A person approach to impersonal passive in Null Subject Languages and elsewhere

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Abstract

In this article, I propose a novel approach to impersonal passive in null subject languages (NSLs), and elsewhere, based mainly on Pers(on) feature and implicit arguments, e.g. pro. It is proposed that pro is the external argument of impersonal passive. pro is specified as a 3 generic/indefinite human agent, and is associated with the PM. The PM is projected as a PassP (= Passive Phrase) headed by Pass. PassP is assumed to be a phase, whose head, i.e. Pass, is ɸ-complete. Pass is assumed to have two probes, namely Agree Feature and Edge Feature (EF). EF is motivated by the unvalued [uGenr] feature, as a sub-feature of Person, and by LF interpretation reasons. This [uGenr] is also assumed to be a dissociated feature from ɸ-composition. Pass agrees with pro in impersonal passive. Like active, pro in our proposal merges in Spec-vP. In Spec-vP, pro values its □-role of agent by v at Merge. An Agree is established between pro and Pass, the result of which is valuing Pass's unvalued features and the unvalued Nom Case of pro. Pass's EF triggers pro to remerge in its Spec, hence valuing Pass's [uGenr] feature.

Keywords: impersonal passive, NSLs, passive morphology, cartography, phase

Introduction

That passive is different from active stems from the fact that no language expresses active and passive in the same way (Kiparsky 2013). Impersonal passive is perhaps one of the most interesting and challenging areas in the syntactic theory. The interesting aspect lies in that unlike personal passive, impersonal passive can be formed in both intransitive and transitive clauses. The passive morpheme/morphology (PM) demotes the subject in intransitive impersonal passives, and demotes the subject, but does not promote the object in transitive impersonal passive clauses. The challenging aspect lies in the difficulty of accounting for the properties of this type of passivization cross-linguistically. In the realm of controversy, several proposals have been articulated in traditional, relational and generative approaches to syntax. In this article, I propose a novel approach to impersonal passives underlying (1).

(1) a. *pro* is the external argument in impersonal passive
   b. The PM is projected as PassP (= Passive Phrase)

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Elaborating on (1), I develop an approach to impersonal passives. In this approach, *pro* is assumed to be the implicit external argument of impersonal passives.[2] Given the verbal nature of passive morphology, I assume that Pass is a verbal head, i.e. an extension of the verbal projection. Adopting a cartography-based approach to verbal projections (see e.g. Cinque 2006; Cocchi 2008), I propose that the PM is projected as PassP. In NSLs, our proposal ensues from the typical 'richness' of Person inflection these languages exhibit. This typical 'richness' of inflection is associated with an unpronounced pronoun (or *pro*) as the null subject in finite clauses. As for nonNSLs, our proposal is based on the syntactic and semantic 'activeness' of the agent in impersonal passive. Thus, our system abstracts away from Case-absorption theory (CAT), an approach to passivization which takes the PM as an argument, hence absorbing the external θ-role and the verb's ability to assign Acc Case to its internal argument. Our proposal also provides a minimalist mechanism for θ-role assignment. It is configurational in nature: each syntactic configuration is associated with one or more θ-roles. For example, the θ-role of agent is assigned in the syntactic configuration [$_{v}$P […] [v]], because it is associated with it, while the θ-role of theme, patient, etc. is assigned in the configuration [V[…]], again because it is associated with it (cf. Baker 1997, 2008). Our proposal takes passivization as a morphosyntactic phenomenon, thus preventing the thematic subject to be lexicalized, while it can still function as an implicit subject, i.e. *pro*. This is manifested by the syntactic and semantic 'activeness' *pro* exhibits in impersonal passive cross-linguistically. *pro* in our system is taken as the thematic (logical) subject in both V-initial languages such as Arabic, Irish, etc., V-second languages like German, Icelandic, etc. and radical *pro*-drop languages like Japanese, Chinese, etc.

The article provides a phase analysis for (1). PassP is a phase, whose head, i.e. Pass, has two probes, namely *Agree* Feature and Edge Feature (EF) (cf. Chomsky 2008). EF is motivated by the unvalued [uGenr] feature, as a sub-feature of Person (cf. D'Alessandro 2007). This [uGenr] is also assumed to be a dissociated feature, i.e. detached, from φ-composition (cf. Frascarelli 2007; Rouveret 2008). Pass agrees with *pro* in impersonal passive. In minimalist conceptions, like in active, *pro* in our system merges in Spec-*v*P. In Spec-*v*P, *pro* values its θ-role of agent at *Merge*. An *Agree* is established between *pro* and Pass, the result of which is valuing Pass's unvalued features. Pass also values the unvalued Nom Case of *pro* via a subsequent *Agree* between both. *pro* is triggered to raise to Spec-PassP in both intransitive and transitive impersonal passive. Given that in impersonal passive of transitives there is no object promotion, Pass's EF, i.e. [uGenr], triggers *pro* to undergo an *Internal Merge* to its Spec, hence valuing Pass's [uGenr] feature. Given the nature of EF interpretation motivations, the implicit agent in Spec-PassP is interpreted as a generic *pro*. It is also assumed that in impersonal passive T is inflected merely for tense (and possibly for mood). T has no φ-features; it has a strong EPP feature, however. T's EPP is satisfied via V-raising to T in VSO languages (cf. Alexiadou and Anagnostopoulou 1998, 2001). In nonVSO languages like German, Icelandic, etc., however, I hypothesize that T's EPP is valued via remerging *pro,* or merging an optional expletive, in Spec-TP, which would be a matter of parameterization.[3]

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[2] It is worth noting that I use the term "demoted" throughout this paper to mean that the subject is just **not lexicalized**, but it does not mean that it is "eradicated/eliminated" from the syntax. This suppression, I argue, is brought about by the passive morphology.

[3] Impersonal passive in this study is defined as a morphosyntactic phenomenon in which a construction involves: i) passive morphology, ii) the demotion of the subject, and iii) the nonpromotion of the object in impersonal passives of transitives. This excludes constructions patterning with passives in meaning or in form. Structures

The rest of the article goes as follows. In Section 2, I develop a critique of passivization in the *Principles and Parameters* (P&P) and minimalism studies, focusing mainly on periphrastic vs. morphological passive, the status of the PM, and the status of the agent in impersonal passive cross-linguistically. In Section 3, I present our proposal. I discuss the proposal's underlying tenets and the possible specifications of Pass and *pro*, and the features of T. In Section 4, I discuss the feature specifications of Pass, *pro* and T in our system. In Section 5, I apply the proposal pursued here to impersonal passives in intransitive clauses. Section 6 applies the proposed approach to impersonal passive in transitive clauses. Section 7 briefly sheds light on the UG parameterization with respect to impersonal passives across languages, and Section 8 concludes the paper.

2. Previous accounts: a critique

In P&P, different proposals were articulated, which tried to account for passive in general and impersonal passive in particular. These attempts were based on CAT. According to such a theory, the passive morpheme is said to absorb the ability of the verb to assign Case to its internal argument, and a θ-role to its external argument. However, before tackling such approaches, and how they account for impersonal passive, let us examine the difference between periphrastic and morphological passive.

2.1. Periphrastic vs. morphological passive

As pointed out above, no language expresses active and passive in the same way; passivization is formed by means of a passive morpheme cross-linguistically. The way this morpheme behaves, however, differs from language or a set of languages to another language or a set of languages. In English and Romance languages, the PM is said to be a clitic, which, according to CAT, is base-generated in I, and then lowered to V (see e.g. Baker et al. 1989). The most important assumption in this view of passive is that the clitic is attached to a nonfinite verb. The finite verb in such languages is said to be an Aux (*be* in English, for example). In languages like Finnish, Modern Greek, Irish, Arabic, etc., the passive morpheme is not a clitic, but rather an affix which is affixed to a finite (but not nonfinite) verb. The former passive is said to be periphrastic and the latter morphological. The former is exemplified in (2) from English.

(2) a. Ali speaks English.
     b. English *is* **spoken (by Ali)**

Comparing (2a) to (2b), it is clear that periphrastic passive in English (setting aside other things) is formed by the Aux *be* 'is' and the PM *–en*. The latter is inflected to the participial form of the main verb. The structural change brought about by passivization is roughly schematized in (3, cf. Chomsky 1957: 42f) as a passivization rule (see also Shormani 2000).

(3) passivization rule

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which have passive content/meaning, but having no passive morphology attached to the verb are excluded in this study. Consider the Ukrainian example in (i).
(i) Mene   poslaly   v kanadu.
    I(ACC) send.pt.3PL to Canada.ACC
    'I was sent to Canada.'
Though (i) has passive 'content', it is not considered passive, simply because there is no passive morphology attached to the verb (cf. Sobin 1985).

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Active: DP  Aux  V    DP
         1    2   3    4
Passive: 4    2+be 3+en (by+1)
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Morphological passive as in (4a) below from Modern Greek and (4b) from Arabic, on the other hand, is formed by affixing the PM –*ke*- and –*u*- (Modern Greek, and Arabic, respectively) to the verbs *ðiavas* and *ktab* (read and write in personal passive, Modern Greek and Arabic, respectively).[4]

(4) a. Afto to   vivli-o   ðiavas-**ke-**ti
         this the book-NOM   read-**pass**-3SG
         'This book was read.'

     b. y-**u**-ktabu   d-dars-u
        3-**pass**-write the-lesson-NOM
        'The lesson is written.'

In addition to the PM, other inflections representing tense, aspect/mood (and agreement, specifically in personal passive) are also affixed to the passivized verb, hence forming a verbal complex.

2.2. The status of PM

As noted above, in P&P it is held that in periphrastic passive the PM is taken to be a nominal clitic. In morphological passive, however, the PM is said to be a verbal affix (affixed to the passivized verb). It follows that the PM is parameterized as in (5) (cf. Ouhalla 1991).

(5) i. PM is nominal (i.e. [+N]).
     ii. PM is verbal (i.e. [+V]).

(5) marks the substantial difference between periphrastic and morphological passives. As for (5i), it was argued in CAT that the PM is a nominal clitic, merged in I, and receives the Acc Case and θ-role from the verb. Given this, CAT also assumes that the PM absorbs the verb's ability to assign Acc Case. Therefore, the internal argument is left without Case, which makes it move to a Case-position (possibly Spec-IP). But since the PM in morphological passive is a verbal affix, affixed to the verb, it can neither receive a Nom Case nor θ-role.

There are three issues to address here: i) from a minimalist perspective, (5) leads to a construction-specific case in that -*en* in active will be different from –*en* in passive, which is not unproblematic in minimalism, ii) assuming for the moment that (5) accounts for periphrastic passives, morphological passives are likely left unaccounted for by CAT. It is not at all clear which constituent in morphological passives absorbs (and receives) the Case and the θ-role of the verb, and iii) there is good evidence cross-linguistically that there are in-situ objects which receive Case and θ-role from the verb, though passivized. Double Object Construction (DOC) passives and impersonal passive of transitive verbs are just two examples. If the PM does not absorb the Acc Case of the passivized verb, it is then expected that the external θ-role is not

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[4] The Modern Greek example has been taken from Tsimpli (1989: 235).

absorbed, too. If the Acc Case is assigned to some constituent, then there seems to be a serious problem concerning the assignment of θ-roles. Given also that in CAT passivization 'demotes' the subject, accounting for the agent θ-role remains a mystery in both types of passives (i.e. personal and impersonal passives), cross-linguistically. In the section to follow, I address this issue, focusing mainly on the status of the agent in P&P and some minimalist studies.

