Inflectional shells and the syntax of causative have

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1 The puzzle

On the one hand, have-causatives are small:

- Ritter & Rosen (1993, 1997) argue that have-causatives contain one event, while make-causatives contain two. They treat have as a "functor predicate" that takes a bare VP complement.
- This is consistent with other work treating causatives as complex predicates, in which the causative verb is a functional head within a monoclausal structure (Harley 1995; Pylkkänen 2008, among others).

On the other hand, have-causatives are big:

- The complement of have can include aspectual morphology:¹
- (1) a. The director is having the chorus sing in the first scene.
 - b. The director has the chorus **be singing** when the show starts.
- (2) a. The screenwriter has had four characters marry in the first scene.
 - b. The writer had the protagonist have been married three times.
- (3) The doctor had the patient **be examined** by a specialist in order to rule out another diagnosis.
- The same aspectual morphology can even occur *both* above and below *have*, further evidence against a straightforwardly monoclausal structure:
- (4) In recent months, the director has **been having** the chorus **be singing** at the beginning of every show.
- The complement of *have* can have an expletive subject. Assuming that *there* is inserted in the specifier of a clause-level functional projection to check an EPP feature, this example suggests that there must be functional structure in the complement of *have*.
- (5) The caterer had there be two chafing dishes on each food service table.

However: have-causatives are still not as big as make-causatives:

- Independent temporal modification: possible with make, not with have.
- (6) a. They made the team throw the game on Monday by threatening them on Sunday night.
 - b. *They had the team throw the game on Monday by threatening them on Sunday night.

^{1.} For some speakers, some of these examples are marginal. For others, they are perfectly acceptable, given the right context.

- If temporal modifiers are related to the event argument of the clause, then the possibility of two distinct temporal modifiers shows that there must be two distinct events.
- make-causatives can also be passivized (at which point the complement becomes an infinitival with to), while have-causatives can't be passivized at all:
- (7) a. We made the children clean up the playroom.
 - b. The children were made to clean up the playroom.
- (8) a. We had the children clean up the playroom.
 - b. *The children were had (to) clean up the playroom.

But even *make*-causatives aren't **fully** biclausal:

- In Romance languages they permit clitic-climbing and have other monoclausal properties (Kayne 1975; Aissen 1977; Burzio 1986; Davies & Rosen 1988; Gonzalez 1994)
- in English they take bare infinitives rather than to-infinitives, at least when make is active. (This is weak evidence, but suggests that the complement of make is less than a full TP.

Upshot: have-causatives and make-causatives apparently have structures of different sizes, both larger than one clause but smaller than two full clauses.

2 A starting point: restructuring infinitives

What does it mean for a structure to be more than one clause but less than two? Let's call this kind of structure **sesquiclausal**.

- Wurmbrand (1998, 2001) proposes that some infinitives are larger than others.
 - The smaller ones—Restructuring Infinitives—consist only of a VP. They lack an external argument, cannot check accusative case, and have various other monoclausal properties, like the possibility of the long passive construction.
 - The larger infinitives have more structure, including some inflectional categories.
 - Restructuring infinitives have two lexical verbs, but only one inflectional superstructure
- Complex predicate constructions, and serial verb constructions have also been analyzed as containing two VPs, but only one IP complex (Baker 1989; Carrier & Randall 1992; Zhang 2001, a.o.).
- These structures are more than one clause, in the sense that they contain two lexical predicates.
- They are also less than two clauses, in that they contain only one IP complex.

How is this different from the situation with causative have?

- have-causatives demonstrably contain more than one standard Infl.
- It's not clear that have-causatives contain two lexical predicates. Is have a lexical verb?

An intriguing possibility: Can there be a sesquiclausal structure with one verbal core, but two inflectional complexes?

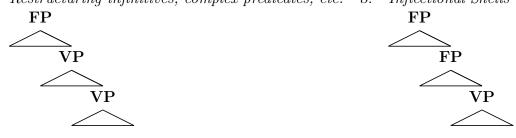
3 Proposal: Inflectional Shells

Why does the size puzzle arise? From the tacit assumption that the presence of a clause-level functional head implies the possible presence of all lower functional heads, as well as a verbal thematic predicate.

