The dynamics and statics of passive[1]

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1. Introduction

It is often argued that the canonical passive is essentially conditioned by pragmatic exigencies from the viewpoint of language use. These exigencies include the speaker's intentionality to forgo mention of the real Agent (or its thematic proxy) for whatever reason. The logical consequence is, therefore, to generally define the passive form of the main verb as a constituent which entails the syntactic deletion, and subsequently the anonymousness, of the real Agent in the unmarked situation, a definition that has been familiar in the history of linguistic thinking since the Middle Ages (see Gruntfest 1984, Owens 1988, 1990). Even if the real Agent is syntactically inserted in the marked situation, on the other hand, its identity may also remain incognito for reasons which have to do with the lexical nature of the main verb itself. Along with the distinction between unmarkedness and markedness in this sense, a corresponding distinction has thus been made between what is known as the 'agentless' or 'short' passive and the 'agentive' or 'long' passive.

However, the pragmatic connotation of the canonical passive is also conditioned by certain changes in the structural representation of the active version. These changes comprise the subjectivization of the objective NP (or any syntactic category standing proxy for it), the attachment of passive morphology to the main verb, the necessary deletion or insertion of the agentive PP, and the like. Structural changes such as these are assumed to emerge from the mental interaction between a given set of general principles which have been designated within the framework of Universal Grammar (see Chomsky 1981, Jaeggli 1986, Chomsky 1988a, Baker et al. 1989, Haegeman 1994, Ouhalla 1999, Radford 2004). The fundamental injunction is to underline the typological convergence between even genetically unrelated languages in the application of these principles, and to explain the apparent typological divergence in terms of setting different values of the same parameters involved, such as, the parameter that is responsible for word order and the parameter associated with the passive morpheme or complex of morphemes (see Fassi Fehri 1987, 1988, Ouhalla 1991). This is because the apparent typological divergence between natural languages, which can only be observed at the two levels of morphology and phonology, is said to be 'illusory and epiphenome-

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nal, the result of interaction of fixed principles under slightly varying conditions' (Chomsky 1994: 4).

The structural representation of the canonical passive and its pragmatic connotation have in fact resulted in the treatment of this construction within at least two antagonistic enterprises, namely, the generativist and the non-generativist. While the generativist enterprise (i.e. Universal Grammar (UG)) attempts to explain the construction as a syntactic phenomenon arising from the workings of specified principles of the mind, the non-generativist enterprise (including Relational and Functional Grammar) tends to view the same construction as a pragmatic phenomenon, whose sole function is societal, and thus examine it to the detriment of the principles that underlie its structural representation. What one would expect from this undesirable conflict is nothing but the coinage of a rather confusing terminology to describe several different types of the canonical passive. Within this terminology we find what are collectively known as the 'personal passive' and the 'impersonal passive,' the latter being a less common type than the former. Generally speaking, the personal passive is assumed to involve the subjectivization of a non-subjective category that has a semantic content, as in (1a) below, whereas the impersonal passive is said to subjectivize the semantically contentless nominal expletive (e.g. the 3NSG-pronominal *it* in English) for the strict reference to an unspecified human Agent, as in (1b) below.

(1) (a) The book was written in the autumn.
(b) It was known that the book was revolutionary.

We also find what is called the 'pseudo-passive,' which seems by far the most misleading term in the literature, since it still reflects the structural and lexical properties that are characteristic of the canonical passive in general but with accidental output representations in the language-particular sense. This term has been coined to identify certain instantiations where peripheral NPs that are prepositionally marked are incorporated, viz. PPs other than the agentive PP. In some Germanic languages such as Danish, for instance, no input representations would affect the base-position of the non-agentive PP under canonical passivization, thereby giving rise to the expletive interpretation of the subjectivized pronominal *der* 'there' or *det* 'it,' and therefore to a further instantiation of the impersonal passive, as in (2a) below. In other Germanic languages such as English, on the other hand, the peripheral NP in the non-agentive PP (i.e. the object of P in this case) would establish a new grammatical relationship with the main verb under the same condition of canonical passivization. As a result, the base-position of the non-agentive PP is affected via the subjectivization of the peripheral NP it contains, a property that is typical of the personal passive, as in (2b) below.

(2) (a) Der blev sovet i huset.
(Lit.: There was slept in the house.)
(b) The house was slept in.

How, then, can the term 'pseudo-passivization' be perceived if in either exemplification the main verb exhibits its canonical passive morphology and presupposes the existence of an active version? Looking at the English counterpart in (2b), the subjectivization of a non-subjective category that has a semantic content does actually apply, whilst at the same time the usual reference to an unspecified human Agent is maintained, hence the subjectivization of the semantically contentless nominal expletive in the Danish counterpart in (2a). This means that neither the 'personal passive' nor the 'impersonal passive' nor any other term such as the 'pseudo-passive' is adequately coined to account for these factual observations about the canonical passive among others. As the combining form *pseudo-* itself usually indicates, the term in fact can only be understood as an appropriate description of those instances which incorporate passive-like elements at a superficial level, but have nothing to do with canonical passivization, simply because such instances do not presuppose the existence of active versions, as in (3a) in English and (3b) in Danish.

(3) (a) The king was paralysed.
(b) Kongen blev paralyseret/lammet.

So it can be seen that the problem with the description of the canonical passive is a fundamentally terminological one. The purpose of the current study is, therefore, to attempt to solve this problem within a detailed analysis of the canonical passive in English as an empirical sample of Germanic languages, though reference will be made to some other languages of the same typology where appropriate. By generalizing across several versions of the derivational system of UG, viz. the Transformational-Generative-Grammar (TGG) model and two incarnations of the Principles-and-Parameters (P&P) model, the possible theoretical description (or descriptions) of this construction will be traced within the conceptual limitations of the terms referred to above. Then, in the light of a more recent incarnation of the P&P model, the discussion will seek to reconsider the whole terminological apparatus in this respect, and to account for all natural instances of the construction in question in terms of the syntactic behaviour of the internal arguments that the main verb has the potential to combine with. If at least one internal argument moves to subject position under canonical passivization, then the resultant construction will be termed the 'dynamic passive.' If, however, all the internal arguments remain in their base-positions under the same condition of canonical passivization, then the nominal expletive is inserted in subject position and the resultant construction will be termed the 'static passive.'[2] This polarity of 'dynamicness' and

[2] The term 'static passive' in this sense should not be confused with what is sometimes called 'stative passive,' a term which is used to describe certain examples where the main verb expresses a state rather than an activity. States may, thus, denote resultative situations with an unspecified Agent, as in (ia) below, unlike eventive situations with a specified Agent, as in (ib).
(i) (a) John was hated.
(b) John was hit (by his mother-in-law).

'staticness' (a polarity which indicates that there exist just these two types both intra-linguistically and cross-linguistically) will, therefore, be established in the universal sense.

Section 2 will consider the canonical passive according to the TGG model (up to the 1970s), where the construction is said to result from the application of a transformational rule called Pass-transformation. The section will also underline the main criticisms levelled at the limitations of this rule, given that the selected units in the phrase marker are viewed as strings of not necessarily ordered morphemes. Section 3 will discuss the canonical passive in accordance with the early version of the P&P model (in the 1980s), where the construction is identified with θ-role absorption and Case absorption, an identification that imposes an argument status on the Pass element. The section will also highlight the conceptual defects of this analysis as well as the inherent contradictions between its premises, since the selected units in the phrase marker are taken, instead, as strings of uninflected lexical items. Section 4, the final section, will introduce an alternative analysis of the canonical passive in the light of the later version of the P&P model (in the 1990s on ward), a model which now regards the selected units in the phrase marker as fully inflected lexical items. Hence, the Pass element will be treated as a functional category in its own right, a treatment that is crucial for scrutinizing virtually unnoticed aspects of the construction under consideration. It should be noted, however, that our critical analysis does not intend to undermine this approach since we will be employing basically the same, but less complicated, dialectic that is characteristic of Chomsky's style. For the purposes of simplification and clarification, technical details will be kept to the bare minimum.

2. Passivization in the TGG model

Within the earliest framework of TGG (Chomsky 1955, 1957), a set of transformations was designed to mediate between phrase structure (the input) and morphophonemic structure (the output). The grammar of the input has a general phrase-structure rule of the form 'Rewrite X as Y,' a rule which is said to generate terminal strings of not necessarily ordered morphemes, thus ultimately converting them into strings of phonemes. Accordingly, these terminal strings would reflect unnatural representations of linguistic expressions Ss, given their tenseless and non-combinational nature. For example:

(4) (a) Det + N + V + Det + N

States may, also, indicate resultative conditions with no perceivable Agent, as in (iia) below, contrary to resultative conditions with a perceived Agent, as in (iib). Hence, the former does not presuppose the existence of an active version, thereby resembling what the misleading term 'pseudo-passive' referred to in the text should adequately describe (cf. examples (3)).

(ii) (a) The well was located at the foot of the mountain.
(b) The well was located at the foot of the mountain (by the local engineers).

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(b) *the* + *boy* + *break* + *the* + *door*

This clearly indicates that phrase-structure grammar on its own cannot account for certain syntactic phenomena, even though it was proved to be more powerful than the so-called finite-state grammar, a simple set of rules that generate linguistic expressions where each element is entirely determined by the nature of the preceding element.[3] It was necessary, therefore, to supplement phrase-structure rules with a set of obligatory transformations for the 'natural' derivation of simple active sentences which can be complexified by a further set of optional transformations. One such obligatory transformation is known as Aux-transformation which results in a configuration where Aux, together with the basic form of V, is immediately dominated by VP in the phrase marker. This rule specifies the Tense feature of V (say, Past) to be inserted in the terminal string as an abstract morpheme. Thus, Past is branched to the left of V in the phrase marker, thereby converting (4b) into (5).

(5) *The boy* [VP [Past [V *break*]]] *the door*

Another obligatory transformation is known as Affix-hopping which is said to regulate the morphological unit or units attached to a given V, for instance, for signalling the temporal location of the event which is assigned by the basic lexical form of that V. This is to capture the fact that such units do not occur side-by-side in the output of natural speech. As the term 'hopping' implies, the morphological unit in question is shifted from one node to another in the phrase marker to be 'affixed' into the basic lexical form of V. Thus, Past would be immediately dominated by the V-node and attached to the right of the basic form of V, thereby converting (5) into (6).

(6) *The boy* [VP [V *break* Past]] *the door*

The functioning of Affix-hopping seems, therefore, to be crucial for scanning a complete picture of the derivational history of a given linguistic expression S. This is because phrase-structure grammar on its own not only yields unnatural representations

[3] As a simple generative device, finite-state grammar is said to operate through a given sentence from its 'initial state' to its 'final state.' For example:

(i) The boy broke the door.

The grammar would begin by selecting one of the set of all possible elements which occur first in the output, such as *the*. It would thus proceed from the initial state of this output to select one of the set of all possible elements which occur next, such as *boy*, and continue until it reaches the final state. Yet this entails the possibility that finite-state grammar deals only with continuous constructions, as in (i), and leaves discontinuous constructions, as in (ii), unexplained.

(ii) The boy who is sitting there broke the door.

of linguistic expressions, as in (4), but also leaves entirely unexplained the significant relationship (both syntactic and semantic) between a simple active sentence and its passive version, as in (7).

(7) (a) The boy broke the door.
(b) The door was broken (by the boy).

