

On the licensing of PP complements

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ABSTRACT

This paper deals with the hypothesis that PP complements are licensed through a PrepTrP projection that is located in between vP and VP and that is in charge of checking the Case features of PP complements, in a similar fashion to DP complements. The transitivity projection PrepTrP is instantiated in active structures but not in passive structures, with the result that Case-checking applies in the former, but not in the latter. This explains (i) why full PPs are not passivisable, the only possibility being preposition stranding, and (ii) why VP-adverbs cannot be placed in between V and P in passive structures. The above-mentioned aspects are accounted for without resorting to reanalysis. Finally, an argument that is standardly used to deny the Case properties of PP complements is viewed from a different perspective: namely, the possibility of placing VP-adverbs in between V and the PP complement itself in active structures is explained here through the covert movement of the features of PP.

Key words: PP complements, PrepTrP, Case-checking, transitivity, passivisation, reanalysis, VP-adverbs.

Sobre la legitimación de los Sintagmas Preposicionales complemento

RESUMEN

El presente trabajo explora la hipótesis de que los Sintagmas Preposicionales (SSPP) complemento se legitiman a través de una proyección funcional Sintagma Preposicional Transitivo (SPrepTr), que está situada entre Sv y SV, y cuyo objetivo es precisamente el cotejo de los rasgos de Caso de los SSPP, de forma paralela a lo que ocurre con los Sintagmas Determinantes complemento. La proyección transitiva SPrepTr tiene lugar en estructuras activas, pero no así en configuraciones pasivas, lo que viene a significar que el cotejo de Caso se da únicamente en las primeras, y nunca en las segundas. Esto explicaría (i) por qué los SSPP no pueden pasivizar como tales sintagmas plenos (la única posibilidad es la pasivización de sus objetos o complementos en las configuraciones de 'colgamiento de la preposición' (*preposition stranding*)), y (ii) por qué los adverbios del Sintagma Verbal no pueden situarse entre V y P en las estructuras pasivas. Los aspectos anteriormente mencionados son analizados en este artículo sin recurrir a la opción de reanálisis. Por último, en este trabajo se da cuenta de un argumento que se utiliza comúnmente para negar las propiedades de Caso de los SSPP complemento, a saber la posibilidad de situar adverbios del Sintagma Verbal entre V y el propio SP, desde una perspectiva diferente: concretamente, a través del movimiento patente de los rasgos de SP.

Palabras clave: Sintagmas Preposicionales complemento, SPrepTr, cotejo de Caso, transitividad, pasivización, reanálisis, adverbios del Sintagma Verbal.

SUMARIO: 1. Introduction. 2. The representation of PP complements. 3. Passivisation. 4. A summary of the proposal.

1. INTRODUCTION

The goal of this paper is to offer a description of the mechanism that licenses PP complements through the analysis of the contrasts existing between active and passive structures. The above-mentioned mechanism consists in the instantiation of a projection that is in charge of checking Case-features of PP complements.

- (1) John spoke to Mary / John laughed at Mary
- (2) Mary was mercilessly laughed at
- (3) a. *To Mary was spoken (by John) / *At Mary was laughed (by John)
b. *It was spoken to Mary (by John) / *It was laughed at Mary (by John)
- (4) *Mary was laughed mercilessly at

It will be argued that a new perspective can be proposed that could possibly relativise the standard assumption that prepositional complements have no Case features to check, in clear opposition to nominal complements. By claiming that PP complements enter into a Case-checking process that legitimates their occurrence in active configurations, as is done in the present approach, the constraints illustrated in (3)–(4) above can be explained without resort to any mechanism of reanalysis or incorporation.

