SpecMod_{volition}P, and allow HAVE to head-move to Mod_{volition}. However, *sooner* cannot head-adjoin to Mod_{volition}, and so Mod_{volition} cannot project Asp. This also clarifies why the correlation with Asp is not bi-directional: Mod_{volition} can project Asp something can adjoin to it, and once this is possible, Asp can raise to Mod_{volition}. But just because something can raise to Mod_{volition} doesn't mean Mod_{volition} can project Asp, because the head adjunction is a crucial part of the process.

¹⁴http://forums.crackberry.com/news-rumors-f40/rim-now-has-80-million-subscribers-up-2-million-last-quarter-746652/ index4.html

¹⁵http://forums.crackberry.com/native-blackberry-os-apps-f152/rim-possibly-others-not-policing-their-app-stores-enough-589084/ index2.html

¹⁶http://streetfightersproject.wordpress.com/multimedia/photofilms/a-kick-in-the-bricks/

¹⁷Although I did find one attested example, online, from a person self-described as a 50-64 year old woman from Brentwood (CA?).

⁽i) They offered us a free dinner but did not include any drinks — the we would have soonered that we got the room we paid for as our supplement was more than the free dinner.

6. A note on the modal requirement

So far, I have said nothing about why the modal is necessary. In fact, I do not have much to say at this time, except that it can't be direct selection, because the modal requirement holds past the Perf head, as can be seen in (76–79).

- (76) a. I would rather them leave early.
 - b. I would {want / prefer} them to leave early.
- (77) a. * I generally rather them leave early.
 - b. I generally {want / prefer} them to leave early.
- (78) a. I would have rathered leave early.
 - b. I would have {wanted / prefered} them to leave early.
- (79) a. * In the past, I have always rathered leave early.
 - b. In the past, I have always {wanted / preferred} to leave early.

The modal is not always would, though it usually is, and it is almost never a deontic modal.

- (80) a. (?) I might rather go to a small school.
 - b. ?? I must rather go to a small school.
 - c. * I should rather go to a small school.

I would like to propose that the modal has some function in constructing the volitional meaning in the first place. To illustrate, consider how verbs like *like* or *love* have experiencer meanings in the present, past, and present/past perfect:

- (81) a. I love to take long walks.
 - b. I like to take long walks.
- (82) a. I loved to take long walks.
 - b. I liked to take long walks.
- (83) a. I had loved to take long walks.
 - b. I had liked to take long walks.
- (84) a. I have loved to take long walks.
 - b. I have liked to take long walks.

With a modal like would, however, the meaning can come much closer to 'want':

- (85) a. I would like to go for a run, even though I do not like to run.
 - b. I would love to eat healthy food, but I just don't love to eat healthy food.

Perhaps Mod_{volition} is not a primitive on its own, but is constructed from at least two modal heads. This would entail that other volitional auxiliaries, cross-linguistically, might be syntactically more complex than they appear. It might also explain what happened to English *will* over time: part of the complex structure was lost, leaving a future modal auxiliary where a volitional auxiliary once was.

7. Further microvariation

Based on patterns of judgments for the eight sentences in (86)–(87), we have seen evidence for three broad generalizations, which are stated in (88).

- (86) a. I would have rathered go to a small school.
 - b. I would have rathered gone to a small school.

- c. I would have rathered him go to a small school.
- d. I would have rathered him gone to a small school.
- (87) a. I would have rather go to a small school.
 - b. I would have rather gone to a small school.
 - c. I would have rather him go to a small school.
 - d. I would have rather him gone to a small school.
- (88) Generalizations
 - A grammar with Mod_{volition}[+Inf] has Mod_{volition}[+Asp]
 - A grammar with Mod_{volition}[+Asp] has Mod_{volition}[+HAVE].
 - A grammar with any HAVE has all of them.

Based on the functional heads in (89)–(90), it was proposed that these generalizations motivated the sets of grammars in (91), which is an abbreviation for the "sets of heads" in (92)–(94).