2.3. The status of the agent

In relational grammar, it is argued that passivization in general demotes the subject and promotes the object. This means that the agent is not lexicalized (see e.g. Comrie 1977; Perlmutter 1978). In P&P studies, similar but (not identical) assumptions have been hypothesized, which, as I have alluded to above, are almost centered on CAT (see Chomsky 1981, 1986a; Jaeggli 1986; Baker et al. 1989).

CAT was based on Burzio's Generalization, which is roughly schematized in (5, adapted from Burzio 1986: 180ff).

(6) Burzio's Generalization
   a.   *DP–θ V DP CP

   b.   DP –θ V DP CP

(6) states that a verb assigns Case to its complement iff it θ-marks its subject (Chomsky 1986a: 141). Reversely put, (6) suggests that if the verb cannot assign a Case to its internal argument (i.e. complement), it will not assign a θ-role to its external argument. This means that Acc Case absorption is coincided by the absorption of the external θ-role, i.e. agent.

Burzio's generalization; nevertheless, is seen as unreliable cross-linguistically, and has even been challenged by languages like Kannada, Finnish, etc., where passivization does not affect the verb's Case assigning ability (see e.g. Sridhar 1980; Abraham and Leisio 2006; Öztürk 2005, 2006). For example, in Kannada passive constructions, the subject receives Nom Case as in (7b) and the object need not move to the subject position. But in case it moves, it also receives an Acc Case as in (7c, cf. Sridhar 1980).

(7) a. Ravi-o-nu   Rita-nannu   kond-an-u.
      Ravi-nom-3SG Rita-ACC-3SG kill-3SG-pt
      'Ravi killed Rita.'

   b. Ravinu-indu Rita-o   ko-pattu-nu.
     Ravi-3SG-inst Rita-NOM kill-pass-pt
     'Rita was killed by Ravi.'

    c. Rita-nannu   kollalayitu.
      Rita-acc-3SG kill-pass.pt
      'Rita was killed.'

In addition, Öztürk (2006: 385) argues that (6) fails to account for "[p]seudo-incorporation of agents" in Turkish as (8) and (9) show.

(8) Ali-yi polis tutukla-di.
    Ali-ACC police arrest-pt
  'Police arresting happened to Ali.'

(9) a. Polisi Ali-yi   [PRO$_i$ sorgula-mak için] kasıtlıolarak tutukla-di.
      police Ali-ACC [interrogate-to for]   intentionally arrest-pt
      'The police arrested Ali to interrogate him intentionally.'

   b. *Ali-yi kasıtlıolarak [PRO$_i$ sorgula-mak için] *polis*$_i$ tutukla-di.
      Ali-ACC intentionally [interrogate-to for]   police arrest-pt
      'Police-arresting happened to Ali to interrogate him intentionally.'

Öztürk points out that "pseudo-incorporation of agents… does not allow control or agent oriented adverbs targeting external arguments" like the Turkish *kasıtlıolarak* (intentionally) in (9a), which implies that such "agents are not in canonical subject positions." Given this, Öztürk concludes that Burzio's generalization does not provide a strong reliability to motivate *v*P cross-linguistically (see also Öztürk 2005).

Another completely different account of the status of the agent has been suggested by Jaeggli (1986). Jaeggli proposes that the agent θ-role is not absorbed by passivization, and that the verb is still able to assign this role to the PM -*en*. He suggests, though, that the agent θ-role is not assigned by the preposition *by*, by itself, but rather via a transmission of this θ-role from the verb.[5] Furthermore, Baker et al. (1989) take Jaeggli's proposal and develop it further. They hypothesize that –*en* is base-generated in I at D-structure, and then undergoes a lowering movement to the participle at S-structure. They hold also that this –*en* forms a chain with a full DP, and may be realized as a *by*-phrase.[6] However, this assumption is not unproblematic. One such problem this analysis suffers from is that it seems that the *by*-phrase is obligatory. Accounting, therefore, for short passives like *The book was written* was not clear. In addition, there are some languages like Arabic, Latvian, Persian, etc., where passive structures do not allow *by*-phrases at all. Furthermore, impersonal passive does not allow *by*-phrases *almost* cross-linguistically, as we will see in this article.

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[5] Baker et al.'s (1989) assumption of 'transmission' of the external θ-role is not even reliable from a minimalist perspective for the fact that minimalism requires a mechanism in which the external argument is assigned a θ-role in the passive 'totally' similar to that of the active. It also violates the Uniformity of Theta-Assignment Hypothesis which is formulated in (i) from (Baker 1988: 46, 1997: 74).
(i) Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure. Cinque (1988: 528ff) also rejects this assumption with respect to the Italian impersonal *si*.
[6] Baker et al. (1989) argue that the passive morpheme–*en* is an argument which "forms a chain with a full" DP, which "forms the coda of the chain may be overtly realized as a *by*-phrase, giving rise to long passives" in the same way clitics are doubled (Baker et al. 1989: 223). They propose that –*en* is merged in I in D-structure, which then gives it the status of a nominal argument outside VP. This status entails that it receives the agent θ-role (or otherwise 'the logical-subject θ-role" in Baker et al.'s (1989: 220) sense. This analysis was in fact very convincing and elegantly accounted for several properties of passive, specifically 'implicit arguments,' i.e. PROs, though it failed to account for passivization cross-linguistically. Among these facts and salient properties of passives accounted for are the following:
(ii) a. The fact that the logical-subject argument is not realized on an NP in passives
   b. The phenomenon of "implicit arguments" in passives
   c. The fact that the subject position is nonthematic in passives, permitting NP Movement into this position
    (Baker et al. 1989: 220).

Several other problems this analysis suffers from can also be noted. One such problem is that if *–en* is base-generated in I, then, the latter is considered an A-position (by virtue of being a θ-position), besides full DPs can occur in I. Thus, if a full DP is positioned in I, then, it will receive a Nom Case under government, hence I is both an A-position and a functional head (of the IP), which cannot be maintained (Lappin and Shlonsky 1993).

I also think that CAT is not reliable for several core properties of passive cross-linguistically. One such core property left unexplained by CAT concerns passives in DOCs as the Arabic example in (10) shows.

(10) ʔuʕtia   muħammad-un   kitaab-an
       pass.gave   Mohammed-NOM   book-ACC
       'Mohammed was given a book.'

In (10), though the verb *ʔuʕtia* is passivized, it still behaves like transitive, assigning the internal argument *kitaab-an* an Acc Case. In fact, the existence of personal passive like (10) refutes the assumption that Case absorption is a core property of passive. It thus seems that passivization is *not* intransitivization, but rather a demotion that "reduces the valency of a predicate (the number of its direct arguments) by one, passives of ditransitives are transitive" (Kiparsky 2013: 12).

A minimalist study that accounts for the status of the agent is proposed by Collins (2005). Collins, in fact, rejects Case absorption approach to passivization, arguing instead that it is the verb that assigns Acc Case and θ-role.[7] He proposes (11) as a *smuggling approach* to passive (Collins 2005: 96).

(11) a. active: v assigns external theta-role,
            v checks accusative Case
       b. passive: v assigns external theta-role
            Voice[by] checks accusative Case

(11b) suggests that there is a Voice[by]P where Acc Case is checked. But again, Collins's theory seems to take into consideration only the promotion of the object and completely ignores the demotion of the subject. In addition, the Voice[by]P (and therefore, *by*-phrase) seems to be 'compulsory' in Collins's theory, which seems to give rise to several problems. One such problem is that though Collins's theory seems to apply to languages like English, French, German, etc., which allow *by-agent* phrases in personal passive, it seems difficult to be applied to languages like Finnish, Kannada, Arabic, etc., where *by*-phrases are not possible. Another problem Collins's theory suffers from is that it does not account for the optionality of *by*-phrase even in English and English-like languages.

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[7] Along these lines, Sobin (1985) argues that if CAT exists at all, it should not be considered a property of UG, as was assumed by Chomsky (1981); it fails to account for passive in Ukrainian, among other languages. The same conclusions have been reached by several authors (see e.g. Reinhart and Siloni 2005) who hold that passivization involves some sort of saturation, where the external θ-role is saturated by existential closure in the semantics. Some others (see e.g. Laks 2009) argue that the agent θ-role is still accessible at the level of interpretation.

Furthermore, Collins's theory seems to motivate *smuggling* solely for the sake of passives, which is not unproblematic. It thus seems unreliable in contexts, where *by* is not a dummy element. If it were so, then, it would be difficult to associate this function with its non-passive adnominal function in such examples as *They invited collaboration by all participants* (cf. Kiparsky 2013).

Let us now turn to impersonal passives. As alluded to above, CAT fails to account for the subject suppression, which is a common property of passivization across languages. Further, in impersonal passive formed from intransitive verbs, only the subject is suppressed, because there is no object to be promoted. In transitive impersonal passives, as we will see, even the object of the verb is not promoted, but rather stays in situ and receives Acc Case from the verb.

There are several attempts in the literature that try to account for impersonal passives, though much less than those concerning personal passive. For example, Lappin and Shlonsky (1993) argue that the PM has two parameterized features: a θ-role feature and a Case-absorption attribute. These two parameterized features, they argue, account for impersonal passive cross-linguistically, be they of intransitive or transitive verbs. They claim that the PM need not receive Case, but needs to receive a θ-role, as a marked option. They actually base their arguments on the fact that the internal argument in impersonal passive of transitive verbs remains in situ, and is assigned an Acc Case by the verb. Although this proposal seems to account for the behavior of the in-situ objects, it is not clear as whether the subject exists at all in their proposal. They seem to ignore the suppressed passivized subject, and focus only on nonpromoted objects.

Another proposal that attempts to account for impersonal passives, specifically those with in-situ objects, is suggested by Chomsky (1986b). Chomsky proposes that in these passive structures an expletive is claimed to occupy the subject position, and forms a chain with the in-situ object. If this expletive represents the head of the chain, and receives a Nom Case, and if this chain has one Case-marked position, Chomsky argues, it is then expected that the in-situ object does not receive Case. But there are facts that make us reject this analysis. One such fact is that this in-situ object does receive Acc Case cross-linguistically, as we will see throughout this article. Rejecting this analysis, Goodall (1993) provides examples from Nepali and Ukrainian languages, where the in-situ object in passive structures is morphologically marked with Acc Case. This actually rules out the assumption that such an in-situ object is assigned Case just by forming a chain with a Nom expletive. In addition, in impersonal passives of intransitive verbs there is no DP the expletive in the subject position can form a chain with (see also Travis 1984).

One of the recent accounts of the status of the agent in impersonal passive is proposed by Sigurðsson (2011). Sigurðsson argues that the agent role is still (partly) active in syntax, given the facts manifested by binding phenomena. He proposes that in impersonal passive *v*P has a strong phase edge, which blocks A-movement, or what he terms as 'no ACC-to-NOM conversion' in contrast to the defective *v*P edge found in personal passive. He argues that the blocking effect caused by this strong phase edge of *v*P is a result of a *v* with multiple * (star notations), which are subject to deletion in impersonal passive in contrast to active. Star-deletion, he argues, is brought about by the nature of passive, as the contrast between (12) and (13) shows (Sigurðsson 2011: 172, emphasis in the original).

