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RESEARCH

Control, temporal orientation, and the cross-linguistic grammar of *trying*

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The verb *try* plays a starring role in many example sentences in the control literature. But one of its most basic properties has eluded satisfying explanation: for many speakers of English, *try* rejects non-control infinitival complements, as in *%I tried for John to notice me* or *%John tried for there to be food on the table*. A number of scholars have hypothesized that this fact about *try* has a semantic basis, but this hypothesis has yet to be fully reconciled with the problem of cross-dialectal and cross-linguistic variation and with existing formal semantic approaches to *try*-sentences. In this paper, based in part on a novel observation from Spanish and Hebrew about how *try*'s complement type interacts with its temporal orientation, I aim to further substantiate the semantic approach to *try*'s behavior. The proposal is couched in an explicit compositional treatment of the formal semantics of *try*-sentences, whereby non-control *try*-sentences induce a presupposition failure which can be repaired in some languages via a coercion mechanism that is independently detectable in that in some languages it enables a future orientation for the complement. The implication is that cross-linguistic variation in the inventory of coercion mechanisms obscures an underlyingly principled semantic basis for *try*'s behavior.

Keywords: control; temporal orientation; coercion; complementation; infinitives

1 Introduction

A fundamental question for control theory is the distribution question: what principles regulate the relative distribution of controlled arguments (also known as PRO)[1] as compared against non-controlled arguments (which include full NPs, ordinary pronouns, and *pro*)? At least two cross-linguistically valid dimensions to PRO's distribution appear to be purely syntactic in nature: with very few possible exceptions, PRO can appear only in subject position, as illustrated in (1), and only in a nonfinite clause, as illustrated in (2). (See e.g., Landau 2013: Chapter 4 for an overview).

(1) a. John wants [PRO to see Bill].
b. *John wants [Bill to see PRO].

(2) a. John claims [PRO to be tall].
b. *John claims [that PRO is tall].

The conclusion that the contrast in (1) is purely syntactic in nature is based on the premise that there is no semantic factor on which the ungrammaticality of (1b) could be blamed;

[1] Here and throughout, I intend *PRO* as shorthand for *obligatorily controlled argument*, not as a theoretical commitment regarding how — or even whether — such arguments are represented syntactically. See Landau (2013): Chapters 2 and 3 for discussion of some of the many issues that are at stake in this area.

supporting evidence comes from the fact that if the embedded clause in (1b) is passivized so that PRO ends up in subject position, the result is grammatical, as in (3). On the intended reading, (1b) and (3) are truth-conditionally equivalent, yet only the latter is grammatical.

(3) John wants [PRO to be seen by Bill].

Similarly, the conclusion that the contrast in (2) is purely syntactic is based on the premise that there is no (relevant) semantic difference between finite and nonfinite clauses on which the contrast in (2) could be blamed; supporting evidence comes from the fact that on the intended reading, (2a) and (2b) are truth-conditionally equivalent, yet only the former is grammatical.

But when these two dimensions are factored out, there are residual distributional puzzles in PRO's behavior whose source is more obscure. This paper takes as its focus one such puzzle, namely the observation that the verb *try* readily accepts control complements (4a) but rejects non-control complements (for many speakers of English)[2] (4b); cf. *want* which comfortably accepts both control (5a) and non-control complements (5b) equally without fuss.

(4) a. John **tried** [PRO to open the door].
b. %John **tried** [for Bill to open the door].

(5) a. John **wanted** [PRO to open the door].
b. John **wanted** [(for) Bill to open the door].

What is the source of the asymmetry between (4) and (5)? At least two analytical options are *a priori* conceivable. On one view — call it the *idiosyncrasy approach* — the asymmetry between (4) and (5) reflects a purely arbitrary, lexically idiosyncratic accident of (some dialects of) English: *want* syntactically selects for both control and non-control complements, whereas *try* syntactically selects for control complements only. On this view, the observed split is no deeper or more interesting than the fact that the verb *depend* just so happens to select for the preposition *on* whereas the verb *wait* just so happens to select for both *on* and *for*.

On another view — call it the *semantic approach* — the asymmetry between (4) and (5) reflects a principled semantic difference between *want* and *try*: *want* has a denotation whereby control and non-control complements both yield sensible truth conditions whereas *try* has a denotation whereby non-control complements yield structures that are either outright uninterpretable or otherwise semantically anomalous (in the relevant dialects).[3]

[2] Henry (1992), for example, reports that sentences formally equivalent to (4b) are acceptable in Ozark English (a variety of American English spoken in the Ozark Mountains of Arkansas, Missouri and Oklahoma; cf. also Chomsky & Lasnik 1977; Carroll 1983; Henry 1995). The issue of cross-dialectal (and cross-linguistic) variation on this point figures prominently in this paper and we will return to it shortly.

[3] Versions of the semantic approach to *try*'s behavior are found in various places in the literature including especially Lasnik & Fiengo (1974); Rochette (1988); Schütze (1997); Wurmbrand (2001); McFadden (2005); Grano (2011, 2012, 2015a). But for the most part these authors do not implement the idea within a formal proposal about the meaning of *try* nor do they come to grips fully with the problem of cross-dialectal and cross-linguistic variation. A goal of this paper is to fill this gap. Clear exemplars of the idiosyncrasy approach in previous literature are harder to come by, though one possible early example is Lakoff (1965). Lakoff considered *try* an "absolute positive exception" to the rule that deletes NPs under identity to yield control; i.e., *try* is exceptional in that (unlike e.g., *want*) the sentences it inhabits are required to meet the structural description for the rule that yields control.

What factors are at stake in deciding between these two approaches? Two are critical. The first is the cross-linguistic picture. Broadly speaking, the idiosyncrasy approach predicts no systematic cross-linguistic agreement in how the meaning of an embedding predicate relates to its complementation options, whereas the semantic approach does predict such agreement. The second is independent semantic evidence: if *try* rejects non-control complements on semantic grounds, then such an analysis ought to be consistent with — if not predictable from — our most sophisticated understanding of the semantics of *try*-sentences.