Given the clear syntactic and semantic relationship between pairs of active-passive sentences, such as (7), a grammar that handles the overt syntax of a given derivation exclusively by means of phrase-structure rules would generate either sentence independently on the basis of an autonomous phrase-structure rule, as in (8), for the simple active sentence and, as in (9), for its passive version.

(8) (a) S
(b) NP + V + NP

(9) (a) S
(b) NP + *be* + V + *by* + NP

However, autonomous phrase-structure rules, such as (8)–(9), would certainly imply that the generation of a given sentence is nothing more than a lacklustre and mechanical operation whereby the purely structural relationships between the immediate constituents of that sentence act as the only precondition for the arrival at its final shape in the output. Because variables like NP and V are such immediate constituents, phrase-structure rules would also imply that the relationship between a simple active sentence and its passive version, as in (7), is both arbitrary and fortuitous, and thus the only loosely common denominator between these two sentences is their structural status which shows that they are both sentences. Furthermore, such rules would not be in a position to guarantee ruling out sentences, such as (10) below, as ungrammatical, since the output represents nothing more than strings of not necessarily ordered morphemes (see, for example, Harris 1993: 44ff.).

(10) (a) * The door broke the boy.
(b) * The boy was broken (by the door).

Given that information about the grammaticality of (7) and the ungrammaticality of (10), for instance, is part of the native speaker's internalized knowledge of language, there seems to be an obvious systematic relationship between an active sentence and its passive version. An adequate grammar should be able to specify the set of all possible NPs that the transitive verb *break* in English, for instance, may take as its subject and object both in the simple active sentence and its passive version, notwithstanding the strict inversion of the two sentences. That is, at the one end, the subject must be able to break things and the object must be breakable in the active sentence; and at the other,

the subject must be breakable and the object of *by* must be able to break things in the passive version.

In order to give a more reasonable account of these existing facts, it was found necessary to postulate an optional transformational rule known as Pass-transformation, an algebraic operation which has its potential scope and its potential limits. Within its potential scope, Pass-transformation is said to be more powerful than the autonomous phrase-structure rules shown in (8)–(9). Within its potential limits, however, it also leaves completely unexpressed certain important facts about the canonical passive in English, as will be seen presently. The algebraic formula of Pass-transformation is illustrated in (12) below, with the rule in (11) being its input. Notice that this formula is a simplified version of the one introduced in Chomsky (1957: 73).

(11) (a) S
(b) NP_1 V NP_2

(12) (a) NP_1 V NP_2
(b) NP_2 *be-en* V *by* NP_1

This algebraic formula can be interpreted in the following way: First, the rule in (11) requires that the input (11b) generate only grammatical active sentences as its output, viz. active sentences, such as (7a), to which the obligatory transformation Affix-hopping has already applied (cf. (6)). Second, the rule in (12) requires that the same input become the input for the optional transformation Pass-transformation, as in (12a). Third, the rule in (12) also requires the application of the obligatory transformation Affix-hopping to shift the affix *-en* in (12b) to the right of V in the phrase marker for the generation of the passive version (7b) as its output. In the light of these three requirements, the derivational history of either output is shown below, with (13) being the input for the active sentence and (14) the input for the passive version.

(13) (a) *the* + *boy* + *break* + *the* + *door*
(b) *The boy* [VP [Past [V *break*]]] *the door*
(c) *The boy* [VP [V *break* Past]] *the door*

(14) (a) *The boy* [VP [Past [V *break*]]] *the door*
(b) *The door* [VP [Past *be-en* [V *break*]]] *by the boy*
(c) *The door* [VP [*be* Past [V *break-en*]]] *by the boy*

This analysis was based on the assumption that the relationship between an active sentence like (7a) and it passive version (7b) is neither arbitrary nor fortuitous, but rather it is both structural and derivational. That is, both sentences are identical at some level of representation, viz. the representation in (13b) and (14a) which is generated by the obligatory transformation Aux-transformation (cf. (5)). Accordingly,

the conclusion that any pair of active-passive sentences are derived from a common source in their derivational history was generalized across all languages instantiating the canonical passive.

However, in the course of the continuous evaluation of the TGG model, several empirical problems with this conclusion were recognized. One such problem is posed by the agentive PP in the passive sentence. Recall that phrase-structure rules generate terminal strings of not necessarily ordered morphemes, such as (13a), to be the output of the phrase-structure representation [S: NP + VP] (cf. (4)). Recall, again, that this terminal string undergoes a set of obligatory transformations such as Aux-transformation which yields the representation in (13b) on the one hand, and Affix-hopping which yields the representation in (13c) on the other. Recall, further, that the latter representation constitutes the input for a simple active sentence, such as (7a). Now if it is indeed the case that active-passive sentences start in the course of their derivational history from the same level of representation shown in (13b) and (14a), then the optional rule Pass-transformation, which yields the representation in (14b), can only be understood to have two functions, viz. movement and addition. Firstly, it moves the object in the active to be the subject in the passive, and moves the subject in the active to be the object of *by* in the passive. Secondly, it adds the Aux *be* and the Aff *-en* to create a 'new' V-complex, and adds the P *by* to create a 'new' PP-complex.

But the P *by* is above all a free morpheme, an autonomous category which has its own lexical status, and should therefore be treated in the history of derivation as an element occupying a phrasal position. Keeping this proviso in mind, a free morpheme, such as *by*, should be generated by phrase-structure rules, not by transformational rules, and should accordingly be inserted in the string of not necessarily ordered morphemes at some level of representation. As I understand it, the consequences of Pass-transformation, which adds the P *by* at a later level of representation, will be catastrophic to its output. That is, the free morpheme *by* should be 'familiar' to the string of not necessarily ordered morphemes from the very outset of derivational history, otherwise the whole derivational construction of this string will be in a state of destruction if a 'strange' body called the P *by* is inserted by an optional rule called Pass-transformation at a later level of representation in (14b). As a result of this 'strangeness,' no definite phrasal category can be specified for the 'new' PP-complex, since Pass-transformation has no access to phrase-structure rules at this level. In a revised version of the TGG model, the insertion of the PP-complex was accounted for in terms of what is known as 'Chomsky-adjunction' so as to underline its optionality. Yet, this may well entail the danger of confusing empirical statements with logical ones, as will be seen later in this section.

What is more, a more serious problem is posed by the deletion of the 'new' PP-complex itself. Pass-transformation, as it stands in (12), presupposes the insertion of this complex into the output, viz. the output of the representation in (14c). How, then,

could such a rule account for the extremely predominant agentless nature of the canonical passive? As is often reported in the literature, approximately 85% of the natural instances of this construction in English are agentless (viz. the so-called 'short passive') (see Siewierska 1984: 38, Thompson 1987: 498). Thus, to generalize a marked property of the canonical passive over the unmarked property via a transformational rule, such as (12), is in fact to identify the exceptional with the normal. On this account, Pass-transformation cannot be perceived as a rule which adds P, since the derivational history of active-passive sentences, such as (7), necessitates that this P as well as its object be deleted at some level.

More significantly, if Pass-transformation can be taken as a working operation at all, then it seems to be limited to transitive verbs only, owing to the obligatory insertion of the objective NP into its input (i.e. NP_2 in (12) above).[4] As such, it addresses only particular instances of the so-called 'personal passive' and leaves completely unexplained instances of the so-called 'impersonal passive.' Because of the restriction of Pass-transformation to transitive verbs, it was necessary to postulate an independent Pass-transformation whose input would permit the insertion of intransitive verbs (see Chomsky 1965: 104). As a consequence, Pass-transformation cannot be perceived as a

[4] Chomsky claimed that restricting Pass-transformation to transitive verbs was motivated by the elimination of the unpassivizable versions of verbs like *resemble*, *have*, *marry*, *fit*, *cost*, *weigh*, etc. He was, therefore, forced to treat canonical passivization and what he called 'pseudo-passivization' by two separate transformational rules. Notice that I am not using the misleading term 'middle verbs,' a term which Chomsky himself borrowed from Lees (1960: 8) to describe these verbs (see Chomsky, 1965: 103ff.). First of all, verbs such as these can never be used intransitively as they always necessitate an Accusative NP, whether they are unpassivizable, as in (i), or passivizable, as in (ii), or represented marginally in a marked situation, as in (iii):

(i) (a) John married Mary.
(b) The suit fits me.
(c) The car weighed two tons.

(ii) (a) The preacher married John and Mary.
(b) The tailor fitted me.
(c) John weighed the letter.

(iii) (a) Recourse was had to a new plan.
(b) A good time was had by all.

How, then, can such verbs be eliminated if in each case they necessitate an Accusative NP? Secondly, by specifying V as a transitive verb in the input, Pass-transformation also implies that transitivity is a decisive precondition for canonical passivization, a position which was already held by most traditional grammarians and linguists in the early part of the twentieth century (see, for example, Siewierska 1984: 4). Pass-transformation could have been more reasonable, and therefore more generalizable, if this V was simply specified as a passivizable verb in the input, so as to exclude examples, such as (i), and to include examples, such as (ii) and (iii).

unified transformational rule generating the canonical passive as a unified syntactic phenomenon.

In the standard model of TGG, the common source from which any pair of active-passive sentences were assumed to derive was identified with the notion of deep structure (DS), as opposed to surface structure (SS), and thus an alternative treatment of canonical passivization was in order. The injunction was to widen the scope of Pass-transformation a little further: primarily, via the combination of the two transformational rules (so that both transitive and intransitive verbs would be captured); and secondarily, via scanning the derived phrase marker of the passive sentence within this scope, and therefore eliminating an *ad hoc* phrase-structure rule for the derived constituent structure. This injunction was motivated by the association of canonical passivization with verbs that take Manner adverbials freely, an observation signifying that verbs which do not take Manner adverbials freely would not undergo Pass-transformation. Hence, English verbs such as *resemble*, *have*, *marry*, *fit*, *cost*, *weigh*, etc. were exemplified in empirical corroboration of this observation where (15) below would represent the former verb class and (16) the latter (see, also, Chomsky 1965: 103, for further examples).

(15) (a) Mary was married by John (the preacher).
(b) I was fitted by the tailor.
(c) The letter was weighed by John.

(16) (a) * Mary was married by John (the groom).
(b) * I am fitted by the suit.
(c) * Two tons are weighed by this car.

Recognition of these existing facts, among others, led research to eliminate the algebraic formula of Pass-transformation illustrated in (12) above for reasons which had to do mainly with presupposed generalizability, and thus a completely different direction was taken in respect of canonical passivization as a unified syntactic phenomenon to be generated by a unified transformational rule. Accordingly, an alternative algebraic formula was proposed with the sole purpose of restricting Pass-transformation to verbs that take Manner adverbials freely such as the passivizable versions of the English verbs just mentioned. This formula is shown in (17c) below, with (17b) being its direct input and (17a) its indirect one. Notice, again, that this formula is a modified version of the one introduced in Chomsky (1965: 104).

(17) (a) Manner Adv $\rightarrow$ *by* Pass
(b) NP_1 V X NP_2 Y *by* Pass Z
(c) NP_2 V X Y *by* NP_1 Z
(where X does not contain an NP)

This algebraic formula was based on the assumption that the Manner adverbial in question should necessitate an element to be associated with canonical passivization as one of its realizations, a 'dummy element' which signifies that Pass-transformation must obligatorily apply as a substitution rule. Thus, the interpretation of the algebraic formula in (17) may run as follows: Firstly, the indirect input (17a) restricts passivization to verbs that take Manner adverbials freely, be they transitive or intransitive. Secondly, the direct input (17b) requires that one such verb will appear under the V-node only if it is positively selected from the lexicon; X could be occupied by P (in the case of phrasal verbs) and Y and Z by PP and Manner Adv freely. Thirdly, Pass-transformation, then, substitutes NP_1 for the dummy element Pass and Places NP_2 in the position of NP_1, as in (17c).