(12) Tφ-probing in transitive constructions
[CP …[TP…Tφ…[v*(*)P**NP** v*(*)-V NP…]]]

(13) Tφ-probing in (NOM) passive constructions
[CP…[TP…Tφ…[vP v-V_PASS**NP**…]]]

Although Sigurðsson's analysis accounts elegantly for the in-situ objects, it focuses merely on such objects, and almost completely ignores the demotion of subjects, which is a substantial property of passivization in general, and impersonal passive in particular. He rather adopts the P&P accounts proposed by Jaeggli (1986) and Chomsky (1981), regarding passives as being 'defective' in that the agentive θ-role is trapped inside *v*P, therefore; it cannot be lexicalized in Spec-TP, which is not unproblematic, as we have seen above.

Another account has been proposed by Sigurðsson and Egerland (2009). They claim that both types of impersonals (i.e. active and passive) exhibit a similar underlying structure in Icelandic and elsewhere, which is not unproblematic. This has been based on Maling and Sigurjònsdòttir's (2002) assumptions. Maling and Sigurjònsdòttir argue that impersonals, active and passive, are to a great extent similar constructions. They propose (14) as the basic structure of active and passive impersonals (p. 100).

 (14) [IP *pro* [I Tns,Agr] [VP V NP]]

Maling and Sigurjònsdòttir (2002) argue that (14) applies to impersonal passive structures in Icelandic, which is based on the assumption that Icelandic has an active construction with arbitrary/generic *pro*.

3. A person approach to impersonal passives
I will try in this section to develop an approach to impersonal passive in NSLs and elsewhere, based mainly on Person feature associated with the passive morpheme attached to the passivized verb. In nonNSLs, our proposal is based on the syntactic and semantic activeness of the implicit external argument. However, before going through our proposal, let us introduce the salient properties of impersonal passive cross-linguistically.

3.1. The properties of impersonal passive
There are many properties the impersonal passive is characterized with. The salient properties characteristic to impersonal passive cross-linguistically are summarized in (15) (cf. Abraham and Leiss (henceforth, A&L 2006a; Eythðrsson 2008; Sigurðsson 2011).[8]

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[8] In fact, impersonal passives create much controversy in the literature (see e.g. Maling and Sigurj`onsd`ottir 2002; Blevins 2003; Abraham and Leisio 2006; A&L 2006a & b; Maling 2006; Eythðrsson 2008; Sigurðsson 2011). The controversy is centered on whether impersonal passives are passives or impersonals. For example, Blevins (2003) holds that impersonal passives are not passives, but rather impersonal structures. Blevins argues that the term 'impersonal passive' is misapplied. This is because impersonal passives do not involve valance-reducing operation like personal passives. A somewhat similar view has also been held by A&L (2006a: 260) who argue that since "impersonal passive does not involve any passive semantics," the term 'impersonal passive' is a misnomer. A&L (2006a) also argue that semantic transitivity criterion as a prerequisite is satisfied by personal passive, but not by impersonal passive, since the verb in the latter preserves its θ-role(s). However, there are two issues in which we differ from such authors: i) the question as to why passive morphology is used in such constructions remains to a great extent unanswered by such postulations, and ii) the fact that the subject is demoted in impersonal passives, be they of intransitives or transitives, in the same way it is in personal passives also casts some doubts on these

(15) a. impersonal passives are formed from intransitive as well as transitive verbs.

    b. only subject is suppressed.

    c. no object is promoted in impersonal passives of transitives, i.e. the semantic transitivity requirement is no more applicable.

    d. the impersonal passive are possible in perfective and imperfective verbs.

    e. the Agent cannot be lexicalized.

    f. the agent is always characterized as animate.

    g. the agent is always 3 person.

    h. the agent is a syntactically and semantically active covert argument, i.e. *pro*.

    i. *pro* is indefinite but more personal in impersonal passive than personal passive, hence binding anaphora, internal reflexives, and secondary predicates.

These properties will be referred to and instantiated throughout the following sections and subsections.

3.2. The Proposal

The assumption that the logical (or otherwise thematic) subject is syntactically and semantically "active" in passive indicates that the agent θ-role is not absorbed. It follows that this θ-role must be assigned to some constituent (conforming to θ-Criterion, see Chomsky 1986; Baker et al. 1989, and to the minimalist notions of configurational θ-Assignment, see Baker 1997, 2008), therefore; abstracting away from CAT. In our system, we adopt a minimalist configurational mechanism, in which the θ-role of agent assigned to the thematic subject in impersonal passive is assigned in the syntactic configuration [$_{vP}$ […] [v]], exactly like active. The θ-role of theme, patient, etc. assigned to the internal argument in impersonal passive of transitives is assigned in the syntactic configuration [V[…]], again, exactly like active.

Having this in mind, I hypothesize that such a thematic subject must be an element that not only receives the externalized (agent) θ-role, but also the Nom Case, in exactly the same way its active counterpart does. And since such a constituent (or implicit argument) cannot be PRO, it must be *pro* which complies with such requirements.[9] Our proposal that this 'implicit argument'

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postulations. If their stipulations were true, then it would be difficult (and perhaps impossible) to account for these two facts. As we will shortly see, that the object is not promoted in impersonal passives formed from transitive verbs lies in some other considerations. This article will try to provide solutions to these among other related issues that have been left open by the previous approaches.

[9] Although PRO may have a person feature, the assumption that the demoted subject in impersonal passive cannot be PRO stems from its behavior. PRO is assumed to be in complementary distribution with a finite T (see e.g. Baker et al. 1989; Mohammad 2000; Aoun et al. 2010; Holmberg, 2007, 2010); it occurs only in nonfinite clauses as (i) shows.

(i) He wants to PRO go home.

In (i), PRO occurs with the infinitive *go*. However, that PRO does not exist in Arabic stems from the fact that clauses in NSLs are always finite, i.e. there are no infinitives in consistent NSLs (see e.g. Biberauer et al. 2010). Consider (ii) from Arabic.

(ii) a. ʔaraada   ʔan   yaktuba   *PRO/*pro* d-dars-s

    wanted.pt.he that write.pres.he.   the-lesson-ACC

    'He wanted to write the lesson.'

  b. ʔan   qad   jaaʔa   *PRO/*pro* mina r-riħlat-i

    that   may came-past   from the-trip-GEN

    'He may have come from the trip.'

As can be seen in (ii), the verb in Arabic is always finite. In (iia), for example, the verb *yaktuba* is in present tense and in (iib), the verb *jaaʔa* is in past tense. Compared to (i), not only are Arabic verbs inflected for tense but also for ɸ-features. This is actually empirical evidence that PRO cannot be the demoted subject in Arabic passive

is *pro* ensues from the fact that NSLs exhibit typical 'richness' of inflection in finite active clauses. This typical 'richness' of inflection allows the subject of finite clauses to be a silent (unpronounced) pronoun, i.e. *pro* (see e.g. Fassi Fehri 2012; Biberauer et al. 2010).

In NSLs, *pro* is associated with Person feature, which is in turn morphologically manifested by Person inflection affixed to the verb. Furthermore, *pro* in active is basically referential in NSLs, i.e. it can refer to 1, 2 or 3 Person. As we will see throughout the coming sections, *pro* in impersonal passive refers only to 3 generic Person, which makes it more specified than *pro,* say in active, for instance. One piece of evidence comes from impersonal passive in Arabic. Compare and contrast (16) with (17).

(16) a. ʔ-u-ḍrabu   fii   d-daar-i
        1-pass-beat   in   the-house-GEN
        'I am beaten in the house.'

    b. t-u-ḍrabu   fii   d-daar-i
        2-pass-beat   in   the-house-GEN
        'You are beaten in the house.'

    c. y-u-ḍrabu   fii d-daar-i
        3-pass-beat in the-house-GEN
        'He is beaten in the house.'

(17) a. y-u-jlasu   fii   d-daar-i
        3-pass-sit in   the-house-GEN
        'One sits in the house.'

    b. *t-u-jlasu   fii   d-daar-i
         2-pass-sit in   the-house-GEN

    c. *ʔ-u-jlasu   fii   d-daar-i
         1-pass-sit in   the-house-GEN

The data in (16) show that *pro* can have 1, 2 or 3 Person reading (16a, b & c, respectively). However, it seems that this is not available in (17), where only a 3 Person reading is available. In other words, *pro* is more specified in impersonal passive as is clear in (17a), where only 3 is available, and neither 2 as in (17b) nor 1 as in (17c) is possible. This otherwise indicates that *pro* in impersonal passive is associated only with 3 Person feature. If this analysis is on the right track, then (18) can be hypothesized (cf. Fassi Fehri 2012).

(18) Impersonal passive is a Person association with PM

Given (18) and since the PM is associated with *pro* in impersonal passive, given also our conclusion so far that impersonal passivization does not affect the transitive verb's ability to
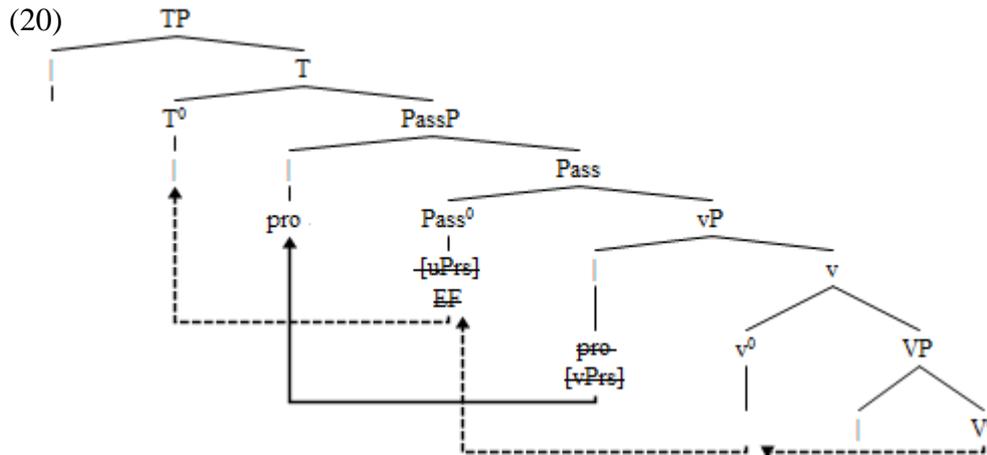
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structures, though PRO may have a person feature. This also answers the question as to what prevents PRO to be the demoted subject in Arabic personal passive.

assign Case and θ-role to its internal argument (i.e. the object is not promoted), I hypothesize that (19) holds of impersonal passive.

(19) In impersonal passive:
    a. The thematic subject is 'suppressed/degraded' into *pro*
    b. The PM necessitates a functional projection, call it PassP
    c. The internal argument cannot be promoted in transitives

Given (19), and adopting a cartography-based approach, where features have a privative status and project their own categories, I propose (20) as the clausal projection in impersonal passive (more on this in sections 4 & 5).

(20)

I assume that impersonal passive is a verbal head Pass. In this sense, passivization is taken as a morphosyntactic operation manifested by the passive head Pass, thus preventing the external argument to be lexicalized. This is while this external argument can still function as an implicit argument, i.e. *pro*.[10] To say how the PM suppresses the external argument, i.e. the lexicalized subject, consider (21).
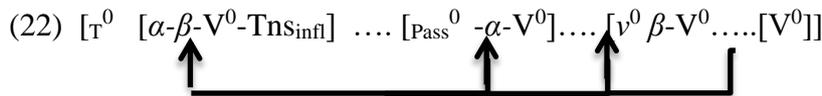
(21)   a.   y-a-naamu   ʕaliyy-un hunaa
                3.act-sleep   Ali-NOM   here
                'Ali sleeps here.'

