1. **Synopsis.** We investigate obligatory control into complement clauses by the implicit external argument (IA) of passives (cf. 2a, b), comparing eight languages from three language families (Dutch, English, German, Icelandic, Norwegian, French, Hebrew, Russian). Pace Landau (2015), languages differ in whether or not they license Implicit Predicative Control (IPC; (2b)) (Predicative control corresponds to Landau’s 2000 et seq. exhaustive control). We show that this difference cannot be reduced to different types of IAs and their (in-)ability to enter a predication relation: in all languages above, the IA can be modified by a secondary predicate. Instead, there is a correlation with the status of impersonal passives: Only languages with impersonal passives allow IPC. We account for this by arguing that in languages without impersonal passives, the pronominal element present in implicit (logophoric) control structures is not an expletive, but a CP-placeHolder, i.e. a pro-form that is merged in the internal argument position and is cataphorically linked to the infinitival CP (e.g. Ruys 2010). In passives, the pro-form moves to SpecTP, thus deriving a personal passive. Since via this pro-form, the embedded clause indirectly acts as the subject in SpecTP, and propositions but not properties are allowed to occur in this position (Rothstein 2004), languages without impersonal passives lack IPC.

2. **Implicit Predicative and Logophoric Control.** Landau (2015) distinguishes two types of obligatory control: logophoric, and predicative control. The two types differ in terms of the matrix predicate (attitude vs. non-attitude verb; Pearson 2016), and the way the control relation is established: logophoric control involves binding of a variable at the edge of CP (thus CP denotes a proposition), whereas predicative control builds on a predication relation between the controller and the infinitival complement (thus CP denotes a property) (cf. Williams 1980, Chierchia 1984). Based on the assumption that implicit arguments cannot be predicated over (cf. the depictives in (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.  
   b. The room was left *(angry).  
      (Chomsky 1986)

(2) a. It was decided/agreed/preferred [CP_vP to raise taxes again].  
   b. *It was managed/tried/dared/stopped [CP_vP 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, cf. (3).

(3) weil versucht/begonnen/ gewagt wurde [PRO die Steuern zu erhöhen].  
   (IPC, German)  
   as trials begun dared was the taxes to raise  
   (cf. 2b)

4. **Implicit Arguments and Predication.** Based on recent investigations of the nature of implicit arguments, one potential way of accounting for this cross-linguistic split is to assume that only in some but not all languages, the implicit agent of passives may be predicated over, e.g. because it is syntactically projected in SpecVP as PRO (Collins 2005), a covert φP (Landau 2010), or a covert DP (van Urk 2013). We show that such an explanation in terms of the syntactic status of the implicit argument fails: The results of our questionnaire studies show that the (un)-availability of IPC (2b vs. 3) does not correlate with the (un)-acceptability 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, our English consultants accepted depictives in passives, contrary to the claim based on (1b) (see also Roep 1987, Safir 1987, Collins 2005, Müller 2008 for many counterexamples to (1b)).

(4) La lettre a sans doute été écrite saoul.  
   (French)  
   the letter has without doubt been written drunk

In languages where examples such as (4) are indeed rated unacceptable (Icelandic, Russian, Hebrew), this has independent reasons: these languages require an adjectival depictive to agree with its subject in φ-features (and sometimes case). If the implicit argument is not syntactically projected (e.g. Bruening 2012a, 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 (cf. (5)). Note that such PPs describe the state the agent was in during the event;

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thereby, they are interpreted exactly like adjectival depictives as in (4), not like adverbials (see Rothstein 2004 for the claim that such a “state” reading distinguishes depictives from adverbials).

(5) Lágð var samiðð í drykkju. (Icelandic)

song was composed in drunkenness

We thus conclude that the IA of passives is cross-linguistically accessible to secondary predication. Note that this is expected if we combine the semantics of depictives in Pylkkänen (2008) with Bruening’s (2012a) theory of passives. According to Pylkkänen, depictives are of type $<$e$<$s,t> and combine via Predicate Modification with constituents of the same type. For Bruening, passive Voice is also of type $<$e$<$s,t> and is therefore predicted to be compatible with agent-modifying depictives. But if implicit agents can be the target of a predication relation, why is IPC banned in some languages?