Under this analysis, any pair of active-passive sentences are now said to be two different reflections of the SS that derive from essentially the same underlying DS (see Chomsky 1965: 23), provided that Pass-transformation is an obligatory substitution rule. Furthermore, the agentive PP in the passive version can now be understood as an optional category, given the generalization of this rule over transitive as well as intransitive verbs. This means that Pass-transformation cannot be understood as responsible for adding the P *by*, since the agentive PP can be deleted, as in (18a–b) below, and inserted, as in (18c), even though all sentences are generated by the same rule whereby the subject NP_1 is unspecified in the former, as in (19a–b), and specified in the latter, as in (19c) (see Chomsky 1965: 104).

(18) (a) The proposal was vehemently argued against.
(b) The new course of action was agreed on.
(c) John is looked up to by everyone.

(19) (a) NP_1 *vehemently argued against the proposal by* Pass
(b) NP_1 *agreed on the new course of action by* Pass
(c) *everyone looks up to John by* Pass

Pass-transformation, as shown in (17), is also said to capture the correlation between strictly local sub-categorization and strictly local transformations, the former specifying which categories are internal to VP (i.e. which are V-complements) on the one hand, and which are external to it (i.e. which are VP-complements) on the other. Given that the dummy element Pass is one of the categories that are internal to VP, it follows that if a PP is locally sub-categorized as a V-complement then V is subject to Pass-transformation. This would account for the grammaticality of (20a) where the PP *at this Job* is a V-complement and the ungrammaticality of (20b) where the PP *at this office* is a VP-complement. By the same token, the ambiguity of the active version of (20c) would also be resolved, since the 'PP' *on the boat* is a V-complement (see Chomsky 1965: 105).

(20) (a) This job is being worked at quite seriously.
(b) * The office is being worked at.
(c) The boat was decided on.[5]

Although Pass-transformation in the standard model in (17) seems to offer a more satisfactory account of canonical passivization than the previous one in (12), as is evident from the above quite comprehensive analysis, its presupposed generalizability, however, is still fraught with a number of serious complications when it comes to aspects of formal representation in the universal sense. These complications may be summarized in two fundamental points as follows:

The first point concerns the optionality of the agentive PP in the passive sentence, a position which is still held by generative syntacticians of today (see Roberts 1996, Ouhalla 1999, among others). The notion of optionality may have been motivated by the structural representation of the PP-complex in terms of what is known as 'Chomsky-adjunction' referred to earlier. That is, the P *by* is 'Chomsky-adjoined' to the left of the relevant NP simply because the insertion or deletion of the whole agentive PP does not affect the internal structure of the passive sentence, given the dependency of either process on the speaker's intentionality (see Akmajian & Heny 1975: 149). But this is an empirical statement not a logical one, and thus identification of the former with the latter would entail the peril of psychologism. Empirical statements are contingent: they may be true or false; whereas logical statements are necessary: they are necessarily true if true, and they are necessarily false if false. In English examples, such as (21) below, the agentive PP is neither optional nor obligatory, but rather it is necessarily deleted when deleted, as in (21a), and it is necessarily inserted when inserted, as in (21b).

(21) (a) Trinity College was founded in 1592.
(b) John Major was succeeded by Tony Blair.

Recall the empirical fact recorded in the literature that approximately 85% of the natural instances of the English canonical passive are agentless (viz. the so-called 'short passive'). This means that in the unmarked situation the agentive PP is necessarily deleted, while in the marked situation it is necessarily inserted. From now on the discussion will be confined to the unmarked situation of the agentless passive, and the input for this construction will be taken as (22) for the SVO-order, where V is simply restricted to passivizable verbs and NP is the subject position.

[5] Notice that I am avoiding the misleading term 'pseudo-passive,' a term used by Chomsky himself to describe sentences like (18) and (20) (see, also, example (2b), note 4). Sentences such as these are in fact examples of the canonical passive, namely what may be provisionally called, the 'personalized' version of the impersonal passive, since the Agent is characterized by a human and indefinite nature but the nominal expletive *it* is not used to refer to it (cf. section 3).

(22) NP Pass V (SVO-order)

The second point is that Pass-transformation in (17), like the previous one in (12), is incapable of providing the input for the so-called 'impersonal passive.' This is because it cannot insert the nominal expletive that acts as the subject in this construction, namely, the explicit 3NSG-pronominal *it* in English and *der* 'there' or *det* 'it' in Danish (cf. (2)). In fact, with this in mind, it would be extremely difficult to capture the fact that an impersonal passive with an expletive interpretation in Danish, for instance, is usually rendered in English into what may be provisionally be called, the 'personalized' version of the impersonal passive, as in (23a–b), reproduced from (2a–b) (see, also, note 5).

(23) (a) Der blev sovet i huset.
(Lit.: There was slept in the house.)
(b) The house was slept in.

The intricate problem with Pass-transformation would, therefore, arise from its failure to provide the input for Danish examples like (23a) on the one hand, and its claim to account for English examples like (23b) on the other, since the latter belong to the class of such mistakenly christened examples as 'pseudo-passives,' as in (18) and (20) (see, also, note 5). To resolve this apparent intricacy, examples such as (18), (20) and (23b) will be provisionally considered a sub-class of the 'personal passive' as they all meet the structural condition shown in (22), whereas any example subjectivizing the nominal expletive, such as (23a), will be taken as an example of the 'impersonal passive' for further analysis. The input for the latter type is illustrated in (24) below for the SVO-order, where Exp is the subjectivized nominal expletive and X is the 'objectivized' V-complement which may be a PP-argument, such as *i huset* 'in the house' in Danish in (23a) above, or a CP-argument, such as the *that*-complement in English in (25a), the *at*-complement in Danish in (25b), etc.

(24) Exp Pass V X (SVO-order)

(25) (a) It was said that John was a writer.
(b) Der/det blev sagt, at Johan var forfatter.

The structural conditions shown in (22) and (24) are, therefore, put forward as simplified representations of the two types of the canonical passive in English or any other Germanic language (viz. the so-called 'personal passive' and the so-called 'impersonal passive') in order to facilitate further analyses of this construction in the upcoming sections. The criticism levelled at the TGG model (both within its rigorous and revised incarnations) has led research to entirely dispense with the assumption that the construction in question results from an application of Pass-transformation, though some of the insights put forward within this model are beyond dispute. The next section

will consider the manner in which the early version of the P&P model treats the canonical passive and the problems that may proceed from this model.

3. Passivization in the P&P model (I)

In the extended standard model of TGG (Chomsky 1970), the lexicalist hypothesis was enunciated to essentially constrain the capacity of the transformational apparatus, and therefore confine the processes inherent in the morphological component to the lexicon. This indicates that the set of elements generated by phrase-structure rules is no longer regarded as a string of not necessarily ordered morphemes, but rather a string of ready-for-work lexical items, each of which plays a role in the syntactic component. As such, a paradigmatic shift has been taken for granted within the early version of the P&P model (Chomsky 1981, 1982, 1986a, 1986b), where the emphasis is placed on the study of general principles and the way they interact for the formation of syntactic constructions.

More specifically, according to this model, there exist no such rules as Pass-transformation to yield such constructions as the canonical passive. Rather, the formation of this construction simply results from the interaction between a set of general principles which are said to reflect certain properties of the human mind. This means that even typologically unrelated languages resemble one another in the application of these principles, and that if they do differ, as they clearly do, they differ only in fixing certain values for the set of parameters involved. The main principles that interact for canonical-passive formation are: Move-α, the Extended Projection Principle (EPP), the θ-Criterion, the Case Filter, and the Empty Category Principle (ECP). Whereas the main parameters that mark cross-linguistic variation are: the word-order parameter and the Pass-parameter as represented in the structural conditions for the so-called 'personal passive' and 'impersonal passive' in (22) and (24), respectively. The former type will be considered first and its structural condition is repeated in (26), where NP is replaced by DP (see Abney 1987).

(26) DP Pass V (SVO-order)

From a universal perspective, the subject position is represented in the Spec of IP (i.e. the [DP, IP] position) and the object position is represented in the Spec of VP (i.e. the [DP, VP] position). These two representations would hold for any output, be it an active sentence (where both representations would be the input) or its passive version (where the former representation would be the input). Given that the DP in (26) acts as the subject of the passive version, it follows that this DP would occupy the [DP, IP] position in the abstract structure of that version. Accordingly, the structure of (26) is converted into (27a) below, with (27b) being a concrete example.

(27) (a) [IP DP [VP Pass V]]
(b) [IP *the door* [VP *was broken*]]

Of the general principles just mentioned, Move-α seems to be the only principle that is characterized by a transformational nature, since it is said to transform a given derivation from one level of representation, viz. DS, to another level or levels, viz. SS, PF and LF. It is assumed, therefore, that DP-movement, the principal movement in canonical-passive formation, can take place only if such a movement is required in order to satisfy such principles. In fact, this assumption is no more than a conceptual outgrowth of the TGG model, which specified movement as one of two functions of Pass-transformation, the other being addition, as we saw in the previous section. To illustrate how DP-movement takes place in (27), consider the mapping of Move-α from DS onto SS in (28a) and (28b), respectively.

(28) (a) [IP *e* [VP *was broken* [DP *the door*]]]
(b) [IP *the door* [VP *was broken* [DP *t*]]]

At the level of DS in (28a), the empty element *e* is base-generated in the [DP, IP] position (the subject) to be occupied by the DP in the [DP, VP] position (the object) in the course of derivation. The generation of the empty element *e*, as such, is said to be preconditioned by the EPP to ensure that the output has a subject. Accordingly, the empty element *e* is non-θ-marked and the [DP, VP] position is θ-marked, for which reason the DP in the latter position (*the door* in (28a)) will move to the former, thereby satisfying the θ-Criterion. Then, at the level of SS in (28b), Move-α regulates the movement of this DP, so as to get Case from I (the head of IP), whilst at the same time the trace *t* that it leaves behind is specified by the ECP. As a result, this DP is assigned Nominative Case which is not realized morphologically in English (*the door* in (28b)). Case-assignment is, therefore, licensed by the Case Filter because DP-movement proceeds from one A(rgument)-position to another.

The interaction between UG principles in this way is taken as the standard analysis of the canonical passive in the early version of the P&P model, an analysis which generally holds that the DS-object, as in (28a), moves to act as the SS-subject, as in (28b). According to this model (which will be referred to as the 'standard analysis' or the 'standard assumption' throughout), passive sentences such as the output of (28b) are assumed to reflect two fundamental properties. These two properties are stated in (29a–b) below, where the DP in the [DP, IP] position carries the same θ-role which the active verb assigns to the DP in the [DP, VP] position (see Chomsky 1981: 124).

(29) (a) [DP, IP] does not receive a θ-role.
(b) [DP, VP] does not receive Case within VP, for some choice of DP in VP.

Given the logical coincidence of the DS-object in (28a) and the SS-subject in (28b), the two fundamental properties in (29a–b) are identified with θ-role absorption and Case absorption, respectively, and are therefore attributed to the Pass element

shown in (27a). That is, the Pass element, when attached to V, as in (27b), is said to 'absorb' the dual ability of this V to assign a θ-role to the external argument at the one end, and to assign Case to the internal argument at the other (see Jaeggli 1986, Chomsky 1988a: 119ff., Baker et al. 1989, Ouhalla 1999: 212ff.). In order to see what either property would follow from, let us first consider the relationship between the sub-categorization grid and the θ-grid of V.