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[10] Folli and Harley (2007) assume that "the passive morphology itself implies the presence of a suppressed external argument, which is available for semantic control in sentences like *The ship was sunk to collect the insurance*" (Folli and Harley 2007: 220, fn. 22). Along these lines, some authors hold that the PM involves 'agentive verbalizing morphology' (see e.g. Harley 2013, for English, and Spyropoulos et al. 2015, for Greek among other languages). This accounts not only for passives, but also for antiacccustative as in (i, from Alexiadou and Anagnostopoulou 2004: 123f).
(i) a. To vivlio   diavastike apo ton Petro   (Passive)
     the book.NOM read.Nact by the Peter
     'The book was read by Peter.'
  b. To bukali   adiase   apo mono tu   (Anticausative)
     the bottle.NOM emptied.Act by itself
     'The bottle emptied by itself.'

b. y-u-naamu   hunaa
   3-pass-sleep   here
'Someone sleeps here/People sleep here.'

In morphological passive, it can be argued that the PM (say, –u- in Arabic and its cross-linguistic equivalents, e.g. -ki- in Turkish, -ibu- in Bantu, etc.) is generated in Pass, and the imperfective/perfective morphology (say, –a-/-i- in Arabic and its cross-linguistic equivalents) in v; each thus constitutes a probe (some sort of EPP, see Roberts 2011). It follows that each triggers the verb to move (or incorporate) (on)to it. If we assume that the (triliteral in Arabic, for example) consonantal root is generated in V^0, it has then to raise to v, where imperfective/perfective morphology is incorporated, and then to Pass, where the PM is incorporated onto it. When both morphemes are incorporated onto the verb, the whole verbal complex raises to T^0, where tense inflection (Tns_{infl}) is affixed to it. As for T, the same triggering mechanism can also be hypothesized here, i.e. T can be argued to be endowed with a feature constituting a probe, hence triggering the verbal complex to raise to it. Let –u- be α and –a-/-i- β, the incorporation/vocalization process is roughly schematized in (22) (see also McCarthy 1979, 1981; Benmamoun 1999, 2000; Bahloul 2008).

(22) $[_{T}^{0}$ $[\alpha\text{-}\beta\text{-}V^0\text{-}Tns_{infl}]$ …. $[_{Pass}^{0}$ $\text{-}\alpha\text{-}V^0]$…. $[_{v}^{0}$ $\beta\text{-}V^0$…..$[V^0]]$

Note that the result of the incorporation is a passive stem, in that it does not "show mood, agreement, or case, gender, or number marking (McCarthy 1981: 385, fn. 2).[11]

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[11] In Arabic, the type of the verbal stem depends heavily on the notion *imperfective vs. perfective* as (i) shows.
(i) a. $uC_1C_2 a C_3$ ➔impf
     b. $C_1uC_2 i C_3$ ➔prf
As is clear in (i), there are two patterns, namely [-u-a-] in the imperfective stem of the verb, and [-u-i-] in the perfective one. Note that [-u-] comes before C_1 in imperfective while it comes after C_1 in perfective. The second vowel, be it [-a-] or [-i-], comes before C_3. These two patterns are instantiated by (iia) and (iib), for the verbal root *k-t-b* (roughly 'to write') in imperfective and perfective, respectively.
(ii) a. y-*u*-kt-*a*-b
      b. k-*u*-t-*i*-b
The two patterns in (ii) can be said to constitute the passive melody in Arabic. Passive melody also alternates with the active melody, depending on the perfective vs. imperfective stem of the verb (McCarthy 1981). Consider (iii) and (vi) which exemplify the active melody vs. passive melody in perfective and imperfective stems in Arabic, respectively.
(iii) a. ð*a*h*a*ba   ʔilaa l-madrasat-i
           3.act.go to   the-school-GEN
           'He went to school.'
       b. ð*u*h*i*ba   ʔilaa l-madrasat-i
           3.pass.go to   the-school-GEN
           'One went to school.'
(iv) a. y*a*dr*i*bu   hunaa
          3.act.strike here
          'He strikes here.'
      b. y*u*dr*a*bu   hunaa
          3.pass.strike here
          'One strikes here.'
In both (iiia) and (iiib), the active *a* alternates with *u* in passive and the active *a* alternates with the passive *i*. Likewise, in both (iva) and (ivb), the active *a* alternates with *u* in passive, but the active *i* alternates with the passive *a*. It is very complicated to gloss the passivized verbal stems in (iiib & ivb) because, in *ðuhib*, for instance, the PM is infixed after the first consonant *ð* in some sort of fusion (see also Bahloul 2008; Danks 2011).
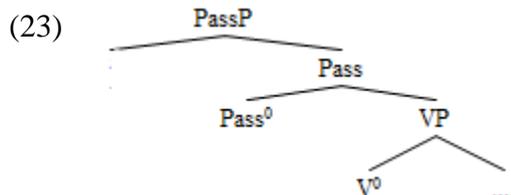
As for periphrastic passive, if we employ the probe-goal system, as assumed for morphological passive above, it can be argued that T/Pass has some sort 'of EPP feature and there is an Aux in the numeration.' T then 'attracts' Aux in this type of passive. As for the PM in periphrastic passive (say, in German or Icelandic, for instance), it can be assumed that it is generated in *v*, and the verb raises to (but only as high as) *v*, where the PM is suffixed to it.[12]

3.3. PassP, but not VoiceP

In this section, I argue against the assumption that passive can be subsumed under VoiceP, as was claimed in the literature (see e.g. Collin 2005; Fassi Fehri 2012). Given the assumption that passive is different from active, and since passive morphology is in complementary distribution with active morphology, it follows that Pass cannot be subsumed under VoiceP *cross-linguistically*. Since active is entirely a different structure, i.e. it does not involve demotion of the subject, it is possible to assume a different projection for active, which is in turn cannot be subsumed under VoiceP. One piece of evidence in support of this comes from languages, where only Pass, but not active/voice, is projected. For example, languages like Irish, Lithuanian, Turkish, etc. allow impersonal passive of unaccusatives, where voice cannot be projected (see e.g. Timberlake 1982; Nerbonne 1982; Embick 1998, 2004; Nolan 2006; Bruening 2012). Consider (22, slightly modified from Timberlake 1982: 511), illustrating the impersonal passive of unaccusatives in Lithuanian.

(22) Ir pamiršom visi, kur mūs gimta, kur augta?
forget all where us.GEN born.NOM.N.SG where grown.NOM.N.SG
'And we have all forgotten, where we were born and where we grew up.'

If voice in these languages cannot be projected, but only Pass can, then in terms of our proposal in (20), sentences like (22) will have a structure roughly schematized in (23).

(23)

The assumption that only *v*/VP can function as a complement of Pass in (23) comes from the fact that in such languages it is impossible for the object of a passivized transitive verb to be suppressed, but the external argument can still be projected as the subject of such a verb.

If voice would be projected as VoiceP, then, it must be projected above Pass, which is not unproblematic, simply because it violates the cross-linguistic facts in that Voice selects for *v*/V cross-linguistically. This otherwise means that Voice cannot even take PassP as a complement, which is tempting to postulate that Pass must be the highest projection in the verbal projection,

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[12] Note that the probe-goal system provides a non-construction-specific analysis for both types of passive. Given the assumption that T has an EPP feature in impersonal passives, it is then expected that Aux is merged in Pass and raises to T when there is an Aux in the numeration, i.e. in periphrastic passives, while V moves to Pass/T when there is no Aux in the numeration.

say, below TP. This also amounts to the nonpromotion of the internal argument of the transitive passivized verb, and that only the (lexicalized) subject DP is demoted, given that the subject is 'the outermost argument' of the passivized verb. But this seems to be exactly the cross-linguistic phenomenon that obtains in impersonal passive (Bruening 2012).

Another piece of evidence that voice cannot be projected cross-linguistically comes from German adjectival passives. It is also held that in German RESULT cannot combine with Voice (see e.g. Kratzer 2000). Furthermore, it is assumed that VoiceP is in complementary distribution with active, and that the main motivation of VoiceP is only for passive (Collins 2005). In this sense, VoiceP in Collins's system seems to be equivalent to PassP in our system. However, the facts manifested by the above Lithuanian data make it clear that even VoiceP cannot be assumed for active. These facts provide empirical evidence that passive and active are different projections, and that they cannot be subsumed under the head Voice. If this analysis is on the right track, it is then possible to assume a different projection for active, something similar to (20) where Act(ive) would replace Pass.[13]

It seems that our proposal solves the problems encountered by these approaches. In English, for example, Bruening (2011, 2012) considers voice (ignoring maximal labels) a 'contentless' (or unsaturated) projection. He also asserts that in passive, V does not move to Voice, as it does in active; the verb's morphological form, is, then, determined by *Agree* (cf. Chomsky 2000). In Bruening's system. Pass agrees with Voice, which in turn agrees with V; this agreement is spelled out as the past participle. The highest projection of Pass forms the complement of the auxiliary verb *be*. The assumption that VoiceP is 'contentless' in Bruening's system makes this projection redundant. He also sometimes even combines it with Pass, and sometimes reduces it just to Pass (Bruening 2012). This begs the questions as to how 'contentless' projection can exist at all, given the assumption that VoiceP exists solely for passive.[14]

4. Feature specifications in impersonal passive

In this section, I elaborate on the issues discussed in section 3 above. In particular, I discuss in some more detail the feature specification/composition of *pro* and Pass in addition to the feature compositions of T in impersonal passive. These among other related issues are addressed in the following sections.

4.1. T's Features

In this section, I argue that T in impersonal passive does not have ϕ-features; the verb is merely inflected for tense. As for Person, T in impersonal passive does not have either 1 or 2 Person feature, which straightforwardly accounts for the ungrammaticality of the Arabic impersonal passive structures in (24a) and (24b).

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[13] Note that this is not construction-specific. It is rather theoretically and empirically motivated by the fact that there are several types of passive voice, including personal, impersonal, adjectival, passive of unaccusatives, reflexives, middles, etc., while there is *only one* active voice. In general, then, if non-active morphology is linked to these (passive) voices, it follows that active morphology must be projected differently from passive. This projection can again be considered part of the verbal projection, specifically assuming a cartography-based approach to verbal projection. If this is on the right track, it is possible that a similar projection like (20) could be hypothesized for active. In this projection, Act can replace Pass in (20). If ActP can be hypothesized for active, and since ActP selects for *v*P as complement, it is then possible that Pass selects for *v*P (cf. also Merchant 2008, 2015).

[14] A somewhat similar analysis to Bruening's (2012) one was proposed by Fassi Fehri (2012).

(24) a. *t-u-ðhabu ʔilaa l-madrasat-i
           2-pass-go   to   the-school-GEN

     b. *ʔ-u-ðhabu ʔilaa l-madrasat-i
           1-pass-go   to   the-school-GEN

As for 3 Person feature, since passive morphology is associated with the 3 Person, and since this feature is in turn associated with Pass, it follows that T does not have this feature either (this will be clear in the next subsection).

Further, T does not have a Gend(er) feature in impersonal passive, which is clear from the ungrammaticality of Arabic structures like (25).

(25) *t-u-rqasu   hunaa
        f-pass-dance here

The assumption that T in impersonal passive has no ɸ-features seems to be true cross-linguistically. Further evidence for this comes from Icelandic, where the verb does not show agreement as illustrated in (26, from Jónsson 2009: 283).

