Thoughts toward an Event Analysis of Obligatory Control

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This paper will present a novel way of approaching the semantic composition of obligatory control verbs with their infinitival complements, using the event analysis of argument association in Kratzer (1996). This approach obviates any discussion of the presence, or absence, of an infinitival subject, either through syntactic means (PRO) or semantic entailments or postulates (Chierchia 1984). The infinitive will denote a proposition-like object ⟨s,t⟩—a set of situations/eventualities—that excludes an external argument. The control verb will be a predicate that introduces an external argument and certain additional meaning elements. The control verb and the infinitive will compose via Event Identification.

Treating obligatory control verbs as semi-functional light verbs will help to explain why the infinitive does not contribute its own tense or event structure, and why certain lexical properties of the infinitive appear to be selected by the control verb in a fashion similar to canonical Voice heads.

1. The Event argument: Kratzer (1996)

Kratzer (1996) argues that verb (roots) are not relations between all the arguments we see in the clauses (i.e. subjects, objects, etc.), but between the internal argument and a situation/event(uality) argument.[1] External arguments are arguments of separate predicates, Voice heads, which are themselves relations between an external argument and an event argument. In active, event denoting sentences, the Voice head is an Agentive predicate. Voice_{ag} and the VP composes via a rule of Event Identification (EI). The lower VP, then, has a proposition-like semantics (*s* ranges over whole worlds as well

[1] I will stay neutral about the ontology here, and simply use *s*, the type of situations, as both an event argument in the Davidsonian sense and as the intensional argument variable. This should be fine, since the set S of all situations has a part structure, so Events will most likely be smaller (minimal) situations (Aspect phrases will take VoiceP complements and manipulate the set of events contained in them). Alternatively, we could make use of the notion of an eventuality that exemplifies a proposition, Kratzer (1998). See Alonso-Ovalle (2002) present an account of Spanish adjunct infinitives that denote eventualities derived through a minimality operator located on the infinitive marker; this may be the role of *to* in English. Larger situations will pick out "propositions", whole worlds in the limiting case.

as partial worlds (situations), and minimal situations, (eventualities, which includes both events and states).

The composition of *John fixed the car* proceeds as follows.

(1) $\exists s.[\mathbf{Agent}(\mathbf{j})(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s)] : t$

$\exists$ $\lambda s.[\mathbf{Agent}(\mathbf{j})(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s)] : \langle s,t \rangle$

John : $\mathbf{j} : e$ $\lambda x.\lambda s.[\mathbf{Agent}(x)(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s) : \langle e,\langle s,t \rangle\rangle$ by EI

Voice: $\lambda x \lambda s.\mathbf{Agent}(x)(s) : \langle e,\langle s,t \rangle\rangle$ VP: $\lambda s.\mathbf{fix}(\mathbf{the\ car})(s) : \langle s,t \rangle$

The second-to-top node, then, is a property of situations/eventualities, which serves as the object of an aspect phrase (where the event argument can be existentially closed, and time arguments introduced (Kratzer 1998)). I'll just existentially close the eventuality argument from here on, although the role of Aspect may very well be important to control complements.

I will argue that obligatory control verbs are analogous to Voice heads, and infinitives analogous to these lower VPs. However, control Voice heads do more than just introduce the external argument; they often add some "extra" information depending on the actual OC predicate involved. But the part that is analogous to Voice introduces an external argument to an complex event that includes the infinitive, and thereby obviates any need whatsoever to discuss where the infinitival subject is, either syntactically or semantically. That is, the traditional "control" question becomes as irrelevant as it is in a simple action sentence like the one illustrated above.

To see how this would work, I need to introduce the class(es) of obligatory control verbs (OC). OC predicates take infinitival or gerundive complements, whose notional subject must be identical to the matrix subject: no long-distance, joint, or arbitrary control (2a), all of which fall under the rubric of non-obligatory control (NOC). I use indices on PRO to illustrate this, but without making any claim about PRO's existence. Furthermore, the non-finite complement cannot be evaluated at a distinct time from the matrix clause (2b). Last, OC complements can only be interpreted sloppily under ellipsis: that is, the understood subject cannot be strictly interpreted (2c)

(2) a. Bill_j told Mary_k that John_i tried $\text{PRO}_{i/*j/*k/*j+k/*arb}$ to fix the car.
b. #John tried at noon [to fix the car at 6pm]
c. John_i tried PRO_i to fix the car, and Bill_j tried as well.
≠ Bill_j tried PRO_i to fix the car.

