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### Micro-Variation in the *Have Yet To* Construction

**Overview** We present novel data to show that although the *have yet to* (HYT) construction (1) exists in all varieties of English, speakers' grammars vary in terms of the underlying syntax that derives it.

(1) John **has yet to** visit his grandmother.

Our primary focus is on whether *have* is analyzed as a main verb or an auxiliary; for many speakers, it can be either, with no difference in interpretation. This discovery forces a new analysis of the syntax of HYT, one which will be supported by novel data from closely related *yet to* constructions. The result is a fully compositional analysis of an otherwise puzzling, ostensibly *sui generis* construction.

**Background** Since Kelly's (2008) snippet, at least three detailed analyses of HYT have been proposed: Kelly 2012, Harves & Myler 2014, and Bybel & Johnson 2014. What is striking is that although they share many theoretical assumptions, they end up with very different analyses based on different judgments of the crucial data points. For Kelly 2012, HYT involves auxiliary *have* (aux-*have*) and sentential negation; for Harves & Myler 2014, HYT involves aux-*have* and no sentential negation; for Bybel & Johnson 2014, HYT involves main verb *have* (main-*have*) and sentential negation. We will resolve this tension by showing that (i) there is genuine speaker variation regarding the main-*have*/aux-*have* question (with an interesting twist), and (ii) syntactic negation is only present in the embedded clause, which correctly predicts mixed results on negation tests.

**Proposal** We propose that a matrix main verb selects for a negative C (cf. Landau 2002), which is responsible for licensing the NPI *yet* and the mixed results on negation tests (see below). Following the spirit of Kelly 2012, this *yet* has temporal features which must be valued as [PERF]. Departing from Kelly 2012, the temporal features can be introduced either by the main verb selecting for the negative C, or by a higher head in that verb's extended projection. If a speaker allows the former, then *have* will be a main verb; if the latter, *have* will be an auxiliary, and the main verb will usually be null. A schematic overview of the analysis is presented in (2) below. (Note: we adopt Wurmbrand's (2012) "Reverse Agree" analysis of temporal features, and assume with Harves & Myler 2014 that *yet* moves to a spec-head configuration with its licenser.) (We set aside *be yet to* here, but will discuss it in the talk.)

- (2) a. [TP John [PerfP has<sub>[IT:PERF]</sub> [<sub>VP</sub> v<sup>0</sup>(=Ø) [CP yet<sub>i</sub> C<sub>NEG</sub> to visit his grandmother t<sub>i</sub> ]]]]  
b. [TP John [PerfP Perf<sup>0</sup>(=Ø) [<sub>VP</sub> has<sub>[IT:PERF]</sub> [CP yet<sub>i</sub> C<sub>NEG</sub> to visit his grandmother t<sub>i</sub> ]]]]

In essence, we agree with Harves & Myler 2014 that aux-*have* derivations involve a null main verb, and with Bybel & Johnson 2014 that main-*have* derivations, with raising verb syntax, are possible as well. The difference is that for us, the silent main verb of (2a) is pronounced as *have* whenever it introduces the [PERF] feature. We now present evidence for the crucial aspects of this proposal.

**Main vs. Aux-*have*** In a recent survey, we asked for acceptability judgments for the sentences in (3).

- (3) a. Oh, she has yet to finish, {has/does} she?    b. What {have you / do you have} yet to eat?  
c. {Has John / Does John have} yet to win...    d. {Hasn't John / Doesn't John have} yet to...

Acceptance of the *do*-support variant implies that a speaker treats *have* as a main verb; acceptance of the *have*-raising variant implies that a speaker treats *have* as an auxiliary. In (4), we cross-tabulate the maximum ratings speakers gave to *do*-support and aux-*have* sentences. (The survey was administered on Mechanical Turk (Sprouse 2011); the results below include only participants who passed control sentences to ensure that they understood the task; more details will be given in the talk.) We see in (4) that 48% of participants accepted both aux-*have* and *do*-support sentences. Moreover, we find a striking implicational relation between them: almost everyone who accepts *do*-support also accepts aux-*have*, but a good number of participants (15%; 42/281) accept aux-*have* while rejecting