(26) a. Það var barið   mig
          it   was hit.DEF   me.ACC
          'I was hit'

     b. Þess vegna var   hjálpað   stelpunum
          therefore   was helped.DEF   the.girls.DAT
          'Therefore the girls were helped'

(26a & b) are transitive impersonal passive structures. In (26a), the 3 Person singular Aux *var* (was) is used with the 1 Person singular pronoun *mig* (me), which suggests that there is no Person agreement. In addition, (26b) shows that there is no number agreement; the singular Aux *var* (was) is used with the plural in-situ object *stelpunum* (the girls).

As for Case, it seems that T in impersonal passive may not have Case shown in (27, from Arabic).

(27) ʔinna-hu yu-rqaṣu   hunaa
       that-it   3.pass-dance here
       'Indeed, people dance here.'

In (27), the C(omplementizer) *ʔinna* assigns the expletive *-hu* an Acc Case, which means that T in impersonal passive has no Case feature.[15]

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[15] What is more important is that the ability of the expletive to occur in Spec-TP explicitly suggests that *pro* lands in Spec-PassP and not in Spec-TP. That is to say, *pro* raises from Spec-*v*P to Spec-PassP and stays there, and never raises beyond that position, an assumption which (20) is based on. It may also be argued that the insertion of an expletive in structures like (27) is licensed by C *ʔinna*, in that, the occurrence of *–hu* is motivated by Case assignment property of *ʔinna*.

As for EPP feature of T, I assume that T has an EPP feature, but is valued by V-raising to T in VSO active structures in general and in impersonal passive in particular. I assume, following Aoun et al. (2010: 44), that in VSO languages "agreement on the verb can fulfill the EPP, thus obviating the movement of the verb." Along these lines, Alexiadou and Anagnostopoulou (1998: 494) point out that one substantial property of VSO NSLs is that in such languages EPP can be satisfied "via verb raising [to T] because they have verbal agreement morphology with the categorical status of a pronominal element."[16]

In SVO languages like Icelandic and German, for instance, I assume that T's EPP feature is valued in one of two scenarios: i) by remerging an optional expletive merged in Spec-TP, as in the case of Icelandic *það* or the German *es* as illustrated in (28).

(28) a. Það var   barið   mig
         it   was   hit.DEF   me.ACC
       'I was hit'

     b. Es wurde getanzt
        It   was   danced
        'There was dancing.'

It is clear that the expletives *Það* and *es* are merged in Spec-TP, and are licensed by T's EPP feature in structures like (28a) and (28b), respectively.

Or ii) by remerging *pro* in Spec-TP as illustrated in (29, from Hofherr 1999: 49).

(29) …dass (es) klar war, dass es so kommt.
     … that it   clear was that   it so comes
     '…that it was clear that that would happen.'

That *es* is optional in structures like (29) can be related to a property of nonNSL languages like German (so called restricted *pro*-drop languages), where *pro* is merged as a null subject. The optionality of *es* in impersonal structures like (29), though not passive "explains why the subject position of the impersonal passive ***can*** remain empty: it is filled by the pro$_{expl}$" (Hofherr 1999: 48, emphasis in the original). Along these lines, Sigurðsson (2011: 150ff & 172) argues that it is a *silent* pronoun which values T's EPP. As for the expletive, it can be assumed that the Icelandic *það* (there/it) in Icelandic impersonal passive "is just an optional placeholder… it is a placeholder of some sort and not a subject" (I return to this point in section 5).

As it turns out, then, it seems that the assumption that T has a strong EPP feature accounts for impersonal passive not only in VSO languages like Arabic, Irish, etc., but also in SVO languages like Icelandic, German, etc.[17] However, the difference is that while in the former the EPP is valued by V-raising to T, in the latter it is valued by *pro* or by an optional expletive.

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[16] Note that I am following the work of (e.g. Plunkett 1993; Yateem 1997; Shormani 2015) in assuming that Arabic, specifically the Standard variety, is a VSO languages. Therefore, I will not discuss these possibilities in relation to SVO here.

[17] Note that although German is a V2-language, the object may show up in the subject position and vice versa, possibly because of Case marking on articles. This is exemplified in (i).

(i) a. Der   Hund sah   den   Mann

4.2. Pass and *pro* feature specifications

In this section, I discuss the feature specifications of Pass and *pro*. I begin with Pass's feature specifications and return to those of *pro*. Given our conclusions above that T in impersonal passive has no ɸ-features, it is then expected that these features are encoded in Pass. As we will see shortly, as a phase head Pass can be taken as the locus of *Agree* feature. Given also that the passive morphology is mainly based on Person feature, it follows that this Person feature may have its own characterization different from Person feature, say, in active, for instance. I postulate that Pass has the set of features in (30) (cf. Fassi Fehri 2012).

(30){[*u*ɸ], [*u*Genr], [*v*Nom]}

Now, let us examine the set of features in (30) the head Pass in impersonal passive has. Examples like (31), from Arabic, indicate that Pass in impersonal passive has a 3 (but not 1 nor 2) Person feature.

(31) a. yu-ntaḍaru   hunaa
        3.pass-wait here
        'One waits here.'

     b. *ʔ-u-ntaḍaru   hunaa
         1-pass-wait   here

     c. *t-u-ntaḍaru hunaa
         2-pass-wait   here

That Pass has a Genr (= generic) feature is evidenced from Arabic impersonal passive structures like (32), where generic/indefinite interpretation persists.

(32) a. ʔinna-hu yu-naamu   hunaa
        that-it   3.pass-sleep here
        'One sleeps here.'

     b.*ʔinna-kunna/hum yu-naamu   hunaa
        that-you.F/they.M 3.pass-sleep here

The ungrammaticality of (32b) indicates that specific/definite interpretation is not possible. This is otherwise indicated by the grammaticality of (32a), where only generic/arbitrary interpretation is available.

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        the.NOM dog   saw   the.ACC man
        '**The dog** saw **the man**.'
     b. Den   Hund sah   der   Mann
        the.ACC dog   saw   the.NOM man
        '**The man** saw **the dog**.'
Note also that when the object shows up in the subject position, it is topicalized or folocalized.

I hypothesize that Pass's Genr feature is a sub-feature of Person.[18] The assumption that the Genr feature exists as a sub-feature of Person comes from the generic interpretation of impersonals in general and impersonal passive in particular as illustrated in (33, from Arabic).

(33) a. ʔaθnaa l-ħarb-i   t-ajidu ʔanna l-ɣaaz-a   ʔixtafaa   min l-ʔaswaaq-i
      during the-war-GEN 2-find that the-gas-ACC disappeared from the-markets-GEN
      'During the war, you will find that the gas disappeared from the markets.'

   b. fii š-šitaaʔ-i   laa ya-ðhab-uu-na ʔilaa l-ʕamal-i   layl-an
     in the-sahara-GEN not 3-like-PL-IND to the-work-ACC evening-ACC
     'In winter, they do not go to work at night.'

   c. yu-ṣallaa   hunaa fii l-ʕiid-i
     3.pass-pray here in the-Eid-GEN
     'People pray here in Eid.'

   d. yu-fṣalu   min l-madrasat-i baʕda l-ɣiaab-i   šahr-an
     3.pass-dismiss from the-school-GEN after absence-GEN month-ACC
     'One dismisses from school after one month absence.'

   e. yu-naamu   ʕala s-sariir-i
     3.pass-sleep on the-bed-GEN
     'People sleep on bed.'

In (33b), the generic interpretation is obtained via 3pl, i.e. 'they' (exclusive) (cf. Sigurðsson and Egerland 2009: 158ff). This implies that *genericity* is interpreted in different persons and different clusivity. In impersonal passive structures like (29c & d), the generic interpretation is expressed via 3pl/sg (exclusive). In (33c), for instance, the generic meaning is not people in general, say, nonMuslims, for instance, are excluded. In (33d), the generic meaning is again not people in general, nor any student, but rather a student "in school," *who is absent for a month*. However, in (33e) the generic meaning is people in general, *all people sleep on beds*. Since this is based on interpretation, genericity seems to have an LF motivation, specifically interpretation. It follows, then, that [Genr] feature is a "sub-feature" of Person. This unvalued [*u*Genr] sub-feature gives Pers feature of Pass the ability to select for a certain type of *pro*, a *pro* that is different from all other types of *pro* (found, for instance, in active and personal passive, as we will see shortly). In our system, [*u*Genr] is taken as a specification of the Person feature, which cannot exist independently of such a feature (cf. D'Alessandro 2007).[19]

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[18] Our postulation of [Genr] sub-feature is to some extent in line with D'Alessandro's (2007: 160ff) postulation of [arb] sub-feature. She proposes that in Italian active impersonals *si* has an [arb] sub-feature of Person. According to her, [arb] provides the sentence with a generic subject. However, the fact that arbitrariness is not an exact equivalent to genericity makes us reject D'Alessandro's assumption. There is, in other words, a difference between the former and the latter. While the former is associated with a quasi-universal reading, the latter with quasi-existential reading. In our system, [Genr] is assumed to trigger quasi-existential reading, i.e. exactly a generic 3 Person reading. The [Genr] sub-feature in our system has always a generic interpretation, but not an arbitrary interpretation.

[19] Note that if impersonal and personal passive are to be dealt with on a par, and given the agreement facts between the verb and the internal argument (which are not there in impersonal passive), it can be assumed that Pass may not have this Genr as a sub-feature in personal passive. Or it may have it, but it is not as strong as in impersonal

As for Num(ber) feature, the assumption that Pass has a Num feature stems from the feature-content of the passive morphology, which is related to the general number associated with it. This is also evidenced from the interpretation of the agent, here *pro,* as illustrated by Arabic impersonal passive structures like (34).

(34) a. yu-fraħu   fii l-ʕiid-i
      3.pass-get.fun   in the-Eid-GEN
      'People get fun in Eid.'

   b. yu-rqaṣu   hunaa
      3.pass-dance here
      'One dances here.'

As indicated by the English translation, the implicit agent is interpreted as 3 singular in (34a) and 3 plural in (34b). If this analysis is on the right track, it follows that Pass has a Num feature.

The final point to address in this regard concerns Gend feature. The assumption that Pass has a Gend feature can be inferred from the examples discussed so far. For instance, in (34) Pass appears to have a masculine Gend feature by default.

It turns out, then, that Pass is a φ-*complete* head in Chomsky's (2000, *et seq*) sense. In other words, Pass seems to be endowed with the feature-specifications characteristic to heads of phases in general (C and *v*, see Chomsky 2005: 18, 2008: 143). It is, furthermore, possible to postulate that Pass is the locus of *Agree* feature (i.e. φ-features). It also follows that Pass has an *Edge Feature*. Given our conclusion that [*u*Genr] feature is a sub-feature Person, I assume that this "edge feature" is [*u*Genr] in the PassP-phase, as a dissociated feature from φ-composition.

The assumption that [*u*Genr] feature counts as an EF in PassP-phase is motivated by LF interpretation purposes (cf. Chomsky 2008: 139). As seen above, that the implicit argument of impersonal passive is interpreted as generic, i.e. generic *pro,* supports this postulation. Chomsky (2008) postulates that the edge feature can be either an external *Merge* or internal *Merge*. However, I assume [*u*Genr], or EF in impersonal passive, to be an internal merge, yielding a remerging movement of *pro* from Spec-*v*P to Spec-PassP.[20]

This also amounts to the postulation that Pass will have two probes, namely *Agree* feature and EF. The former concerns φ-features (cf. Chomsky 2008), that is, Pass probes for valuing its unvalued φ-features via *Agree* with *pro* in Spec-vP. The latter concerns remerging *pro* in Spec-PassP.