All these characteristics contrast with non-obligatory control (3):[2]

(3) a. Bill_j told Mary_k that John_i thought [[$\text{PRO}_{i/j/k/j+k/arb}$ fixing it] was pointless].
b. John thought, at noon today, that [fixing the car at 6pm] was pointless
c. John_i thought that [PRO_i fixing the car was pointless] and Bill_j did too.
= Bill_j thought that $\text{PRO}_{j/i}$ fixing the car…

Furthermore, control verbs can be divided into two broad classes according to Landau (2000): exhaustive and partial control. The two are identical except for the fact that in Partial Control (PC), the notional subject of the infinitive can include more than the controller (although it must include at least the controller). The notional subject of the infinitive in exhaustive OC must refer to the controlling argument, and **only** the controlling argument.

I will concentrate only on exhaustive control. This subclass can be further divided into different classes. These include the implicative class (4a), the aspectual class (4b), and modals (4c) (from Landau 2000):

(4) a. *dare, manage, make sure, bother, remember, get, see fit, condescend, avoid, forget, dial, refrain, decline, neglect, for, compel…*
b. *begin, start, stop, finish, continue, resume…*
c. *have, need, may , should , is able, must…*

Two words about the class of exhaustive OC predicates are needed. First, I will ignore the modals, since their inclusion hinges on whether modals can be control verbs as well as raising verbs. Also, absent from this list is the quintessential OC verb, *try*. I will demonstrate the proposal with the implicatives first, and then *try*. I will assume that the

[2] It's probably not even fair to contrast the two types, as is so often done in the syntactic literature: OC infinitives are complements to verbs, NOC predicates are not. So the distinction probably has less to do with controlled PRO, but with what kind of objects OC verbs select for. This is a pretty obvious fact, but not one that enters discussion of control distinctions too often. In my proposal, the lexical semantics of OC predicates is right at the heart of what "control" is.

analysis can be extended to the aspectual verbs in some fashion. We'll see that treating the verbs in (4a,b) as Voice heads captures the OC semantics as well as some other facts.

2. Implicative control verbs

Implicative control verbs are obligatorily and exhaustively controlled. An OC implicative verb such as manage asserts that its subject "did" whatever action is denoted by the complement, and it implicates that doing such a thing was hard (for the subject)

(5) Ed managed to fix the car.

entailment: Ed fixed the car

implicature: It was hard (for Ed) to fix the car

Similarly, other implicatives assert that the subject performed the action in the infinitive and they make commentary about the nature of that action/event. Some examples below:

(6) Bill condescended to come to the party.

entailment: Bill came to the party.

implicature: It was beneath Bill to come to the party.

(7) Freda forgot to water the plants:

entailment: Freda didn't water the plants.

implicature: Freda intended to/should have watered the plants.

Take the sentence (7) with *manage*. Minimally, we want the denotation of the verb, plus its composition with the examples, to give us the entailment. I propose that the entailment is actually just the meaning of *manage*. The complement infinitive is not a clause with a subject position in it, but is simply a property of eventualities/situations that the root of the verb denotes before the Voice head is introduced. So in (5): [[**fix the car**]] = λs.fix(the car)(s). Below is a parse tree of (5):

(7) *Control as Voice head*

$\exists$ $\lambda s.[\mathbf{Agent}(\mathbf{j})(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s)] : \langle s,t \rangle$

John : $\mathbf{j} : e$ $\lambda x.\lambda s.[\mathbf{Agent}(x)(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s) : \langle e,\langle s,t \rangle\rangle$ by EI

manage: $\lambda x \lambda s.\mathbf{Agent}(x)(s) : \langle e,\langle s,t \rangle\rangle$ VP: $\lambda s.\mathbf{fix}(\mathbf{the\ car})(s) : \langle s,t \rangle$

Here the verb *manage* is not a functor on the infinitival complement, as is commonly assumed for control verbs. Instead, it introduces an external argument. Since an external argument isn't in the domain of the infinitival predicate , the job of introducing the external argument falls to the control predicate. The two compose via Event Identification like any other (active) Voice head and VP in Kratzer's system. The entailment we saw above is trivial: the external argument to the *fixing* event is introduced by *manage* itself, so the sentence simply means that John fixed the car. In this way, the traditional "control" question disappears for exhaustive OC verbs.

