Modal ingredients of causative *have*[*]

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1. Introduction

Causative *have* constructions, as illustrated in (1a), are understood to convey a modal component. This is illustrated by the paraphrase in (1b), which involves the intentions of the subject of *have*, *Mary*, and the fact that Jess is acting in accordance with these intentions.

(1) a. Mary had Jess shovel the steps.
b. 'In all worlds compatible with Mary's intentions, Jess shovelled the steps'

This paper argues that the modal component found in *have* causatives is contributed by a modal operator with quantificational force. I argue that (1a) contains a quantifier over possible worlds leading to the agent-oriented modality referenced in (1b). This form of modality is directly connected to the subject of *have* and their intentions. The argument is based on the behavior of *have* causatives with disjunctive complements where support for the presence of a quantifier comes from the different ways disjunction can be understood in these cases. In particular, disjunction behaves as you'd expect when you have an overt modal present as it induces a scope ambiguity. I take this to illustrate that *have* causatives include a modal item with quantificational modal force just like overt modals do.

The paper is structured as follows. Section 2 starts by presenting a novel observation concerning the interpretation of *have* causatives with disjunctive complements. Section 3 presents an analysis that captures this novel observation as a scope ambiguity at LF. Section 4 looks at a previous analysis of *have* causatives presented in Myler 2014:Ch.4 and shows why the central observation concerning disjunctive complements poses challenges for such an analysis. Section 5 offers some concluding remarks concerning the modal nature of *have* causatives more generally and presents questions for future research. Section 6 wraps up.

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2. Causative *have* and modality

As alluded to above, *have* causatives make reference to the subject's intentions since the causer intends for the causee to carry out some process.[1] This, in turn, determines the particular flavor of modality which is detected in these constructions: agent-oriented modality. If the modal component of *have* causatives is represented as a modal quantifier, they should be able to induce a scope ambiguity when another quantificational expression is present. In this section, we will explore whether these constructions contain a modal quantifier by inserting a second quantificational operator into the sentence in order to observe the interaction; i.e., whether this gives rise to different interpretations. First, I will focus on using disjunction as a diagnostic. I will then briefly observe the interaction with indefinite DPs, which is parallel.

2.1 Disjunction and causative *have*

In *have* causatives, disjunction can receive two different interpretations. This is laid out in (2) where the two different interpretations are provided in (2a) and (2b).

(2) Mom had Alphonso or Tajon shovel the driveway.
   a. *Ignorance:* It is unknown which of the two people, Alphonso or Tajon, shoveled, but one did.
   b. *Free Choice (FC):* The mother provided a choice to shovel, either Alphonso or Tajon—both are possibilities.

The availability of two different interpretations for disjunction parallels what is observed in sentences containing an overt modal. This is illustrated below: (3) also has two interpretations (ignorance and free choice), and these interpretations have been analyzed as a scope ambiguity.

(3) Sue or Mary may eat the last cookie.
   a. *Ignorance:* Unknown which of Sue or Mary will eat the last cookie.
   b. *Free Choice:* Both Sue and Mary are permitted to eat the last cookie.

To get a better understanding of what each interpretation of disjunction corresponds to, we can look at the different contexts in which *have* causative would be used. We will start with the context in (4).

[1] Terminology: I will use the terms "subject" or "causer" to refer to the argument introduced by *have*. I will use the term "causee" to refer to the subject of *have*'s complement. I use small caps to indicate theta roles, as in AGENT.

(4) *Free choice context:*

a. *[Alphonso and Tajon are brothers. Their mother hates shoveling the driveway and always delegates the task to one of them—she doesn't care who does it. The next day, Tajon and Alphonso's sister, Nadine, arrives home:]*

b. Alphonso (to Nadine): Mom had me or Tajon shovel the driveway again.

In the above context, (4b), is acceptable under the FC interpretation and unacceptable under the ignorance interpretation (since Alphonso knows who shoveled). The intuition is that the mother's intentions are compatible with a state of affairs where Alphonso shovels the driveway and a state of affairs where Tajon shovels the driveway. The mother's intentions do not require either of these two individuals to carry out the shoveling, either one is a permissible alternative. Next we turn to the context in (5).