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passive, given that personal passive may have definite interpretation in some contexts (see e.g. Biberauer et al. 2010). Further evidence of this comes from *pro* interpretation.

[20] The assumption that [*u*Genr] as a sub-feature of Person could count as an EF comes in line with similar proposals for different features put forth in the literature (see e.g. Frascarelli 2007: 718ff, for [Aboutness] feature encoded in Top as a phase head; Rouveret 2008: 175ff, for [Mood] feature encoded in C/*v* as phase heads in Irish/Welsh Relativization) (see also Shormani to appear). It also stems from the genericity the implicit argument is characterized with in impersonal passive. If this is on the right track, it is expected that valuation of the [*u*Genr] feature is dissociated from φ-composition of Pass, as assumed for [Aboutness] and [Mood] features in Frascarelli (2007) and Rouveret (2008), as just noted.

As for Case valuation, I assume that the Case feature of Pass is valued by *pro*.[21] I also assume that Case valuation is dissociated from *Agree* Feature valuation. While the latter are realized via *Agree* on the verb, the former is valued via *Agree* with *pro.* That is to say, Case feature is interpretable on Pass (and *v*, specifically in impersonal passives of transitives) but uninterpretable on *pro,* and ɸ-features are uninterpretable on Pass (and *v*), but interpretable on the verb (cf. Pesetsky and Torrego 2001, 2004). For example, Pesetsky and Torrego (2004: 495f) argue that Nom Case is an interpretable feature on functional heads, here Pass. Pass's valued Case feature, then, values *pro*'s unvalued Case feature via *Agree*, and a similar (though not identical) mechanism can be assumed for *v* and Acc Case.[22]

Let us now turn to the feature specifications of *pro* in impersonal passive. Given the feature specifications of Pass discussed above, it is expected that *pro* enters the derivation with feature specifications that would be able to value Pass's unvalued features, by which *pro* is licensed.[23]

Everything being equal, in what follows I will show how the behavior of *pro* in impersonal passive is different from that of *pro* in active and personal passive. The first difference has to do with the feature [+ Human]. This feature gives *pro* in impersonal passive a distinguished 'identity.' As noted by Blevins (2003: 476), the feature [+ Human] is not restricted "to verbs whose subject can be construed as human" but even if the verb denotes a non-human agent, the interpretation is (and always) human. This view, in fact, seems to hold cross-linguistically as is illustrated in (35), representing impersonal passive in German as in (35a, A&L 2006b: 509), Icelandic as in (35b, Sigurðsson and Egerland 2009: 168, fn.13), Italian as in (35c, D'Alessandro 2004: 45), and Polish as in (35d, Frajzyngier 1982: 273), for the verb *bark*.

(35) a. An der Tür wurde gebellt
     at the door was barked
     'At the door there was a human barking.'

   b. Pað var geltað he´r.
     it was barked here
     'There was barking here.'

   c. Qui si abbaia tutto il giorno
     here SI barks all the day
     'Here people bark all day long.'

   d. Zaszczeka-no do drzwi

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[21] Note, in addition, that phase analysis to PassP also accounts straightforwardly for the Nom Case the Pass has. Being a phase head, Pass is a Case-licensing head (cf. Bruening 2011).

[22] Note that this approach abstracts away from previous approaches to Case assignment argued for in Burzio's (1986) Generalization. It also abstracts away from Case valuation 'by convention' suggested in Chomsky (2001). Chomsky (2001) assumes that Case features are valued by convention: a DP whose ɸ-features are valued by T is Nominative and a DP whose ɸ-features are valued by *v** is Accusative.

[23] Note, in addition, that the valuation system adopted here amounts to the fact that only the 3 generic *pro* can value Pass's unvalued features. Note also that these feature specifications make 3 generic *pro* in impersonal passive different from active 3 generic *pro* in nonconsistent NSLs like Finnish, Hebrew, Marathi, etc. In particular, while *pro* in impersonal passive is always generic/indefinite, active 3 Person *pro* in these languages may be definite in certain restricted circumstances (see Shlonsky 2009; Biberauer et al. 2010).

      bark-pass   at door
      'There was barking at the door.'

In the above examples, though 'barking' is a property of 'dogs,' *pro* is interpreted as human.

Consider also (36a-c) from Dutch, Arabic and Icelandic. In these impersonal passive examples, though the verbs *run* in Dutch, *sleep* in Arabic and *whistle* in Icelandic, can subcategorize for nonhuman subjects in the active, the agent in these structures is interpreted only as human. The Dutch and Icelandic examples are adapted from A&L (2006b: 510) and Maling (2006: 216), respectively.

(36) a. Er wordt gelopen
      it   is   run
      'People run.'

   b. yu-naamu   hunaa
      3.pass-sleep   here
      'People sleep here.'

   c. Það var flautað
      it was   whistled
      'People whistled.'

Even though the passivized verb can subcategorize for a non-human agent, *pro* is always restricted to [+Human] agent. For example, in (36c), though animate non-human like grasshopper or even inanimate like trains can *whistle*, the *pro*-subject must be interpreted as human.

The second difference concerns *pro's* syntactic and semantic 'activeness' in impersonal passive. The fact that *pro* in impersonal passive is syntactically and semantically active stems from its binding behavior: *pro* binds the reciprocal as in (37a), internal anaphora as in (37b), and secondary predicate as in (37c) (cf. Fassi Fehri (2012).[24],[25]

 (37) a. yuḍrabu   furaadaa   wa-jamaaʕaat-in ḍidda z-zulm-i   daʕimiina baʕḍ-un baʕḍ-an

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[24] However, these binding diagnostics are not maintained in personal passive while they are in active. Compare (i) and (ii), personal passive and active, respectively.
(i) a.*yu-ʔkalu   l-burtuqaal-u   furaadaa   wa-jamaaʕaatin
      3.pass-eat   the-oranges-NOM   individuals and-groups
  b. *yu-ɣsalu   nafs-u-hu   hunaa
      3.pass-wash self-NOM-him here
(ii) a. ya-xdimu   nafs-a-hu   layl-an
      3.act-serve self-ACC-him   night-ACC
      'He serves himself at night.'
   b. ya-nṣarifu   maši-an   ʔilaa l-bayt-i
      3.act-depart walking.SG-ACC to   the-house-GEN
      'He leaves walking to the house.'
[25] Note that Fassi Fehri's (2012) analysis takes *pro* to be a topic focusing on left periphery materials. Our analysis, however, takes *pro* as a subject in both V-initial languages such as Arabic, Irish, etc. and V-second languages like German, Icelandic, etc.

3.pass.strike   individual-ACC   and-groups-ACC   against   the-injustice-GEN
supporting-PL.ACC each-NOM   each-ACC
'People strike individuals and groups against injustice, supporting each other.'

    b. yu-t-tt-aharu   ʕinda   l-kaʕbat-i
      3.pass-reflex-wash beside the-Kabba-GEN
      'One purifies oneself beside the Kabba.'

    c. yu-ntaqalu   maši-an   fawqa l-jisr-i
      3.pass-move walking.PL-ACC   on   the-bridge-GEN
      'People walk on the bridge.'

In Icelandic impersonal passive, *pro* is also evidently syntactically active, as can be observed by control facts, anaphora and subject-oriented adverbials. This is illustrated in (38, from Sigurðsson and Egerland 2009: 170).

(38) a. Það var   reynt **aðhjálpa** honum.   (control)
      it   was tried   to help   him
      'NN tried to help him.'

    b. Eftir vinnu var bara farið heim til **sín**.   (anaphora)
      after work was just gone home to self.REFL
      'After work, NN just went home (to their own place).'

    c. Það var horft   framhjà honum **af àsettu   ràði**   (adverbial)
      it   was looked past   him   by intended means
      'He was deliberately neglected/discriminated.'

Furthermore, Sigurðsson (2011: 159) provides evidence from Icelandic that *pro* can control even into control clauses. This is illustrated in (39).

(39) Það er reynt ad dansa hèr.
    it   is tried to dance here
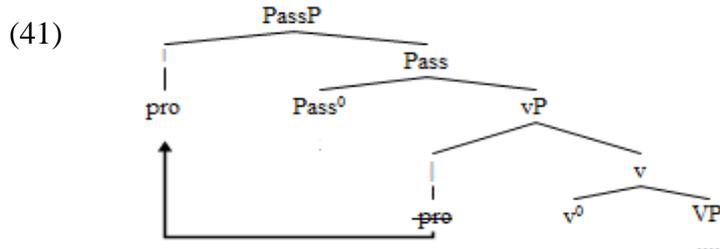   'People try/are trying to dance here.'

The binding facts manifested by *pro* in impersonal passive structures like (36-39) can be taken as empirical evidence for the assumption that *pro* in impersonal passive is 'referentially' more specified than it is in personal passive. This can be signaled as a third difference between both *pros*.

A forth difference has to do with the landing site of *pro* in both passives. Given that in personal passive the internal argument is promoted, *pro* in this type of passive is argued to merge in Spec-*v*P and stays there. However, since the internal argument is not promoted in impersonal passive of transitives, Pass's [*u*Genr] feature triggers *pro* to raise to Spec-PassP, in line with (20) above.

5. Intransitive Impersonal Passives (IIPs)

As the name suggests, IIPs refer to those impersonal passive structures whose verbs are intransitive. Given that in IIPs only the subject is suppressed (since there is no object to be promoted), I hypothesize that IIPs like (40) will have the structure simply schematized in (41).

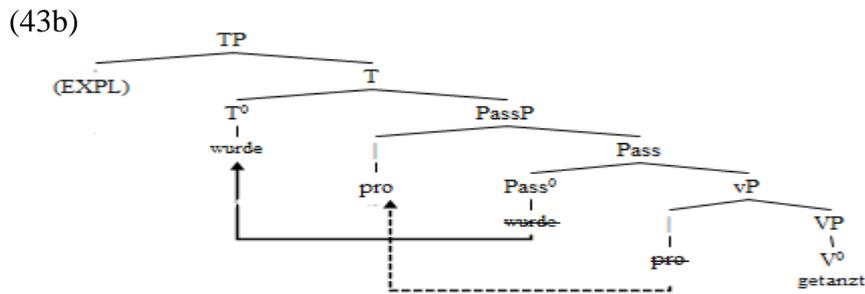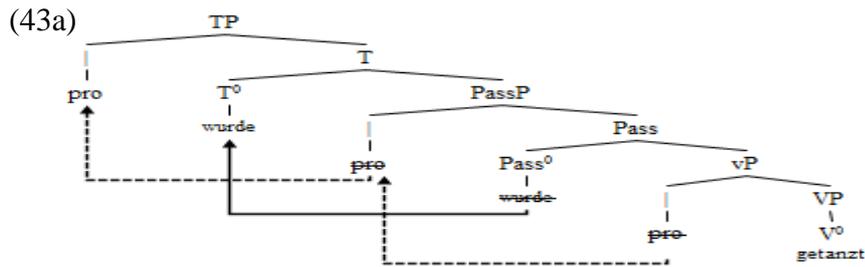(40) yu-naamu   hunaa
  3.pass-sleep here
  'One sleeps here.'