(89)	a.	Mod _{volition} {[+HAV	VE],[+Asp],[+Inf]}	e.	Mod _{volition} {[+Asp],[+Inf]}
	b.	Mod _{volition} {[+HA	VE],[+Asp]}	f.	Mod _{volition} {[+Asp]}
	c.	Mod _{volition} {[+HA	VE],[+Inf]}	g.	Mod _{volition} {[+Inf]}
	d.	Mod _{volition} {[+HA	VE]}	h.	Mod _{volition} {}
(90)	a.	HAVE {[+Asp],[+	-Inf]}	c.	HAVE $\{[+Inf]\}$
	b.	Have ${[+Asp]}$		d.	HAVE { }
(91)	Sets c	of grammars (abbrev	viated)		
	a.	Grammar A: HAV	VE{([+Asp]([+Inf]))}	, Mod	l _{volition} {([+HAVE])}
	b.	Grammar B: HAV	/E{([+Asp]([+Inf]))}	, Mod	$volition \{([+HAVE]), ([+Asp])\}$
	c.	Grammar C: HAV	$VE\{([+Asp]([+Inf]))\}$, Mod	$l_{volition} \{([+HAVE]), ([+Asp]([+Inf]))\}$
	d.	Mod _{volition} {}			
(92)	Gran	nmar A			
	Mod	l _{volition} { }			
	Moc	l _{volition} {[+HAVE]}			
	HAV	E{}	HAVE{[+ASP]}		HAVE{[ASp],[+III]}
(93)	Gran	nmar B		_	
	Moc	l _{volition} { }	Mod _{volition} {[+Asp]	} [11 A X	7E]]
	HAV	<pre>Prolition {[+HAVE]}</pre>	$HAVE\{[+Asp]\}$,[+HAV	HAVE{[Asp],[+Inf]}
(94)	Gran	ımar C			
()+)	Mod	l _{volition} { }	Mod _{volition} {[+Asp]	}	Mod _{volition} {[+Asp],[+Inf]}
	Moc	l _{volition} {[+HAVE]}	Mod _{volition} {[+Asp],	,[+HA\	VE]} Mod _{volition} {[+Asp],[+Inf],[+HAVE]}
	HAV	YE{ }	HAVE{[+Asp]}		HAVE{[Asp],[+Inf]}

However, we have also seen some exceptions to these, and there is further in fact microvariation beyond this. Let us take a brief look at where in the system this kind of variation might reside.

7.1 What kind of "have'?

So far we have focused on ECM *have* with a bare infinitive complement. There is further variation in other "kinds" of *have* (my own judgments below).

- (95) a. I would rather HAVE him arrested.
 - b. I would rather HAVE him in jail.
 - c. ? I would rather HAVE a puppy.
 - d. ?? I would rather HAVE a conversation.
 - e. ?* I would rather HAVE a good time.
 - f. * I would rather HAVE to scrub the floor.

This variation must connect to the licensing of silent HAVE. There a few possibilities for where this variation might fit into the current system:

- Speakers might have different structures for *have*, with only some of them feeding the appropriate head movement.
- Speakers might have different "identification" requirements on silent HAVE.
- Movement to Mod_{volition} might be sensitive to the feature content of HAVE.

These possibilities also connect to the issues discussed above. Recall that the generalization that speakers allowing HAVE allow all varieties of HAVE was not quite absolute. Speakers who seem to lack HAVE{} may lack HAVE{} entirely, since overt ECM *have* always has the [+Inf] feature. Still, it is unusual, since overt *have* in general (for example, possessive *have*) doesn't have to have a [+Inf] feature. So the grammar would have to specify specifically that the *have* that takes an AspP complement must have a [+Inf] feature. Perhaps this is why it is such a marked option, if it's an option at all. Speakers who seem to lack HAVE[+Inf] are more challenging—perhaps there is some reason that only a defective HAVE can move to Mod_{volition}, or there is some preference to pronounce HAVE[+Inf]. Still, speakers with this pattern of judgments are rare, so it is not clear how much we should modify our basic assumptions to account for them.

7.2 Variation in the modal requirement

As mentioned above, some speakers do not require a modal; for them *rather* may be closer to an ordinary verb. Still, at least some of them also except some of the structures here (e.g. parasitic participles), so this might be worth looking at more closely. Do we find parasitic past tense marking, for example? Moreover, speakers vary in terms of the range of modals that may license verbal *rather*—and this needs to be better understood.

