Two sources of grammatical deviance in non-controlled nonfinite subjects

1 Introduction

The DISTRIBUTION QUESTION for control theory: What principles regulate the distribution of controlled arguments (“PRO”) vs. non-controlled arguments (ordinary pronouns, pro, and full NPs)?

Scholars working on this question have typically focused on how FINITENESS and related properties interact with the distribution of control (see e.g. Landau 2004 among many, many others).

Less attention has been paid to the following question:

**Question:** In nonfinite environments, what regulates the relative distribution of controlled infinitives like (1a) vs. for-to infinitives like (1b)?

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<td>(1)</td>
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<tr>
<td>a.</td>
<td>[PRO to open the door] CONTROLLED INFINITIVE</td>
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<tr>
<td>b.</td>
<td>[for John to open the door] for-to INFINITIVE</td>
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Background assumption (cf. Heim and Kratzer 1998): The grammar consists of two independent modules, the generative (syntactic) component that assembles structures and the interpretive (semantic) component that assigns denotations to structures. Some strings are deviant because even though they are syntactically well-formed, they are semantically uninterpretable.

The Free Variation Hypothesis: As far as the generative component of the grammar is concerned, controlled infinitives and for-to infinitives are in free variation. All observed distributional differences have either an interpretive or an extra-grammatical source. (Cf. Schütze 1997; McFadden 2005.)

Upshot: In this corner of the grammar, the distribution of control is not syntactically regulated and the syntax is correspondingly simpler than we might otherwise have thought.

Preliminary supporting evidence:

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<td>(2)</td>
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<td>a.</td>
<td>[(For John) to leave] would be a good idea. SUBJECT</td>
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<tr>
<td>b.</td>
<td>I found a book [(for John) to read]. RELATIVE</td>
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<td>c.</td>
<td>I opened the window [(for John) to get some fresh air]. PURPOSE ADJUNCT</td>
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<td>d.</td>
<td>I wanted/demanded/was thrilled/was eager [(for John) to win]. COMPLEMENT</td>
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Two challenges:

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<td>(3)</td>
<td>John began [(*for Bill) to understand the problem]. (cf. also: start, continue)</td>
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<td>(4)</td>
<td>John tried [(%for Bill) to get a job]. (cf. also: intend, decide, manage)</td>
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Goal for the rest of the talk: Convince you that these judgment marks (* and % in (3) and (4) respectively) plausibly have an extra-syntactic source.
Roadmap:

- Section 2: *begin*-for-NP is deviant because infinitival complementizer *for* signals subjunctive mood, which renders the embedded clause semantically incompatible with aspectual verbs.
- Section 3: *try*-for-NP is deviant (for some speakers) because *try* and other predicates in its class are inherently self-oriented, with consequences for the acceptability of non-control.
- Section 4: Conclusion.

2 Begin

Aspectual verbs as a class resist *for*-to complements:

(5)  
   a. John began [(*for Bill) to understand the problem].
   b. John started [(*for Bill) to cough].
   c. John continued [(*for Bill) to have difficulty].

Preliminary hypothesis (to be rejected): Aspectual verbs are raising verbs rather than control verbs:

(6)  
   a. It began to rain.
   b. There began to be trouble.
   c. The shit began to hit the fan.

If aspectual verbs were exclusively raising verbs, then (5) would be outside the purview of the Free Variation Hypothesis and also not a puzzle at all: On a raising analysis, there are not enough θ-roles to go around to support an overt embedded subject.

Reason for rejecting the preliminary hypothesis (cf. Perlmutter 1970; Becker 2006; Landau 2013):

(7)  
   CONTROL  
   a. Kim tried to read the book, but Sandy didn’t try.
   b. John eagerly tried to read the book.
   c. Try to read the book!
   d. I persuaded Bill to try to read the book.
   e. What Kim did was try to read the book.

(8)  
   RAISING  
   a. ??Kim happened to read the book, but Sandy didn’t happen.
   b. ??John eagerly happened to read the book.
   c. ??Happen to read the book!
   d. ??I persuaded Bill to happen to read the book.
   e. ??What Kim did was happen to read the book.

(9)  
    *begin*: patterns like CONTROL!  
    a. Kim began to read the book, but Sandy didn’t begin.
    b. John eagerly began to read the book.
    c. Begin to read the book!
    d. I persuaded Bill to begin to read the book.
    e. What Kim did was begin to read the book.
**Interim conclusion:** Aspectual verbs are control/raising-ambiguous; hence, the Free Variation Hypothesis must answer to the unacceptability of for-to complements.

**A more promising solution:**

The puzzle reduces to a mood choice effect: for-to infinitives have a SUBJUNCTIVE semantics.

Portner 2015: Subjunctive clauses are found in environments that involve PRIORITY (aka PREFERENCE-RANKING) modality (cf. Villalta 2008).