Turning first to the cross-linguistic factor, what we in fact see is neither fully regular nor fully irregular; instead, we see a kind of systematically constrained irregularity. As pointed out by Grano (2015b) — from whom Table 1 below is borrowed — we see cross-linguistic agreement for *want* in accepting non-control complements, and cross-linguistic agreement for aspectual verbs like *begin* in rejecting non-control complements (as long as the syntax of the language is respected — in many cases this means using a subjunctive clause in testing for the possibility of a non-control complement).[4] This is exactly what we would expect if there is a semantic component to PRO's distribution but unexpected if the relative distribution of control and non-control complements is lexically idiosyncratic. But for *try*, we see instability, both across dialects of English, as well as across languages, with some including French and Mandarin rejecting non-control complements but others like Greek, Hebrew and Spanish allowing them.[5] This is of course expected on the idiosyncrasy approach, but what would still remain unexplained on the idiosyncrasy approach is why the observed cross-linguistic and cross-dialectal instability is confined to *try* to the exclusion of *want* and *begin*. In light of this tension, a major goal of this paper is to pursue a compromise whereby *try*'s behavior has a principled semantic basis in that non-control *try*-sentences are semantically anomalous, but this underlying regularity gets obscured by variation in the availability of a coercion mechanism that repairs the anomaly. In its general shape, this proposal bears a close resemblance to some of the ideas expressed about control by Perlmutter (1968); Jackendoff & Culicover (2003); Grano (2012, 2015a).

Turning next to the semantic factor, the only two formally explicit treatments of the semantics of *try*-sentences that I am aware of are Sharvit (2003) and Grano (2011), both of whose insights will be weaved into the analysis pursued below. Sharvit (2003: 422) is explicitly neutral about whether *try*'s syntactic behavior "has a deeper semantic reason" or not; it is not something that follows from the semantics she proposes. Grano (2011) attempts an explicit connection between *try*'s syntactic behavior and its semantics, and ends up pursuing an interface account whereby (following Sharvit) *try* has an aspectual semantics, and (building on Cinque 1999, 2004) morphemes with aspectual semantics are realized as inflectional-layer functional heads whose syntax precludes overt embedded

Table 1: Cross-linguistic availability of overt embedded subjects (Grano 2015b).

	English	French	Mandarin	Greek	Hebrew	Spanish
want	✓	✓	✓	✓	✓	✓
try	%	*	*	✓	✓	✓
begin	*	*	*	*	*	*

[4] I assume following Perlmutter (1970) that aspectual verbs are control/raising ambiguous. The relevant point is that on its control use, PRO does not alternate with a lexical subject. See Grano (2016) (briefly summarized in the final paragraph of Section 5 below) for a potential explanation for this fact.

[5] See also Kissock (2014), who observes that Tamil *paar* 'try' disallows non-control complements whereas Telugu *prajatnintʃu-* 'try' allows them.

subjects. A goal of this paper is to try to make the connection between meaning and syntactic behavior even tighter, in a way that does not rely on mapping principles that relate aspectual morphemes to particular syntactic positions.

The organization of the rest of the paper is as follows. Section 2 lays out novel cross-linguistic data that form part of the empirical basis of the account to be developed, with a focus on a puzzling interaction between control and temporal orientation that obtains for *try*-complements in Spanish and Hebrew. Section 3 develops a semantics for *try* as used in control sentences. Section 4 turns to non-control *try*-sentences and argues that they have an additional causative component not present in their control counterparts. Section 5 argues that this causative component is the result of coercion. Section 6 discusses how the core analysis might be scaled up to account for the broader range of observed cross-linguistic variation in *try*'s behavior. Finally, Section 7 concludes.

2 Some novel data

2.1 The core puzzle

Wurmbrand (2014) argues that English infinitival complements come in three temporo-aspectual classes. *Future infinitives* are diagnosed based on their compatibility with time frame adverbials that are future-oriented with respect to the matrix reference time, as in (6a–b) (cf. Stowell 1982). *Simultaneous propositional infinitives* are diagnosed based on their incompatibility with episodically interpreted, aspectually zero-marked event descriptions, as in (7a–b). Finally, *simultaneous nonpropositional infinitives* are diagnosed based on their incompatibility with time frame adverbials that are future-oriented with respect to the matrix reference time, as in (8).[6]

(6) *Future infinitives*
   a. (Today,) John **wanted** [PRO to leave tomorrow].
   b. (Today,) John **expected** [Bill to leave tomorrow].

(7) *Simultaneous propositional infinitives*
   a. John **claimed** [PRO to {be leaving/have left/#leave} at 3].
   b. John **believed** [Bill to {be leaving/have left/#leave} at 3].

(8) *Simultaneous nonpropositional infinitives*
   a. John **tried** [PRO to leave (#tomorrow)].
   b. John **managed** [PRO to leave (#tomorrow)].
   c. John **began** [PRO to leave (#tomorrow)].

Turning to the cross-linguistic situation, we observe here that in Spanish and Hebrew, *want* and *try* both behave like their respective English counterparts in that *want* enables future orientation (9a)/(10a) whereas *try* does not (9b)/(10b).

(9) *Spanish*
   a. Hoy Juan **quería** [**PRO** abrir la puerta (**mañana**)].
      today Juan wanted.3SG open.INF the door tomorrow
      'Today, Juan wanted to open the door (tomorrow).'

[6] An anonymous reviewer suggests that it is not clear that (8a) is as bad as (8b) and (8c). Here I follow the previous literature (see especially Wurmbrand 2014 and references therein) in treating (8a)–(8c) as deviant in a way that we want to have a grammatical explanation for (whether that explanation be syntactic or semantic). A grammatical account of the deviance of (8a)–(8c) does not preclude the possibility of gradation in perceived levels of deviance across the sentence types, though this is not something that I will be able to document or investigate in this paper.

b. Hoy Juan **ha** **intentado** [**PRO** abrir la puerta (#**mañana**)].
today Juan have.3SG tried open.INF the door tomorrow
'Today, Juan tried to open the door (tomorrow).'

(10) *Hebrew*
a. Ha-yom Dani **raca** [**PRO** liftoax et ha-delet (**maxar**)].
the-day Dani wanted.3MS open.INF ACC the-door tomorrow
'Today, Dani wanted to open the door (tomorrow).'
b. Ha-yom Dani **nisa** [**PRO** liftoax et ha-delet (#**maxar**)].
the-day Dani tried.3MS open.INF ACC the-door tomorrow
'Today, Dani tried to open the door (tomorrow).'

Unlike in (standard) English, however, Spanish and Hebrew *try* also have the option of taking a non-control complement, as in (11)–(12). (11), for example, could be used to report a scenario in which Juan did something with the intention that his action would result in Pedro opening the door (e.g., he might have simply asked him to do so, or tried reasoning with him, or employed subtle psychological manipulation).

(11) *Spanish*
Juan **ha** **intentado** [que Pedro abriese la puerta].
Juan have.3SG tried that Pedro opened.SBJV.3SG the door
Lit.: 'Juan tried for Pedro to open the door.'