The semantic or interpretive rationale backing the syntactic mechanism of Case-licensing that is proposed here is centred upon the concept of *transitivity*. Thus, the projection that will be argued to be in charge of checking the properties of PP complements will make it possible for structures containing PP complements to be assimilated to ordinary *transitive* structures containing DP complements. Crucially, the fact that PP complements fail to passivise (see (3) above) means that these constituents do not count as such *transitive* complements in passive configurations. By contrast with PP complements, DP complements are characterised as transitive constituents both in active and in passive configurations, which means that ordinary active sentences like (5) have a corresponding passive counterpart like (6).¹

- (5) John rented the apartment
- (6) The apartment was rented (by John)

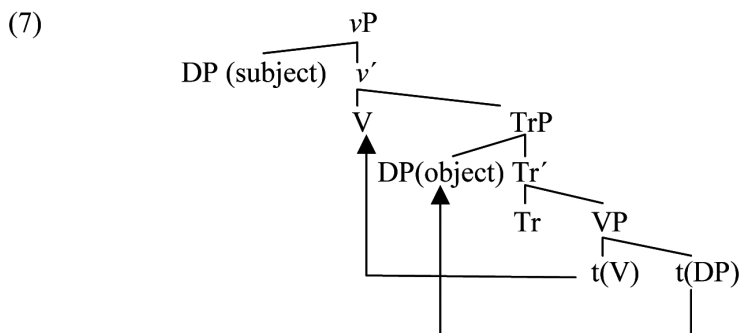
Following a minimalist framework like Chomsky (1995, 2000), I assume that attraction and movement of a constituent involves the matching of features between the target of movement and the raised constituent; in case the features checked are strong or have an EPP property, movement will be overt, whereas if the features are weak, it will be an instance of covert LF movement.

The *vP*, which is the place where the verb and all its arguments are base-generated, is argued in the framework presented in Bowers (2002) to include a projection located

¹ It must be noted, however, that not all (ordinary) active configurations have a passive counterpart. Nonetheless, the generalisation that is implicit in the main text is sufficient for the purpose of the present paper. See note 10 below.

just above the VP which makes it possible for the DP complement of transitive structures to raise *overtly* in order to check its Case features. This way, the overt movement of the DP complement is made compatible with the position targeted by V, which must be *higher* than the one where the complement is eventually located. As is well known, the opinion in the literature is divided as to whether complements raise overtly or covertly in English. The reader is referred to the arguments offered in Johnson (1991) and Bowers (2002) in favour of the overt movement of complements. The pertinent arguments deal mainly with adverbs and also with ECM structures. It is interesting to note that the position of adverbs will be used in the present framework to argue for the Case-checking by PP complements.

Following Bowers (2002), the above-mentioned projection into whose specifier moves the DP complement, is here called *TrP*, though in previous frameworks a construct similar to TrP is instantiated under the name of *AgrOP* (see Bobaljik 1995, Koizumi 1993, 1995). The latter is reminiscent of the projection that was formerly placed outside VP in frameworks previous to the advent of the VP-shell mechanism.² See the configuration in (7) below.



V is therefore assumed here to raise from VP into *v*, and the DP complement that is merged with V to raise likewise from VP into [Spec, TrP]. As for the DP subject, which is generated in [Spec, *v*P], it must move later into [Spec, TP] in order for the strong feature of English finite T (or EPP feature) to be checked properly.

Some comments are needed relative to the way in which the Case-checking mechanism of PP complements is understood in the present framework.

First, the fact that PP complements have no overt phonetic realisation could in principle seem problematic for an approach based on the instantiation of Case features; however, let us note that non-pronominal DPs are not overtly inflected for Case in English (with the exception of genitive phrases), it being only DPs with a pronominal status that show overt signs of Case inflection. In spite of the fact that

² The existence of AgrO was originally postulated in Chomsky (1991), following Pollock (1989).

there is no direct morphological evidence that PP complements check Case, it will be argued that such constituents license structural Case properties.

Secondly, it must be noted that, whenever reference is made to the checking of PP complements, it is the checking of the PP as a whole that is generally meant. Thus, I assume that Case-checking also applies within the PP since the DP complement of P has Case features to check. As a matter of fact, such is the only instance of Case-checking standardly assumed to be involved in PP configurations. Transitive prepositions have therefore Case properties to be licensed by their own complements, though my focus is on the licensing of the Case features or properties of the full PP. Nevertheless, in section 3.2, I will deal briefly with the checking of the DP complement of PP as applying in prepositional passive configurations. Such Case-checking will be argued to be ultimately responsible for which prepositional passives are actually instantiated and which are not, though a detailed study of the topic is deferred to future work.