Of course, we need to add somewhere the other component of the verb's meaning, because we don't want *manage* to be synonymous with Kratzer's canonical (active) Voice head, a functional category. One way to add the "extra" meaning is conjoining it with the meaning of Voice:

(8) $[[\mathbf{manage_1}]] = \lambda x \lambda s.\mathbf{Agent}(x)(s) \wedge s\ \mathbf{is\ difficult}\ (\mathbf{for}\ x)$

This meaning, though, treats the implicature as an entailment, on par with the other conjuncts in the Kratzerian-VP. As Potts shows, we want to put the implicature on a separate dimension from the asserted content. Potts (2005, handout) offers just such a framework for dealing with multidimensional meaning for such verbs. Potts's *manage* is shown below:

(9) $[[\mathbf{manage}_2]] = \left\langle \begin{array}{l} \lambda f.\lambda x.f(x) \\ \lambda g.\lambda x.x\ \mathbf{try\text{-}hard}\ g(x) \end{array} \right\rangle$

The top meaning just passes on the function that it selects, here a verb phrase that has external arguments already in its domain. The second, bottom meaning adds the implicative content. Adopting this approach into the Kratzer-system, I suggest the denotation below, **manage$_3$**:

(10) $[[\textbf{manage}_3]] = \left\langle \begin{array}{l} \lambda x.\lambda s.\textbf{Agent}(x)(s) \\ \lambda x.\ s\ \textbf{is hard}\ \text{for}\ x \end{array} \right\rangle$

Here I have changed two things.[3] The top meaning of **manage$_3$** is just like Kratzer's active Voice head, as shown above. The second meaning is analogous to Potts's second dimension in **manage$_2$** but I have altered it to refer to situations/eventualities, simply saying that "the event/situation that x is an agent of is difficult for x." I altered the original because the complement of *manage* in a Kratzer-style VP is no longer a VP-function $\langle e,\langle s,t\rangle\rangle$, so the kind of predication involved in **manage$_2$** is no longer possible or required. Also, we need to be sure that the event/situation that is **hard for x** is the same one that **x is an agent of** (the *s* variable involved in the EI composition). So I put a free *s* in the implicative meaning that will be bound along with the variables in the upper dimension of meaning.[4] Also, I wanted to keep the predicate *try* out of the mix, since we'll see below that its meaning is rather complex and involves its own type of composition with VP infinitives.

In any case, the secondary meaning, however the technical details play out, gives us what is distinctive about this particular control verb. The top meaning, however, plays out just like a Voice head. This combination is spelled out as the English verb *manage*.

[3] I don't think this changes in any way the multidimensionality approach (does it?), but is a technical adaptation for the event-compositional approach to control taken here.

[4] Furthermore, the function I gave for the implicative dimension might be too simplistic. That is, we might need the Agent predicate in implicative content as well, e.g. $\lambda x.\textbf{Agent}(x)(s) \wedge \textbf{difficult}(x)(s)$, so that *John's fixing the car* is the event that is difficult, not just a *fixing the car*. Moreover, allowing binding into the implicative dimension might be a problem (?). But we need some way of making sure that the event that the subject actually "does" is the same event that the subject has difficulty doing! Note that the conjunctive analysis of the implicature (in 8) will give us this binding for free, but at the expense of making the implicative content an entailment.

The other implicatives will operate the same way: the same upper meaning (modulo negation), but with varied implicative dimensions:

(11) [[**condescend**]] = $\left\langle \begin{array}{l} \lambda x.\lambda s.\ \mathbf{Agent}(x)(s) \\ \lambda x.\ s\ \mathbf{is\ beneath}\ x \end{array} \right\rangle$

(12) [[**forget**]] = $\left\langle \begin{array}{l} \neg\ \lambda x.\lambda s.\ \mathbf{Agent}(x)(s) \\ \lambda x.x\ \mathbf{meant\ to/should\ have\ done}\ s \end{array} \right\rangle$

Below is an example of the composition of (7), with both dimensions of meaning being hauled up the parse-tree:

(13) *John tried to fix the car* →

$\left\langle \begin{array}{l} \exists s.\mathbf{Agent}(\mathbf{j})(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s) \\ s\ \mathbf{is\ hard\ for\ j} \end{array} \right\rangle$

$\exists$ $\left\langle \begin{array}{l} \lambda s.\mathbf{Agent}(\mathbf{j})(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s) \\ s\ \mathbf{is\ hard\ for\ j} \end{array} \right\rangle$

John : **j** : *e* $\left\langle \begin{array}{l} \lambda x.\lambda s.\mathbf{Agent}(x)(s) \wedge \mathbf{fix}(\mathbf{the\ car})(s) \\ \lambda x.s\ \mathbf{is\ hard\ for\ j} \end{array} \right\rangle$

$\left\langle \begin{array}{l} \lambda x.\lambda s.\mathbf{Agent}(x)(s) \\ \lambda x.s\ \mathbf{is\ hard}\ \text{for}\ x \end{array} \right\rangle$ $\lambda s.\mathbf{fix}(\mathbf{the\ car})(s)$

What (13) means, informally, is: *there is an event s, s.t. s is a fixing event and John is the agent of s, and s was difficult (for John to do).* Aside from the secondary content of *manage*, we simply have a mono-clausal construction; there's just one VoiceP, with one subject. There's no further need to specify the how the matrix subject comes to be

identified as the subject of the lower clause, since there is no lower-clause in the familiar sense.[5]

Further evidence that implicative control verbs are like Voice heads may come from event modification (the following discussion applies to *try* as well, and perhaps even the aspectual control verbs). For instance, OC constructions involve only one event, indicating that something like EI has occurred. For instance, adverbs cannot separately modify a *managing* event and a *fixing the car* event. Manner adverbs cannot target each separately, thus leading to contradictions below:

(14) #John slowly managed to fix the car quickly.

There can be no *managing* event that is separate from the *fixing* event, so they cannot have separate manner adverbs.

We furthermore account for the facts that were used to characterize OC, above. Since control here is simply Davidsonian-Kratzer style argument association, there is no reason that (i) the notional subject of the infinitive would be any different from the "matrix" subject; (ii) no reason that there could be separate temporal locations/arguments for the one event, and (iii) no reason that eliding the complement infinitive would bring along the matrix referent. Of course, further research is needed to determine how this account fares against previous analyses, all of which account for these facts in one way or another, or the different predictions it makes.

In particular, the Voice head analysis suggests that these verbs will determine the kind of predicates allowed in the VP infinitive. As Kratzer (1996) argues, different kinds of Voice heads will be compatible with certain root VPs and not others. In particular, a stative Voice head will introduce external arguments of states (say possessors and experiencers) when the VP is a stative predicate. An eventive Voice head will introduce Agentive external arguments for eventive VPs. Selection is required here.

[5] Wurmbrand (2001)—and all HSPG accounts—should be cited as providing a syntactic argument that some control is mono-clausal. However, she advocates a Chierchia-style property-level semantics for these constructions. Actually, the semantic proposal here is more in line with the syntactic arguments she makes (see my other paper).

The same reasoning applies in control. Implicatives, *try*¸ and aspectuals appear to more easily introduce Agentive external arguments, since an action- or event-denoting VP is more natural as a complement, versus a state denoting VP:

(15) a. John managed to fix the car.
b. Freda forgot to water the plants.
c. Ed neglected to comb his hair.
d. Chiara tried to fix the car.
e. Chiara began to fix the car.

(16) a. #John managed to be a red-head.
b. #Freda forgot to know French.
c. #?Ed dared to have a cold.
d. #?Chiara tried to resemble Bill.
e. #?Chiara began be tall.

Derived statives (17a) are a little less odd, as well as passive (17b,c), when embedded under implicatives:

(17) a. ?John managed to have been in the right place during the riot.
b. ?Freda forgot to be given a medical exam today.
c. ?Ed neglected to be interviewed at the job fair.

Perhaps control verbs can have both Agentive and Stative Voice alternates. Or perhaps the relative acceptability of these examples is due to their complements' being coerced into the kind of events compatible with Agents. In particular, these kind of sentences always improve with an "actor context." Imagine John is playing a role that demands his character exhibit certain qualities:

(18) a. John tried to be a red-head.
b. John managed to be hit by the other actor (during the last scene)
c. John forgot to know French in Act II scene I.