(12) *Hebrew*
Dani **nisa** [she-**Moshe** yiftax et ha-delet].
Dani tried.3MS that-Moshe open.3MS.FUT ACC the-door
Lit.: 'Dani tried for Moshe to open the door.'

Against that backdrop, the novel and crucial observation is that when *try* is used with a non-control complement, future orientation now becomes possible in both Spanish and (for at least some speakers) Hebrew, as witnessed in (13) and (14) respectively. (13), for example, could be uttered in a scenario where Juan did something *today* (making a request, or whatever) with the intention that this action would result in Pedro opening the door *tomorrow*.[7]

(13) *Spanish*
Hoy Juan **ha** **intentado** [que Pedro abriese la puerta
today Juan have.3SG tried that Pedro opened.SBJV.3SG the door
mañana].
tomorrow
Lit.: 'Today, Juan tried for Pedro to open the door tomorrow.'

[7] A note on the reliability of the data: All of the Spanish sentences in this section have been checked with three native speakers of Castilian Spanish and the Hebrew sentences have been checked with two native Hebrew speakers. For the most part there is agreement on the judgments, except that of the two Hebrew speakers, one reports that (14) is bad; hence I mark it with "%" to signal variation in judgments. This suggests one of two possibilities. First, it is relevant to note that there is broad consensus among both the Hebrew and the Spanish informants that 'today'. . .'tomorrow' sentences are in general a bit awkward, as are sentences in which *try* takes a non-control complement. Since (14) combines both of these properties, its perceived oddity could be the aggregate effect of these two (by hypothesis extra-grammatical) factors rather than an indication that the grammar forbids future orientation for non-control *try*-complements. But another possibility is that this is a genuine point of grammatical variation among Hebrew speakers. For more on grammatical variation, see Section 2.2 below.

(14) *Hebrew*
%Ha-yom Dani **nisa** [she-**Moshe** yiftax et ha-delet **maxar**].
the-day Dani tried.3MS that-Moshe open.3MS.FUT ACC the-door tomorrow
Lit.: 'Today, Dani tried for Moshe to open the door tomorrow.'

The nature of the puzzle should be clear: if we hypothesize that future orientation is unacceptable in control *try*-sentences because control infinitives cannot be future-oriented, then we make the wrong predictions about control *want*-sentences, which do enable future orientation. But if we hypothesize that future orientation is unacceptable in control *try*-sentences because *try* disallows future-oriented complements, then we make the wrong predictions about non-control *try*-sentences, which also do enable future orientation. Rather, it must be something about the *interaction* of *try* with control that conspires to *preclude* future orientation and similarly something about the *interaction* of *try* with the absence of control that conspires to *enable* future orientation.

In this light, the narrow goal of this paper is to propose an account of the pattern of data in (9)–(14). In a nutshell, the proposed account has three ingredients:

(15) a. Control *try* can only combine with simultaneous infinitives because *try* has an aspectual semantics that precludes future orientation (cf. Sharvit 2003; Grano 2011) (Section 3).
b. Non-control *try* involves an additional causative layer of meaning that renders it compatible with future orientation (Section 4).
c. The source of the additional causative layer for non-control *try* is coercion (cf. Perlmutter 1968; Jackendoff & Culicover 2003; Grano 2012, 2015a) (Section 5).

In what follows, I unpack each of these components in turn. First, though, I document two other cross-linguistically attested patterns of data regarding *try*-sentences that the proposed analysis will ultimately have to be responsible for as well and to which we will ultimately return in Section 6.

2.2 Two other patterns

Although the data from the previous subsection constitute the core explanandum of this paper, evidently not all languages can be categorized as English-like or as Spanish/Hebrew-like in how *try* behaves, and so it will be important to ensure that the proposed account leaves room for the other attested patterns as well. In particular, I am aware of two other patterns.

First, as seen in (16), Greek behaves like Spanish and Hebrew in that *want* enables future oriented complements (16a) and *try* enables (future-oriented) non-control complements (16c). Unlike Spanish and Hebrew (and for that matter English), though, Greek also enables future orientation with control *try*, as witnessed in (16b) which is taken from Roussou (2009: 1826).[8]

(16) *Greek*
a. O Kostas **ithele** simera [na fiji **PRO** **avrio**].
the Kostas wanted.3SG today SBJV leave.3SG tomorrow
'Today, Kostas wanted to leave tomorrow.'

[8] Cf. also Terzi (1992); Spyropoulos (2008). Terzi (1992) argues that Greek *prospatho* has two lexical entries, one meaning 'try' and selecting for a control complement, and the other meaning 'try to make/bring up a situation such that' and selecting for a non-control subjunctive adjunct. Terzi's evidence for the adjunct status of the latter comes from the observation that arguments cannot be extracted from non-control clauses under *prospatho*, unlike what is the case for non-control clauses under e.g., *thelo* 'want'.

b. O Kostas **prospathise** simera [na fiji **PRO** **avrio**].
the Kostas tried.3SG today SBJV leave.3SG tomorrow
Lit.: 'Today, Kostas tried to leave tomorrow.'

c. O Kostas **prospathise** simera [na fiji **i** **Maria** **avrio**].
the Kostas tried.3SG today SBJV leave the Maria tomorrow
Lit.: 'Today, Kostas tried for Maria to leave tomorrow.'

Second, preliminary evidence suggests that (Brazilian) Portuguese may instantiate yet another pattern. According to my consultant, Portuguese *want* unsurprisingly enables future orientation, as in (17a). Portuguese *try* accepts control complements and (at least marginally) non-control complements, but does not enable future orientation with either, as seen in (17b–c) (cf. also Note 7 above on a potential point of variation among Hebrew speakers that would make one variety of Hebrew look just like Portuguese with respect to this pattern of data).[9]

(17) *Portuguese*

a. Hoje o João **queria** [**PRO** abrir a porta (**amanhã**)].
today the Joao wanted.3SG open.INF the door tomorrow
'Today, Joao wanted to open the door (tomorrow).'

b. Hoje o João **tentou** [**PRO** abrir a porta (#**amanhã**)].
today the Joao tried.3SG open.INF the door tomorrow
'Today, Joao tried to open the door (tomorrow).'

c. ?Hoje o João **tentou** [que **o** **Pedro** abrisse a porta (#**amanhã**)].
today the Joao tried.3SG that the Pedro opened.SBJV.3SG the door tomorrow
Lit.: 'Today, Joao tried for Pedro to open the door (tomorrow).'