(41)

As is clear in (41), *pro* is merged in Spec-*v*P, where its θ-role of agent is valued at *Merge* in the configuration [$_{vP}$ […] [*v*]], as assumed so far. An *Agree* relation is established between *pro* and Pass, whereby all the unvalued features of both are valued. Pass's EF feature then triggers *pro* to remerge in Spec-PassP to value Pass's [*u*Genr] feature.

The proposed approach also elegantly accounts for impersonal passive constructions in SVO languages like German, Icelandic, etc. in which periphrastic passive is used. For example, (42) presents the periphrastic passive in impersonal passive structures in German and Icelandic (see also Ackema and Neeleman 1998). In these examples, the periphrastic verbal complexes *wurde getanzt* (was danced) and *er dansad* (is danced) in German and Icelandic, respectively, are made use of (from Abraham and Leisio 2006: 14, and A&L 2006a: 276, respectively).

(42) a. Es wurde getanzt
   It was   danced
   'There was dancing.'

  b. Það er dansad   ìskólanum
   it   is danced   in school.the
   'There is dancing in the school.'

I hypothesize that in such impersonal passives the periphrastic Auxs *wurde* and *er* are merged in Pass, and the main verbs *getanzt* and *dansad* are merged in V (and raise to *v*). And only Aux(s) will raise to T. I also assume that in such impersonal passives, *pro* is merged in Spec-*v*P, and is then triggered by Pass's EF to remerge in Spec-PassP to satisfy Pass's [*u*Genr] feature. It does not raise beyond Spec-PassP. As for valuing T's EPP feature, it can be valued either by i) *pro* remerging in Spec-TP, or ii) an optional expletive merging in Spec-TP. These

two alternatives are shown in (43a) and (43b), respectively, in German impersonal passives, for example.[26]

(43a)

(43b)

In addition, in languages with impersonal (generic) overt pronouns like the Spanish *se*, for example, I assume that this arbitrary *se* (or its cross-linguistic counterparts) is a matter of Case.[27] This comes in line with Aranovich's (2009) proposal. The latter argues that in Spanish

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[26] *pro* is the subject of impersonal passive structures like (42) which comes from a property of German. In German, expletives can only be omitted in impersonal passives. Other constructions do not allow such omission as (i) shows (see Abraham 1993: 120ff).
(i) 1st *(es) dort zu kalt?
   'Is it too cold there?'
Abraham argues that expletives in some impersonal passive contexts are not possible as (ii) shows
(ii) Darf (*es) gelacht werden?
    may-it-laughed-be
   'Is it permitten to laugh?' (The word *permitten* is spelled as such in Abraham 1993:120).
Furthermore, the assumption that *pro* merges in Spec-vP and then remerges in Spec-PassP in German indicates that "the subject position of the impersonal *werden*-passive must remain empty" as in (iiib, from Hofherr 1999: 48)
(iii) a. Gestern   kam *(er) zu spät.
       yesterday came he   too late
      'Yesterday he came too late.'
   b. Gestern   wurde   (*es) lange diskutiert.
      yesterday were.3SG EXPL long discussed
      'Yesterday it was discussed/ the discussion went on until late.'
Hofherr argues that in *es*-impersonal passive constructions, *es* merges in the subject position of a *werden*-passive and "receives an argumental reading as the 3sg neuter pronoun" as the ungrammaticality of (ivb) shows.
(iv) a. Gestern   wurde   *es* früh gegessen.
       yesterday were.3SG it early eaten
      'Yesterday it (e.g. the food) was eaten early.'
   b. *Gestern wurde   es früh geschlafen.
      yesterday were.3SG it early slept
      'Yesterday it (=sth) was slept early.'
[27] Cross-linguistically, overt indefinite [+ Human] pronouns include English *one*, Italian *si*, French *on*, Spanish *se*; Polish *się*; Dutch *men*, German, Norwegian, Swedish and Danish *man*, Icelandic *maður*; Hungarian *az ember*. However, languages such as Arabic, Finnish, Hebrew and Russian do not have overt impersonals. They, instead, have a covert (in)definite/generic 3 pronoun, namely *pro*.
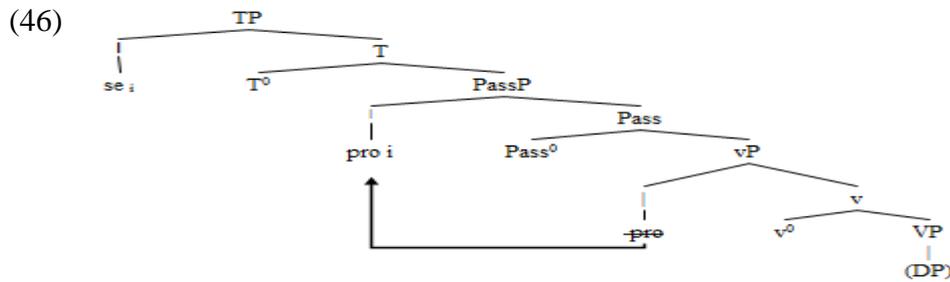
impersonal passives, or what he refers to as 'reflexive impersonal passive' as in (44), *se* absorbs the Nom Case, and that it "licenses an empty pronoun in subject position," possibly *pro* (Aranovich 2009: 620f).

(44) Se felicitó   a   los soldados.
    SE congratulate.3SG to the soldiers
   'The soldiers were congratulated.'

He also argues that *se* is coindexed with *pro* not only for Case, but also for interpretation as roughly schematized in (45, cf. Aranovich 2009: 623).[28]

(45) Nominative se: se$_i$ *pro$_i$ v* (DP)

I propose that *se-* (or its cross-linguistic counterparts) impersonal passive constructions will have the simple structure presented in (46).

(46)

As is clear in (46), *pro* is merged in Spec-vP. It values its θ-role of agent in [$_{vP}$ […] [*v*]] at *Merge*. An *Agree* is established between Pass (by virtue of having an *Agree* Feature) and *pro*, the result of which is valuing the unvalued features of both elements. Pass also values *pro*'s Nom Case feature via a subsequent *Agree* between both. Pass's EF then triggers *pro* to raise to Spec-PassP, and hence valuing Pass's [*u*Genr] feature. *se* is merged in Spec-TP, where it values T's EPP feature.

It can be assumed, along the lines put forth in Sigurðsson and Egerland (2009), that impersonals such as *se* in *se*-constructions are placeholders. This seems also to hold true of even *there*-impersonal passive structures in Icelandic like (42b), where *there* is optionally a placeholder. It optionally merges in Spec-TP, as shown in (43b) for German. It can be argued that overt impersonals like the Spanish *se* or the Icelandic *maður* cannot be interpreted as *pros*. Having this in mind, it can be assumed that "null impersonals are constructed in syntax but interpreted as zero in the overt, expressive component of language, PF" (Sigurðsson and Egerland 2009: 160).[29]

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[28] It should be noted here that in active impersonal expressions, *se* in Spanish or *si* in Italian is used only in generic reading (see e.g. Sigurðsson and Egerland 2009; D'Alessandro 2007). Given this, it may well be argued that the occurrence of these generic impersonal "markers" is not a core property of impersonal passive in these languages, but rather *pro* is. Based on relational grammar, Perlmutter (1978), for example, proposes that the subject of impersonal passive can be a dummy (expletive) element, which may or may not be realized. Examples of the realization of this dummy element include *er* in Dutch, *se* in Spanish, *si* in Italian, etc. (though this assumption is not borne out, as we have seen above).

[29] See also McCloskey (2007: 828f & 835) for differences between overt and covert impersonals, on the one hand, and between these impersonals and implicit arguments (or *pros*), on the other hand.

6. Transitive Impersonal Passive (TIP)

It is cross-linguistically held that TIPs are formed from 2-place predicates, and that impersonal passivization is neutral to valence. It follows that TIPs are 'valence-preserving' structures. This is simply because in TIPs the internal argument of the verb is not promoted, but rather remains in situ. (47) exemplifies TIPs in Arabic.

(47) "li-yu-jzaa   qawm-an   bi-maa   kaan-uu   ya-ksib-uu-na"   (Qur'an)[30]
     to-3.passa-award   people-ACC   by-what   were-PL   3.act-do-PL.IND
     'People will be awarded according to what they have done.'

Syntactically, the internal argument, namely *qawm-an* in (47), is not promoted. It turns out that it is assigned an Acc Case, and the assigner is invariably the verb. The transitive verb *yu-jzaa*, though passivized, seems to still be able to assign the internal argument an Acc Case. Semantically, it seems also that this internal argument is assigned a θ-role of patient by such a verb.

The assumption that the internal argument in impersonal passive is not promoted, on the one hand, and that Pass agrees with *pro,* but not with the internal argument, on the other hand, seems to hold true cross-linguistically. Consider (48) exemplifying North Russian as in (48a), Latin as in (48b), and Turkish as in (48c) (slightly modified from Keenan and Dryer 2007: 346ff, see also Pieroni 2000, for more on Latin impersonal passive data), Icelandic as in (48d, from Jónsson 2009: 283), Spanish as in (48e, from Aranovich 2009: 620) and German as in (58f, from A&L 2006a: 264).

(48)   a. U mena bylo   telenka   zarezano
      at me   was(3SG.NEUT)   calf(F.ACC)   slaughtered(SG.NEUT)
     'By me there was slaughtered a calf'

    b. Legibus   (a bonis civibus)   paretur
      law(DAT.PL)   is.obeyed(3SG)
      'There is obeying laws.'

    c. Ankara-ya   gid-il-di
       Ankara-to   go-pass-pt
       'It was gone to Ankara'

    d. Það   var   barið   mig
       there   was   hit.DEF   me.ACC
       'I was hit'

    e. Se felicitó   a   los soldados.
       SE congratulate.3SG   to the soldiers
       'The soldiers were congratulated.'

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[30] In traditional Arabic grammar, examples like (47) have been taken as evidence by Kufians for this type of passive (based on ʔabi Jaʕfar's reading).

f. Es wird fleißig   Treppen   hochgestiegen
   it is   assiduously stairs.ACC   up-climbed
   'Stairs were assiduously climbed.'

The agreement facts manifested by the cross-linguistic examples in (48) support our postulation that no verb agrees with the internal argument, which in turn remains in situ.

Furthermore, there is also another fact that can be drawn from (48). In impersonal passive, intransitivity criterion is no more than a strong tendency. In other words, impersonal passive structures seem to be transitivity-maintaining (see also A&L 2006a & b; Abraham and Leisio 2006, among other related work).

Note also that the internal argument can be assigned a Case other than Acc (as can be noted in 49b, from Latin), as in Icelandic in (49a), and compare it to (49b) (from Jónsson 2009: 283ff).

(49) a. Það var   bjargað   uppskerunni
        It   was saved   the.crop.DAT
        'There was saved the crop.'

    b. Það var   keypt   stóla
       there was bought.DEF chairs.ACC
       '(Some) chairs were bought.'

(49a), the internal argument *uppskerunni* is assigned Dat Case while in (49b) the internal argument *stóla* is assigned Acc Case. In both cases, what is important to note here is that in TIP impersonal passive passivization does not affect the verb's ability to assign Case, whatever this Case is. As for why the in-situ argument in (49b) is assigned Dat rather than Acc Case, it has perhaps to do with the nature of the verb. As far as Icelandic is concerned, there are also in-situ passive structures where the object is assigned Gen Case as (50) shows (from Sigurðsson 2011: 148).

