

An Experimental Study of the Interpretability of Ostensible Subject-Control Promise

Aaron J. Dinkin, University of Pennsylvania
dinkin@babel.ling.upenn.edu

The standard interpretation of (1a) in the syntax literature is as shown in (1b–c), with **subject control**:

- (1) a. John promised me to help Mary.
 b. John₁ promised me₂ [*e*₁ to help Mary].
 c. ‘John promised me that **he** would help Mary.’

This distinguishes *promise* from other verbs, which behave as in (2):

- (2) a. John persuaded me to help Mary.
 b. John₁ persuaded me₂ [*e*₂ to help Mary].
 c. ‘John persuaded me that **I** should help Mary.’

But how robust is the interpretation given in (1)?

- Chomsky (1968) found subject-control unacquired by 25% of her sample of children.
- Courtenay (1998) had numerous respondents judging subject-control ungrammatical.
- Panther & Köpcke (1993) had at least 15% of respondents choosing object of *promise* as subject of embedded infinitive in every context.

An alternative possible interpretation of (1a) with ECM:

- (3) a. John promised me to help Mary.
 b. John promised [me to help Mary].
 c. ‘John promised (someone) that **I** would help Mary.’

My methodology: embed a sentence with *promise* + NP + infinitive in a paragraph, and ask questions about the scenario which will make people reveal their interpretations of the *promise* sentence. This should be more reliable than asking people to describe their intuitive judgments of sentences (Labov 1996).

The survey (version F):

Sally, Jim, and Frank all work in the same office on the same project. On Monday, there was an important meeting that Sally was supposed to go to, but she called in sick that morning and told Frank she couldn't go. Jim promised Frank to go in her place. Was it reasonable for Jim to make this promise...

- ...if Sally is Frank's and Jim's boss?
- ...if Frank is Sally's and Jim's boss?
- ...if Jim is Frank's and Sally's boss?

Version J replaces “...told Frank she couldn't go” with “...told Jim she couldn't go”.

The second question is the important one: if someone interprets *Jim promised Frank to go in her place* as in (3), they will answer the second question with “no”.

(4) Typical responses illustrating interpretations of the *promise* sentence:

a. Subject control:

- “Yes, Jim might cover for her if they're similarly informed.”
- “Yes, if Frank says it's ok for Jim to go in place of Sally.”
- “Yes—that's awfully nice, but most bosses would probably make Frank go.”

b. ECM:

- “No, in this case Jim does not have authority over Frank.”
- “Jim does not appear to be in a position to commit Frank.”
- “Subordinates shouldn't... be able to promise someone else their bosses' time.”

Versions F and J differ in which interpretation of the *promise* sentence is relatively pragmatically favored: Version F (Sally talks to Frank) should favor subject control (Jim talks to Frank), while version J (Sally talks to Jim) should be more inclined toward ECM (Jim talks to someone other than Frank).

Overall results: 63 intelligible responses; 47 gave the *promise* sentence the subject-control interpretation: 75% subject control.

Detailed results:¹

	Version J		Version F	
	ECM	S.Control	ECM	S.Control
Male	4	10	9	8
Female	3	16	0	12

Significance tested with Fisher's exact test:

Version J vs. Version F: **Not significant!**

($p > 0.15$ for males, $p > 0.21$ for females, $p > 0.26$ overall)

Males vs. females: **Significant!**

($p < 0.005$ for version F and overall; n.s for version J alone)

Interpretation:

- The lack of a significant effect of pragmatic context (version J vs. version F) suggests that individuals aren't choosing between two equally grammatical interpretations.
- What about the difference between men and women?
 - It doesn't seem likely to be a sociolinguistic variable.
 - Ullman et al. (2002): men have relatively better grammatical memory while women have relatively better lexical memory, in the sense of Ullman (2004).
 - This gives us an interpretation: subject control is dependent on an irregular lexically-specified feature of *promise* which women are more likely to acquire than men.
- Why does the gender difference lose significance in version J?
 - Possibly unintentional typographical variation in the two surveys is having an effect: *Jim promised Frank / to go* in version J vs. *Jim promised / Frank to go* in version F.

Relation to previous research:

This interpretation is congruent with Sakamoto & Walenski (1998; see also Walenski & Ullman 2005), who conclude that subject control is a lexically specified feature.

It argues against analyses like Panther & Köpcke (1993) and Larson (1991), according to which subject-control is a regular consequence of other semantic or syntactic features of *promise*.

With regard to the debate over the theory of control, the current study supports Boeckx & Hornstein (2003, 2004) as against Culicover & Jackendoff (2001), in that it suggests subject control for *promise* is non-fundamental.

Possibilities for future research:

- For people without subject control, what is the grammatical status of these sentences?
- What is the effect of varying the infinitive clause, following Panther & Köpcke (1993)?

References:

- Boeckx, Cedric and Norbert Hornstein (2003). "Reply to 'Control Is Not Movement'". *Linguistic Inquiry* 34.2: 269–280.
- Boeckx, Cedric and Norbert Hornstein (2005). "Movement Under Control". *Linguistic Inquiry* 35.3: 431–452.
- Chomsky, Carol (1969). *The Acquisition of Syntax in Children from 5 to 10*. MIT Press, Cambridge.
- Courtenay, Karen (1998). "Summary: Subject control verb PROMISE in English". <http://linguistlist.org/issues/9/9-651.html>.
- Culicover, Peter and Ray Jackendoff (2001). "Control Is Not Movement". *Linguistic Inquiry* 32:493–512.
- Labov, William (1996). "When Intuitions Fail". In L. McNair, K. Singer, L. Dolbin, and M. Aucon (eds.), *Papers from the Parasession on Theory and Data in Linguistics, Chicago Linguistic Society* 32:77–106.
- Larson, Richard K. (1991). "Promise and the Theory of Control". *Linguistic Inquiry* 22.1: 103–139.
- Panther, Klaus-Uwe and Klaus-Michael Köpcke (1993). "A Cognitive Approach to Obligatory Control Phenomena in English and German". *Folia Linguistica* 27: 57–105.
- Sakamoto, Tsutomu and Matthew Walenski (1998). "The Processing of Empty Subjects in Japanese and English". *Syntax and Semantics*, vol. 31: *Sentence Processing: A Crosslinguistic Perspective*: 95–111.
- Ullman, Michael T. (2004). "Contributions of Memory Circuits to Language: The Declarative/Procedural Model". *Cognition* 92(1–2): 231–270.
- Ullman, Michael T., Ivy V. Estabrooke, Karsten Steinhauer, Claudia Brovetto, Roumyana Pancheva, Kaori Ozawa, K. Mordecai, and P. Maki (2002). "Sex Differences in the Neurocognition of Language". *Brain and Language* 83: 141–143.
- Walenski, Matthew and Michael T. Ullman (2005). "The Science of Language". *The Linguistic Review* 22:327–346.

Acknowledgements:

I would like to thank Aviad Eilam, Benjamin George, William Labov, Tatjana Scheffler, Michael Ullman, Matthew Walenski, and especially Marjorie Pak for their helpful advice in assembling this paper. Thanks also to Tony Kroch, for making me aware of the issue of subject-control *promise* in the first place.

¹ These numbers add up to 62, not 63, because I forgot to record the gender of one of the respondents.