According to my informant, to express the intended meaning of (17c), it is necessary to insert an overt causative predicate, as in (18).

(18) *Portuguese*
Hoje o João tentou [PRO **fazer** o Pedro abrir a porta amanhã].
today the Joao tried.3SG make the Pedro open.INF the door tomorrow
'Today, Joao tried to make Pedro open the door tomorrow.'

Where does this leave us? Taking a step back, if the behavior of *try* with respect to the availability of control vs. non-control complements and the availability of simultaneous vs. future-oriented complements were independent of one another, then we would expect that in a given language, *try* with a control complement could be either simultaneous, future-oriented, or ungrammatical; and independently of that, *try* with a non-control complement could similarly be either simultaneous, future-oriented, or ungrammatical. Ignoring the hypothetical case where *try* is ungrammatical with both control and non-control complements alike, this yields a total of eight possible language types as

[9] An anonymous reviewer suggests that the choice of the embedded predicate may play a role in modulating the acceptability of future orientation; for example, *pass the driving test*, as in *John tried for Peter to pass the driving test tomorrow — by having bribed the examiner* might be easier to accept than *open the door*. Here I use (the Portuguese equivalent of) *open the door* in order to facilitate comparison with the Spanish and Hebrew data presented above, but the influence of the embedded predicate would be a worthwhile factor to explore in future research.

schematized in Table 2.[10] Of these eight types, only four are attested: first we have languages like Brazilian Portuguese and Greek in which complements to *try* always have the same temporal profile regardless of whether they involve control or not (types a and e in the table). Then we have Spanish and Hebrew in which control complements are simultaneous but non-control complements are future-oriented (type b). Finally, we have languages in which control complements are simultaneous and non-control complements are ungrammatical. Such languages include (standard) English — as well as French (Rochette 1988), German (Wurmbrand 2001), and Mandarin (Grano 2015a) (type c), based on the reports of this verb's behavior in the cited references. The other four logically possible scenarios (types d, f, g, and h) are as far as I know unattested.

After arriving at an account of types b and c languages in Sections 3–5 below, I will return in Section 6 below to a discussion of how the core account might accommodate type a and e languages as well without erroneously letting in the unattested types.

3 A semantics for *try* as used in control sentences

Any adequate semantics for *try* as used in sentences like (19) is responsible for at least two facts.

(19) John tried to open the door.

First, as emphasized by Sharvit (2003), in order for (19) to be true, it must be the case that John did something; i.e., there must be some event whose agent is John. That this is so is evidenced by the observation that it sounds contradictory to pair a *try*-sentence with a denial that the relevant individual took action, as in (20); cf. the corresponding *want*- and *intend*-sentences in (21) which are purely attitudinal and hence not similarly contradictory. We'll call this the *action* component of *try*.

(20) #John **tried** to open the door, but he didn't do anything about it.

(21) John **wanted/intended** to open the door, but he didn't do anything about it.

Second, as also pointed out by Sharvit (2003) and further discussed by Grano (2011), (19) also conveys that John had a particular kind of mental attitude — namely an intention — to

Table 2: The cross-linguistic behavior of *try* (key: S = *simultaneous*; F = *future-oriented*; U = *ungrammatical*).

	CONTROL	NON-CONTROL	LANGUAGE
a.	S	S	Brazilian Portuguese
b.	S	F	Spanish, Hebrew
c.	S	U	(standard) English, French, Mandarin, German
d.	F	S	(unattested)
e.	F	F	Greek
f.	F	U	(unattested)
g.	U	S	(unattested)
h.	U	F	(unattested)

[10] In this table, I use *future-oriented* to indicate that the relevant predicate *allows for* a future-oriented complement, not that it requires one. An anonymous reviewer, for example, points out that control *try* in Greek allows for simultaneous complements in addition to futore-oriented complements. In this respect it is similar to English *want*, which usually has a future-oriented complement, even though simultaneous readings are possible as well under some conditions (see e.g., Harrigan 2015).

open the door. This is evidenced by the contradictory status of (22); cf. the corresponding *want*-sentence in (22) which is not similarly contradictory. We'll call this the *intention* component of *try*.[11]

(22) #John **tried** to open the door, but he had no intention of opening the door.

(23) John **wanted** to open the door, but he had no intention of opening the door.

Putting together the action component with the intention component leads us to (24) as a first approximation of the semantics for the *try*-sentence in (19). I assume here a Hintikkan semantics for intention reports whereby *INT* is a function from individuals *x* and worlds *w* to the set of worlds compatible with *x*'s intentions in *w*. This function is borrowed from Stephenson (2010: 423–424); for discussion and alternative options, see Grano (2017). Also, because it is orthogonal, we abstract away here from the need to account for the obligatory *de se* interpretation of attitude reports expressed by control sentences; for options broadly consistent with the other theoretical choices made in this paper, see Stephenson (2010); Pearson (2016).

(24) Proposed denotation for *John tried to open the door* (version 1 of 2):
$\exists e[Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[open(e') \wedge Ag(e', j) \wedge Th(e', d)$ *in* $w']]$
$\approx$ 'There is some event *e* whose agent is John and all worlds compatible with John's intentions in *w* are worlds in which there is some event *e′* which is an opening event whose agent is John and whose theme is the door.'

As it stands, though, (24) is inadequate, because although it correctly conveys that John acted and that John intended to open the door, it does not specify that John acted *with* the intention of opening the door; i.e., his intention was that the action in question result in the fulfillment of the intention (cf. Searle's 1983 concept "intention in action"). Hence we incorrectly predict that (19) would be true in a scenario where John's action had nothing to do with the named intention.

In order to rectify this shortcoming, we need the truth conditions to specify some sort of link between the action John took and the outcome he intended. There are various ways one could go with this; here we will basically adopt the approach taken by Sharvit (2003), whose insight was that the relationship that a *try*-sentence establishes between action and intended outcome is very reminiscent of Dowty's (1977) imperfective paradox. In particular, a progressive sentence like (25a) asserts the existence of some event that stands in a part-whole relationship with the event asserted to exist by the sentence's non-progressive counterpart in (25b).

(25) a. John was opening the door.
b. John opened the door.

[11] A comment by an anonymous reviewer who reports not finding the contrast in (22)/(23) so sharp prompts me to clarify that wanting is certainly *consistent* with having an intention; instead the claim is that wanting at least sometimes does not *entail* having an intention. Complicating the picture is the possibility that *want* sometimes does have a meaning akin to *intend*, as suggested in passing by Heim (1992) and formally implemented by Condoravdi & Lauer (2016). But the existence of an intention-free use of *want* is supported by the fact that utterances like (i) are felicitous without having to assume that John believes himself to have control over his height, which would be a prerequisite for his having an intention to be tall (see Grano 2017).