7.3 Adjunction to Mod_{volition}

All of the above is stated in terms of the functional head Mod_{volition}, not *rather* itself. The claim is that for Mod_{volition} to act like a verb—to project Asp—something must be adjoined to it (perhaps to be able to bear the Asp morpheme). Notice, for example, that one could be a "Grammar A" with *sooner* but a "Grammar C" with *rather*. One could imagine that *rather* could be sensitive to the feature content of the Mod_{volition} head it adjoins to. For example, one could imagine that *rather* may only adjoin to Mod_{volition} {[+Asp]}, but not to Mod_{volition} {[+Asp],[+HAVE]}. A speaker with such a system would accept *rathered*, accept ECM, but would not accept *rathered* with ECM.

In this case, only 3 speakers in our sample have this pattern of judgments, so it is not clear if it is a real reflection of their grammar. We could imagine the converse: *rather* may only adjoin to Mod_{volition}{[+Asp],[+HAVE]}, but not to Mod_{volition}{[+Asp]}. A speaker with such a system would accept *rathered*, accept ECM, but would only accept *rathered* with ECM. In this case, at least 13 speakers in our sample have this pattern of judgments. It is worth considering what this means for the account of HAVE.

This leads us to Wood's (2013) "Grammar C", reflecting my own judgments, which were as follows:

- (96) a. I would have rathered go to a small school.
 - b. I would have rathered gone to a small school.
 - c. I would have rathered him go to a small school.
 - d. I would have rathered him gone to a small school.
- (97) a. * I would have rather go to a small school.
 - b. * I would have rather gone to a small school.
 - c. * I would have rather him go to a small school.
 - d. * I would have rather him gone to a small school.

The survey data did not provide support for the existence of this grammar; only two participants shared my judgments. Part of the problem might be (97b), which is in fact possible me, but only under a sharply different reading, meaning 'instead'. This reading can be brought out with the use of a nonvolitional subject, as in:

- (98) a. The kids' books would rather have been placed on a more accessible shelf.
 - b. The kids' books would have rather been placed on a more accessible shelf.
 - c. The bill ... instead of reducing the price of books, would have rather increased it.

Still, even accounting for this didn't help—only 2 people who accepted all the *rathered* sentences rejected the other 3 *rather* sentences. According to the present system, this makes sense. Nothing in the system should prevent Mod_{volition}{} from hosting *rather* in its specifier, or force *rather* to adjoin to Mod_{volition}. Nor would it make sense to say that my grammar lacks Mod_{volition}{} entirely, and only has the more complex varieties.

For one possibility, consider the fact that Mod_{volition} is higher than Asp_{Perf} in the Cinquean hierarchy. The constructions discussed here involve Mod_{volition} lower than Asp_{Perf}. This suggests that Mod_{volition} "resets" the extended projection, like a lexical verb would. Perhaps my judgments reflect a strong pressure to do this explicitly, by projecting Asp whenever it is lower than Mod_{volition}. In some sense, this is saying that my grammar is not really unable to generate the sentences in (97), but rather that I have a very strong preference for the sentences in (96). Quite possibly, other "highly unusual" judgment patterns reflect preferences rather than options within the set of grammatical sentences.

8. Conclusion

Despite a lot of microvariation, the present study has revealed a more restricted range of verbal *rather* grammars than we might have otherwise expected. Returning to the interesting syntactic properties we began with, the overall picture supports the following broader conclusions. First, silent verbs can be licensed by head-moving to a functional (modal) head in the extended projection. This movement it freely available, but silence demands recoverability, which limits its application only to certain verbs, and certain uses/meanings of those verbs. Second, bare-infinitive-selecting verbs are nearly "closed class" because they have special syntactic properties that go beyond semantic or even syntactic selection: they must license the temporal verbal features of the embedded verb, or else provide a structural context for such licensing. Third, parasitic participles are possible only when the two unvalued Asp heads are in the same domain. This can be accomplished by: (a) "Restructuring" Voice (not available in English), (b) embedding an inflected auxiliary under another auxiliary (previously observed, but not for English), (c) moving the lower verb to the higher verb (extending the phase, but leading to the lower verb's silence) (novel observation).

The restricted distribution of *rather* suggests suggests that volitional meaning is not a primitive, but is constructed from smaller primitives. The microvariation reveals a tight connection among logically distinct functional heads, suggesting that they are not acquired independently of each other, but interact in significant ways.