(5) *Ignorance context:*

a. *[Tajon, Myriam, Alphonso and Nadine are all siblings. This morning, Tajon walked by his mother's room and heard her yelling at one of his siblings to shovel the driveway. Tajon doesn't know if it was Alphonso or Nadine though. Later, the driveway was shoveled.]*

b. Tajon (to Myriam): Mom had Alphonso or Nadine shovel the driveway; I have no idea who though.

In the above context, the target sentence, (5b), is acceptable under the ignorance interpretation and unacceptable under the FC interpretation (since the mother asked a specific person to shovel). This context differs from the free choice one. Here, the mother's intentions are such that a specific person is responsible for shoveling the driveway—the speaker just doesn't know who that person is. Disjunction signals the speaker's lack of knowledge concerning who carried out the shoveling rather than signalling that there are two permissible shovelers.

2.2 Causative *have* and indefinites

The same point regarding the interaction between a quantificational operator and the modal component can be illustrated by looking at the interpretation of indefinites in the complement of *have*. In what follows, I assume that specific and non-specific interpretations of indefinites result from different scope configurations between an indefinite DP and an intensional operator. A non-specific interpretation would correspond to the indefinite DP being interpreted in the scope of the modal, while the specific interpretation would correspond to the indefinite DP being interpreted outside the scope of the modal. To start, we can just consider a case with an attitude verb, like *wants* (since it has been analyzed as a modal quantifier which quantifies over the subject's desire worlds), as in (6).

(6) Alice wants to hire a semanticist.

Imagine this sentence were used in the following scenario: Alice works at a law firm and even though she doesn't know any semanticists, she thinks that they make great employees since they can be critical of legal language and catch any ambiguous sentences. In this scenario, the sentence is true under the non-specific interpretation but false under the specific interpretation: all of Alice's desire worlds are such that she hires a semanticist, but there is no specific semanticist in mind (in fact, she doesn't even know any semanticists).

Next, imagine (6) were used in the following scenario: Alice met a wonderful person, Christine, yesterday who is looking for a new job. Alice wants to hire Christine at her law firm. Little does Alice know, Christine is a semanticist and Alice hates semanticists—she thinks they are pedants and she would never hire one. In this scenario, the sentence is true under the specific interpretation (since there is an actual semanticist that Alice wants to hire) but false under the non-specific interpretation (since Alice's desire worlds do not have her hiring a semanticist). Now, consider the sentence in (7).

(7) Mary had a butler make her dinner.

Here, under a non-specific interpretation of the indefinite in (7), in every possible world where Mary's intentions are satisfied, there is a (potentially different) butler who made her dinner.[2] Under a specific interpretation of the indefinite, there is a butler in the actual world that makes Mary dinner in every world that accords with her intentions. With that in mind, consider the context in (8).

(8) *Non-specific interpretation*

a. *[Mary is rich and has many butlers at home, in addition to her personal chef. Today, the chef was busy and Mary didn't have the patience to wait for her chef to cook. Instead, she decided that one of her butlers would make her dinner. There is no specific butler whose cooking Mary wants.]*

b. Rather than the usual chef, Mary had a butler make her dinner.

The target sentence, (8b), is true under a non-specific interpretation of the indefinite expression, *a butler*. All worlds that satisfy Mary's intentions are worlds where a butler makes her dinner; but it is not necessarily the same butler in all worlds. The sentence can also be perceived as false under a specific interpretation of the indefinite since this would require there to be a specific/actual butler which Mary got to cook dinner. Turning to the specific interpretation, consider the context in (9).

[2]The non-specific interpretation could still be true if, in every possible world where Mary's intentions are satisfied, the same butler made her dinner. The non-specific interpretation is just compatible with variation of the butler across the modal base while the specific interpretation isn't. What is required for the non-specific interpretation is simply that, all worlds that satisfy Mary's intentions have a commonality: a butler makes her dinner.