(i) John wants to be tall when he grows up.

Here we'll implement this insight somewhat differently from how Sharvit does by simply adding to the content of John's intention the clause that the action John took is an initial stage of the outcome he intended, as in (26) (with bolding to show what's been added). In other words, in order for John's intention to be satisfied, it has to be the case that the outcome he intended (successfully opening the door) had as an initial stage the action he took. The "initial-stage-of" relation used here ($\subset_{init}$) is borrowed from Piñango and Deo's (2016) work on aspectual verbs.

(26) Proposed denotation for *John tried to open the door* (version 2 of 2):
$\exists e[Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[\mathbf{e} \subset_{init} \mathbf{e'} \wedge open(e') \wedge Ag(e', j) \wedge Th(e', d)$ *in* $w']]$
$\approx$ 'There is some event *e* whose agent is John and all worlds compatible with John's intentions in *w* are worlds in which **e is an initial stage of** some event *e'* which is an opening event whose agent is John and whose theme is the door.'

Treating *try*-sentences as naming the initial stage in an action raises a question about how *try* differs from *begin* when *begin* is used as a control predicate. Here I follow Grano (2011) who proposes, building on relevant work in action theory (see e.g., O'Shaughnessy 1973), that volitional events have as their initial stage a mental action that precedes and causes externally observable actions. Whereas *try* merely requires that the event is underway at least to the mental action stage, *begin* requires that the action has been successfully externalized. In other words, we need to read "$\subset_{init}$" in (26) as relating an event to its mental action stage, and would need to define another relation for *begin* that relates an event to some portion of its externalized onset. Following Grano (2011), support for this difference comes from the observation that if an agent is (perhaps unknowingly) paralyzed, that agent can *try* to raise his arm (i.e., execute a mental action intended to cause an arm raising) but cannot *begin* to raise his arm, as seen in (27).[12]

(27) CONTEXT: John is paralyzed from the neck down.
a. John tried to raise his arm.
b. #John began to raise his arm.

Armed with this semantics, we are now in a position to say something about the unacceptability of *try* with future-oriented infinitives. By way of background, consider the anomalous sentence in (28).

(28) #Today John opened the door tomorrow.

We can make sense of this anomaly by assigning (28) a denotation like (29), so that it comes out contradictory: the event's runtime is asserted to be included both in the day of the utterance time (i.e., "today") and in the day after the utterance time (i.e., "tomorrow"). Because "today" and "tomorrow" do not overlap temporally, this is a logical contradiction. (In the formula, t^* denotes the utterance time, DAY-OF is a function from time intervals to the relevant 24-hour period that contains them, and DAY-AFTER is a function from time intervals to the relevant 24-hour period that follows them).

[12] Once we incorporate the notion of "mental action" into the specification of the action component of *try*, the division of labor between the action component and the intention component becomes blurred and it is not clear that both are necessary. Here I follow Grano (2011) in maintaining both, though only the action component (more specifically the aspectual relation it incorporates) will be crucial in accounting for *try*'s temporal behavior. I thank an anonymous reviewer for drawing my attention to this point.

(29) $\exists e[open\ (e) \wedge Ag(e, j) \wedge Th(e, d) \wedge \tau(e) \subseteq \text{DAY-OF}(t^*) \wedge \tau(e) \subseteq \text{DAY-AFTER}(t^*)]$
$\approx$ 'There is some event *e* such that *e* is an opening event whose agent is John and whose theme is the door and the runtime of *e* is included in the day of the utterance time and the runtime of *e* is included in the day after the utterance time.'

Returning to *try*, the result now is that a future-oriented infinitive like in (30) will under the current proposal yield the semantics in (31).

(30) #Today John tried to open the door tomorrow.

(31) $\exists e[\tau(e) \subseteq \text{DAY-OF}(t^*) \wedge Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[e \subset_{init} e' \wedge open(e') \wedge Ag(e', j) \wedge Th(e', d) \wedge \tau(e') \subseteq \text{DAY-AFTER}(t^*)\ in\ w']]$
$\approx$ 'There is some event *e* whose runtime is included in the day of the utterance time and whose agent is John and all worlds compatible with John's intentions in *w* are worlds in which *e* is an initial stage of an opening event whose agent is John and whose theme is the door and whose runtime is included in the day after the utterance time.'

The trying event *e* is asserted to be contained in "today" and the intended outcome *e'* is asserted to be contained (in John's intention alternatives) in "tomorrow". But since *e* stands in a part-whole relationship with *e'*, it is impossible for the former to be contained in "today" and the latter in "tomorrow". This impossibility can hence be understood as the source of the perceived unacceptability of the sentence. This is a good result: the temporal orientation of *try* does not have to be stipulated but rather is an emergent consequence of *try*'s aspectual semantics (cf. Wurmbrand 2014: Note 29 for a similar point).

4 A causative component for non-control *try*

Consider now the semantics of *try*-sentences that involve non-control complements (in those varieties of English and those languages that permit such structures). The null hypothesis would be that a sentence like (32) has a semantics just like its control counterpart except that the thematic relation borne by the subject position of the lower clause is not bound by the matrix subject but rather has its own referentially independent subject, in this case Bill, as in (33).

(32) John tried [for Bill to open the door].

(33) Proposed denotation for *John tried for Bill to open the door* (version 1 of 2):
$\exists e[Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[e \subset_{init} e' \wedge open(e') \wedge Ag(e', b) \wedge Th(e', d)\ in\ w']]$
$\approx$ 'There is some event *e* whose agent is John and all worlds compatible with John's intentions in *w* are worlds in which *e* is an initial stage of an event of Bill opening the door.'

But if this is right, then we erroneously predict that future-oriented infinitives should be unacceptable with non-control *try*-sentences: (33) has all the same temporo-aspectual properties as its control counterpart and hence future-oriented infinitives should give rise to the same anomalous outcome as discussed in the previous section. Yet as we saw in Section 2, non-control *try*-sentences enable future-oriented interpretations in Spanish and Hebrew.

Suppose then that non-control *try*-sentences have a bit more semantic structure than their control counterparts; in particular, suppose that they assert not that the agent of the

trying intended for the trying to be an initial stage in the intended outcome but rather that the agent of the trying intended for the trying to be the initial stage in an event that *stands in a causal relationship with* the intended outcome, as in (34).