## (4) Max Rating

Do-support	Aux Have							
	Bad		Marginal		Good		Total	
Bad	9	3%	20	7%	42	15%	71	25%
Marginal	6	2%	13	5%	42	15%	61	22%
Good	3	1%	10	4%	136	48%	149	53%
Total	18	6%	43	15%	220	78%	281	

all examples of *do*-support. This result tells us two things. First, the semantics of HYT cannot rely on the presence of *aux-have*; second, *main-have* must somehow be the “marked” variant, not available to everyone. **Our analysis**

**captures this asymmetry:** all speakers of English have access to the general Perf<sup>0</sup>-head that may introduce an interpretable [*i*T:PERF] feature (or take a default,  $\emptyset$  value; cf. Cinque 1999); the ability to introduce [*i*T:PERF] on a main verb—even it is just a “light” little *v*—requires something extra. Our analysis is thus quite similar to the analysis of ‘perfect doubling’ in Koenen et al. (2011); they show that ‘perfect doubling’ in Dutch really involves a lexical ‘have’ selecting for a perfect participle in adjectival form. The analysis also accounts for the behavior of the—until now undocumented—group speakers who allow *have got yet to*, as in (5a). For these speakers, the otherwise null *v* in (2a) may be spelled out as *got*. Finally, the account correctly predicts that speakers will be able to introduce the [*i*T:PERF] feature on both the main verb and in Perf<sup>0</sup>, as in (5b).

- (5) a. We’ve got yet to visit our grandmother.      b. He has had yet to pay me for 29 years now.

**The position of yet** The fact that *yet* follows *have* in *do*-support cases, and in the sentences in (5), suggests that *yet* is not high in the structure (as in Harves & Myler’s and Kelly’s proposals), but below the matrix main verb, as in Bybel & Johnson’s proposal. Moreover, note that *yet* survives in the absence of a higher predicate, as in the small clause in (6).

- (6) With the bride yet to arrive, the wedding was about to fall apart.

We also find evidence, from the sentences in (7) that *yet* must precede a complementizer:

- (7) a. John has **yet for anyone to** openly oppose him.  
b. I have **yet for this battery to** last longer than a couple of hours.

These sentences, which have not been noticed in previous work, have an ‘experiencer *have*’ reading, a reading that arises configurationally when a lexically empty light verb takes an external argument (Ritter & Rosen 1997, Myler 2014); this supports the proposal that a main verb must be present.

**The complementizer’s NEG feature.** The presence of a [NEG] feature in the lower clause, rather than the matrix clause, also explains some of the variation found in the literature and in our surveys. Respondents generally judged sentences like those in (8a) to be quite bad, but sentences such as (8b-c), were judged to be much better. Whence the discrepancy?

- (8) a. Jordan has yet to read it, I don’t think. (Accept: 19%, Marginal: 18%, **Reject: 63%**)  
b. Jordan has yet to visit Grandpa, not even once. (**Accept: 79%**, Marginal: 10%, Reject: 11%)  
c. Jordan has yet to read it, and neither has Pat. (**Accept: 61%**, Marginal: 18%, Reject: 20%)

We suggest that the discrepancy follows from how the tests work. *Not even* must attach to a clause with syntactic negation, but that is easily satisfied by the embedded CP in (2). Similarly, *neither*-inversion requires only a syntactically negated verb phrase; the understood ellipsis in (8c) is *neither has Pat* <READ IT>, and <READ IT> falls under the scope of the embedded negative C as well. It is only the negative slifting example in (8a) that truly must attach to a negative matrix clause. Since the matrix clause in HYT is (for most speakers, we argue) not negative, (8a) is generally rejected.

**References** Bybel & Johnson, Greg 2014. The syntax of ‘have yet to’ *SECOL*. •Harves & Myler 2014. Licensing NPIs and licensing silence. *Lingua*. •Kelly 2012. The syntax and semantics of infinitival *yet* constructions. *Cahiers Chronos*. •Koenen et al. 2012. Perfect Doubling. *Linguistic Variation*. •Landau 2002 (Un)interpretable Neg in Comp. *LI*. •Myler 2014. *Building and Interpreting Possession Sentences*. NYU PhD. •Ritter & Rosen 1997. The function of *have*. *Lingua*.