(9) *Specific interpretation*

a. *[Mary wants her friend John to make her dinner since he is an amazing cook. What Mary doesn't know is that John is a good cook because he works as a chef. If Mary knew this, she would have felt bad asking him; she would never have a professional chef cook for her for free.]*

b. Even though she didn't mean to, Mary had a chef make her dinner.

In this context, the specific interpretation is true and the non-specific interpretation is false. The specific interpretation is true since there is an actual chef who cooks dinner for Mary in all words in which her intentions are met. The non-specific reading is false since in all words where Mary's intentions are met, she does not have a chef cook for her. In her intended worlds, John cooks for her, but John is not a chef in those worlds.

3. Proposal

3.1 Overview of proposal

In the previous section, we observed the following: the interpretation of disjunction and indefinites in *have* causatives parallels the way disjunction and indefinites interact with overt modals in that *have* causatives with disjunctive/indefinite complements can receive two different interpretations. A natural way to capture this observation is as a run-of-the-mill scope ambiguity. In order to capture the two interpretations as a scope ambiguity, we require there to be a second quantificational expression in addition to disjunction. For this reason, I assume that there is a syntactically present modal operator at LF that can interact scopally with disjunction. More specifically, I analyze *have* as a quantifier over possible worlds, as shown in (10).[3]

(10) $[\![\text{have}]\!]^w = \lambda P_{\langle s,vt\rangle} \lambda e_v$: e has an agent and e establishes preferences in w. $\forall$w' $\in$ Preferences(e) $\exists$e'[P(e')(w')]
where Preferences(e): the set of worlds which are compatible with the preferences of the agent of e

The main result concerning the above entry is that *have* introduces a modal component that scopes over the property of events in its complement. In addition to the modal component, there are some details worth spelling out. First, there is a definedness condition on the event argument requiring it to be the kind of event that determines what the goals and intentions of the agent are. That is, the event argument establishes the agent's preferences in the actual world. In the case at hand, this event could correspond to the mental decision (along with the intentions underlying the decision) that is taken by the subject of *have*. When this definedness condition is met, 'Preferences(e)' projects a set of worlds which are compatible with the preferences of the agent that were established by e. This leads to the

[3]Notation: I assume an interpretation function relativized to a world (and a variable assignment function). The basic semantic types are: 'e' for individuals, 'v' for events, 's' for worlds, and 't' for truth values.

modal component introduced by *have* quantifying over all those possible worlds which are compatible with the intentions of the subject. We can understand these details by briefly looking at the example, *Mary had Jess shovel the steps*. In this example, the event e is Mary's decision to have Jess shovel. This mental decision leads to a set of possible worlds compatible with the content of said decision (i.e., Mary's goals/preferences) and these are also all worlds where Jess shovels the steps. As a result, the modal quantifies over all those worlds which are compatible with Mary's intentions for Jess to shovel the steps. Finally, the complement of *have* conveys that in every one of those worlds, there is an ensuing event of shoveling in which Jess is the agent.

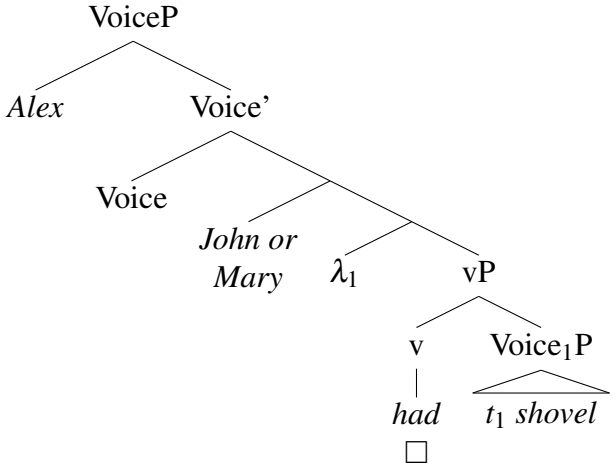
In the next subsection, we will see how this entry for *have* allows us to naturally capture both interpretations of disjunction as a scope ambiguity.