It is assumed that the sub-categorization grid of a given V is regulated by the EPP (so as to include the subject) and the θ-grid of this V is regulated by the θ-Criterion (to ensure that every DP occupies an A-position). In the former grid, the number and type of complements that V c-selects is determined and, in the latter grid, each of these complements as well as the subject is assigned its appropriate θ-role. The complements that figure in the sub-categorization grid are known as 'internal arguments' and their θ-roles 'internal θ-roles,' whereas the subject of V (being the predicate) is known as the 'external argument' and its θ-role the 'external θ-role,' since it does not figure in that grid (see Williams 1980, 1981). Both the internal argument(s) and the external argument that a given predicate necessitates designate what is traditionally known as the 'argument structure' of the predicate, which is synonymous with the 'valency' of the verb in Tesnière's (1959) terminology. Thus, the transitive verb *break* in English selects the sub-categorization grid and the θ-grid illustrated in (30a) and (30b), respectively, the latter being the argument structure itself.

(30) (a) *break* (tr.) [___ DP]
(b) *break* (tr.) [Agent Patient]

In fact, the expansion of the EPP seems to have resulted from this very notion of 'argument structure' to account for the subject of a predicate on the one hand, and to maintain the one-to-one relationship between sub-categorization and θ-marking on the other. That is, the necessary insertion or deletion of a given argument correlates with the presence or absence of the θ-role that is assigned to that argument, otherwise the θ-Criterion will be violated. Because Case is assigned to a given argument in accordance with visibility conditions on DPs (see Chomsky 1981: 170ff.), Case-assignment must also be correlated with θ-marking, otherwise the Case Filter will also be violated. These seemingly logical consequences of the θ-Criterion and the Case Filter have led Chomsky and his followers to identify θ-role absorption and Case absorption as the two fundamental properties of the canonical passive stated in (29a–b) above. Given that these two properties are ascribed to the Pass element specifically, the distinction between a transitive active verb, as in (30), and its passive form would be explained in terms of the distinction between their θ-grids and between their corresponding Case grids, as in (31) and (32), respectively. Notice that NOM is included in the Case grid for ease exposition, since it is assigned by some element in I (in the early version of the P&P model) or in T (in the later version), as will be seen throughout.

(31) (a) *break* (tr.) [Agent Patient]
(b) *break* (tr.) [NOM ACC]

(32) (a) *was broken* [Patient]
(b) *was broken* [NOM]

Concerning the first fundamental property in (29a), θ-role absorption is assumed to be a crucial function of the Pass element in that it 'absorbs' the external θ-role (i.e. the Agent in (31a), for instance) by being assigned this role, hence the θ-grid in (32a), and therefore the non-θ-marked empty element *e* in the [DP, IP] configuration in (28a). This assumption is motivated by the non-assignment of the external θ-role to an argument in the sub-categorization grid of V, since only internal arguments figure in this grid, as in (30a), meaning that the external θ-role is the only θ-role that can be 'absorbed' by (i.e. assigned to) the Pass element. Accordingly, the distinction between the external θ-role and the internal θ-role(s) is said to correlate with the distinction between absorbability and non-absorbability, a correlation that would explain the reason why active sentences where the explicit 3NSG-pronominal *it* in English is incorporated as a non-human Agent, as in (33a) below, can never be interpreted as a paraphrase of (33b) with expletive representation.

(33) (a) It broke the door.
(b) The door was broken.

In such a perspective, the impossibility of expletive interpretation would, therefore, be accounted for by assuming that the external θ-role in (33b) is assigned to the Pass element in accordance with the standard analysis, whereas the same θ-role in (33a) is assigned to the [DP, IP] position, since the Pass element is absent in this configuration. Pursuing the matter a little further, an important question would arise: How can a θ-role be assigned to the Pass element? At the one extreme, the Pass element above all involves a complex of a bound morpheme and a free morpheme in English (cf. section 4); and at the other, θ-role assignability is typical of DPs (or any sorts of arguments standing proxy for them) and of some PPs. Given these two existing facts, to answer the question just posed would not be an easy task.

According to the standard analysis, θ-role absorption is simply defined as 'θ-role assignment to a bound morpheme,' an obligatory process which is said to impose a lexical specification on the Pass element. As such, it must be stated in the lexicon as an idiosyncratic property of the canonical passive in general, and must therefore be projected as part of the mapping from DS, as in (28a), onto SS, as in (28b), so as to escape violation of the EPP. On this basis, the Pass element can only be understood as an argument, perhaps an external argument that is assigned an external θ-role, to also escape violation of the θ-Criterion. This analysis is claimed to be compatible with the factual observation that external θ-role assignment is a decisive precondition for

canonical passivization: *Verbs which assign an external θ-role are passivizable; verbs which do not assign an external θ-role are not passivizable*.[6] Accordingly, both transitive and intransitive verbs can be captured so far as the whole process of canonical passivization is concerned (see Jaeggli 1986: 593). However, although it offers a much more reasonable account than the rigid formula put forward within the traditional approach, such a factual observation is in fact incompatible with the standard assumption that the external θ-role in the canonical passive is assigned to the Pass element. In order to demonstrate such incompatibility, it is necessary, therefore, to discuss the second fundamental property of this construction in greater detail, given the correlation between θ-marking and Case assignment.

Regarding the second fundamental property in (29b), Case absorption is also assumed to be a crucial function of the Pass element, a function which seems to be analogous to θ-role absorption. That is, the Pass element 'absorbs' the objective Case (i.e. Accusative in (31b), for instance) by being assigned this Case, hence the Case grid in (32b), and therefore the non-Case-marked DP in the [DP, VP] configuration in (28a). In fact the assertion that '[DP, VP] does not receive Case within VP' as stated in (29b) holds only for Germanic languages such as English, while it is not the case with Romance languages such as Italian and Spanish where the DP in the [DP, VP] position can be assigned Nominative Case (see Jaeggli 1986: 593ff.). The assertion that '[DP, VP] does not receive Accusative Case within VP' seems, therefore, to have been implied, so as to maintain its generalizability, if it turns out to be the case. For this reason, the correlation between Case absorption and θ-role absorption would simply mean that the Pass element absorbs Accusative Case because it also absorbs the external θ-role at DS. The DS-representation in (28a) is repeated here in (34).

(34) [IP *e* [VP *was broken* [DP *the door*]]]

Given this generalized correlation, the DP in the [DP, IP] position (i.e. the empty element *e* itself) is assigned no external θ-role, and the DP in the [DP, VP] position (*the door* in (34)) is assigned no Accusative Case. It follows that, because the passive verb (*was broken* in (34)) is not an Accusative-Case assigner, the DP in the latter position must move to the former where it can be assigned Nominative Case by the relevant element, viz. I (the head of IP), an exclusively legitimate type of movement which would

[6] Unlike the rigorous formula which considered transitivity a decisive precondition for canonical passivization within the traditional approach (viz. *transitive verbs require a direct object and are passivizable; intransitive verbs do not require a direct object and are not passivizable* (cf. note 4)), this factual observation would explain the non-passivizability of idiomatic expressions, as in (i) below, in terms of inhibition of external θ-role absorption (see, also, Jaeggli 1986).

(i) (a) He breathed his last.
(b) *[IP *his last* [VP *was breathed* [DP *t*]]]

render (34) grammatical when represented at SS. The SS-representation in (28b) is repeated here in (35).

(35) [IP *the door* [VP *was broken* [DP *t*]]]

As discussed above, this type of movement is legitimate because it proceeds from one A-position to another, the former being θ-marked and the latter being non-θ-marked. Thus, the moved DP (*the door* in (35)) receives both Nominative Case from I (the head of IP) and the internal θ-role through the medium of its trace *t*, which is θ-marked. Both the moved DP and the trace *t* it leaves behind form a chain, [*the door*, *t*], where the head of this chain (*the door*) receives one Case and the foot of the same chain (the trace *t*) receives one θ-role. Under this analysis, DP-movement is mainly triggered by Case Theory in that Nominative-Case assignment must occur, and therefore be licensed by the Case Filter in order to satisfy this Filter. As a precondition for SS, this DP-movement is in general obligatory in Germanic languages such as English as is evident in (34)–(35), whereas the same DP-movement is optional in Romance languages such as Italian and Spanish (see Chomsky 1988a: 119).

It seems the case that Case absorption is simply interpreted as the exhaustion of the sole occurrence of Accusative-Case assignment: once the Accusative Case is absorbed by the Pass element, it is no longer assignable to a DP in the [DP, VP] position. But this interpretation appears to imply the following rigorous generalization: *Verbs which assign Accusative Case are passivizable; verbs which do not assign Accusative Case are not passivizable*. Here, again, we are facing the same problem that the traditional approach is fraught with, and thus 'identification of canonical passivization with Accusative-Case assignment' would be no more than an elegant locution for re-expressing the misguided belief that transitivity is a decisive precondition for canonical passivization (cf. notes 4 and 6). Suppose, for the moment, that this generalization is true in some Germanic languages such as English. It is certainly false in other Germanic languages such as Danish, which permit instantiation of the so-called 'impersonal passive' with intransitive verbs. Let us now reintroduce the structural condition for this construction stated earlier in (24), and simplify its notations accordingly, as in (36a–b), respectively.

(36) (a) Exp Pass V X (SVO-order)
(b) [IP Exp [VP Pass V [X]]]

(where Exp stands for the explicit nominal expletive *it* in English, *der* or *det* in Danish, etc., and X stands for the V-complement, which may be a PP-argument or a CP-argument as in Danish, or just a CP-argument as in English). The PP-argument and the CP-argument will be discussed in turn.

With respect to the PP-argument, certain intransitive verbs in Danish can be 'impersonally' passivized, thereby allowing an expletive interpretation of the subjectivized pronominal *der* 'there' or *det* 'it,' an interpretation that cannot be instantiated in English for no apparent reason.[7] Consider the following examples of the so-called 'impersonal passive' in Danish, as in (37a–39a) below, with (37b–39b) being their SS-representations in accord with the structural condition in (36b). Notice the ungrammaticality of the English counterparts in the c-group.

(37) (a) Der blev gået på jorden.
(b) [IP *der* [VP *blev gået* [PP *på jorden*]]]
(c) *[IP *there* [VP *was walked* [PP *on the land*]]]
(d) (Lit.: There was walked on the land.)

(38) (a) Der blev gået forbi biblioteket.
(b) [IP *der* [VP *blev gået* [PP *forbi biblioteket*]]]
(c) *[IP *there* [VP *was passed* [PP *by the library*]]
(d) (Lit.: There was passed by the library.)

(39) (a) Der blev danset i teatret.
(b) [IP *der* [VP *blev danset* [PP *i teatret*]]]
(c) *[IP *there* [VP *was danced* [PP *in the theatre*]]]
(d) (Lit.: There was danced in the theatre.)

Now if one accepts the standard assumption that intransitive verbs are not Accusative-Case assigners, then the rigorous generalization mentioned above (a generalization which identifies canonical passivization with Accusative-Case assignment) would predict that intransitive verbs such as *gå* 'walk, pass,' *danse* 'dance,' etc. in Danish would systematically fail to passivize, which is absurd as the examples in (37a–39a) above demonstrate. Plainly, there is no Accusative Case in the active versions of these examples to be absorbed by the Pass element, if one takes Case absorption for granted at all. Paradoxically, it would be argued within the standard assumption that, in languages which permit an expletive interpretation of the subjectivized pronominal, as

[7] However, this expletive interpretation is also permissible in other Germanic languages such as Dutch and German within more or less the same configuration (see Perlmutter 1978: 168ff., Siewierska 1984: 101ff.). To clarify the point, a concrete example from Dutch, as in (i), and from German, as in (ii), will suffice:

(i) (a) Er wordt in deze kamer vaak geslapen.
(Gloss: it was in this room often slept)
(b) (Lit.: It was often slept in this room.)