These are cases where we have a "Controllable action" (Lasnik and Fiengo 1974); the OC predicates are only compatible with such actions.

But even if a principle of "controllable action" is the proper description of the facts, the data in (15-18) show that there is a strong connection between the aksionart of the VP predicate and the controlling verb. I have ensured that we can state strong constraints on this connection by virtue Event Identification in Kratzer's semantics. That is, whatever mechanism rules out Eventive Voice heads combining with stative predicates will also work here. Accounts in which the complement is a property-level VP or a clause of some sort will require more "long-distance" selection mechanisms to ensure Voice compatibility between the "matrix" and "embedded" predicate. That is not to say there can't be an account without Voice heads that works; the event approach to control offers a more direct way of approaching these facts.

Related to this is Farkas' (1988) account of controller choice using the notion RESP(onsibility). RESP is a relation that holds between an initiator and a situation, just in case the initiator brings about *s* intentionally. RESP can be detected outside of OC constructions: it governs the use of rationale clauses, imperatives, and the adverb *intentionally* itself. It accounts for contrast in verb-types below (from Farkas):

(19) a. The shop window has a big sale sign in it in order to attract customers.
b. #John resembles his father in order to annoy his grandmother.

(20) a. Be polite!
b. #Be tall!

(21) a. John was intentionally polite.
b. #John was intentionally tall.

Furthermore, *intentionally* is not compatible just with Agents, but with any type of argument that could have some "control" over the situation. So a passive subject can bear the RESP relation to an event/situation depending on the nature of the embedded predicate (*seen vs. watched*):

(22) a. John was intentionally seen by the best specialist.
b. #John was intentionally watched by his neighbours.

One way of approaching verbs that license *intentionally*, rationale clauses, and imperatives—while implementing Farkas' RESP relation in Kratzerian terms—could

involve Voice heads. Some Voice heads could introduce external arguments that are intentional initiators of events, while others just introduce agents. OC predicates will be of the former type. This will capture the fact that the external argument to *try* and *manage* do not just have to be the agents of run-of-the-mill lexically inherent action predicates. When the context is right, or the event a "controllable" one, OC will be licit. This is presumably the case in the actor scenario in (18).

3. *Try*: Voice plus intensionality

Next I turn to *try* and demonstrate how an event analysis of control plays out there. It will involve some attention to the lexical semantics of *try*, but it will demonstrate a radical case of the role of events in control. It will also be a case where the complement is not composed via EI.

The meaning of *try*, I will argue, has three ingredients the semantics needs to capture. First, the matrix subject, *the tryer*, must be the agent of some event in the evaluation world: she has to do something we would call an action (see examples above). But, secondly, the action that the agent performs need not be related to the action denoted by the embedded predicate. That is, if *John tried to fix the car*, his *trying* could involve walking out to the garage and banging on the car hood, something that could never be described as a *fixing* event. But there's a caveat and this leads us to the third component: the Agent must **believe** that he is the agent of an event denoted by the embedded predicate. Whether or not he is in the actual world, or whether or not he completes or actually engages in the action, is beside the point and not part of the lexical (or "non-implicative") denotation of *try*. In the above example, John just must think that the action he is performing in the actual world is a *fixing the car* event. Here's a denotation:

(23) $[[\textbf{try}]] = \lambda p_{st}.\lambda x.\lambda s.\textbf{Agent}(x)(s) \wedge x\ \textbf{believes}\ p\ \textbf{de re of}\ s$

is true iff
x is the agent of an event s and he believes de re of s that it is p.

(24) [[**John tried to fix the car**]]

$\exists$s. **Agent**(**j**)(s) $\wedge$ **j believes de re of** s [λs.**fix**(**the car**)(s)] (in w_0)

informally: John is the Agent of some event *s*, and he believes of that event in the actually world (i.e. *de re* of *s*) that *s* is a *fixing the car* event.

The first component of *try* is its Voice head meaning: to *try* is to be the Agent of an event. But that event is not (necessarily) the kind of event denoted by the VP infinitive. The reason is that we didn't do EI as we did with *manage*. The event that John is the agent of can be any (contextually salient) event, which may be of a kind that is or will lead to a VP-infinitive event. The second component of *try* is the requirement that the Agent believe of the event they are performing in the actual world (again, this could be *a fixing* event but just as easily as could be a *banging-on-the-hood* event), that it is a *fixing of the car* event. I simply adopt the semantics for de re beliefs about situations/events from Kratzer 1998.

