## Implicit External Arguments in Passives: against syntactic projection

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1. Recent discussions of passives pursue the idea that their implicit argument is syntactically projected as a covert nominal element in the canonical subject position (spec,vP or Spec, VoiceP; e.g., Landau 2010, Legate 2012, 2014, a.o.). Further, differences across passives in terms of, e.g., the licensing of by-phrases, the ability to bind anaphors, or to license accusative case on the internal argument have been related to differences in the syntactic feature content of this covert element (cf. Bhatt & Pancheva to appear). We argue that the syntactic projection of (different types of) implicit arguments in passives is unmotivated: First, if the empirical variation found across passives is related to syntactic properties of implicit arguments, one is forced to stipulate a large inventory of new empty categories. Second, none of the arguments that have been provided in support of syntactic projection of the implicit argument hold upon closer scrutiny. Instead, all of the facts are compatible with a model in which the implicit agent simply corresponds to a variable introduced by an agentive Voice head (Bruening 2012, Alexiadou et al. 2015). Differences across passives (intra- and cross-linguistically) follow from independent factors, such as certain morpho-syntactic properties i) of the particular language, ii) of the particular passive morpheme or iii) of the particular diagnostic in a particular language. 2. It is well-known that the canonical tests for syntactically "active" implicit arguments (i.e. byphrases, agent-oriented modifiers, control into purpose clauses) are actually non-indicative of the syntactic properties of this argument (e.g. Bhatt & Pancheva 2006). Landau (2010) therefore develops a new argument in favor of the syntactic realization of implicit arguments, which involves a specific type of (obligatory) control relation. Collective predicates such as meet in (1a) require a (semantically) plural subject. (1b), where such a predicate is licitly embedded in a control infinitive with a singular controller, involves thus a Partial Control relation.

(1) a. The couple / John and Mary / \*Bill met on top of the Empire State Building.

b. Bill<sub>i</sub> planned [PRO<sub>i+</sub> to meet on top of the Empire State Building].

Landau's argument now runs as follows: if (obligatory) control could be treated as a lexical relation between co-arguments, the control relation must involve predication of the infinitival complement over the controller (e.g., Williams 1980 who treats control via predication). Given (1a), partial control cannot be treated via predication and, consequently, has to involve a syntactic relation. If implicit arguments can exert partial control, they must thus be syntactically realized. To show that this is, in fact, possible, Landau advances the data in (2) and (3).

(2) a. It is amusing (to  $John_i$ ) [PRO<sub>i</sub> to listen to this speech].

b. John<sub>i</sub> finds it amusing [PRO<sub>i</sub> to listen to this speech].

(3) a. Mary<sub>i</sub> found it exciting [PRO<sub>i+</sub> to meet on top of the Empire State building].

b. The chair<sub>i</sub> found it frustrating [PRO<sub>i+</sub> to gather without a concrete agenda].

(2a) shows that psych-adjectives select an experiencer argument, which may remain implicit and obligatorily controls PRO of the infinitival complement clause. (2b) is taken to indicate that if set in the frame 'X finds it A to', the subject exhaustively determines the reference of the implicit experiencer argument. This, then, allows Landau to construct (3a,b) as unambiguous instances of partial control, since the subject, and thus the implicit experiencer, is necessarily singular. Based on (3), Landau concludes that implicit arguments must be syntactically projected, and may only differ in their syntactic structure: while the implicit agent of adjectives (as well as passives) corresponds to a  $\phi P$  (a 'Weak Implicit Argument'), other covert arguments such as *pro* or *PRO* project full DPs (i.e. they involve not only  $\phi$ -features but also a D-feature; 'Strong Implicit Arguments'). The difference is meant to correlate with differences in terms of accusative case licensing on internal arguments, visibility as an antecedent of reflexive pronouns (Principle A), or the licensing of depictives. Landau's argumentation, however, is flawed on several levels: first, Pearson (2014, 2016) has developed a purely semantic analysis of partial control which relies on a predication relation between the infinitival clause and the controller. This effectively voids one of the antecedents in Landau's line of argumentation. Second, Landau simply presupposes that the implicit agent in passives patterns with the implicit experiencer object in (3). Yet, while the implicit experiencer in (3) is bound by a higher argument, it is well-known that this is never possible for the implicit agent of passives (4). (4) Bill wants Mary to be seen. (Bill =/=seer; Williams 1985)

**3.** Legate (2014) extends Landau's system and advances the New Passive in Icelandic (5b) as an argument in favor of the syntactic realization of the implicit argument (see also Maling and Siguriónsdóttir 2002, Jónsson 2008, Sigurdsson 2011 for discussion of this construction).