(ii) (a) Es wurde in der Vorstadt getanzt.
(Gloss: it was in the suburbs danced)
(b) (Lit.: It was danced in the suburbs.)

in (37a–39a) above (cf. note 7), the passivizability of these intransitive verbs is attributed to their ability to assign 'structural' Case indirectly to the object of P.[8] If this contention were true of these languages only, then cross-linguistic variation between Danish and English in the intransitive verbs in question would be explicable in terms of the polarity of structural-Case assignment versus non-structural-Case assignment, respectively, meaning that the English counterparts would never passivize. However, given that the passivizability of intransitive verbs is determined by strictly local sub-categorization, where the PP is sub-categorized internally to VP (cf. (18)–(20)), it follows that nothing would in principle prevent English intransitive verbs such as *walk, pass, dance*, etc. from 'impersonal' passivization with an expletive interpretation of the subjectivized pronominal, as in (37c–39c). In other words, if these English intransitive verbs were not able to assign structural Case under similar conditions, then they would never be able to instantiate the movement of the object of P to the [DP, IP] position under canonical passivization, which is absurd as the examples in (40a–c) below demonstrate.

(40) (a) [IP *the land*] *was walked on*
(b) [IP *the library*] *was passed by*
(c) [IP *the theatre*] *was danced in*

Notwithstanding, of course, the possible licensing of this type of DP-movement by what may be called an 'affectedness constraint' in the sense that the object of P moves to the [DP, IP] position when it exhibits directly or indirectly the physical effects of the central activity.[9] If the constraint in question is not violated, then DP-movement to the

[8] Chomsky makes a distinction between what he calls 'structural' Cases and 'inherent' Cases. The former are assigned to DPs by dint of their structural positions in the sentence, such as, Nominative and Accusative in Danish, English, etc., whereas the latter are assigned to DPs by virtue of their thematic functions, such as, Dative and/or Oblique in German, Icelandic, etc. In accordance with uniformity conditions on Case assignment, inherent Cases are said to be associated with θ-marking in that the head assigns inherent Case to the DP it θ-marks (see Chomsky 1986a: 193, Chomsky & Lasnik 1991).

[9] Apart from the 'affectedness constraint,' however, the mechanisms underlying this type of DP-movement in English constitute one of the unsolved problems in current linguistic thinking. Ian Roberts (personal communication) has pointed out that the presence of P, in this case, somehow imposes a transitive nature on the intransitive V, for which reason it is susceptible to canonical passivization. This means that the intransitive V and the P it requires are linked in a causative relation, a point that was already expressed in medieval Arabic linguistic theory (see El-Marzouk 1998b: 58ff., 83ff., Forthcoming a, Forthcoming b). Yet, it does not seem to explain the structural relation between (ia–b) below, given the grammaticality of the latter in Danish, for instance (cf. (37a–39a)).

(i) (a) The land was walked on.
(b) *There/it was walked on the land.

It may be the case that the causative relation being talked about reduces both the intransitive V *walk* and the P *on* to an inseparable transitive entity *walk-on*, which selects an argument structure in the same way transitive Vs like *break* do. If this is correct, then the difference between *walk-on* and *walk* would be

[DP, IP] position, as in (40a–c) above, would result in what may provisionally be called, the 'personalized' version of the impersonal passive rather than what is misleadingly called the 'pseudo-passive' (see, also, example (2b), notes 4 and 5). Therefore, the rigorous generalization which simply identifies canonical passivization with Accusative-Case assignment should be radically modified in the light of these existing facts, since it was already spelled out in one form or another within the traditional approach referred to above (cf. note 4). This is because an analysis of the PP-argument, which X in the structural condition of (36) stands for, illustrates that certain intransitive verbs in Danish can nonetheless passivize 'impersonally' with an expletive interpretation of the subjectivized pronominal, as in (37a–39a). Even in the case of the English counterparts, 'personalized' impersonal passivization is still possible, particularly when the object of P moves to the [DP, IP] position, as in (40), not to mention the fact that the PP-argument, in both languages, is locally sub-categorized as a V-complement.

With regard to the CP-argument, another alternative for X in the structural condition of (36), certain ditransitive verbs can also be 'impersonally' passivized, thereby permitting an expletive interpretation of the subjectivized pronominal, an interpretation which is systematically instantiated in Germanic languages like English, Danish, etc. These ditransitive verbs are usually associated with mental activities that are characteristic of humans, specifically, such as *know, say*, *believe,* etc. The most prominent property of these ditransitive verbs is the semantic identification of the two objects they necessitate with an independent (declarative) sentence, a sentence which acts syntactically as the embedded CP-argument itself (Note that the CP will become a TP in the case of ECM verbs, like *believe*, especially when they take an infinitival complement with an overt object). Confining the analysis to the technical terms of the standard analysis, consider the following 'impersonal' passives from English, as in (41a–c) below, which appear in their SS-representations in accordance with the structural condition of (36b).

(41) (a) [IP *it* [VP *was known* [CP *that John was a writer*]]]
(b) [IP *it* [VP *was said* [CP *that Mary was beautiful*]]]
(c) [IP *it* [VP *was believed* [CP *that philosophy taught wisdom*]]]

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explained in terms of the difference between their argument structures, viz. [Agent Patient] versus [Agent Location], respectively. Accordingly, the structural relation between (ia–b) would only be detected in the SS-representations of their active versions, as in (iia–b) below, where the DP in the [DP, IP] position is an unspecified (human) subject, the DP *the land* in (iia) acts as the object of 'V,' and the same DP *the land* in (iib) acts as the object of P.

(ii) (a) [IP DP [VP *walked-on* [DP *the land*]]]
(b) [IP DP [VP *walked* [PP *on the land*]]]

Consequently, (iia) would be passivizable in English, as in (ia), whereas (iib) would not be passivizale in English, as in (ib), but passivizable in other Germanic languages such as Danish, Dutch, German, etc. (see, also, note 7).

Here, the *that*-complement in English is structurally represented as the embedded CP-argument in each example, a single-bar projection of the independent (declarative) sentence S. It seems that, like the PP-argument just discussed, the whole CP-argument is locally sub-categorized as a V-complement to act as the object of this V. Accordingly, it should be assigned the Accusative Case in the same way objective DPs are treated, contrary to the analysis introduced by Safir (1986). Given that this CP-argument does not normally require movement to the [DP, IP] position under canonical passivization (except perhaps the case with some English verbs),[10] it should in principle retain the potential for Accusativeness, and therefore its abstractive dissociation from being 'absorbed' by the Pass element (if Case absorption were true). This is in fact ascribable to the potential Nominativeness of the nominal expletive *it* itself. Hence, the CP-argument represents its structural status within a configuration that has nothing to do with the voice value of the main verb, whether it is 'impersonally' passivized, as in (41a–c), or 'personally' activized with an unspecified human subject, as in (42a–c).

(42) (a) [IP DP [VP *knew* [CP *that John was a writer*]]]
(b) [IP DP [VP *said* [CP *that Mary was beautiful*]]]
(c) [IP DP [VP *believed* [CP *that philosophy taught wisdom*]]]

In such a perspective, conservation of the potential Accusativeness of the CP-argument in English constitutes one of the hidden facts that stand in contrast with the standard assumption that the Pass element absorbs the Accusative Case or, for that matter, the external θ-role. It is worth noting here that 'impersonal' passives with CP-arguments, such as (41a–c), exhibit more syntactic flexibility than 'impersonal' passives with PP-arguments do, as in (37a–39a). This can be attributed to the ditransitivity of V in the former type, where the subject of the CP-argument, the direct object of V, may move to the [DP, IP] position, thereby replacing the nominal expletive *it* itself. Even if this movement occurs in English, for instance, it would not affect the potential Accusativeness of the CP-argument, since the trace *t*, which presupposes the existence of

[10] Researchers like Williams (1979) observe that some ditransitive verbs in English permit the movement of *that*-complement to the [DP, IP] position, as in (ia) below, whereas other ditransitive verbs do not, as in (ib–c) below (cited in Chomsky 1981: 149, fn.121).

(i) (a) [IP *that-complement* [VP *was believed*]]
(b) *[IP *that-complement* [VP *was held*]]
(c) *[IP *that-complement* [VP *was reasoned*]]

Yet the possibility of CP-movement to the [DP, IP] position, as in (ia), can be taken as empirical evidence of potential Case assignment to this argument. That is, if the CP-argument remains in its base position, as in (41)–(42), then it retains the potential for Accusativeness. If, however, the same CP-argument moves to the [DP, IP] position, as in (ia), then it replaces the nominal expletive *it* and acquires the potential for Nominativeness, thereby resulting in a further example of what may provisionally be called, the 'personalized' version of impersonal passive, as will be seen in the text.

an implicit argument, is still co-referential with the moved DP, as will be seen in the next section. Thus, the potential 'Accusativeness' of *t* is transferred onto the second internal argument (the residue of CP), as in (43a–c), where this transfer in English is realized via the infinitivization of the predicate of CP.

(43) (a) [IP *John* [VP *was known* [*t to be a writer*]]]
(b) [IP *Mary* [VP *was said* [*t to be beautiful*]]]
(c) [IP *philosophy* [VP *was believed* [*t to teach wisdom*]]]

For virtually the same structural reasons, the examples in (43a–c) may also be provisionally considered the 'personalized' versions of the impersonal passives in (41a–c), given that the potential Accusativeness of the CP-argument is still maintained.[11] Returning to the Danish impersonal passives with PP-arguments in (37a–39a), the intransitive verbs in the SS-representations (the b-group) are said to assign 'structural' Case to the object of P, assignment which would account for their susceptibility to canonical passivization. If this is indeed the case, then, like the CP-argument in (41a–c), the PP-argument also represents its structural status within a configuration that has nothing to do with the voice value of the main verb, since this argument, too, does not normally require movement to the [DP, IP] position due to the potential Nominativeness of the nominal expletive itself. It follows that the potential for 'structural' Case would not be affected either whether the main verb is 'impersonally' passivized, as in (37a–39a), or 'personally' activized with an unspecified (human) subject, as in (44a–46a).

(44) (a) [IP DP [VP *gik* [PP *på jorden*]]]
(b) [IP DP [VP *walked* [PP *on the land*]]]

(45) (a) [IP DP [VP *gik* [PP *forbi biblioteket*]]]
(b) [IP DP [VP *passed* [PP *by the library*]]]

(46) (a) [IP DP [VP *dansede* [PP *i teatret*]]]
(b) [IP DP [VP *danced* [PP *in the theatre*]]]

[11] Notice that the Case structure of CP in (43a–c) cannot be equated with one selected by the idiosyncratic verb *decide* within an exceptionally marginal situation, as in (i) below (see Chomsky 1986a: 124, 211, fn.63).