Some supporting data that for = SUBJUNCTIVE:

(10) Varieties of PRIORITY modality
a. John wants [for Bill to leave]. BOULETIC
b. John was thrilled [for his son to get an A on the exam]. BOULETIC
c. John aimed [for his son have a good life]. TELEOLOGICAL
d. It is illegal [for you to park here]. DEONTIC
e. It was stupid [for me to neglect this]. EVALUATIVE

(11) a. John said [for Bill to leave]. (reports a directive)
b. John said [that Bill would leave]. (reports an assertion)

(12) a. John claims [PRO to be a genius].
b. *John claims [for Bill to be a genius]. (incompatible with priority modality)

Crucially, aspectual verbs do not involve ranking of preferences, and reject subjunctive complements in languages that mark this mood:

(13) *Juan empezó [que Pedro abriese la puerta].
Juan began that Pedro opened. SBJV the door
Intended: ‘Juan began that Pedro opened the door.’ SPANISH

(14) *O Yanis arxise [na anoigi tin porta i Maria].
the Yanis began SBJV opens the door the Maria
Intended: ‘Yanis began that Maria open the door.’ GREEK

**An implementation:**

Suppose following Kratzer (2006, 2013) that attitude predicates are just predicates of states (15), and the modality in attitude reports comes from functional heads in the left-periphery of the embedded clause (16).

(15) a. [believe] = λxλs.belief(s) ∧ Experiencer(s,x)
b. [want] = λxλs.want(s) ∧ Experiencer(s,x)
c. [claim] = λxλs.claim(s) ∧ Agent(s,x)

(16) [∅ say] = λpλs.∀w′∈f_content(s):p(w′) where s is a mental state or speech event
For example:

\[(17) \lambda x \lambda s. \text{belief}(s) \land \text{Exp}(s,x) \land \forall w' \in f_{\text{content}}(s): \text{it's raining in } w'\]

These modal functional heads can have selectional restrictions:

\[(18) [\emptyset_{\text{say}}] = \lambda p \lambda s. \forall w' \in f_{\text{content}}(s): p(w')\]
where s is a mental state or speech event

\[(19) [\text{German reportative subjunctive}] = \lambda p \lambda s. \forall w' \in f_{\text{content}}(s): p(w')\]
where “the speaker is not committed to the truth of p” (Kratzer 2013:slide 60)

\[(20) [\text{sollen}] = \lambda p \lambda s. \forall w' \in f_{\text{content}}(s): p(w')\]
“requires anchors like rumors, reports, claims; rejects mental states” (Kratzer 2013:slide 58)

My proposal:

\[(21) [\text{for}] = \lambda p \lambda s. \forall w' \in \text{PRIORITY}(s): p(w')\]

Consequences for complementation:

\[(22) \lambda x \lambda s. \text{want}(s) \land \text{Exp}(s)=x \land \forall w' \in \text{PRIORITY}(s): \text{Bill leaves in } w' \quad \leftarrow \text{OK!}\]

\[(23) \lambda x \lambda s. \text{begin}(s) \land \text{Exp}(s)=x \land \forall w' \in \text{PRIORITY}(s): \text{Bill leaves in } w' \quad \leftarrow \text{NO GOOD!}\]

(wanting states are appropriate anchors for PRIORITY; structure is interpretable)

(beginning states are NOT appropriate anchors for PRIORITY; structure is not interpretable)
Upshot: The *’s in (24) are due to a syntax-semantics conspiracy: Licensing an overt subject necessitates for, but for sneaks in a modal semantics that renders it incompatible with aspectual verbs.

(24)  
- a. John began [(for Bill) to understand the problem].
- b. John started [(for Bill) to cough].
- c. John continued [(for Bill) to have difficulty].

3 Try

With try, we see variation in the acceptability of for-to complements:

(25) John tried [(for Bill) to understand the problem].

try-for-NP is reported to be acceptable in Ozark English (Henry 1995), and translation equivalents of such sentences are acceptable in some languages such as Greek.

(26) I Maria prospathise na diavasoun ta pedia.  
the Maria tried.3SG SBJV read.3PL the children  
‘Maria tried for the children to read.’ GREEK (Terzi 1992:38)

A glimpse at the broader cross-linguistic landscape:

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<tbody>
<tr>
<td>want</td>
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<td>try</td>
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Table: Crosslinguistic availability of overt embedded subjects (taken from Grano 2015)

If the Free Variation Hypothesis is correct, then the source of the variation must either be semantic or extra-grammatical.

A useful point of departure:

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<tr>
<td>try</td>
<td>%</td>
<td>*</td>
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<td>begin</td>
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The CAUSATION EFFECT: An approximate paraphrase relation holds between sentences like (27a) and sentences like (27b):

(27)  
- a. John tried for Bill to understand the problem.
- b. ≈ John tried [PRO to bring it about that Bill understand the problem].

This suggests that try is inherently SELF-ORIENTED (even when not reflected in the syntax).