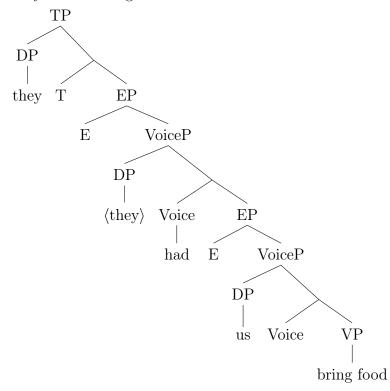
The presence of two T heads, or two Event heads, has thus been taken to show that there are two full clauses.

Another possibility: one verbal core, two inflectional shells, giving two types of sesquiclausality:

(9) a. Restructuring infinitives, complex predicates, etc. b. Inflectional Shells



- This suggests the following for the structure of a have-causative:
- (10) They had us bring food.



- Have spells out a higher Voice head (Kim 2011, 2012), which takes at least an EventP complement. The higher Voice head introduces the causer argument, and the lower one introduces the causee.
- Either or both Event heads in (10) may carry imperfective aspect, spelled out by progressive -ing (Cowper 1999, 2005), as in (1).
- The complement of have may also include the perfect head, Perf, above EventP, giving (2b).

4 Causation and Events

This slightly complicates the eventive structure of have-causatives.

• For Ritter & Rosen (1993, 1997), have-causatives contain one (extended) event, while make-causatives contain two:

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(11) a. have: 1 \text{ event} b. make: 2 \text{ events} [Causer + Agent + Predicate] [_1\text{Causer} + \text{CAUSE}] \rightarrow [_2\text{Agent} + \text{Predicate}]
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Evidence that *make*-causatives involve more complex event structure:

- The two events can have independent temporal modifiers in *make*-causatives; this is impossible with *have*-causatives:
- (12) a. On Tuesday, by giving everyone a huge dinner, the coach made the team lose on Wednesday.
 - b. *On Tuesday, by bribing each and every player, the coach had the team lose on Wednesday.
 - The causative event can be independently negated with make, but not with have:
- (13) a. I didn't **make** Bill write the article, but he wrote it anyway.
 - b. I didn't have Bill write the article, *but he wrote it anyway.

However: the structure we propose in (10) suggests that *have*-causatives have two events: the inner, simple event with just one agent, and the outer, complex event with two agents:

- $(14) \quad [{}_{1}Agent\text{-}Causer + [{}_{2}Agent\text{-}Causee + Predicate}]]$
 - To maintain that *make*-causatives are more complex, they must involve **three** events: the causing event, the caused event, and the complex event, in which the causing event causes the caused event:
- (15) $[_{1}[_{2} \text{ Agent-Causer} + \text{CAUSE}] \rightarrow [_{3} \text{ Agent-Causee} + \text{Predicate}]]$

An analogy: The event-structural difference between *make*-causatives and *have*-causatives parallels the difference in morphological structure between compounding and affixation:

- (16) a. Compounding: 3 words: $[word [word \log] [word house]]$
 - b. Affixation: 2 words: [word un [word cover]]

5 Have and Make

We are now in a position to account for the differences between have- and make-causatives:

- 1. Radical vs. configurational causation:
- Make has a lexical root, \sqrt{MAKE} , which introduces the independent causing event illustrated in (15). Make thus contributes lexical, or more precisely **radical**, causative semantics.
- If *make* is radically causative, then it is not surprising that it can take as a complement any event or state of affairs that can be interpreted as caused. It thus appears with a broad range of complements in which causative *have* does not appear.
- (17) a. We made the children fall off the climbing structure. (unaccusative complement)
 - b. We made the food last for three days. (non-sentient lower subject)
 - c. We made the teacher angry. (stative complement)
 - *Have*, by contrast, does not have a lexical root. It spells out an argument-introducing functional head. The causative properties of *have* are therefore **configurational**, not radical.
 - So-called causative *have* arises when it spells out a Voice head that adds a second, higher, Agent to a clause that a) already denotes an event and b) already has an agent (i.e. a VoiceP).
 - 2. Coerced agentivity with have-causatives
 - Notice that a causative *have* interpretation sometimes involves coercing an agentive reading where one would otherwise not be necessary:
- (18) a. The children fell off the climbing structure. (unaccusative, no VoiceP)
 - b. The children (deliberately) fell off the climbing structure in order to frighten the teacher. (Agentive, VoiceP present)
 - c. The teacher had the children fall off the climbing structure. (Agentive reading only, lower VoiceP required)
 - This is explained if causative *have* occurs only in structures containing two Voice projections above a single verbal core
 - 3. Authority/control requirement for have-causatives.
 - The requirement that the causee be a volitional (and thus necessarily sentient) participant in the event follows from the fact that it is the specifier of VoiceP.
- (19) a. The teacher had the children cover the food with plastic wrap.
 - b. *The teacher had the plastic wrap cover the food.
 - The fact that the cause agent must be interpreted as psychologically, socially, or organizationally under the control of the causer agent follows pragmatically from the structural relation between the two:
 - The causer agent is agentive with respect to the entire event, including the causee agent, reducing the autonomy of the causee agent.