(34) Proposed denotation for *John tried for Bill to open the door* (version 2 of 2):
$\exists e[Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[e \subset_{init} e' \wedge \exists e''[\textsc{cause}(e', e'') \wedge open(e'') \wedge Ag(e'', b) \wedge Th(e'', d)\ in\ w']]]$
$\approx$ 'There is some event e whose agent is John and all worlds compatible with John's intentions in w are worlds in which e is an initial stage of an event e' such that e' causes an event of Bill opening the door.'

The representation in (34) carries out the intuition that in a non-control *try*-sentence, the subject of *try* is understood as playing a causal role with respect to the eventuality associated with the complement of *try*. And if this is right, then (35) has a denotation like (36).

(35) Today John tried [for Bill to open the door tomorrow].

(36) $\exists e[\tau(e) \subseteq \textsc{day-of}(t^*) \wedge Ag(e, j) \wedge \forall w' \in INT_{j,w}: \exists e'[e \subset_{init} e' \wedge \exists e''[\textsc{cause}(e', e'') \wedge open(e'') \wedge Ag(e'', b) \wedge Th(e'', d) \wedge \tau(e') \subseteq \textsc{day-after}\ (t^*)]\ in\ w']]$
$\approx$ 'There is some event e whose runtime is included in the day of the utterance time and whose agent is John and all worlds compatible with John's intentions in w are worlds in which e is an initial stage of an event e' such that e' causes an event of Bill opening the door whose runtime is included in the day after the utterance time.'

Is there any semantic anomaly or contradiction in (36)? It depends on what kinds of constraints there are on the temporal relationship borne by events that stand in the hypothesized CAUSE-relation. As long as these events need not overlap temporally — that is, as long as the causing event is allowed to precede and not overlap with the caused event — then we predict that (35) is acceptable (in those languages like Spanish and Hebrew that allow non-control *try* to begin with).

As it turns out, causative expressions vary as to whether they allow for temporal distance between the causing event and the caused event. For example, as pointed out by Bjorkman & Cowper (2013), causative *make* admits future-oriented complements, as in (37a), whereas causative *have* does not, as in (37b).

(37) Bjorkman & Cowper (2013: 2)
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.

On some theories, this distinction correlates with the distinction between direct and indirect causation; see e.g., Martin & Schäfer (2014) for discussion. For our purposes, it suffices simply to note the existence of causative expressions like *make*, which serve as an existence proof that our hypothesized CAUSE predicate is in principle compatible with future orientation.

5 Causation by coercion

We have solved the puzzle by *deus ex machina*: in non-control *try*-sentences, a causative predicate disrupts the inclusion relation between the trying event and the intended outcome, enabling future orientation. But can this causative predicate be independently motivated?

The strategy we'll take here is to independently motivate the causative predicate as a coercion mechanism used to satisfy a selectional restriction *try* has to the effect that its complement must have an unsaturated agentive thematic relation. To start with, consider the fact that *try* sounds odd in combination with outcomes that are not ordinarily construable as being amenable to deliberate control (cf. Farkas 1988; Jackendoff & Culicover 2003; Grano 2017). (38), for example, sounds odd because it seems to presuppose that John potentially has control over — or at least believes himself to potentially have control over — the timing of his sexual development.

(38) #John tried to go through puberty.

The status of this meaning component as a presupposition is supported by the observation that questioning, negation, and conditionalization of the sentence preserves the perceived oddity, as seen in (39).

(39) a. #Did John try to go through puberty?
b. #John did not try to go through puberty.
c. #If John tries to go through puberty, I'll be surprised.

This suggests that it is sensible to model this meaning component as a selectional restriction on *try* (though see Grano 2017 for a more extensive discussion of the nuances involved in adopting this approach). Working backwards from our semantics for *try*-sentences from Section 3, repeated in (40), the semantics that we end up with for *try* itself is as indicated in (41). The assumption here is that the complement to *try* denotes a function of type $\langle e, \langle \mathcal{E}, st\rangle\rangle$, i.e., a function from individuals to functions from eventualities to propositions.

(40) Proposed denotation for *John tried to open the door* (version 2 of 2):
$\exists e[Ag(e, j) \wedge \forall w' \in INT_{j,w}\colon \exists e'[e \subset_{init} e' \wedge open(e') \wedge Ag(e', j) \wedge Th(e', d) \text{ in } w']]$

(41) $TRY(P)(x)(e)(w) = 1$ iff…
$Ag(e, x) \wedge \forall w' \in INT_{x,w}\colon \exists e'[e \subset_{init} e' \wedge P(x)(e')(w')]$

To encode the suggested selectional restriction, we can augment the denotation as in (42). With this revision in place, a *try*-sentence will have a defined denotation only if *try*'s first argument *P* is such that any individual and any eventuality it applies to results in the entailment that the relevant individual stands in the agent relation with the relevant eventuality (for any arbitrary evaluation world). In those cases where this selectional restriction is met, the resulting denotation is the same as what we had before.

(42) $TRY(P)(x)(e)(w)$ is defined only if…
$\forall y \forall e' \forall w'[P(y)(e')(w') \rightarrow Ag(e', y) \text{ in } w']$
where defined, $TRY(P)(x)(e)(w) = 1$ iff…
$Ag(e, x) \wedge \forall w' \in INT_{x,w}\colon \exists e'[e <_{init} e' \wedge P(x)(e')(w')]$

So if *P* is instantiated by *go through puberty*, the resulting sentence has an undefined semantics unless *go through puberty* can be construed as entailing an agent relation for its individual argument.

Now consider again a non-control sentence like (43) as considered in a dialect of English in which it is grammatical.

(43) John tried for Bill to leave.

The first question that needs to be dealt with has to do with semantic type of *for-to* clauses. In a great many environments, control clauses are syntactically interchangeable with *for-to* clauses. These environments include subject position (44), infinitival relatives (45), purpose clauses (46), and complements to desiderative predicates (47).

(44) [{PRO/For John} to go to the store] would be a great idea.

(45) This would be a great book [{PRO/for us} to read].

(46) I opened a window [{PRO/for them} to get some fresh air].

(47) a. I am dying [{PRO/for John} to get this job].
b. I long [{PRO/for John} to get this job].
c. I was hoping [{PRO/for John} to come over].
d. I want very much [{PRO/for John} to help those in need].
e. I was so happy [{PRO/for John} to get the job].