(i) [IP *it* [VP *was decided* [PRO *to go*]]]

This is because PRO, in this case, has an arbitrary interpretation, such as 'one,' since no DP has moved from inside CP to the [DP, IP] position to control PRO. In other words, the idiosyncratic verb *decide* is not a ditransitive verb of the type in (43a–c), and thus the transferred null Case from PRO to the residue of CP is null 'Nominative.' Yet an exceptionally marginal example of the 'impersonal' passive, as in (i), may also be captured under one of the two types of the canonical passive, as will be seen in the next section (cf. section 4).

From the above analysis it can be seen that the Pass element is not an 'absorber' of the Accusative Case at the DS-level of the canonical passive in general (cf. (34)), given the conservation of Case-assignment at the SS-level of the so-called 'impersonal' passive type at least. As for the PP-argument, if it is true that the Case assigned to the object of P is 'structural,' then this Case is still retained in the Danish impersonal passives, as in (37a–39a), due to the (independent) structural status of PP in these passives as well as their corresponding actives, as in (44a–46a). Hence, the structural relation between the Danish impersonal passives, as in (37a–39a), and their English 'personalized' versions, as in (40a–c), can be explained by reference to the SS-representations of the active counterparts of both (cf. note 9). As for the CP-argument, the analysis has shown how the potential Accusativeness of this argument is retained more transparently both in the impersonal passives, as in ((41a–c)), and their 'personalized' versions, as in (43a–c), by recourse to the SS-representations of the active counterparts, as in (42a–c).

Now if the Pass element is not an 'absorber' of the Accusative Case as demonstrated, and if Case absorption is correlated with θ-role absorption, then it follows that the Pass element is not an 'absorber' of the external θ-role either. The notion of absorption is based on the standard assumption that the Pass element is an argument which is base-generated under I (the head of IP) and outside the domain of VP, for which reason it is said to absorb (i.e. be assigned) the external θ-role to satisfy the θ-Criterion. Yet, the status of the Pass element as an argument conflicts with its status as base-generated under I (except perhaps the case with the ambivalent status of clitics, which are not to be considered here). The conflict within the status of the Pass element means, therefore, that the standard assumption is incompatible with the factual observation that external-θ-role assignment is a defining factor in canonical passivization. Conceptual defects such as these suggest that radical modifications of the standard assumption put forward within the early version of the P&P model should be in order. In the next section an alternative analysis of the canonical passive will be introduced with some reference to the later version of the P&P model.

4. Passivization in the P&P model (II)

Within the later version of the P&P model (Chomsky 1994, 1995a, 1995b), the internal levels of DS and SS have been eliminated due to the redundancy of well-formedness evaluation at these levels on the one hand, and the greater viability of well-formedness evaluation at the external levels of PF and LF on the other. However, this does not mean that the principles which essentially apply at DS and SS are altogether dispensed with, but rather their interaction is reflected in one form or another at PF and LF through the workings of a set of transformations (unitary and binary) similar in spirit to those of the traditional model of TGG. Given that Move-α is a sub-case of unitary transformations, this general principle is said to be the direct mediator between the lexicon and the external levels of PF and LF. It follows that the essential difference

between the early and later versions of the P&P model can be detected in the manner in which units are selected from the lexicon. In the early version, such units are inserted in the phrase marker as uninflected lexical items (NPs with no Case, for example), whereas, in the later version, they are inserted as fully inflected lexical items whose features must be checked off in order to be spelled out at PF. More specifically, the essential difference between the two versions is discernible in the sort of trigger for the operation of Move-α: uninflected NPs, for instance, move to get Case features, as we saw in the preceding section, while fully inflected NPs are now said to move to check off (i.e. to *value* and *interpret*) such features. Hence, the two main operations which are underlined in the later version of the P&P model point to Move and Merge, with the former preserving the selfsame task of Move-α and the latter combining two constituents to derive a larger constituent in a bottom-up manner. Thus, DP moves and merges with V to derive VP, the resultant VP moves and merges with T (as representing Agr and Pass) to derive TP, and so forth. The principal objective is to reduce the derivational system of UG to the bare minimum, since hierarchical-structural relationships such as these can lead to the prediction of linear-structural relationships in one form or another. This indicates that the theoretical descriptions of the latter relationships are redundant as well, and should therefore be eliminated from the derivational system of UG (see Chomsky 2001a, 2001b).

The notion of feature checking (i.e. *valuing* and *interpreting*) was in fact motivated by the factual observation that it is the functioning of the morphological component which, together with that of the phonological component, characteristically exhibits parametric variations between natural languages. This factual observation seems to have resulted in the categorical expansion of inflectional features, which IP is responsible for (in the early version of the P&P model), by splitting up the I-node into a number of functional categories, such as Agrs, Tns, Agro, etc., in the abstract structure (or structures). Because the Pass element is one such inflectional feature (an element which involves a complex of a bound morpheme and a free morpheme, as in Germanic languages), it must therefore be categorically projected in a format similar to that of the X-bar Theory. This indicates that the Pass element cannot be inserted in the phrase maker as an argument to which Case and a θ-role are assigned, as we saw in the preceding section, but rather projected as a functional category having its independent categorical status and passing through the projection cyclicity in the same way as any member of the (previously designated) IP-group does, a seemingly tenable breakthrough which originated with Fassi Fehri (1987, 1988).

The idea of inserting the Pass element as an argument (an idea that was adopted within the early version of the P&P model) led a number of generative syntacticians to consider this element a nominal category which is base-generated under I (the head of IP) along with inflectional features such as Tns and Agr. Thus, incorporation of the Pass element into V (the head of VP) is said to proceed from one of two types of covert movement under canonical passivization, viz. V-movement to I, or I-movement to V (see

Baker et al. 1989). Accordingly, the three designations of inflectional features (viz. Agr, Tns, and Pass) would be incorporated into V 'simultaneously,' since they are said to be all base-generated under I (the head of IP), as illustrated in the abstract structure (47a), with (47b) replacing IP with TP (see Julien 2001).

(47) (a) [IP Spec [I' I-**Agr**-**Tns**-**Pass** [VP V DP]]]
(b) [TP Spec [T' **T-Agr-Pass** [VP V DP]]]

However, this representation will clearly violate the principled difference between arguments and heads so far as the level of projection is concerned (not to mention, of course, the possible exception of the ambivalent nature of clitics referred to above). At the one extreme, to impose an argument status on the Pass element will certainly put this element on a par with maximal or phrasal projections (i.e. double-bar projections). At the other, to consider the Pass element a nominal category that is base-generated under the (now designated) T feature, which is after all the head of TP, will give this element a head status, and therefore a status of zero-bar projections. In both extremes, the distinction between zero-bar projections and double-bar projections will result in a seemingly unsolvable paradox. What is more, the representation in (47) is, empirically speaking, incapable of deriving the fixed position of the Pass element in relation to T and Agr. In Germanic languages such as English, the Pass element necessitates a complex of a bound morpheme and a free morpheme, the former being systematically suffixed to the underlying lexical form of V, as illustrated in (48).

(48) (a) *was broken*
(b) [*be*] + [*break*] + [*-en*]
(c) [T-Agr] + [breaking] + [Pass]

Here, the passive verb *was broken* in (48a) consists of three morphemes, as in (48b): first, the free morpheme *be* which is only responsible for T and Agr; second, the underlying lexical form of V *break*; and third, the bound morpheme *-en (-n* in this case) which is the Pass element itself. Given that the Pass element is systematically suffixed to the underlying lexical form of V, the incorporation of passive morphology will, therefore, establish an *external* position for the Pass element in relation to T and Agr, notwithstanding the location of the whole TP outside the domain of VP in the phrase marker. In this external position, specifically, Germanic languages stand in sharp contrast with Semitic languages such as Arabic, where the Pass element requires a single bound morpheme which is systematically infixed into the underlying lexical form of V. This means that the position of the Pass element, in the latter languages, is *internal* instead, a matter that is beyond the scope of the current study.[12]

[12] However, a parallel analysis into the Arabic counterpart of (48) in the text, as in (i) below, will suffice.

(i) (a) *kusira*
(b) [*k-s-r-*] + [*-u-i-a*]

Now if the abstract structure represented in (47) above is incapable of deriving the fixed position of the Pass element in relation to T and Agr, as demonstrated, then it is equally incapable of accounting for the typological divergence between natural languages in the morphological representation of the Pass element itself. This conceptual defect also indicates that an alternative analysis of the canonical passive is inevitable. To avoid possible confusion, let us call the Pass element which necessitates a complex of a bound morpheme and a free morpheme '2-morph Pass,' as in Germanic languages such as English (in contrast with the '1-morph Pass' in Semitic languages such as Arabic (cf. note 12)). This terminology will, therefore, help to explain the typological divergence being talked about in terms of parametric variation, as will be seen presently.

In a quite comprehensive analysis, researchers like Ouhalla attempt to explain the major properties of the canonical passive in general, an explanation that seems to have resulted from the particular focus of attention on the morphological component within the later version of the P&P model. Drawing on Fassi Fehri's (1987, 1988) original observation referred to above, Ouhalla's analysis attributes to the Pass element the status of an independent functional category, a category which heads its own maximal or phrasal projection (call it PassP) and intervenes between VP and the other element of TP, viz. T and Agr (see Ouhalla 1991: 94). Because Agr is an element of the TP-features of V like the Pass element itself, it must also be considered an independent functional category which heads its own maximal or phrasal projection (call it AgrP) in order to be at the same level of projection as PassP, thus steering clear of the unsolvable paradox that would arise from the abstract structure in (47).

(c) [breaking] + [T-Agr-Pass]

Here, the passive verb *kusira* in (ia) consists of two bound morphemes, as in (ib): first, the three-radical root *k-s-r-* which is the underlying lexical form of V, carrying the basic lexical meaning of 'breaking;' and second, the formative morpheme *-u-i-a* which is responsible for all the TP-features in question, viz. T, Agr, and Pass. Since the Pass element, which amalgamates with the other TP-elements in the phonological structure of the passive verb *-u-i-a* (as opposed to that of the active version *-a-a-a*), is systematically infixed into the three-radical root, the incorporation of passive morphology will, therefore, establish an *internal* position for the Pass element in relation to T and Agr (see El-Marzouk 1998a, 1998b). It is interesting to see that both the canonical passive in Semitic languages like Arabic and what is known as the *s*-passive in Germanic languages like Danish, Norwegian, etc. coincide in the absence of the free morpheme Aux, even though the latter still constitutes an *external* position for the Pass element (*-s* in this case) in relation to T and Agr, as in the Danish counterpart in (ii).

(ii) (a) *ødelagdes*
(b) [*ødelægge*] + [FF] + [*-s*]
(c) [breaking] + [T-Agr] + [Pass]

Yet, apart from the contrast between the internal and external positions of the Pass element, the absence of the free morpheme Aux clearly indicates a single-bound-morpheme representation of this element, and thus both the Arabic canonical passive in (i) and the Danish *s*-passive in (ii) converge in the derivational history by dint of their *verbal* value, as will be seen in the text.

Under this analysis, an apparently simple formula of the form 'Pass c-selects VP' has initially been introduced to capture the most prominent property of the canonical passive that is generalizable across languages, whether they employ the 2-morph Pass, as in Germanic languages, or the 1-morph Pass as in Semitic languages (cf. note 12). This formula clearly states that the c-selection of VP constitutes such a generalizable property, since the Pass element in any language instantiating the canonical passive tends to be systematically attached to V, not any other lexical category.[13] Accordingly, the general order of the main functional categories (T, Agr, and Pass) will essentially be the same (though not necessarily invariant) when each category heads it own maximal projection, as illustrated in the abstract structure in (49) below. Notice that the single-bar projection of each category is disregarded here for the purposes of technical simplification.