(50) Þeirra   var   leitað.
     them.GEN   was.DFT looked-for
     'They were looked for.'

Following Svenonius (2006), Sigurðsson (2011: 163f, fn. 19) has rightly observed that there are certain cases where idiosyncratic factors 'internal to V_X' can affect argument Case marking (see Sigurðsson 2009, for some of such factors). He states that "even though an argument gets DAT in a structural configuration with v**-Vx, the fact that the particular Vx in question matches v** rather than v*, for instance, may be due to idiosyncratic factors, internal to Vx."[31] The idiosyncrasy of such Case alternations, Sigurðsson argues, is manifested by structures where subjects surface with Dat rather than Nom and objects with Nom as (51) shows, as noted by Jónsson 2003: 129f; Svenonius 2006: 2).

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[31] Sigurðsson (2011) has also listed different Cases that can be assigned to the internal argument in Icelandic including "DAT and ACC subjects of several sorts, DAT and ACC indirect objects, DAT and ACC direct objects, DAT and ACC P objects, and several types of adverbial DAT and ACC NPs."

(51) a. Mér   blæddi.
     me.DAT   bled
     'I bled.'

   b. Fólkinu   sárnuðu Þessi   ummæli.
     the.people.DAT hurt   these.NOM   words.NOM
     'The people were hurt by these words.'

Along these lines, Svenonius (2006: 2) argues that Acc Case can be "more fragile than the dative, as the dative is preserved in contexts where the accusative is lost (as in passive)." Svenonius adds that though both, Acc and Dat, are "structure cases, … there are contexts in which both are lost (as in the middle)."

Given these assumptions, I hypothesize that the TIP impersonal passive will have the structure roughly schematized in (52).

(52)

Merging in Spec-*v*P, *pro* values its θ-role at *Merge*, and by remerging in Spec-PassP, it values Pass's [*u*Genr] feature. An *Agree* relation is established between the in-situ DP and *v*, whereby all the unvalued features of both are valued, and deleted at LF. The unvalued θ-role of the internal argument DP is valued at *Merge* in the thematic configuration [V[…]].

Note, in addition, that the binding test applied in IIPs, where *pro* binds a secondary predicate, can be applied here as well, as exemplified in (53a), and roughly schematized in (53b, from Arabic).[32]

(53) a. "wa-siiqa   llaðiina   kafar-uu   ʔilaa jahanam-a zumara"   (Qur'an)
     and-3.pass.drove who.PL   disbelieved.PL to   hell-ACC   groups.ACC
     'And those who disbelieve were taken to hell in groups.'

   b. [$_{TP}$ [$_T$ siiqa]$_i$ [$_{PassP}$ [pro$_k$]$_j$ …. [$_{vP}$ [t$_j$] [$_v$ [t$_i$] [$_{VP}$ [v t$_i$ [$_{CP}$ […] zumara$_k$]]]]]]]]]]]

That *pro* is the constituent which values Pass's EF feature in TIPs is evident from Arabic impersonal passive structures like (54), where the expletive –*hu* values the T's EPP.

(54) a. yu-qaalu   ʔinna l-ħukuumat-a   sa-tuʕaaqibu l-muxaalif-iina
     3.pass-say that   the-government-ACC will-punish   the-transgressors-ACC
     'People say that the government will punish the transgressors.'

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[32] See in particular Schäfer (2012) for more on these issues in languages like German, Icelandic, etc.

b. Ɂinna-hu yu-qaalu Ɂinna l-ħukuumat-a sa-tuʕaaqibu l-muxalif-iina
that-it 3.pass-say that the-government-ACC will-punish the-transgressors-ACC
'Indeed, people say that the government will punish the transgressors.'

To conclude this section, it should be noted that our system accounts also for impersonal passive in languages like Chinese, Japanese, Korean, etc., so-called radical *pro*-drop languages, where *pro* can be dropped, but only in relation to discourse (see e.g. Hasegawa 1985; Rizzi 1986; Abraham 1993; Huang 1984, 1989). These languages are "typologically and genetically distinct" from NSLs, be they consistent or nonconsistent. They allow not only subject *pros,* but also object ones to be dropped quite freely "without agreement marking of any kind" (Biberauer et al. 2010: 8). I assume that structures like (46) can be employed to derive impersonal passive in these languages. The mere difference between languages like German, Icelandic, etc. and radical *pro*-drop languages is that in the latter *pro* can be said to merge in Spec-vP, remerges in Spec-PassP, and finally in Spec-TP. Given also that radical *pro*-drop languages depend on discourse in interpreting *pro*, and given also the assumption that C-domain is equated with the information/discourse structure, one further way out would be that *pro* (re)merges in Spec-CP (see also Shormani to appear, and references cited therein).

7. Language variations and UG parameterization

In the previous sections, we have dealt with properties in-common to impersonal passive cross-linguistically. However, I think that an adequate approach should not only account for these impersonal passive properties common to all languages, but it should also account for the cross-linguistic variations in this phenomenon. In fact, not all languages allow impersonal passive. Nor is there any correlation between allowing personal passive and impersonal passive in a language or a set of languages. Generally, languages like English allow personal passive, but not impersonal passive; languages like Lithuanian, Latvian and Sanskrit form impersonal passives of all intransitives, including unaccusatives, and even the verb 'to be,' but of no transitives. There are also some other languages like Swedish, which form impersonal passives of transitives, and restrict impersonal passives to the allegedly "unaccusative" subclass of intransitives (Haspelmath et al. 2005: 434ff). I hypothesize that these cross-linguistic variations are accounted for in terms of UG parameterization. The latter allows us to account for these variations, among other typological issues, natural languages are (genetically) characterized with.

Another aspect in which UG parameterization is manifested concerns imperfectivity vs. perfectivitiy impersonal passive. Abraham and Leisio (2006) claim that impersonal passives are aspectual in nature, i.e. they depend on aspect, postulating that they are formed only from imperfective verbs. However, it seems that this postulation cannot be generalized, because such an assumption seems not to hold true cross-linguistically. Contra Abraham and Leisio (2006), I show here that impersonal passive structures are formed from perfective and imperfective verbs. Take languages like Arabic, as an example, where impersonal passive is possible to be formed from perfective and imperfective verbs, as illustrated in (55a) and (55b), respectively.

(55) a. niima hunaa
3.pass.slept here
'People have slept here.'

b. yu-naamu   hunaa
   3.pass-sleep here
   'People sleep here.'

Another UG parameterization that can be noted here concerns the Case assigned to the internal argument in impersonal passive. As noted regarding examples in (49-51), there are few structures in languages like Latin and Icelandic in which the internal arguments can be assigned Dat/Gen rather than Acc Case. But the behavior of impersonal passive in these structures cannot be generalized. Accounting for such cases, Sigurðsson (2011) calls them quirky/dynamic impersonal passives, which have different behaviors based on the verbs involved. In UG parameterization terms, they can be attributed to the underlying nature or the intrinsic properties the verbs involved in these impersonal passives have. These intrinsic properties may have to do with causativization/ergativization properties specific to such verbs. This lies in that such verbs can assign their internal arguments nonAcc Cases, even in nonpassive structures. This may also account for the wide range of verbs which assign Acc Case to internal arguments in impersonal passives in these languages.

This UG parameterization can be analogized to account for few impersonal passive structures in languages like German and Dutch, where *by*-phrases are acceptable. Consider (56) from German, for example.

(56) a. Es wurde (von allen Teilnehmern) hart   gekämpft.
        It   was   by all participants   hard fought
        'People (All participants) fought hard.'

    b. Dann wurde (von den Kindern) getanzt.
       then was   by the children   danced
       'Then there was dancing (by the children).'

That *by*-phrases in these structures are possible while they are not in a wide range of impersonal passives in German cannot again be generalized, but rather parameterized, and attributed to the intrinsic properties of the verbs involved. In other words, the limited number of these verbs makes it clear they constitute a small subset of verbs and that their behavior is just a matter of parameterization (cf. Kiparsky 2013: 27).

To conclude this section, UG parameterization, in fact, allows us enough space to account not only for these phenomena, but also for a wide range of passivization facts across languages. For example, it accounts for the fact that there is not even any correlation between allowing impersonals in active but not allowing them in passive, as in the case of English and Czech. Allowing or not allowing impersonal passives of intransitives in a language, for example, has been attributed to the (in)ability of the verb to assign structural Case. In languages like English, intransitive verbs cannot assign structural Case, and hence impersonal passives are not possible. In languages like Arabic and German, however, impersonal passives of intransitive (unergative) verbs are possible, because verbs in these languages can assign structural Case (Jaeggli 1986). There are also some Slavic languages, where passive is expressed in structures which 'are not morphosyntactically passive' (Blevins 2003: 482), i.e. they are passive only in meaning. There are also some languages like Malayalam, Tongan, etc. which do not allow passivization of both

types at all. Some other languages like Hebrew, though closely topologically related to Arabic, allows impersonal passive in transitive, but not in intransitive clauses. For a language to allow passivization, in both spheres, or either, or even neither, could be argued to be a property of UG. In principle, passivization is a principle of UG, while allowing it (or any type of it, or even a property of it) by a language *L* is parameterized across languages.

Conclusion

I have proposed a unified approach to impersonal passive in NSLs and elsewhere, based mainly on the Person feature the PM is associated with. Our analysis takes *pro* as the logical subject in both V-initial languages such as Arabic, Irish, etc. and V-second languages like German, Icelandic, etc. Central to the proposal developed here is the assumption that the thematic subject in impersonal passive is syntactically and semantically active, receiving a θ-role (and Case) from the verb in exactly the same way its active counterpart does. This conforms to configurational θ-role assignment in minimalism, that is, *v* is the assigner of the agent θ-role in both the active and passive. Since such a subject is demoted, in the sense that it is not lexicalized, *pro* is what qualifies to be such a subject. It has been proposed that *pro* is merged in Spec-vP, valuing its θ-role there in [$_{vP}$ […] [*v*]] at *Merge*. It also values its Nom Case via *Agree* established between it and Pass. Pass is assumed to be a phase head, hence ɸ-*complete*. It has two probes, namely *Agree* and *Edge* features. EF is motivated by the unvalued genericity [*u*Genr] feature, as a sub-feature of Person, dissociated from ɸ-composition. EF feature triggers *pro* to remerge in Spec-PassP, hence valuing Pass's [*u*Genr] feature. Pass has a valued Nom Case feature, which values the unvalued Case feature of *pro*.

There are also several implications the proposal pursued here is expected to have. One such implication has to do with postulating that PassP exists in UG. This implication leads to dealing with cross-linguistic facts with less terminology and less machinery apparatus (though partly on impersonal passive) as a substantial assumption of minimalism. The article also provides strong support for the assumption that UG principles do exist: that the external argument is suppressed, but is still syntactically and semantically active, turns out to be a property of passivization in all human languages. It also supports the assumption that no Case nor θ-role seems to be absorbed by passivization as was claimed in the P&P framework. However, UG is indeed parameterized, as we have shown in the previous section.

A further implication concerns the extension of this proposal to the analysis of personal passive. Given that the passive morphology behave similarly in personal and impersonal passive cross-linguistically, it is expected that (20) can be applied to personal passive as well.

A final implication concerns the application of the proposed approach to adjectival passive, and passive of unaccusatives cross-linguistically, accounting for language typology and adequately tackling the significant properties of passivization across languages.

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