The distributional similarity between control clauses and *for-to* clauses renders plausible the hypothesis that they are also type-theoretically similar, and so I will pursue the idea — *contra* Dowty (1985) but in line with more recent work in the literature on the semantics of control such as Stephenson (2010); Pearson (2013) — that control and non-control clauses are type-theoretically identical. More specifically, I will assume following Pearson (2013) that they are both property-denoting. See Pearson (2013) for an extensive defense of the view that clauses denote properties. What this will mean for a *for-to* clause like (48) is that it instantiates vacuous lambda binding: the clause denotes a function whose input is an individual argument x, but that argument does not figure anywhere in the output of the function.

(48) $[\![\text{for Bill to leave}]\!] = \lambda x \lambda e \lambda w.leave(e) \wedge Ag(e, b)\ in\ w$

Putting together the semantics for *try* in (42) with the semantics for *for-to* infinitives in (48), the important observation now is that although there will be no type-theoretic difficulty in combining *try* with a *for-to* clause, there will be a presupposition failure: it is not the case that any arbitrary individual and eventuality that the function in (48) applies to will be such that they stand in the agent relation; this will hold only in the special case where that individual is Bill. This gives us an account for why *try* resists non-control complements in many languages including standard English, Mandarin, and French: such sentences suffer a presupposition failure.

As for those languages and those dialects of English where *try* accepts non-control complements, the suggestion is that in these languages, a coercion mechanism is available to repair the selectional restriction violation (cf. Perlmutter 1968; Jackendoff & Culicover 2003; Grano 2012, 2015a who propose essentially this, but without formalizing it in the way done here).[13] One initially plausible way in which this coercion mechanism could

[13] I take no stance here on whether the proposed coercion operator corresponds to a piece of unpronounced structure for which one might be able to find morphosyntactic evidence or to a process that occurs "behind the scenes" in the semantic component of the grammar only, *à la* type shifting on some approaches. If it turns out to be syntactic, then, as pointed out by an anonymous review, the approach fits well with Wurmbrand's (2001) proposal that complement infinitives come in different structural sizes. But it remains to be seen whether morphosyntactic evidence for the proposed operator can be found or not.

work would be as defined in (49). This coercion operator combines with an arbitrary *P* and adds an agent relation linked to the unsaturated individual argument, which would yield the result in (50) for the case at hand.

(49) $[\![\text{Op}_C]\!] = \lambda P_{\langle e, \langle \varepsilon, st\rangle\rangle}\lambda x\lambda e\lambda w.P(x)(e)(w) \wedge Ag(e, x)$

(50) $[\![\text{Op}_C]\!](\lambda x\lambda e\lambda w.leave(e) \wedge Ag(e, b)) =$
$\lambda x\lambda e\lambda w.leave(e) \wedge Ag(e, b) \wedge Ag(e, x)$

But such an operator is not of very good general use because it will frequently run afoul of thematic uniqueness (see e.g., Parsons 1990), i.e., the requirement that for any given thematic relation and any given eventuality, there can be at most one individual that stands in that thematic relation with that eventuality. The solution then is for the coercion operator to introduce its own eventuality that stands in a causation relation with the eventuality introduced by *P* and that can have its own agent relation with no risk of violating thematic uniqueness. This gives us (51), which will yield the result in (52) for the case at hand.

(51) $[\![\text{Op}'_C]\!] = \lambda P_{\langle e, \langle \varepsilon, st\rangle\rangle}\lambda x\lambda e\lambda w.\exists e'\text{CAUSE}(e, e') \wedge Ag(e, x) \wedge P(x)(e')(w)$

(52) $[\![\text{Op}'_C]\!](\lambda x\lambda e\lambda w.leave(e) \wedge Ag(e, b)) =$
$\lambda x\lambda e\lambda w.\text{CAUSE}(e, e') \wedge Ag(e, x) \wedge leave(e') \wedge Ag(e', b)$

The causative predicate is thereby motivated for non-control *try*-sentences, and the puzzle we started with is thereby solved.

Before moving on, one question that should be addressed is whether positing coercion leads to an overgeneration problem when we look at other verbs besides *try*. While a full cross-linguistic investigation of how different verb types behave with respect to control is well beyond the scope of this paper, one cross-linguistically stable trend identified by Grano (2015b) is that aspectual verbs robustly resist non-control complements even in languages like Greek, Hebrew and Spanish that allow non-control complements to *try* (see Table 1 in Section 1 above). Similarly, I am not aware of and would not expect to find any variety of English that accepts sentences like (53). The question then is why, on the coercion account, languages that allow coercion for *try* do not similarly allow for coercion with 'begin' so that a sentence like (53) would be acceptable and receive an interpretation like (54).

(53) *John began [for Bill to open the door].

(54) John began [PRO to get Bill to open the door].

In response to this I will simply point to Grano (2016) for a relevant proposal. In a nutshell, what Grano proposes is that what goes wrong in (53) is not the lack of control *per se* but rather the presence of complementizer *for*, which is syntactically required to license the overt subject. Grano proposes that *for* introduces a modal semantics (roughly, priority modality in the sense of Portner 2007), and this modality conflicts with the semantics of *begin* which is arguably modal but not priority-oriented (i.e., not bouletic, teological, or deontic). By contrast, predicates like *want* and *try* do have a priority-oriented modal semantics and so are in principle semantically compatible with complementizer *for*. Scaling this up to the cross-linguistic picture, Grano speculates that the subjunctive and

other morphology needed to syntactically license an overt subject in other languages has a similar modal semantics that conflicts with the semantics of aspectual verbs. If this is on the right track, then we have an account of why (53) should be ruled out even in languages that have coercion: even with coercion in place, there is a semantic conflict between the meaning of the embedding verb and the semantics of the morphosyntactic machinery needed to introduce the subject.

6 The two other patterns revisited

In the preceding three sections, I arrived at an account of the behavior of *try* in (standard) English-like languages vs. Spanish/Hebrew-like languages. If these two language types exhausted the cross-linguistic behavior of *try*, then the account would lend itself to the overall picture in (55).

(55) The cross-linguistic grammar of *try* (version 1 of 2)
- a. Universally, *try* has an aspectual semantics that precludes future orientation.
- b. Universally, *try* has a selectional restriction that precludes non-control complements.
- c. In some languages but not others, a coercion mechanism repairs violations to the selectional restriction and thereby enables non-control complements.
- d. In all those languages that have the relevant coercion mechanism, this mechanism enables future orientation.