3.2 Capturing the two interpretations

Recall that disjunction in *have* causatives can be understood in two ways: as conveying free choice or as conveying ignorance. As I've already pointed out, this observation suggests that these constructions may involve a scope ambiguity. I propose to capture this intuition by positing a structural ambiguity at LF. In what follows, I will make two further assumptions for expository purposes. First, I assume that the Voice head introducing the subject of *have* assigns an AGENT theta role to the subject in order to satisfy the definedness condition on the event argument, see (10). Second, I assume, following the literature on *have* causatives, that the complement of *have* is a Voice projection (Bjorkman and Cowper 2013, Myler 2014, Jung 2014, Copley 2018, Nie 2020).

First, disjunction can scope above the modal operator as in (11). This configuration gives rise to ignorance.[4]

(11) *Ignorance reading*: Alex had John or Mary shovel.

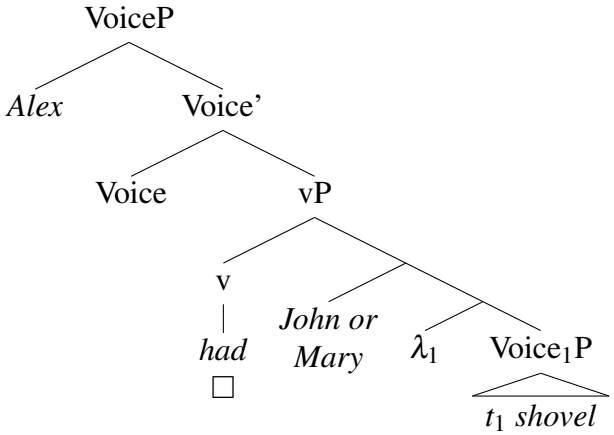


[4]The following derivations involve a complication concerning existential closure of the event variable. Here, I am treating disjunction as a generalized quantifier, which would normally have the type $\langle\langle e,t\rangle,t\rangle$. To avoid complications with the event variable, I simply assume disjunction has the type $\langle\langle e,\langle v,t\rangle\rangle,\langle v,t\rangle\rangle$ since I am mainly concerned with the scope configurations between disjunction and the modal quantifier. For further discussion concerning the interaction between quantifiers and event semantics, see Champollion (2015).

When disjunction raises above the modal operator, it is not interpreted in the scope of the worlds that are compatible with Alex's intentions. Crucially, whether ignorance is derived grammatically (Meyer 2013) or pragmatically (Sauerland 2004), it involves a logical form where disjunction scopes above the modal operator. This leads to the following meaning: Alex had John shovel or Alex had Mary shovel and it is unknown who. In some accessible worlds, the shoveler is John and in some accessible worlds, it is Mary.

Second, disjunction can scope below the modal operator, as in (12). This configuration gives rise to free choice.

(12) *Free choice reading*: Alex had John or Mary shovel.



Similarly, whether free choice is derived grammatically (Chierchia 2004, Fox 2007) or pragmatically (Sauerland 2004), it involves a logical form where disjunction scopes below the modal operator. This leads to the following meaning: in all worlds compatible with Alex's intentions, either John or Mary shovel. Each disjunct must be true in some world so that there is at least one accessible world where John shovels and at least one accessible world where Mary shovels.

The general takeaway is that, given that *have* introduces a modal quantifier, the different ways of interpreting disjunction are straightforwardly captured as a scope ambiguity at LF. While this analysis may seem simple enough, it is worth noting that it is not usually assumed that *have* causatives involve a grammatically present modal component. In the next section, we will look at a previous analysis that takes a different approach to derive the meaning of *have* causatives, the Contextual Allosemy Analysis put forth in Myler 2014. This analysis proposes that *have* causatives require a novel theta role instead of a modal operator.

4. The Contextual Allosemy Analysis (CAA) — (Myler 2014)

Myler (2014) actually describes two interpretations of causative *have* constructions. Myler calls the interpretation that we have been concerned with so far the engineer interpretation, which is repeated in (13a). The other interpretation, illustrated in (13b), is what he calls the cause interpretation (the main difference being the inanimacy of the subject of *have*).