Finally, I would like to make the point that exploring the possibility that PPs are involved in Case-checking means contravening the observation made by Stowell a long time ago (1981) that categories that assign Case are generally Case-resistant: since P is a Case-assigner (or, using a more modern term, a Case-attractor), this means that it cannot be a Case-assignee, and since PP is a projection of P, this means that PP cannot be assigned Case. As mentioned above, the goal of this paper is to give evidence of the fact that certain aspects of the syntax of PP complements agree with the hypothesis that such categories check Case. In this respect, it is interesting to note that, in recent work by Chomsky (2001), *v*P and CP – but not PP – are the projections acting as *phases*, hence as barriers to external agreement and Case-marking.

The paper is organised as follows. Section 2 is dedicated to analysing those aspects of prepositional active structures that are relevant for the treatment of the major constraints affecting passive sequences. After showing that PP complements occupy the same structural position as DP complements, a mechanism is implemented that is in charge of checking the structural Case of PPs. Such a mechanism is shown to apply in active configurations, irrespective of whether V is unergative or unaccusative, and ensures that active configurations with PP complements include a transitivity category. In a subsection within 2, it is argued that the placement of VP-adverbs (in active structures) is no conclusive evidence against PP complements entering into Case-checking. Section 3 is devoted to passive constructions: the inability of PPs to passivise, and similarly the constraint on the placement of VP-adverbs in passive structures, are claimed to be the result of passive structures with PP complements not being transitive structures. That is, the mechanism that has previously been implemented in active configurations will be argued *not* to apply in passive configurations. Finally, an analysis of prepositional passive configurations is hinted at.

One final remark that must be made regarding the type of PP complement analysed here is that those PPs introduced by prepositions with an idiomatic or fossilised meaning are outside the scope of this paper.³

³ By idiomatic or fossilised meaning I mean structures of the type illustrated below:

- (i) a. It so seems that John takes to Mary
- b. I came across Mary's doll's house

2. THE REPRESENTATION OF PP COMPLEMENTS

In spite of the fact that a prototypical complement has the form of a DP (former NP), PP complements share with DP complements basic properties like the following:

- (8) a. PP complements occupy the same position with respect to V as DP complements, that is they are both sisters to V (see the simplified configuration in (9)). From the point of view of selectional properties, this means that both DP and PP complements are strictly subcategorised by V, that is they are both arguments of V.
- b. PP complements can undergo a process of topicalisation in a similar fashion to DP complements (10).
- (9) a. [_{TP}He [_{VP}considered [_{DP}Mary]]
- b. [_{TP}He [_{VP}spoke [_{PP}to Mary]]
- (10) a. The children really enjoyed that film / That film the children really enjoyed!
- b. They will always listen to John / To John they will always listen!

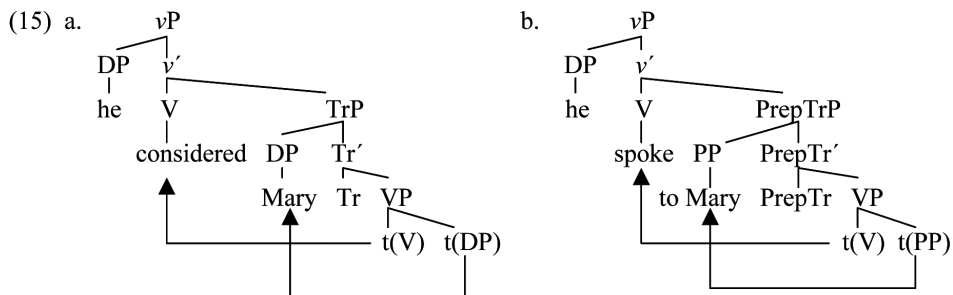
Apart from their categorial status, PP complements differ from DP complements in basic properties like the ones below. As argued in the Introduction, the constraint or restriction described in (11b) is at the core of the present discussion.

- (11) a. Whereas DP complements must occur adjacent to V, VP-adverbs can occur in between V and its PP complement (12).
- b. Whereas DP complements typically passivise, PP complements cannot become passive subjects (13). In contrast with full PPs, and in a similar fashion to DP complements of V, DP complements within PP can passivise (14).
- (12) a. He kissed (*tenderly) Mary (tenderly)
- b. He spoke (gently) to Mary (gently)
- (13) a. *To Mary was spoken (by John)
- b. *On the coach is relied (by the team)
- (14) a. They have ignored this issue / This issue has been ignored (by them)
- b. He laughed at Mary / Mary was laughed at (by him)

A description of the structural position of PP complements (8a) is in order, together with a specification of the way in which Case-checking on PP complements can be implemented.