Evidently, though, this account is too strong, because as we saw in Section 2.2, not all languages fall into the two patterns that have been the focus of this paper: instead, Greek and Brazilian Portuguese each exemplify their own distinct pattern. In other words, in the terms of Table 2 of Section 2.2, (55) predicts that we should only be able to find type b and type c languages to the exclusion of the six other hypothetical types. How can we loosen (55) so as to let in type a languages (Brazilian Portuguese) and type e languages (Greek) without loosening things up so much that we erroneously let in the four unattested types (types d, f, g, and h)?

Returning first to Portuguese, what we saw is that *try* disallows future orientation regardless of whether it takes a control complement or a non-control complement. This state of affairs is actually relatively easily to accommodate within the overall account: we already observed at the end of Section 4 that causative predicates vary as to whether they enable future orientation; within English, for example, causative *make* allows it but causative *have* does not. Hence we can make sense of the Portuguese facts by appealing to the hypothesis that among those languages that employ coercion to enable non-control complements to *try*, some have a causative semantics that enables future orientation (a *make*-like causative) and others have a cuasative semantics that do not enable future orientation (a *have*-like causative). In other words, we can revise the overall account to that in (56), with italics to show what's been changed.

(56) The cross-linguistic grammar of *try* (version 2 of 2)
- a. Universally, *try* has an aspectual semantics that precludes future orientation.
- b. Universally, *try* has a selectional restriction that precludes non-control complements.
- c. In some languages but not others, a coercion mechanism repairs violations to the selectional restriction and thereby enables non-control complements.
- d. In *some of* those languages that have the relevant coercion mechanism, this mechanism enables future orientation.

Returning now to Greek, what we saw in this language is that *try* allows for future orientation with both control and non-control complements alike. Accommodating this pattern is not as straightfoward: if *try* universally names an initial stage of the action denoted by its complement, then a ban on future orientation would seem to be an inescapable result for the same reason that we would not expect to find a language in which the translation equivalent of *Yesterday John left tomorrow* could be a felicitous utterance. But two hypotheses come to mind. First, it could be that the Greek word that we translate as *try* (i.e., *prospatho*) does not have the kind of aspectual semantics pursued by Sharvit (2003) and Grano (2011) for English *try*. In particular, it could have some other kind of semantics that renders it consistent with future orientation. Consider for example the verbs *plan* and *decide* in English. Like *try*, the verbs *plan* and *decide* have an action component and an intention component, but they allow for a gap of time between the planning/deciding and the intended outcome, as witnessed by examples like (57).

(57) a. (Today,) John **planned** [PRO to open the door tomorrow].
b. (Today,) John **decided** [PRO to open the door tomorrow].

It is conceivable that Greek *prospatho* behaves likewise or is perhaps polysemous between a 'try' reading and a 'plan'/'decide' reading.

A second possibility is that Greek *try* is like its cross-linguistic counterparts but that there is something about the grammar of Greek that enables a causative component even in sentences where it is not forced by the presence of a non-control complement. It is tempting to relate this hypothesis to the more general fact about Greek that it altogether lacks nonfinite complementation: verbs are always morphologically marked for subject agreement and for tense and aspect, possibly signaling a richer structure of the sort that could host a silent morpheme that enables future orientation.[14] But finite complementation *per se* cannot be a sufficient condition for future orientation because even within Greek, future orientation is banned in complements to aspectual verbs, as seen in (58).

(58) *Greek* (Roussou 2009: 1826)
O Kostas arxise simera [na odhiji PRO (#avrio)].
the Kostas began.3SG today SBJV drive.3SG tomorrow
'Kostas began today to drive (tomorrow).'

While further research will be needed to decide which (if either) of these hypotheses is correct for Greek *try*, either hypothesis is broadly compatible with this paper's core proposals.

7 Conclusion

The central conclusion of this paper is that superficial cross-linguistic variation in *try*'s syntactic behavior conceals an underlying regularity: *try* semantically demands a control complement because only a control complement satisfies the presupposition that *try*'s complement bear an unsaturated agent relation, and apparent counterexamples are handled via a coercion mechanism that is independently detectable in that it enables future orientation in some languages. In its general shape this proposal is closely allied with ideas expressed by Perlmutter (1968); Jackendoff & Culicover (2003); Grano (2012, 2015a), though I have gone beyond these earlier works by recruiting novel cross-linguistic

[14] A prediction made by this second possibility is that languages similar to Greek in lacking nonfinite complementation should also be similar to Greek in how *try* behaves. So a potentially fruitful direction for future study would be to look at other Balkan languages (which also lack nonfinite complementation) such as Albanian, Bulgarian, Croatian, and Romanian. I thank an anonymous reviewer for this suggestion.

data and also by formalizing the proposal in a way that is informed by work on the formal semantics of *try*-sentences.

In closing, a note is in order on the broader implications of this study for the division of labor between syntax and semantics in regulating the distribution of control. At the outset of the paper I identified two purely syntactic dimensions to PRO's distribution: PRO can only occur in subject position and PRO can only appear as an argument of a nonfinite clause. Are these the *only* purely syntactic dimensions to PRO's distribution? Can *all* distributional differences that turn on the choice of the embedding verb be understood in terms of semantic principles? While this would be a welcome result, I am pessimistic about its prospects, given the (English-internal) contrast in (59)–(60) as well as the (cross-linguistic) contrast in (60)–(61). Why is it that *claim* allows control complements but *believe* does not? Although *claim* and *believe* are not semantically identical, they are similar enough in meaning that it is hard to see how a semantic account of (59)–(60) would be possible. Instead, it looks like lexical idiosyncrasy. Similarly, why is it that in Italian unlike English, 'believe' allows control complements? Again, it is hard to see how English *believe* and Italian *credere* could differ semantically in just such a way as to produce the contrast in (60)–(61). And so far as I know, (61) has no special interpretive properties that we could use to build an argument that Italian 'believe' affords some coercion mechanism that enables control complements and that is not available to its English counterpart.

(59) John **claims** [PRO to be tall].

(60) *John **believes** [PRO to be tall].

(61) *Italian*
Gianni **crede** [di PRO essere alto].
Gianni believe.3SG of be.INF tall
'Gianni believes himself to be tall.'

The suggested conclusion then is that the distribution of control as a function of embedding verb choice is sometimes a matter of semantics and sometimes a matter of syntax. A comprehensive picture requires attention to both of these components of grammar.

Abbreviations

ACC = accusative, FUT = future, INF = infinitive, SBJV = subjunctive, 3MS = third-person masculine singular, 3SG = third-person singular

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Competing Interests

The author has no competing interests to declare.

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