Going forward, I will adopt these labels (engineer vs. cause) for each interpretation. While both interpretations convey some form of causation, the source of causation differs. We saw that the former required an animate subject and involved deliberate planning on the subject's part; roughly paraphrasable as: 'Jess shoveled the steps, *at Mary's behest*'. The cause interpretation on the other hand simply involves causally related eventualities and is roughly paraphrasable as: 'Jess is in the state of shoveling *as a result of the snowstorm*'.

(13) a. *Engineer:* Mary had Jess shovel the steps.
b. *Cause*: The snowstorm had Jess shoveling the steps.

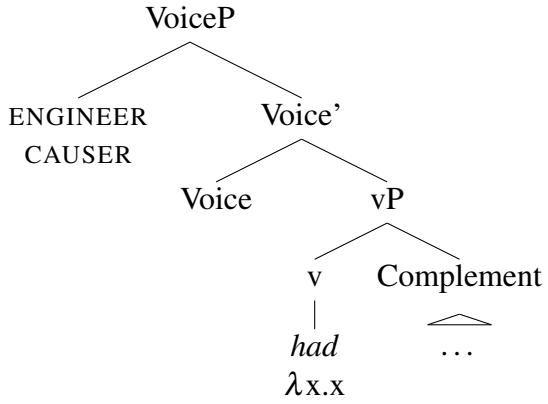
The proposal put forth in Myler 2014 can naturally be understood as conveying that these two interpretations are ultimately rooted in an ambiguity, with each interpretation involving a different Voice head. According to the CAA, the two interpretations arise from distinct allosemes of Voice. The general idea is that different syntactic contexts lead to different interpretations of the Voice head: in one context, the Voice head assigns the subject a novel ENGINEER theta role and in another context, the Voice head assigns a CAUSER theta role.[5] As a result, each alloseme of Voice also selects for a different complement. The engineer interpretation arises when *have* takes an eventive complement while the cause interpretation arises when *have* takes a stative complement, as illustrated in (14).

(14) a. $[\![\text{Voice}]\!] = \lambda x_e \lambda e_v$. ENGINEER(e, x) / ___ (eventive complement)
b. $[\![\text{Voice}]\!] = \lambda x_e \lambda e_v$. CAUSER(e, x) / ___ (stative complement)

The crucial takeaway from this analysis is that different theta roles account for the difference between the two interpretations. This means that, for the engineer interpretation, any reference to the intentions of the subject of *have* is packaged into the way the ENGINEER theta role is interpreted. Furthermore, the CAA assumes that *have* spells out little v and is semantically inert, as illustrated in (15) where *have* denotes the identity function. Crucially, *have* makes no semantic contribution on its own, its presence simply triggers the spell out of the Voice head.

[5]The CAUSER theta role that the CAA makes use of is a special case of the HOLDER theta role that is assigned to arguments in stative eventualities. Note that I have been using the terms 'causer' in a purely descriptive sense, to identify the argument introduced by *have*.

(15)



The observations in Section 2 concerning the engineer interpretation present a challenge for this proposal that relies on a theta role to capture the meaning of the engineer interpretation. The reason is as follows: if the engineer interpretation involves a scope ambiguity (as outlined in the previous section), whatever is being contributed by the Voice head or *have* in the engineer interpretation must be able to interact scopally with disjunction to give rise to two different interpretations. However, appealing to a theta role doesn't straightforwardly capture this. Theta roles are added conjunctively and conjunction is commutative. This is illustrated in (16) where both (16a) and (16b) describe the exact same property of events, immaterial of whether the disjunction precedes or follows the ENGINEER theta role.