- However, the causee agent is still an agent with respect to the inner event, which gives it the thematic character of a puppet agent, rather than a patient or an instrument, in the sentence as a whole.
- If Voice not only introduces an external argument but also introduces an event argument (as in early conceptions of vP), we should also expect causative *have* to appear with eventive passive complements (passive VoicePs), but not with stative passive complements (Adjectival passives).
- This prediction seems to be correct, as shown in (20) and (21):
- (20) Causative, eventive passive complement:
 - a. I had the suitcases taken to the airport by my assistant.
 - b. I had the rest of the work done by my assistant.
- (21) Resultative, stative passive complement: I had the rest of the work done by noon.

6 Faces of Have

There are (at least) two structures that look superficially like causative *have*, but are structurally and semantically quite different.

Experiencer have:

- (22) a. The manager had six assistants quit last month.
 - b. Six assistants quit last month.
- (23) a. The new employee had several colleagues compliment her work in the first week.
 - b. Several colleagues complimented the new employee's work in the first week.
 - Following Kim (2011, 2012), we assume that the matrix subject in (22) and (23) is merged in the specifier of a peripheral Applicative projection, above Voice but below Event.
 - The subject is interpreted as (negatively or positively) affected by the event, and the agency of the lower subject in each (a) sentence is the same as in the simpler structure in (b).
 - This is a monoclausal, not a sesquiclausal structure, since no additional inflectional shells are present, but the peripheral Appl head is spelled out by *have*.

Resultative have:

- In Old English there was a resultative perfect construction, which took either auxiliary be or auxiliary have depending on the transitivity of the main verb.
- (24) a. *Hie wæron cumen Leoniðan to fultume* they were come to-Leonidas as help 'They had come to Leonidas to help him.'

- b. pa pa ge hiene gebundenne hæfdon then when you him bound had
 'then when you {had bound him / had him in the state of being bound}'
 (Alfred's translation of Orosius, ca. 893, quoted in Traugott 1992)
- The transitive version of this construction survives in Present-Day English, as in (25):
- (25) a. We had the bicycle assembled (and ready to go) before lunch.
 - b. They had the kitchen clean by the time the guests arrived.
 - These clauses are stative at all levels:
 - The lower predication is an adjectival passive, or even a simple adjectival predication.
 - The upper predication is also stative, as can be seen from the fact that it appears in the simple present without a habitual or reportive interpretation:
- (26) The helpers have all the vegetables chopped; what should they do next?
 - We assume that these constructions consist of a lower ResultP (Ramchand 2008; Borer 2005), which is the complement of an argument-introducing v spelled out by have.
 - The interpretation of the role played by this external argument is pragmatically determined, as argued for a variety of other *have* constructions by Cowper (1989), and by Bjorkman & Cowper (2013).
 - It is thus possible to construct minimal triplets, as in (27).
- (27) a. Causative: I had my car spraypainted by experts. (have in Voice, lower passive VoiceP)
 - b. Experiencer: I had my car spraypainted by vandals. (have in Appl, between Event and Voice)
 - c. Result: I had my car spraypainted by lunchtime. (have in v, with ResultP complement)

7 Conclusion

- There are (at least) two ways sentences can be sesquiclausal: Two verbal domains and one Infl domain, or one verbal domain and two Infl domains.
- have spells out a variety of argument-introducing heads, obscuring significant structural differences.
- have lacks a lexical root. The meanings it seems to express depend on which head it spells out, and on the nature of the arguments it takes.

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