(28)  
Option 1: The coercion hypothesis (inspired by what Perlmutter 1968; Jackendoff 1996; Jackendoff and Culicover 2003; Grano 2015 say about intend):

- b. Controlled infinitives can be parsed in such a way that they denote actions.
- c. for-to infinitives cannot be parsed in such a way that they denote actions.
- d. Therefore, when try combines with a for-to infinitive, uninterpretability results.
- e. But in some dialects, a coercion mechanism repairs the illicit combination by inserting the semantic material bring it about in the appropriate place in the representation.
As long as COERCION is a property of the interpretive component rather than the generative component of the grammar, the Free Variation Hypothesis is upheld.

**But is there any independent evidence for coercion?** The verb *intend* is like *try* in giving rise to the causation effect (29).

(29)  
   a. John intended for Bill to break the window.  
   b. ≈ John intended to **bring it about** that Bill break the window.  
      (cf. also *decide, plan, manage*; the COMMITMENT predicates of Sag and Pollard 1991)

I show in recent work (Grano 2016a,b) that there is no semantic motivation for appealing to coercion in (29a). In particular, it is possible to write a denotation for *intend* that is flexible enough to accurately characterize the truth conditions of both control and non-control sentences.

A Hintikka-style semantics for *intend*:

(30) \[ \text{[intend]}^w = \lambda p \lambda x. \forall w' \in \text{ALT}_{int}(x,w): p \text{ holds in } w' \]

| My proposed semantics for *intend* (see Grano 2016b): |
| (31) \[ \text{[intend]}^w = \lambda p \lambda x. \forall w' \in \text{ALT}_{int}(x,w): \text{it is intentional on } x\text{'s part that } p \text{ holds in } w' \] |

Consequences for the relevant sentences:

(32) \[ \text{[John intended to break the window]}^w \]
    ≈ ‘All those worlds compatible with what John intended in the evaluation world are worlds in which **it is intentional on John’s part that** John break the window.’

Cf. Searle 1983 on the causally self-referential nature of intention for independent support that we need the underlined portion of the truth conditions in (32).

(33) \[ \text{[John intended for Bill to break the window]}^w \]
    ≈ ‘All those worlds compatible with what John intended in the evaluation world are worlds in which **it is intentional on John’s part that** Bill break the window.’

The causation effect falls out because if an outcome is intentional on someone’s part, that individual must have a sufficient degree of foresight or control over how the outcome comes about (cf. Egré 2014, building on Knobe’s 2003a; 2003b work in experimental philosophy).

**Upshot:** If this analysis of *intend* is right, it should extend straightforwardly to a coercion-free account of *try-for-NP*, and then we can’t appeal to coercion to explain the variation.

**Option 2:** Could the source of the variation be extra-grammatical? What’s special about *try* and *intend* is that they are **SELF-ORIENTED**: the attitude holder is necessarily part of the content of the attitude. Perhaps, there is functional pressure to exploit the grammatical resource of control to make transparent this self-orientation, but the strength of this pressure is subject to variation.

**In lieu of a conclusion:** There are at least two extra-syntactic ways of understanding variation in the acceptability of *try-for-NP*. Both are **a priori** more plausible than a syntactic account, which makes the facts seem accidental despite their principled lexical semantic basis in predicates that involve commitment to action.
4 Conclusion

The Free Variation Hypothesis, repeated in (34), imposes interesting and not implausible limitations on where we seek explanations for data like (35)–(36).

| (34) | **The Free Variation Hypothesis:** As far as the generative component of the grammar is concerned, controlled infinitives and *for-to* infinitives are in free variation. All observed distributional differences have either an interpretive or an extra-grammatical source. (Cf. Schütze 1997; McFadden 2005.) |

(35) John **began** [{(*for Bill) to understand the problem}]. (**cf. also: start, continue**)

(36) John **tried** [{(%for Bill) to get a job}]. (**cf. also: intend, decide, manage**)

**Other challenges** to the Free Variation Hypothesis that I haven’t talked about:

(37) John **was stupid** [{(*for Bill) to leave so early}]. **EVALUATIVE PREDICATES**

(38) John **begged** Kim [{(*for Bill) to leave early}]. **OBJECT CONTROL PREDICATES**

**Potential for cross-linguistic extention?** The distribution of controlled clauses vs. subjunctive clauses in languages like Greek and Romance seems similar enough to English controlled infinitives vs. *for-to* infinitives to entertain a cross-linguistically generalized version of the hypothesis.

But moving **beyond for-to infinitives** (and subjunctive clauses), there are some areas of the grammar where the distribution of control probably is regulated by the generative component:

(39) **FINITENESS**  
a. John claimed [{PRO/*Bill} to be a genius].
b. John claimed [that {*PRO/Bill} is a genius].

(40) **LEXICAL IDIOSYNCRASY**  
a. John **claimed** [{PRO/*Bill} to be a genius].
b. John **believed** [{*PRO/Bill} to be a genius].

Consequently, a comprehensive answer to the distribution question will involve some cases where the distribution of PRO is regulated by syntactic principles and some cases where it is regulated by lexical and compositional semantic principles.

**References**


Grano, Thomas. 2016b. The logic of intention reports. Ms., Indiana University.