(16) a. λe. ENGINEER(e, Alex) $\wedge$ [AGENT(e, John) $\vee$ AGENT(e, Mary)] $\wedge$ shovel(e)
b. λe. [AGENT(e, John) $\vee$ AGENT(e, Mary)] $\wedge$ ENGINEER(e, Alex) $\wedge$ shovel(e)

Therefore, it is not obvious how an account such as the CAA can handle the apparent scope ambiguities observed in Section 2 given that there is no modal quantifier present in the derivation.[6]

5. Modality revisited and the cause interpretation

One of the important takeaways from Myler 2014 is that there are two interpretations of *have* causatives. In this paper, I have only discussed one of these, the engineer interpretation. Having argued that the engineer interpretation contains a modal operator, we can also ask whether the cause interpretation in (17) does as well. To state it differently, (17) conveys that the snowstorm caused Jess' shoveling. This causation boils down to a coun-

[6]Before moving on, a point is in order concerning where the modal component is introduced in my analysis. I have assumed that it is introduced by *have*. However, it's also possible that the modal component is introduced by the Voice head. In other words, whatever is being contributed by the Voice head would be able to interact scopally with disjunction and give rise to a free choice interpretation. The observations made so far are compatible with either assumption and I know of no evidence at this moment which can tease apart where the modal operator sits. This issue won't be resolved here, instead I leave it as a matter for future research. The main takeaway is simply that some expression in *have* causatives (either *have* or Voice) is analyzed as a quantifier over possible worlds that interacts scopally with disjunction.

terfactual dependency (Lewis 1974): if the snowstorm hadn't happened, Jess' shoveling wouldn't have happened. Under this interpretation, (17) also conveys a modal component, although of a different kind than was observed in the engineer interpretation. The question is again whether this modal component is contributed by a modal element with quantificational force.

(17) *Cause*: The snowstorm had Jess shoveling the steps.
'Jess is in the state of shoveling as a result of the snowstorm'

First of all, when we move to the cause interpretation, we observe that it can convey ignorance, as illustrated in (18).

(18) *Ignorance context:*

a. *[Sabrina, Myriam and Samuel live together. There was a huge snowstorm this morning. Later that day, Myriam saw someone shoveling the driveway but couldn't tell if it was Sabrina or Samuel.]*

b. Myriam (to herself): The snowstorm had Sabrina or Samuel shoveling the driveway; I have no idea who though.

The more interesting question concerns whether it is possible to get a free choice interpretation of disjunction in the cause interpretation. What would free choice correspond to in this case? In the engineer interpretation, the subject of *have* is animate with intentions, and having intentions is what leads to the particular free choice interpretation that was observed. In other words, free choice corresponded to each disjunct being true in some accessible world that is compatible with the subject's intentions/preferences. In contrast, in the cause interpretation, the accessible worlds would intuitively concern the circumstances of the situation: it involves a causing event and two natural extensions (i.e., possible worlds) to that event where each disjunct is true. This means that, to the extent that free choice is licensed in the cause interpretation, it would be licensed with a different modal base than in the engineer interpretation. Once again, we can draw comparisons with cases which contain an overt modal, as in (19).

(19) There is a snowstorm heading towards the Paris area. Given the current trajectory and the conditions of the storm, the meteorologists on the weather network report that **the snowstorm can hit Paris or Versailles** in the next 24 hours.

In (19), the modal receives a circumstantial modal base and disjunction is interpreted below the modal. This means each disjunct is true in some accessible world corresponding to a possible extension of the causing event. As a result of the conditions surrounding the snowstorm, there are two kinds of natural consequences (i.e., possible worlds):

w_1: worlds where the snowstorm hits Paris;

w_2: worlds where the snowstorm hits Versailles.

Having established that free choice interpretations are possible with an overt circumstantial modal, we can now ask whether the same is possible for the cause interpretation in (20).

(20) The broken vending machine had Will eating a sandwich or a cookie.

Again, to parallel the free choice observed with the engineer interpretation, there would have to be two possible natural extensions determined by the broken vending machine:

w_1: worlds where Will eats a sandwich;

w_2: worlds where Will eats a cookie.

We can look at the free choice interpretation as it is used in the context in (21).

(21) *Free choice context:*

a. *[John gets his lunch from the vending machine every day. At lunch, the vending machine was broken and only two of the options were available: a turkey sandwich and a chocolate chip cookie—two things John hates. Later that day, John was fuming. Bill asked Sue what's wrong with John.]*

b. Sue (to Bill): John's upset about lunch. The broken vending machine had him eating a sandwich or a cookie at lunch.