References

- Cinque, Guglielmo. 1999. Adverbs and Functional Heads: A Cross-Linguistic Perspective. Oxford: Oxford University Press.
- Cinque, Guglielmo. 2006. *Restructuring and Functional Heads: The Cartography of Syntactic Structures Volume 4*. Oxford: Oxford University Press.
- Den Dikken, Marcel. 2006. *Relators and linkers: the syntax of predication, predicate inversion, and copulas*. Cambridge, MA: MIT Press.
- Den Dikken, Marcel, and Eric Hoekstra. 1997. Parasitic participles. Linguistics 35: 1057–1089.
- Harves, Stephanie. 2008. Intensional Transitives and Silent HAVE: Distinguishing between Want and Need. In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, eds. Natasha Abner and Jason Bishop, 211–219. Somerville, MA: Cascadilla Press.
- Harves, Stephanie, and Richard S. Kayne. 2012. Having *need* and needing *have*. *Linguistic Inquiry* 43 (1): 120–132.
- Harves, Stephanie, and Neil Myler. 2014. Licensing NPIs and Licensing Silence: *Have/Be Yet To* in English. *Lingua* 148: 213–239.
- Johnson, Gregory II. 2014. Restructuring and Infinitives: The View from Appalachia. Doctoral Dissertation, Michigan State University.
- Kayne, Richard S. 2006. On Parameters and on Principles of Pronunciation. In Organizing Grammar: Linguistic Studies in Honor of Henk van Riemsdijk, eds. H. Broekhuis, N. Corver, R. Huybregts, U. Kleinhenz, and J. Koster, 289–299. Berlin: Mouton de Gruyter.
- Kayne, Richard S. 2009. A note on auxiliary alternations and silent causation. In Le français d'un continent à l'autre. Mélanges offerts à Yves Charles Morin, eds. Luc Baronian and France Martineau, 211–235. Québec: Presses de l'Université Laval.
- Kayne, Richard S. 2011. Have, got, need. Class Handout, NYU.
- Kayne, Richard S. 2014. Comparative syntax and English *is to. Linguistic Analysis* 39 (1–2): 35–82.
- Myler, Neil. 2016. Building and interpreting possession sentences. Cambridge, MA: MIT Press.
- Tyler, Matthew, and Jim Wood. 2019. Microvariation in the *have yet to* construction. *Linguistic Variation* 19 (2): 232–279.
- van Gelderen, Elly. 2004. Economy, Innovation, and Prescriptivism: From Spec to Head and Head to Head. *Journal of Comparative Germanic Linguistics* 7: 59–98.
- van Riemsdijk, Henk. 2002. The unbearable lightness of GOing: The projection parameter as a pure parameter governing the distribution of elliptic motion verbs in Germanic. *Journal of Comparative Germanic Linguistics* 5: 143–196.
- Wiklund, Anna-Lena. 2001. Dressing up for Vocabulary Insertion: the parasitic supine. *Natural Language and Linguistic Theory* 19: 199–228.
- Wiklund, Anna-Lena. 2007. The Syntax of Tenselessness: Tense/Mood/Aspect-Agreeing Infinitivals. New York: Mouton de Gruyter.
- Wood, Jim. 2013. Parasitic participles in the syntax of verbal rather. Lingua 137: 59–87.

- Wood, Jim, and Halldór Ármann Sigurðsson. 2014. *Let*-causatives and (a)symmetric DAT-NOM constructions. *Syntax* 17 (3): 269–298.
- Wurmbrand, Susi. 2012a. Parasitic participles: Evidence for the theory of verb clusters. *Taal en Tongval* 64: 129–156.
- Wurmbrand, Susi. 2012b. The syntax of valuation in auxiliary-participle constructions. In *Coyote Working Papers: Proceedings of the 29th West Coast Conference on Formal Linguistics (WCCFL 29)*, ed. Jaehoon Choi et al., 154–162. University of Arizona, Tucson.
- Wurmbrand, Susi. 2015. Complex predicate formation via voice incorporation. In *Approaches to Complex Predicates*, eds. Léa Nash and Pollet Samvelian, 248–290. Leiden: Brill.
- Zanuttini, Raffaella, Jim Wood, Jason Zentz, and Laurence R. Horn. 2018. The Yale Grammatical Diversity Project: Morphosyntactic variation in North American English. *Linguistics Vanguard* 4 (1): 1–15.