The simplified representation in (9) shows that both DP and PP complements subcategorised by V occupy the same position with respect to the latter. That is, PP complements are merged with V to form a VP constituent in a parallel fashion to DP complements. The structural parallelism between DP complements and PP complements is coupled in the present framework with the instantiation of a *PrepTrP* projection similar to the TrP projection employed in Bowers (2002) to analyse (non-prepositional) transitive structures. The above-mentioned *PrepTrP* is meant to be in charge of checking the Case properties of PP. As shown in the

configurations below, a prepositional sequence like *He spoke to Mary* is assimilated in the present approach to a transitive configuration like *He considered Mary*.⁴



The present approach differs therefore from Bowers' in the treatment of unergative sequences: only those unergatives lacking a PP complement are expected to be generated in a configuration without TrP – or rather PrepTrP – in between vP and VP. Sequences like *He spoke* or *They are laughing*, but not *He spoke to Mary* or *They are laughing at us*, will receive in the present framework the same treatment as in Bowers (2002: 186). It must be noted that PP complements can likewise occur in unaccusative structures (see (16) below). As expected, the treatment of the latter in the framework proposed here is similar to that of unergatives: though in unaccusatives no TrP is instantiated for the DP complement, in identical fashion to Bowers' approach, I propose that a PrepTrP be instantiated to license the Case features of the PP complement, in case there is of course a PP complement involved. The DP complement (*he* in (16) below), which, as standardly assumed, is shifted into [Spec, TP] in unaccusative structures, is not available for raising into the Spec of PrepTrP, since PrepTrP can only check PP-features, and not those required by DP. This way, the Minimal Link Condition is not a problem to solve.⁵ From a semantic or interpretive perspective, it is interesting to note that the PP constituent occurring in (16) is typically of a loco-directional nature, and that similarly the PPs

⁴ Due to lack of space, in the present paper I deal only with structures containing a single complement. As is well known, in a similar fashion to structures containing two DP complements, as in (i) below, or a DP complement and a PP complement, as in (ii), it is possible to entertain structures with two PP complements, as in (iii).

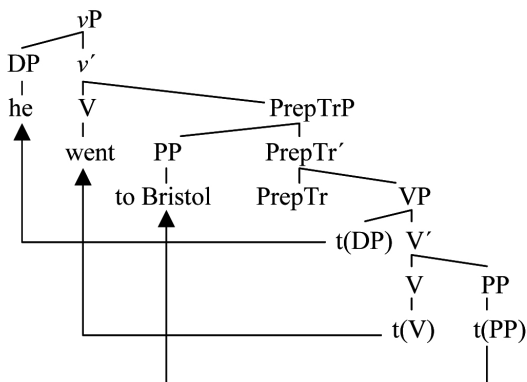
- (i) a. John gave Mary the tapes
- b. The doctor will send his patients the results
- (ii) a. John gave the tapes to Mary
- b. They congratulated Angela on her promotion
- c. He might put the vase on the table
- (iii) He talked to Mary about the manager

⁵ As standardly assumed, the Minimal Link Condition ensures that the movement of constituents from one position to another be as short as possible.

in unergative structures like *He spoke to Mary* or *They are laughing at us* can be argued to be underlyingly locative or loco-directional.⁶

(16) He went to Bristol

(17)



By including a transitivity category (PrepTr) in prepositional structures like *He spoke to Mary* or *He went to Bristol*, such prepositional structures are assimilated to (ordinary) transitive structures, with which they share crucial syntactic and semantic features like the ones mentioned in (8a) above. Since, in clear opposition to adjuncts, both DP and PP complements are arguments of V, and they both occupy the same position with respect to V, it does seem plausible to hypothesise that PP complements are licensed in a similar fashion to DP complements: specifically, it does seem plausible to hypothesise that PP complements also have a Case of their own to check. As will be argued in 3, the sharp contrasts existing between active and passive configurations where V takes a PP complement can be made to correlate with the presence *vs.* absence of the transitivity category PrepTr.