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 this type of passive.

(6)a. Er wirdt gedanst. (Dutch) b. I går ble *(det) danset. (Norwegian)

day was danced (*People danced.’’ in yesterday was it danced

The lack of impersonal passives reduces either to an EPP-violation, or to a non-valuation of T’s $\phi$-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 $\phi$-features (Norwegian; Holmberg 2001). To explain the contrast between (7a) and (7b), Bruening (2012) proposes that English ‘it’ is a dummy that c-selects for a CP. The difference in acceptability between (7b) and (7c), then, could be due to ‘it’’s-selecting for CP$<$s,t> – and such a CP is only present in ILC. Yet, since nothing rules out a dummy selecting for CP$<$s,t> – which would render IPC acceptable – such an account treats the correlation between IPC and impersonal passives as accidental. More importantly, since subject clauses in (7b’) and (7c’) show the same contrast, it is unlikely that the problem in (2b/7c) is related to properties of a dummy ‘it’.

(7)a. *It was danced.

b. It was decided [CP$<$s,t> to solve the problem]. b’ [To solve the problem] was decided once again.

c. *It was tried [CP$<$s,t> to solve the problem]. c’. *[To solve the problem] was tried once again.

6. Analysis. We argue that in languages without impersonal passives, ‘it’ in ILC-structures is not a dummy but a placeholder pro-form cataphorically linked to the embedded clause (it’... CP$<$). (while the pro-form is overt in English or French, it is covert in Russian and Hebrew; see Shlonsky 1990, Haider 2017). As such, it is base generated in an argument position, where it acts as a regular Case marked and theta-marked variable operator-bound by the CP (e.g. Ruys 2010; cf. Rosenbaum 1967, Bennis 1986, Vikner 1995, Müller 1995). We provide three arguments to support this claim: i) The pro-form moves in pseudo-passives (8), ii) it can bear lexical case (9) and iii) it can control into and be controlled in adjunct clauses involving obligatory control (10) (cf. Bennis 1986 for Dutch). Crucially, in German implicit control the pro-form is optional; but to establish control, it must be present (11).

(8) a. They counted [pp on it] [that ...]. b. It was counted [pp on t] [that ...]

(9) Ígaar var því, frestvó [að háshöggva fangana]; (Icelandic; cf. Wood 2012)
yesterday was it.DAT postponed to execute the.prisoners

(10) It$<$i was decided [without PRO; being announced] [PRO$<$implag to raise taxes next year$<$]

(11) weil ??(es) beschlossen wurde [ohne PRO; bekannt gemacht zu werden], [daß die Steuern ...],
as it decided was without known made to become that the taxes raise

ILC as in (7b) thus involves A-movement of the pro-form and qualifies as a personal passive (cf. 12).

(12) [TP It$<$i T$<$ impersonal Pass [Voice$<$CP Voice$<$, decision of it$<$ ... ] [CP to solve the problem$<$]]

IPC, by contrast, can never be construed in this way, and is therefore only licit in languages with impersonal passives. Here is why: With e.g. Heycock (1994, 2013), Rothstein (1995, 2001), Eide & Åfarli (1999) or Åfarli (2017), we assume that the kernel of a proposition is a predication relation, potentially established via T in EPP-languages. In this context, Rothstein (2004:55) argues that properties/predicates may not function as subjects. Since through a placeholder pro-form, the denotation of the CP in an EPP-language enters the semantic computation in SpecTP, and the CP denotes a property in predicative control, such a pro-form in IPC illegitimately leads to a property in subject position (see also (7b’) vs. (7c’)). Since in languages with impersonal passives, SpecTP is either not projected (e.g. German; Haider 1993; Wurmbrand 2006) or filled by a dummy expletive not cataphorically linked to a CP (e.g. Dutch, Norwegian), IPC is grammatical (cf. 3). ILC (7b, b’), by contrast, is well-formed in all languages, as the pro-form in SpecTP denotes a proposition. This
explanation is independently supported by the contrast in (13), which shows that if a non-attitude predicate in English can be combined with a propositional finite CP, the passive is well-formed.

(13) a. It was forgotten (*to solve the problem)/(that the problem had already been be solved)

b. (*to solve the problem)/(that the problem had already been be solved) was forgotten again