According to my judgment and most native English speakers I consulted with, the target sentence in (21b) is acceptable in this context; however the judgments are admittedly subtle and there was some variability among consultants concerning how accessible the free choice interpretation was. Another example is provided in (22).

(22) *Free choice context:*

a. *[The printer in the Linguistics department is old and broken. For some reason, it can only use Legal or A4 paper. Last night, Diane spent the whole night making a handout on Letter paper, but unfortunately:]*

b. The printer had Diane using A4 or Legal paper.

I speculate that one reason why the free choice interpretation may be difficult to access in the above examples is due to the aspect associated with the past tense use of *have* (which all the examples have used so far). In languages which mark aspect morphologically, circumstantial modals with perfective marking (i) convey an actuality entailment and (ii) do not license free choice inferences when they embed disjunctions (Alxatib 2016). Given that English doesn't overtly distinguish perfective from imperfective aspect, there is no way to determine if these constructions involve perfective or imperfective aspect. Therefore, it is possible that perfective aspect is effectively neutralizing the free choice inference meaning that disjunction can only be understood as conveying ignorance.

One potential way of avoiding these issues is to change the tense on *have* to present tense, as illustrated in (23).

(23) The broken vending machine **has** Will eating a sandwich or a cookie.

The above example doesn't contain past perfective, which may make the construction as a whole more compatible with the future orientation of the modal, in turn licensing free choice. In my judgment (and several native English speakers I consulted with), (23) more readily licenses the free choice interpretation when used in the context in (21), in contrast to (21b). This suggests that the hypothesis concerning perfective aspect is on the right track. However, it remains to be seen whether this change in tense on *have* completely accounts for the variability in judgements concerning (21) and (22); I leave this as a matter for future research. If it is the case that the cause interpretation also licenses free choice, this suggests that *have* in the cause interpretation does in fact convey a circumstantial modal component which can be analyzed as a modal quantifier—parallel to the engineer interpretation. Even though these details are not fully understood, the hypothesis outlined above proposes that this modality is harder to detect than the agent-oriented modality observed in the engineer interpretation.

While the above observations concerning the cause interpretation are rather preliminary, they do pave the way for a unified analysis of the cause and engineer interpretations. There is a single entry for *have* whose semantic contribution is a modal quantifier, and the modal flavor of this quantifier can vary: in one case, it is agent-oriented in nature and gives rise to the engineer interpretation and in the other case, it is circumstantial in nature and gives rise to the cause interpretation. Spelling out the details of such a unified analysis is a promising line of inquiry for further research. This kind of analysis would also connect *have* causatives to other phenomena observed in the literature given that a similar analysis has been proposed for defeasible causatives in Martin 2020.

6. Conclusion

To wrap up, let's take stock of the main takeaways. Empirically, it was observed that when it comes to *have* causatives, disjunction can be understood in two different ways: as conveying ignorance or free choice. In addition, it was observed that indefinite DPs can be interpreted as specific or non-specific. These observations lead to an analysis where whatever is being contributed by *have* has to be able to interact scopally with disjunction. I proposed that the semantic contribution of *have* is a modal quantifier where the modal base is determined by the subject's intentions. This proposed characterization of the engineer interpretation provides insight into what it means to call an individual an 'engineer' without relying on a novel ENGINEER theta role. The crucial insight is that the relation between an 'engineer' and the complement of *have* relies on agent-oriented modality and this is what gives rise to the free choice interpretation. As a result, we can see that, on the basis of causative *have* constructions, it is not necessary to stipulate a novel theta role in order to understand the semantics of such constructions. I believe this to be an appealing conse-

quence given that theta roles are taken to be conceptual primitives in grammar, and so one should be cautious of stipulating that a new primitive needs to be invoked.

As a final remark, even though my analysis differs from the CAA, what I propose can also be viewed as an extension of the CAA which decomposes the ENGINEER theta role along semantically motivated grounds. Re-analyzing the ENGINEER theta role as a modal quantifier provides a more transparent characterization of the contribution made by the subject of *have* and also straightforwardly captures the different interpretations of disjunction as a scope ambiguity at LF, parallel to cases with an overt modal.

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