It was noted at the beginning of this section that PP complements also resemble DP complements in relation to topicalisation phenomena (8b). 2.1 below is dedicated to the latter.

2.1. TOPICALISATION STRUCTURES

It is a standard assumption that both DP and PP complements are arguments of V and that they both occupy the position that is sister to V. By contrast, *adjuncts*, whether of the adverbial type or otherwise the prepositional type, occupy, as the name indicates, an adjoined position within VP, and their meaning or interpretive force is not so central to the core meaning of the overall predicate as that of

⁶ That is, the prepositions *to* and *at* that follow the predicates *speak* and *look* could be argued to be metaphorical extensions of true locative or loco-directional prepositions.

arguments (*They dress [so smartly], John will leave [next Monday]*). Topicalisation structures can be used to highlight the differences between both DP and PP complements on the one hand, and adjuncts on the other.

In the GB tradition, the so-called *Visibility Hypothesis* (Chomsky 1981, 1986) ensured that argument variables – that is, the traces of arguments left by A'-movement – have Case: see (18) below (former (10a)). The phrase in initial position typically occupies the Spec of Top(ic)P(hrase), one of the projections argued in the literature to be instantiated above IP or TP (see, for instance, Rizzi 1997, or Haegeman and Guéron 1999).

(18) That film the children really enjoyed!

By contrast with (18), the constituents introducing structures like the ones in (19) were excluded from the requirement of Case-assignment: such constituents could move in spite of the fact that no Case was assigned to them, since they were clearly adjuncts.

(19) a. Next Monday John will leave
b. In London John died!

What is of interest for the present discussion is that a PP complement like the one in (20) (former (10b)) was argued to pattern like the initial constituents in (19) above since, in spite of being an argument itself, it was stipulated that PPs generally speaking were banned from Case-assignment (see Stowell's claim in the Introduction). Therefore, the fact that PP complements could be topicalised was not held as a sign that such constituents had Case properties to license.

(20) To John they will always listen!

Within a minimalist framework, the first thing to note is that constituents moving into TopP do not do so to license Case properties, but to check off or license (interpretable) [+topic]-features; in a similar fashion, interrogative phrases are typically raised into [Spec, Foc(us)P(hrase)] in order to check off [+focus]-features. It is therefore implicit in the account that constituents moving to the Spec of TopP or FocP must have their Case features checked previous to that shift, if indeed they have Case features to check. As happened in the GB framework, for PP complements to be able to shift into the CP-domain does not prove that they license Case features within current minimalist assumptions.⁷

⁷ For the sake of completeness, let me note that a full taxonomy of (non-clausal) constituents that can be topicalised must also include the ones below, on a par with those illustrated in (18)–(20) in the main text.

(i) a. Honest he is not / Malcolm his name is
b. Cook the chicken in the oven he did indeed!

Though the existence of such structures could be taken as an argument in favour that Case is not needed for topicalisation to apply, it is a fact that the constituents in initial position in (i) are not arguments in the wide sense, but *predicates* themselves, and therefore they lack Case inherently. The only possible exception could be the predicate nominal *Malcolm* in (ia), which would check Case by means of the small clause configuration.

However, it must be agreed that (20) is much closer to (18) than to (19) in that both (18) and (20) sound more highly marked or much less neutral than (19). Such a contrast might be imputed to semantic differences between complements and adjuncts: that is, complements are more tightly connected with V than adjuncts, which would seem to mean that separating a complement from the V head results in a less natural kind of configuration than separating an adjunct.

The main purpose of this section was to describe a structural type that renders PP complements as constituents similar to DP complements. In spite of the fact that the topicalisation facts illustrated above seem to provide no conclusive evidence in favour of Case-checking by PP complements other than the above-mentioned reinforcement of the close connection between PP complements and V, I would like to point out that a possible line of argumentation can perhaps be found in the domain of clausal constituents. Though an analysis of the contrast illustrated below belongs to work in progress by the author, I would like to note here that the ungrammaticality of a structure where a *that*-clause is located in initial position seems to evidence a close connection between Case-checking and topicalisation (as standardly assumed, clauses check no Case properties).

