The (in-)ability to control implicitly – a cross-linguistic investigation

- 1. Synopsis. We investigate obligatory control into complement clauses by the implicit external argument of passives, comparing five Germanic (Dutch, English, German, Icelandic, Norwegian) and three non-Germanic languages (French, Hebrew, Russian). We show that languages differ in whether or not they license *Implicit Predicative Control* (IPC; (2b)) (Landau 2015; Predicative control corresponds to Landau's 2000 exhaustive control). Against predictions made in Landau (2015), this difference between languages does not follow from the (in-)ability of the implicit argument to enter a predication relation which we show to be possible in all languages above but from the status of impersonal passives: Only languages with impersonal passives allow IPC. Our analysis of this correlation relies on the semantic type of the infinitival complement and its ability to indirectly function as the structural subject. Besides clarifying the empirical picture of implicit control, we argue that this type of control is non-indicative of the syntactic status of implicit arguments (pace van Urk 2013).
- **2.** (Implicit) Predicative and Logophoric Control. Landau (2015) makes a distinction between two types of obligatory control: *logophoric*, and *predicative* control. The two types differ in terms of the matrix predicate involved (an attitude vs. non-attitude verb; Pearson 2015), and the way in which the control relation is established: logophoric control involves variable binding, whereas predicative control builds on a predication relation between the infinitival complement and the controller (cf. Williams 1980, Chierchia 1984). Based on the assumption that implicit arguments cannot be predicated over (cf. (1a, b)), Landau predicts that *Implicit Predicative Control* (IPC) is impossible across languages, whereas *Implicit Logophoric Control* (ILC) should be licit. This prediction is borne out in English (2a, b).
- (1) a. John likes to eat *(the meat) raw. (Chomsky 1986)
 - b. The room was left (*angry).
- (2) a. It was decided/agreed/preferred to raise taxes again. (ILC)
 - b. *It was managed/tried/dared/stopped to raise taxes again. (IPC)
- **3. Two types of languages.** We tested Landau's prediction in eight languages by means of questionnaire studies. While ILC indeed turned out to be acceptable in all eight languages, we found that the ban against IPC only holds in a subset of these languages (English, French, Hebrew, Russian). In Dutch, German, Icelandic, and Norwegian, by contrast, IPC is licit (3).
- (3) Es wurde begonnen [PRO die Steuern zu erhöhen]. (IPC, German) it was begun the taxes to raise 'People began to raise the taxes.'
- **4. Implicit arguments and predication.** One way of accounting for this cross-linguistic split is to assume that only in some languages, the implicit agent of passives may be predicated over, e.g. because it is syntactically projected in Spec,vP as PRO (Collins 2005), a covert φP (Landau 2010) or covert DP (van Urk 2013). However, such an explanation in terms of the syntactic status of the implicit argument fails: The results of our questionnaire study show that the availability of IPC (2b) does not correlate with the availability of depictives predicated over the implicit agent (1b). E.g., in French, IPC is not acceptable, whereas depictive predication over the implicit agent is (4). Similarly, English depictives were accepted in passives, contrary to the claim in (1b) (see also Roeper 1987, Safir 1987, Collins 2005).
- (4) La lettre a sans doute été écrite saoul. (French) the letter has without doubt been written drunk 'The letter was clearly written drunk.'

In languages where examples such as (4) are indeed rated unacceptable (Icelandic, Russian, Hebrew), this is due to independent reasons: these three languages require their adjectival depictives to agree with their subject in (at least) φ-features. If the implicit argument is not syntactically projected (e.g. Bruening 2012, Legate 2014, Alexiadou et al. 2015), the features on the depictive will go unvalued and the derivation crashes. Interestingly, non-agreeing PP-

depictives are acceptable in passives in these languages. The PP in (5), just as the adjectival depictive in (4), describes the state the agent was in during the event. This suggests that the PPs must be treated as adjectival depictives (see Rothstein 2004 for the claim that the "state" reading distinguishes depictives from adverbs), and thus, shows that implicit arguments of passives are cross-linguistically accessible to predicative modification.

(5) Lagið var samið í drykkiu. (Icelandic) song was composed in drunkenness 'The song was composed drunk.'

The ban against IPC in some languages must therefore find a different explanation.

5. Impersonal Passives. We show that the acceptability of IPC correlates with the availability of *strict impersonal passives* as in (6): none of the languages without IPC allow for (6).

(6) Er wordt gedanst. (Dutch) there is danced

'People danced' (compare: *It/there was danced.)

The lack of impersonal passives in a language reduces either to an EPP-violation, or to a non-valuation of T's φ -features. Languages with impersonal passives either lack the EPP and allow default-valuation of T (German), have a locative expletive checking the EPP and allow default-valuation of T (Dutch; Ruys 2010), or have an expletive with inherent φ -features (Norwegian; Holmberg 2002). The unacceptability of (6) in English thus indicates that neither *it* nor *there* suffice as TP-expletive: *it* needs a (quasi) θ -role; *there* satisfies the EPP, but lacks φ -features so that a further DP must be present to value T (Richards & Biberauer 2005).

- 6. Analysis. The cross-linguistic acceptability of ILC ((2a)) indicates that in languages without impersonal passive, the criterial checking/valuation requirements are not nevertheless satisfied in this type of control configuration. We propose that in these languages, ILC obligatorily involves an associative pronoun (overt it in English/ ø in Hebrew and Russian) that is semantically tied to the infinitival clause and functions as the structural subject (see Bennis 1986, Vikner 1995, Ruys 2010 for a discussion of associative pronouns in the context of extraposition; and Hoeckstra & Roberts 1993, Lekakou 2005, Broekhuis & Corver 2015 for such a pronoun in impersonal middles). Since this pronoun is a DP with full φspecification (e.g. Cardinaletti 1990), no issues arise when the control predicate is passivized and the sole DP-argument (the external argument) is demoted. Turning to IPC, its crosslinguistic distribution is captured if passivization of the non-attitude control predicate necessarily results in an impersonal passive. We propose that the above mechanism involving an associative pronoun, which "saved" ILC, is unavailable in IPC. We argue that this is due to the semantic type of the infinitival complement. Landau (2015) argues that the infinitive in logophoric control denotes a proposition, whereas it denotes a property in predicative control. We argue that an associative pronoun cannot be linked to a property. This might be an inherent restriction of such an association relation, as indicated by the contrast in (7), involving an associative pronoun in object position (the attitude verb promise selects a proposition, the non-attitude verb begin selects a property).
- (7) Hans versprach/*begann es, das Buch zu lesen. John promised/ began it the book to read 'John promised/began to read the book.'

Alternatively, a semantic explanation can be given (and (7) must then be treated in terms of selection; Rothstein 1995): if the infinitival clause must be interpreted at LF in the position of the pronoun, IPC would involve a property/predicate that semantically functions as the subject of another predicate, leading to an infelicitous and uninterpretable predication relation (Rothstein 2004). No such issue arises in ILC, where the infinitive is propositional (and thus only subject to the restrictions on sentential subjects discussed in, e.g. Lohndal 2014).