(49) [TP T [AgrP Agr [PassP Pass [VP V DP]]]]

Proceeding from right to left (or in a bottom-up manner), the configuration where VP is immediately dominated by PassP would account for the generalizable property of the canonical passive that the Pass morpheme is attached to V. Thus, as an initial step in the derivation of this construction, both the (Germanic) 2-morph Pass and the (Semitic) 1-morph Pass will converge in the application of V-movement to Pass (rather than V-movement to T or T-movement to V as has been misleadingly believed (cf. the abstract structure in (47)). As a result of V-movement to Pass, a new complex will be derived (call it the [V+Pass] complex) which simply indicates that the Pass morpheme is attached to V. At this point, before any other type of movement is applied in the course of derivation, the derived [V+Pass] complex alone would mark the beginning of typological divergence between Germanic and Semitic languages in that only one part of the 2-morph Pass is merged with the former (e.g. *-en* in (48b)), while the entire 1-morph Pass is merged with the latter, including the so-called *s*-passive referred to in note 12 (e.g. *u-i-a-* in (ib) and *-s* in (iib)). This now leads to the identification of the derived [V+Pass] complex in terms of an independent parameter (call it the [V+Pass] parameter) which has two different values, as in (50a–b).

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[13] This indicates that types of the non-canonical passive like the nominal or gerundive passive are to be treated by a formula different from 'Pass c-selects VP' since the Pass element itself is invisible in these types though the same pragmatic properties of the canonical passive are perceivable. Consider the following example of the nominal passive from English.

(i) The book's translation (took a long time).

Here, the derived nominal *translation* would select the same argument structure of the passive verb *was translated*, viz. [Patient], a matter that is not to be addressed in this study. Yet, the invisibility of the Pass element in nominal passives, as in (i), is further empirical evidence that the Pass element is assigned neither Case nor a θ-role. This also holds for the gerundive passive with the derived gerundive *translating* within basically the same paradigms.

(50) (a) [V+Pass] marks nominalization [+**N**].
(b) [V+Pass] marks verbalization [+**V**].

Clearly, therefore, in the initial step of derivation, the nominal value of the [V+Pass] parameter in (50a) is fixed in Germanic languages such as English, Danish, etc., whereas the verbal value of the same parameter in (50b) is set in Semitic languages such as Arabic, Hebrew, etc. (not to mention the so-called *s*-passive in the former language family (cf. note 12)). What determines whether the [V+Pass] parameter has a nominal or a verbal value is perhaps the corresponding distinction between the presence and the absence of the free morpheme Aux, which does have a verbal value. Hence, the two values in question can also account for further typological divergence between the two language typologies in the next step of derivation. Of prime concern here is the nominal value of the [V+Pass] parameter in (50a) that is fixed in Germanic languages such as English, Danish, etc. Returning to the abstract structure in (49), it is the derived [V+Pass] complex of the value (50a) which, unlike that of the value (50b), cannot move directly to T to value and interpret Agr because of its nominal nature, otherwise the morphological-selectional properties of T will be violated, properties which dictate that T m-selects verbal categories in general. Instead, the Aux *be*, as in (48b), will be m-selected from the lexicon to act as an instrumental unit, and will therefore be merged under T due to its verbal nature. The merging of the Aux *be* will, then, give rise to a new derived complex (call it the [*be*+V+Pass] complex) which marks verbalization in the same way the derived [V+Pass] complex of the value (50b) does. Given that the new derived complex [*be*+V+Pass] satisfies the m-selectional properties of T, it can now value and interpret Agr in (49) for the final step of derivation. In consequence, the resultant complex can surface at the PF level to be spelled out because all the TP-features of the 2-morph Pass are satisfied at this level.

In such a perspective, the magnitude of derivation in respect of the canonical passive is determined by the sort of value of the [V+Pass] parameter in (50). If the derived [V+Pass] complex is nominal as in Germanic languages such as English (value (50a)), then this complex remains in Pass and the Aux *be* is merged under T, thereby creating a new derived complex, [*be*+V+Pass], which subsequently value and interpret Agr, so as to surface at PF under well-formedness conditions. The purpose of *be*-merging under T is to match the form of the derived passive verb, the 2-morph Pass, with the DP-subject. Recall that the DP-subject occupies the Spec of IP (i.e. the [DP, IP] position) before splitting up IP into AgrP, TnsP, and PassP and replacing IP with TP in the early version of the P&P model. This indicates that the DP-subject after splitting up IP and replacing it with TP in the later version will occupy the Spec of TP (i.e. the [DP, TP] position), as illustrated in (51) below, which is an extended version of (49).

(51) [TP Spec [T' T [AgrP Spec [Agr' Agr [PassP Spec [Pass' Pass
[VP Spec [V' V DP]]]]]]]]

Proceeding from right to left (or in a bottom-up manner), again, DP is the object of V, which is an Accusative-Case position; the Spec of VP is the non-Case position of the subject that is assigned the *external* θ-role (call it the *E-subject*); and the Spec of TP is the Nominative-Case position of the subject that may be assigned an *internal* θ-role (call it the *I-subject* in contrast). Given the typological divergence between Germanic and Semitic languages in the TP-features of the canonical passive, it appears that the distinction between the E-subject and the I-subject is crucial for scrutinizing the typological convergence in the structural aspects of this construction. As an alternative to the two properties of the Pass category discussed in the preceding section (cf. (29a–b)), let us assume that the presence of this category in the abstract structure in (51) brings about two essential properties, as illustrated in (52a–b) below. These two properties will be discussed in turn.

(52) (a) The E-subject does not move to the [Spec, TP] position to become the I-subject.
(b) The DP-object may or may not move to the [Spec, TP] position to become the I-subject.[14]

With respect to the first essential property in (52a), it is absolutely imperative that the E-subject be realized as an empty category in order to meet the well-formedness conditions referred to above. This is due to the fact that if the E-subject is realized as a lexical category, then these conditions will not be met at the PF level. As such, the lexicalized E-subject will remain in its base-position, the Spec of VP in (51), which is a non-Case position, as we have just seen, meaning that Case requirement will be violated. On this account, the occurrence of a lexicalized E-subject, and therefore Case-requirement violation, will invariably result in ill-formed passives, as in (53) below, where *the boy* in English is the E-subject itself. Notice that the symbol (Ø) indicates that the DP in question is deprived of Case.

(53) *[TP *the door* [VP *was broken* [DP *the boy* (Ø)]]]

Lexicalization of the E-subject, in such a configuration, follows from the fact that the underlying lexical form of V *break* moves to the Pass element *-en* in order to generate the derived [V+Pass] complex *broken* in the initial step of derivation, prior to the functioning of T and Agr, as discussed above. The only way to evade the ill-formedness of canonical passives, such as (53), is the application of an instrumental

[14] Notice that the distinction between the E-subject and the I-subject is similar to Ouhalla's distinction between thematic and structural subjects, respectively (see Ouhalla 1991: 96). Yet, the two essential properties stated in (52) presuppose the necessary synchronization of the workings of the general principles that underlie canonical-passive formation with lexical selection, thereby paving the way for Merger and Move to operate.

process which necessarily deletes the E-subjects *the boy* altogether or necessarily merges the P *by* as an adjunct to the latter, so as to posit its Oblique Case for the interpretation and valuation of TP-features. Thus, the ill-formedness of canonical passives, such as (53), is explicable in terms of the more reasonable assumption that the Pass category (by dint of its co-indexational value, as will be seen soon) inhibits the movement of the E-subject to the [Spec, TP] position, as stated in (52a), than the standard assumption which attributes Case absorption and θ-role absorption to the Pass category itself, as we saw in the preceding section.

From this standpoint, the ill-formedness that results from realizing the E-subject as a lexical category makes it absolutely imperative to consider this E-subject an empty category simply because the inhibition of its movement to the [Spec, TP] position will not affect the internal structure of the canonical passive. The only empty categories that do not proceed from the application of Move-α are *pro* and PRO, the former being marked in a Case position [–anaphor, +pronominal] and the latter in a non-Case position [+anaphor, +pronominal].[15] Given that the [Spec, VP] position in (51) is base-generated in a non-Case position, it follows that the E-subject, which originates in this position, must be realized as the empty category PRO rather than *pro*. Accordingly, PRO is perceived to be the implicit argument itself in that if the P *by* is necessarily merged as an adjunct to the E-subject *the boy* in (53), then this E-subject can no longer be considered the external argument of V alone. Rather, both PRO and the derived PP complex will share the external θ-role of this V. This leads to the identification of PRO with the implicit controller when the PP complex is necessarily deleted and a (non-finite) infinitival clause is merged instead. For example:

(54) [TP *the door* [VP *was destroyed* [PRO *to build a wall*]]]

Here, the implicit argument can be interpreted arbitrarily as the (non-anaphoric) quantifier *someone* or pronominal *they*, etc. As such, it refers to both 'the destroyer' and 'the builder' in examples, such as (54), since it is not obvious whether the former has the intension of the latter, notwithstanding the possible semantic relation between the two. Hence, the dual reference of the implicit argument may impose a syntactically 'active' nature on its implicitness, which enters into some sort of grammatical relation, even though it is not structurally represented in an A-position. The question arises as to which structurally represented category is to control PRO in examples, such as (54). According to the standard assumption, it is the Pass morpheme which would be the legitimate controller of PRO, since this morpheme, being structurally represented, is said to absorb (i.e. be assigned) the external θ-role of V. However, this will certainly violate control relations between A-positions simply because Pass cannot act as an

[15] Notice that traces such as DP-traces and WH-traces are also empty categories, but are co-indexed with their antecedents as a result of Move-α applications, namely, the movement of the DP-object in the canonical passive, as we saw earlier (cf. (28)) and the movement of WH-phrases which are not to be dealt with in the present study.

argument, as we saw in the pervious section. Given that the E-subject is structurally represented in an A-position as the Spec of VP in (51), it must therefore be the only legitimate controller of PRO to escape violation of control relations.

It now becomes evident that identification of the E-subject with the implicit controller of PRO will naturally account for the arbitrary interpretation of the implicit argument in the sense just discussed, even if the (non-finite) infinitival clause in (54) is not embedded in the (matrix) main clause. In this case, what is known as the 'agentless' or 'short' passive, the principal concern of the current study, will be the resultant construction, where the implicit argument being talked about refers exclusively to 'the destroyer', as in (55a) below. Therefore, the arbitrary interpretation of the implicit argument follows from the absence of the referential controller of PRO (being the implicit argument itself) in the traditional sense of arbitrary control relations, as in (55b).

(55) (a) [TP *the door* [VP *was destroyed* [*t*]]]
(b) [TP *It is easy* [PRO *to destroy the door*]

With regard to the second essential property stated in (52b) above, the question arises as to whether or not the DP-object may move to the [Spec, TP] position in order to act as the I-subject. In fact, the second essential property eliminates the possibility of misunderstanding the logical consequences of the first essential property stated in (52a). That is, the assumption that the Pass morpheme inhibits the movement of the E-subject to the [Spec, TP] position does not necessarily mean that the DP-object should obligatorily move to the same position. For this reason, two possible syntactic configurations are clearly articulated in the second essential property: first, where the DP-object may move to the [Spec, TP] position; and second, where the DP-object may not move to the same position. These two syntactic configurations will also be considered in turn.