- (21) a. He was afraid that she would leave
 b. *That she would leave he was afraid

2.2. THE PLACEMENT OF VP-ADVERBS

It was argued in 2 and 2.1 above that it is possible to implement a mechanism ensuring that PP complements check their own Case in active configurations, which would mean that both (ordinary) transitive structures and prepositional structures containing PP complements share a transitivity category (Tr and PrepTr, respectively). It is now necessary to show that the behaviour of adverbs (11a) is not an obstacle for the raising of PP to PrepTrP for Case-checking purposes.

The contrast in (12) above, repeated below for convenience as (22)–(23), is assumed in those frameworks that defend the overt movement of complements, like Bowers (2002), to mean that only DP complements, and not PP complements, raise to check Case features. Starting with (22), VP-adverbs like *tenderly* are argued to originate at the left edge of V. Since such adverbs are prohibited in between V and its DP complement (note the asterisk marking the first occurrence of *tenderly* in (22a)), this means that the DP complement – *Mary*, in the case at hand – must raise over the adverb and out of VP in order to check its Case features. Thus, in the original or primitive structure (22b), it is not only V that must typically move out of VP, but also the DP complement *Mary*, with the result that the adverb *tenderly* is left behind.

In contrast to (22), a prepositional structure like (23) allows for the VP-adverb to be located to the left of the PP complement in the phonetic chain. Such behaviour is assumed generally speaking (and, more specifically, in Bowers (2002)) to give evidence of the fact that the PP complement does not get raised at all since it has no

features to check. That is, for the adverb *gently* to occur to the left of the PP complement *to Mary* (as the first parenthesis indicates) is taken to mean that the PP complement does not enter into a process of Case-checking, a claim that is not shared by the present approach.⁸

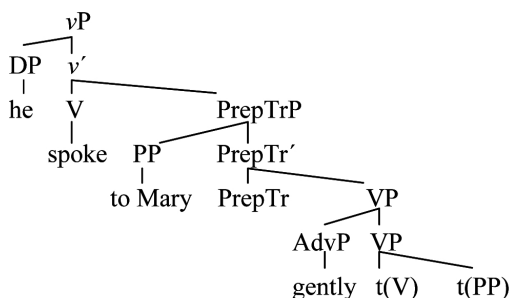
- (22) a. He kissed (*tenderly) Mary (tenderly)
- b. He [_{VP}[_{TrP}[_{VP}tenderly kissed Mary]]]
- (23) He spoke (gently) to Mary (gently)

As (23) shows, the asymmetry between the structure with the DP complement and the one with the PP complement is only partial: it is also necessary to account for the position that the VP-adverb can hold to the right of the PP complement (*He spoke to Mary gently*). One possible explanation could be that the VP-adverb in question can occupy a position adjoined to the right of VP. However, as argued in Costa (1997), right-adjunction is not considered a desirable construct in the theory and, instead, movement to the left of the VP should be argued to take place, thereby leaving the adverb in final position: in that case, *speak to Mary* would be shifted over the adverb *gently*. See the configuration (24) below.

- (24) He [...[_{VP}[_{VP}spoke to Mary]_i gently t_i]]

I would like to argue that a plausible explanation for the facts in (23) is that PP complements raise in a similar fashion to DP complements, but that they can do so either overtly or in a covert manner. In a construction like *He spoke to Mary gently*, the PP argument raises to PrepTrP in a similar fashion to the DP argument in *He kissed Mary gently*; alternatively, in *He spoke gently to Mary*, the shift or movement of Case features of PP is covert LF movement. Covert movement is indicated in the tree-diagram (25b) below with the notation *FF(PP)*.⁹

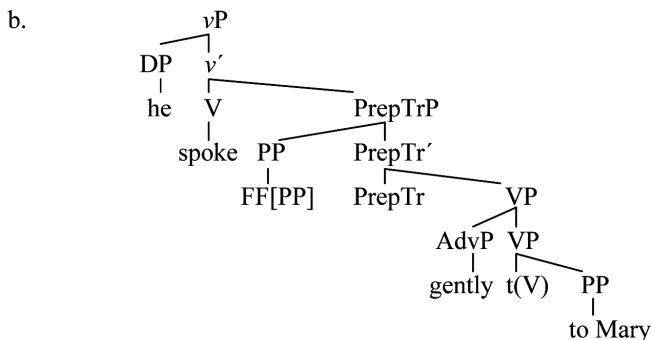
- (25) a.



