Control Issues: A Cross-Linguistic Perspective on Syntactic and Discourse Dependencies
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Background: Syntactic control involves a binding relation with the unpronounced subject of a non-finite clause, notated as PRO in (1):

(1)   John$_1$ phoned Bill$_2$ before PRO$_{1/*2/*3}$ running to the shop.

In (1), PRO is interpreted as the subject *John,* but not as the object *Bill,* due to their respective syntactic relations[1]. While the syntactic nature of this constraint has been recently debated[2], the dependency between PRO and *John* in (1) contrasts with (2) with an overt pronoun:

(2)   John$_1$ phoned Bill$_2$ before he$_{1/2/3}$ ran to the shop.

While a subject preference is still reported in (2), this preference is discourse-based, and cannot be syntactic - in contrast with (1)[3–5].

This contrast between a syntactic dependency in (1) and a discourse-based dependency in (2) is reported to be universal, aligning with universal properties of syntactic control. However, the cues to these dependencies are highly variable across languages, particularly with the availability pro-drop (the option to drop *he* in (2)).

In this study, **we compare (1) and (2) in English with non-finite and finite counterparts in Romanian, a pro-drop language –** i.e. the subject is dropped in sentences like (2)[6–8]. Our goal is to establish whether the unpronounced subject PRO in (1) in Romanian involves a similar or a different type of dependency from English. Our results suggest a different dependency: in English, we replicate the strict subject pattern predicted by a syntactic dependency; however, **in Romanian, responses for non-finite clauses (1) pattern similarly to finite clauses (2),** as predicted by a discourse dependency. This has implications for non-finite universals.

Experiment 1 (English): first, we replicated the strict subject interpretation for sentences like (1) with PRO in non-finite clauses (N=32), and the subject discourse preference for sentences like (2) with an overt pronoun in finite clauses (N=40). In a Truth Value Judgment Task, adult native English speakers evaluated sentences like (3) with respect to a context like in Figure 1:

(3)   a. Adjunct control: Mickey washed Diego before eating the blue apple.
          b. Ambiguous pronoun : Mikey washed Diego before he ate the blue apple.

The truth value of the sentence depended on an item's color: in Fig.1, Diego's apple is colored in blue and Mickey's apple is orange, so a subject interpretation of PRO/the pronoun *he* makes the sentence false (since Mickey's apple is orange); an object interpretation makes the sentence true.

Sentences were also included that made the sentence true with a subject interpretation of the PRO/pronoun (*…before eating/he ate the orange apple;* within-subjects), and control sentences had unambiguous pronouns (*Dora* instead of *Diego/Mickey*). The results for Experiment 1 are presented in Figure 2. As expected **for English, participants accessed a strict subject interpretation for PRO**, but accepted more object interpretations for the ambiguous pronoun.

Experiment 2 (Romanian): next, we used the same design as for English; however with an unpronounced subject in both non-finite (N=36) and finite (subjunctive; N=24) conditions, in (4). Preliminary results are in Figure 3. **Unlike in English, many object interpretations were accessed for the non-finite condition in Romanian** in addition to the finite condition – both when the object interpretation was true *and* when the object interpretation was false.

These results suggest either that (a) strict subject interpretations in control structures like in (1) are not universal, such that control occurs in some (but not all) languages, or (b) the non-finite structure in (4a) is not control (PRO) in Romanian, but rather small *pro*. The latter option aligns with previous analyses of Romanian, which argue that null subjects in infinitival and subjunctive clauses can alternate with lexical subjects (see (5)), a behavior expected for *pro* but not for PRO [9–12]. Both options have important theoretical implications, given the similarity of (4a) across Romance languages, and the outcomes will also bear on which abstract features (i.e. underlying structure vs. surface form) must be acquired by children.

(1) John[1] phoned Bill[2] before PRO[1/*2/*3] running to the shop.

(2) John[1] phoned Bill[2] before he[1/2/3] ran to the shop.

(3) a. Adjunct control: Mickey washed Diego before eating the blue apple.

    b. Ambiguous pronoun : Mikey washed Diego before he ate the blue apple.

(4) a. Non-finite: Mickey l-a udat pe Diego înainte de a mânca mărul portocaliu

               Mickey cl-M washed DOM Diego before of to-eat apple orange

    b. Finite: Mickey l-a udat pe Diego înainte să mănânce mărul portocaliu

               Mickey cl-M washed DOM Diego before să ate apple orange

(5) a. Ion a mâncat înainte de a pleca mama.

    John ate before to leave mother.

    b. Ion a mâncat înainte să piece mama.

    John ate before să leave mother
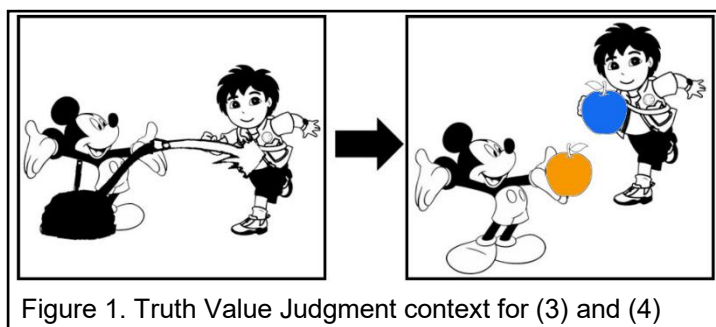
   'John ate before mother left.'

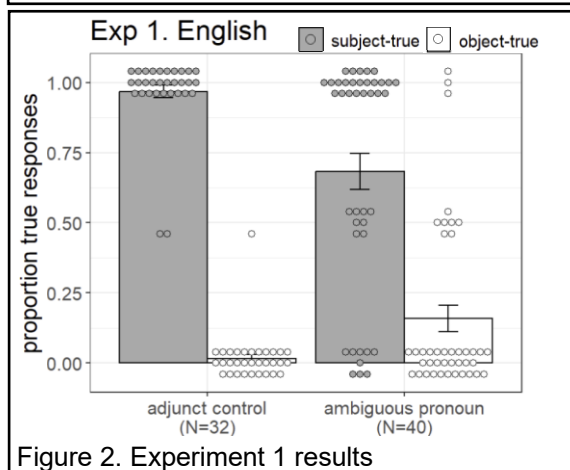Figure 1. Truth Value Judgment context for (3) and (4)
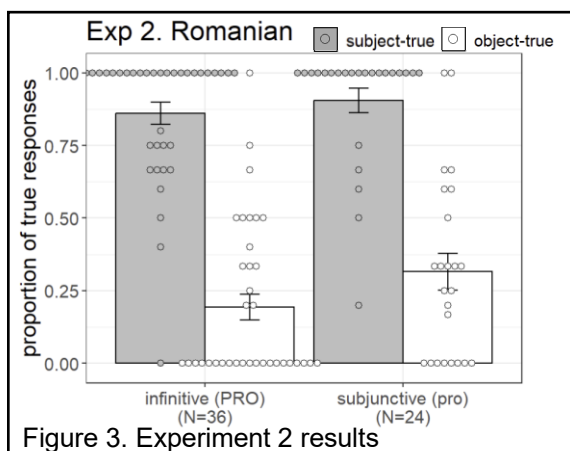

Figure 2. Experiment 1 results

Figure 3. Experiment 2 results

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