As for the first possible syntactic configuration, it plainly permits the actual movement of the DP-object to the [Spec, TP] position, in which case *all* natural examples of the so-called 'personal passive' will be generated, as cited throughout. Yet the notion of the DP-object (direct or indirect) needs to be reconsidered a little further and extended to those categories that stand proxy for it in the case of its absence (i.e. the categories that have the potential for I-subject promotion under canonical passivization). These categories include the object of the P which is causatively linked to V, as in (40) (see, also, note 9), the subject of the CP-argument which acts as the direct object of V, as in (43), and even the entire CP-argument itself in a marginally exceptional situation, as in (ia) in note 10. The movement of these categories to the [Spec, TP] position aims at replacing the nominal expletive *it*, thereby resulting in the derivation of what we provisionally called the 'personalized' version of the impersonal passive within the same syntactic configuration. For convenience, examples (40) and

(43) are repeated in (56) and (57), respectively, with (58) being cited on the analogy of the marginally exceptional situation, as in (ia) in note 10:

(56) (a) [TP *the land* [VP *was walked on*]]
(b) [TP *the library* [VP *was passed by*]]
(c) [TP *the theatre* [VP *was danced in*]]

(57) (a) [TP *John* [VP *was known* [*t to be a writer*]]]
(b) [TP *Mary* [VP *was said* [*t to be beautiful*]]]
(c) [TP *philosophy* [VP *was believed* [*t to teach wisdom*]]]

(58) (a) ?[TP *that John was a writer* [VP *was known*]]
(b) ?[TP *that Mary was beautiful* [VP *was said*]]
(c) [TP *that philosophy taught wisdom* [VP *was believed*]]

This clearly indicates that all natural examples of the canonical passive which actually involve the movement of an (internal) argument to the [Spec, TP] position in English can be classified under the first syntactic configuration of the second essential property stated in (52b). The moved argument may be the object of V (direct or indirect) or a category which stands proxy for it like the object of P, as in (56), and the subject of CP, as in (57), a configuration that can also be generalized over marginally exceptional situations where the entire CP-argument moves to the same [Spec, TP] position, as in (58). In order to generalize the first syntactic configuration even further, let us call the categories that do in fact move to the [Spec, TP] position *dynamic categories* and contrast them with *static categories*, categories which do not move to this position, as will be seen soon. Such contrast is syntactically determined, so it seems, and thus corresponds to the respective contrast between the presence and absence of the potential for I-subject promotion under canonical passivization.

The mechanism underlying movement in the case of dynamic categories may be explained in terms of co-indexation of a functional representation with a lexical one in the sense that the Pass category is co-indexed with the dynamic category (see Borer 1986, Kayne 1987, Tsimpli 1989, Ouhalla 1991). Thus, for the derivation of any natural example of the canonical passive which does involve movement to the same target, the co-indexation mechanism implies that the dynamic category moves to the [Spec, TP] position through the [Spec, PassP] position, but not any other position in the abstract structure in (51). To illustrate the co-indexation mechanism in structural terms, this abstract structure is repeated to include the CP-cycle (or, more recently, the CP-phase), as in (59) below, with the DP-object in (51) being replaced by the dynamic category (DC), which has the same index *i* as the [Spec, PassP] category itself.

(59) [CP Spec [C' C [TP Spec [T' T [AgrP Spec [Agr' Agr [PassP Spec$_i$ [Pass' Pass [VP Spec [V' V **DC**$_i$]]]]]]]]]]

As for the second possible syntactic configuration stated in (52b) above, on the other hand, it does not permit the actual movement of an (internal) argument from its base-position to the [Spec, TP] position, in which case *all* natural examples of the so-called 'impersonal' passive incorporating transitive verbs, specifically, will be generated. However, this syntactic configuration applies only to Slavonic languages such as Ukrainian and Celtic languages such as Welsh, etc., where the direct object under 'impersonal' passivization remains in its base-position and the nominal expletive is inserted in the [Spec, TP] position.[16] Accordingly, the term 'DP-object' in these languages should be sub-classified under what we have called *static categories*, categories which behave syntactically within the same configuration, where the inhibition of their movement to the [Spec, TP] position is the immediate trigger for the insertion of the nominal expletive in this position. These categories comprise the PP-argument which acts as the V-complement in Germanic languages except English, as in (37)–(39) from Danish (cf. note 7), and the embedded CP-argument in Germanic languages including English, as (41). For convenience, examples (37)–(39) and (41) are repeated in (60) and (61), respectively:

(60) (a) [TP *der* [VP *blev gået* [PP *på jorden*]]]
(b) [TP *der* [VP *blev gået* [PP *forbi biblioteket*]]]
(c) [TP *der* [VP *blev danset* [PP *i teatret*]]]

(61) (a) [TP *it* [VP *was known* [CP *that John was a writer*]]]

[16] In these languages, certain transitive verbs may undergo 'impersonal' passivization with the result that the direct object is still assigned the Accusative Case and the inserted nominal expletive (EXP) is assigned the Nominative Case. A concrete example from Ukrainian, as in (i), and from Welsh, as in (ii), will suffice (cited in Baker 1988, Baker et al. 1989, Ouhalla 1991: 97).

(i) (a) Cerkv-u bulo zbudova-n-o v 1640 roc'i.
(Gloss: church (ACC) was (EXP) was built in 1640)
(Lit.: The church it was built in 1640.)
(b) The church was built in 1640.

(ii) (a) Lladdwyd dyn.
(Gloss: was killed (EXP) man (ACC))
(Lit.: It was killed a man.)
(b) A man was killed.

Yet, on the analogy of the Welsh example in (ii), the possible expletive interpretation of the existential *there* in English, as in (iiia) below, may also instantiate what is sometimes termed 'long-distance passivization,' a process which involves basically the same movement mechanisms discussed thus far, except that it applies across certain types of clause boundary, as in (iiib), a matter that does not concern us here (see Radford 2004: 264ff.).

(iii) (a) There were believed to have been killed many people.
(b) [TP *Many people* [VP *were believed* [TP *to have been killed* [*t*]]]].

(b) [TP *it* [VP *was said* [CP *that Mary was beautiful*]]]
(c) [TP *it* [VP *was believed* [TP *that philosophy taught wisdom*]]]

Likewise, the inhibition of movement to the [Spec, TP] position indicates that all natural examples of the canonical passive incorporating static categories are classifiable under the second possible syntactic configuration of the second essential property stated in (52b). The static category may be a DP-object (cf. note 16), a PP-argument, as in (60), or a CP-/TP-argument, as in (61), a configuration that can also be generalized over the embedded (non-finite) infinitival clause which idiosyncratic verbs such as *decide* in English instantiate with an expletive interpretation (cf. note 11). Thus, unlike the case with the dynamic category, the representation where the static category cannot be co-indexed with the [Spec, Pass] category follows from the fact that its movement to the [Spec, TP] position is inhibited. To illustrate movement inhibition in structural terms, the abstract structure in (59) above is repeated in (62) below, with the DC-position being occupied by the static category (SC), and the [Spec, TP] position by the nominal expletive (Exp).

(62) [CP Spec [C' C [TP **Exp** [T' T [AgrP Spec [Agr' Agr [PassP Spec [Pass' Pass [VP Spec [V' V **SC**]]]]]]]]]]

Finally, within the alternative analysis put forward in this section, the Pass element is not an argument absorbing Case and a θ-role, but a functional category having its own categorical status along with other TP-features such as T and Agr. Hence, the typological divergence between the Germanic 2-morph Pass and the Semitic 1-morph Pass can be reduced to the nominal and verbal values of the [V+Pass] parameter in (50), respectively (cf. note 12). The typological convergence, on the other hand, can also be detected in the general structure in (51), a structure that reflects the distinction between the E-subject and the I-subject. From the two essential properties of the canonical passive, as stated in (52), it can be seen that what virtually all natural examples of this construction have in common, both intra-linguistically and cross-linguistically, is in fact the first essential property (52a), a property which points to the prevention of the E-subject from moving to the [Spec, TP] position by the presence of the Pass element. This means that the I-subject can never be represented as the E-subject, for which reason the latter must be realized as the empty category PRO in its base-position, the [Spec, VP] position. The realization of the E-subject as the empty category PRO rather than *pro* is, in effect, a logical consequence of generating the former (but not the latter) in a non-Case position (cf. (53)).

Given the conceptual compatibility between this logical consequence and the factual observation that external-θ-role assignment is a determinant factor in canonical passivization, the question arises as to whether or not passivizable verbs permit the movement of the DP-object to the [Spec, TP] position to become the I-subject, as stated in the second essential property in (52b). This question has led us to reconsider and

extend the notion of the DP-object to include all categories which may move to the [Spec, TP] position (hence the term *dynamic categories*) and all categories which may not move to the same position (hence the term *static categories*), a seemingly reasonable rectification of the mistaken belief that Accusative-Case assignment is a decisive factor in canonical passivization. Indeed, with this distinction mind, we can dispense with all the misleading terms that have been used in the literature to describe different types of the canonical passive. We can now safely say that there exist just two types in the universal sense, not only in Germanic languages, but also in any other language family instantiating this construction, viz. the *dynamic passive* and the *static passive*. These two types are defined in (63) below, which is a reformulation of the two essential properties stated in (52) above.

(63) (a) In both the **dynamic passive** and the **static passive**, the E-subject does not move to the [Spec, TP] position to become the I-subject.
(b) In the **dynamic passive**, DC is co-indexed with [Spec, PassP], and therefore moves to the [Spec, TP] position to become the I-subject (cf. the structure in (59)).
(c) In the **static passive**, SC is not co-indexed with [Spec, PassP], and therefore does not move to the [Spec, TP] position to become the I-subject (cf. the structure in (62)).

6. Conclusion

The discussion concentrated on a set of general principles that are proposed within the framework of UG and the manner in which they interact for canonical-passive formation in Germanic languages such as English, though reference was also made to some other (related and unrelated) languages where necessary for typological analysis from the universal perspective. Given the assumption that these general principles reflect certain properties of the human mind, they are perceived to yield the mental representation of the construction under consideration as one instantiation of UG, thereby delineating its universal properties. This means that the general principles in question are taken as being responsible for the typological convergence between even genetically unrelated languages, whereas the typological divergence is reducible to different values of the same parameters involved.

Section 2 considered the canonical passive according to the TGG model up to the 1970s, where the sets of units inserted in the phrase marker were looked upon as strings of not necessarily ordered morphemes. Accordingly, the construction was assumed to result from the application of a transformational rule known as Pass-transformation. The section also underlined the main criticisms forwarded against this rule such as its presupposed optionality of the agentive PP and its failure to incorporate to so-called 'impersonal passive.' Section 3 discussed the canonical passive according to the early version of the P&P model in the 1980s, where the sets of selected units were viewed as

sets of uninflected lexical items. Thus, the Pass element was identified with θ-role absorption and Case absorption (an identification which imposes an argument status on the Pass element). The section also highlighted the conceptual defects of this analysis and showed that the Pass element absorbs neither Case nor θ-role assignment, simply because its status as an argument is not compatible with its status as base-generated under I (or T in more recent works). Section 4, the final section, introduced an alternative analysis of the canonical passive with some reference to the later version of the P&P model in the 1990s (onward), a version which now takes the selected units as fully inflected lexical items. Here, the Pass element is treated as a functional category in its own right, a treatment that is crucial for scrutinizing virtually unnoticed aspects of the canonical passive and reconsidering all the misleading terms that have been used to describe several different types of this construction. Finally, the section was concluded with the new syntactic definition of the construction, a definition which now indicates that, both intra-linguistically and cross-linguistically, there exist only two types in the universal sense, viz. the *dynamic passive* and the *static passive*.

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