The meaning of *try* then is like a Voice head without any of the kind of event conjunction used in regular Voice heads or implicative verbs. The semantic content of the VP infinitive gets applied (via Functional application) to an embedded intensional operator in *try*. Intuitively, this puts *try* somewhere halfway between an intensional attitude verb and a Voice head.

This can be compared to other modal analyses of *try* (Chierchia 1984), which compose the matrix subject with the infinitive predicate by way of a modal operator. For instance, one definition runs as follows: **John tried VP** is true iff *in all worlds compatible with John's attempts (those where he succeeds), John does VP*. This approach just tells us what the agent is doing when he succeeds. The present approach provides a semantics that asserts the existence of a relation between an event and an agent in the actual world, without recourse to control postulate or modality.

Moreover, the present approach leaves open whether the Agent actually "did VP" or not (something it has in common with the modal approach). But the pragmatics are set up so as to favour a use of *try* which implicates that the event wasn't completed successfully. I think this is inline with intuitions: we can cancel the implicature that the agent didn't succeed, but this just goes to show that *try* in general implicates the opposite:

(25) John tried to fix the car.
implicature: he didn't fix the car

(26) John tried to fix the car…and believe or not he actually did!
~~*implicature:* he didn't fix the car~~

Since the semantics of *try* are a lot like the regular external argument introducing Voice head, which would entail that the agent *did* perform the VP, then *try* competes with that meaning. But *try* has the extra intensional meaning, which falls short of saying that the agent performed VP, only that the Agent ***thought*** that his action was a VP action of the relevant sort. The hearer assumes *try* was chosen over $\text{Voice}_{\text{agent}}$ for a particular reason, and infers that this talk about *belief* suggests the VP action was a fiction of the Agent's imagination, not an event in the actual world.

Whatever the reasoning that leads to the implicature in the *try* cases, I think it is clear that we do not want a *try* control construction to entail the successful completion of the event or even necessarily that the Agent was involved in any VP-relevant event.

Still, the traditional "control" question — how the infinitival subject is represented — disappears. The "matrix" subject is the agent of one event. In the case of implicatives, that event is also an event of the relevant VP-infinitive kind. In the *try* case, that event can be one thing in the actual world, but in the *tryer's* doxastic alternatives it's a event that has the property denoted by the infinitive VP (another reason to the complements properties of events).

4. Conclusion

I have argued that OC can be treated on par with regular transitive constructions, using Kratzer's semantics for argument association (using events and event identification). I argued that OC control predicates were lexical Voice heads, which are distinguished from the more familiar, functional Voice head by either carrying implicatures or hidden intensional operators. But since they are treated as single, transitive clauses, the question about how the infinitival subject is interpreted or presented (in syntax or semantics) becomes an ill-posed question, unstatable. I maintain that this is a good result.

I have not yet provided an account of aspectual predicates: it is likely that they involve Voice heads with addition information about the internal structure of the event, specifications about end-points, duration, and presuppositions about the events (e.g. *stop, finish*).

There's a big issue, though, lingering behind this approach. How do we account for Partial Control, i.e. control complements to verbs like *want, decide,* and *claim* or *believe*? These predicates can't be (solely) responsible for introducing the external arguments of the embedded infinitival predicate. That is, *wanting* is not the same state/event as the event/state/situation that is denoted by the complement. Moreover, the kind of Voice and aksionart constraints we saw in OC structures are absent in these cases: *want* takes all kinds of complements, that can exhibit a full range of lexical aspect, derived aspect, and, to some extent, tense. Here we have a bigger semantic and syntactic object, and the traditional control question may still apply. It is important to note, though, that all of the PC predicates are intensional: they are all propositional attitudes of some sort or other. This was not the case for OC. That ought to play a role in framing the control question for this class of constructions—an observation never made in the syntactic literature.

The very fact that there are differences between Partial control and OC suggests that the account given for OC is on the right track, since it radically distinguishes the way the traditional notion of "control" plays out. The crucial message in all of this has been that understanding control requires a close look at the lexical semantics of the controlling predicate, and what kind of semantic object the complement infinitive is.

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