- (5) a. Stúlkan var lamin í klessu. the.girl-NOM was hit-f.sg.NOM in a.mess (Canonical Passive) 'The girl was badly beaten.'
  - b. Það var lamið stúlkuna í klessu. EXPL was hit-neut.sg. the.girl-f.sg.ACC in a.mess (New Passive) 'The girl was badly beaten.'

Legate argues that ACC in (5b) is in line with Burzio's Generalization because the implicit agent in the New Passive is realized as a  $\phi$ P in Spec, VoiceP (whereas Spec, VoiceP is empty in in (5a)). However, the problem with any such proposal is that the alleged differences concerning the external argument in (5a,b) do not correlate with anything else besides case marking on the internal argument in the two Icelandic passives. Both license by-phrases, agentive adverbs and control into purpose clauses, both reject adjectival depictives and both license reflexive pronouns, but only with naturally and inherently reflexive predicates (see Schäfer 2012 for discussion). Thus, in order to derive one unexpected property (ACC on the internal argument in the New Passive) a new empty category is postulated, although there is no independent evidence for this empty category besides ACC that it is suggested to derive. Apart from paying such a high theoretical prize, other questions arise: If merge is free, why can't  $\phi P$  merge in other positions than in Spec, VoiceP? Why is VoiceP, when  $\varphi P$  (or *pro* in Maling & Sigurjónsdóttir 2002) merges in its specifier, necessarily spelt-out with passive morphology? Why is ACC (and in turn  $\phi P$  (or *pro*)) cross-linguistically rather an exception in passives? 4. Finally, accounting for differences in passives (both intra- and cross-linguistically) in terms of the properties of their implicit arguments necessarily leads to a multiplication of empty categories. For example, Romance SE-passives disallow by-phrases (just as pro), but require ACC-to-NOM advancement. German and English passives license adjectival depictives modifying the implicit agent (Roeper 1987, Müller 2008), whereas this is impossible in both Icelandic passives in (5a, b) as well as in Russian or Hebrew passives. As we will show with a crosslinguistic investigation, the four diagnostics claimed to diagnose a syntactically projected subject (i) no by-phrase, ii) no ACC-to-NOM iii) binding of reflexives iv) licensing of depictives) never pattern together; instead many variations concerning i)-iv) can be found. 5. We argue that passives generally involve the same type of implicit argument, which simply corresponds to a semantic variable introduced by a functional head (Pass/Voice; Bruening 2012, Alexiadou et al. 2015). Prima facie, one would expect then different diagnostics to behave the same in passives across languages: a particular diagnostic either can be semantically licensed by an existentially bound variable introduced by Voice, or it cannot be licensed in such a way, say because it needs a syntactically projected antecedent. Cross-linguistic mismatches involving some diagnostics as we have seen them above must find an explanation other than properties of the implicit argument. They can result from a) language particular morphosyntactic peculiarities of the diagnostic at hand (we will show that passives reject adjectival depictives in exactly those languages where depictives must agree in  $\varphi$ -features with their antecedent); b) morpho-syntactic building blocks of the particular passive construction (as has been argued in Sigurðsson 2011 for the licensing of ACC in the New Passive and in Schäfer 2017 for the absence of by-phrases in Romance SE-passives); c) from general morpho-syntactic properties of the language at hand (as has been argued for the licensing of SE-reflexive anaphors; Schäfer 2012). In general, we predict that each diagnostic should show a default behavior in passives, which might, however, be overridden by language-particular reasons.