⁸ It was noted in the Introduction that the facts analysed here apply only to PP complements introduced by non-idiomatic prepositions. See the ungrammatical configuration (i) below.

(i) *I came eventually across their doll's house

⁹ I would like to note that, in a footnote, Bowers hints at the possibility of "optional leftward movement of non-Case marked complements" (Bowers 2002: 188).



In a theory that allows for the possibility that movement applies either in an overt or in a covert manner, there is nothing that precludes PP complements from doing so. Though such optionality is not completely desirable, the strong or otherwise weak nature of features seems to offer an answer to the behaviour of PP complements with respect to adverbs. Let us note that the SVO/VSO word order alternation in a language like Spanish is standardly assumed to be due to nominative Case being checked either overtly or in a covert manner (see Zubizarreta 1998). Thus, a framework like the one presented here will only partially comply with the Principle of Greed, which states that if a constituent does not have to move, then it cannot move.

The fact that there exist VP-adverbs like *well* which must necessarily occur to the left of PP complements does not mean that PP complements cannot raise from their base-generated position. See the paradigm in (26) below.

- (26) a. John speaks French well
 - b. John speaks well to his mother
 - c. *John speaks to his mother well
- (Costa 1997: 65)

As noted by Costa – though it must be said that the author himself does not envisage the possibility that PPs be raised – the ungrammatical status of the sequence above changes dramatically if the adverb is made to bear heavy stress, or if more material is added either before or after the adverbial head (*John speaks to his mother very well, John speaks to his mother well, before starting arguing...*). Such a relativisation of facts seems to mean that the ill-formedness of (26c) above does not have to do with the inability of PP complements to move, but rather with specific constraints holding on monosyllabic elements like *well*.

3. PASSIVISATION

It was noted in the Introduction that the aim of this paper is to describe the mechanism that is in charge of licensing PP complements through the analysis of the sharp contrasts existing between active and passive configurations. Crucially, PP

complements are banned from both the complement and the subject position in passive structures: see (28) below (former (3)). The restriction holding on VP-adverbs will be dealt with in 3.1.

- (27) a. John spoke to Mary / John laughed at Mary
 (28) a. *To Mary was spoken / *At Mary was laughed
 b. *It was spoken to Mary / *It was laughed at Mary

The mechanism that was argued in the preceding sections to license PP complements in active configurations was one that satisfies Case properties of such constituents. In the present section it will be argued that the major constraints affecting passive configurations can be explained by positing that PrepTrP is absent in passive structures, in clear opposition to active structures. A major benefit that can be obtained from such an approach is that the process of reanalysis (or incorporation) becomes unnecessary.

In a typical minimalist framework, the inability of PP complements to become passive subjects – see (28a) – would be explained as PP complements not checking Case features: since movement is typically triggered by the need to license features both on the part of the host projection and on the part of the raised constituent, the ill-formedness of (28a) evidences that PPs do not have to move to [Spec, TP] to check any Case features. Let us recall that, according to Greed, if a constituent does not have to move, that means that it cannot move.

As for (28b), an account based on PP complements not needing to check Case features must resort to reanalysis or incorporation in order to explain such facts. The ill-formedness of (28b), which cannot be due to the EPP feature of T since the latter is satisfied by filling [Spec, TP] with expletive *it*, is argued to lie in a process or mechanism that reanalyses P together with V, thereby creating a kind of compound or complex verb [_V V P]. This way, the well-known inability of passive participles to assign or check Case affects what was originally the object of P by transforming it into the object of a (compound) V. However, it must be noted that the traditional reanalysis process is not a desirable one from a minimalist perspective (see Baltin and Postal 1996). I would like to argue that it is possible to provide a unified account of both (28a) and (28b) without resorting to reanalysis in the latter case.

In the preceding sections, PP complements have been argued to be related to V through a PrepTrP projection where the features of PPs are checked. The very fact that PPs are not passivisable objects, as (28a) shows, indicates that a configuration with passive V cannot take PP as complement (28b). This is reflected in the present framework by positing the absence of the above-mentioned PrepTrP. Since no PrepTrP is instantiated in configurations like (28b), the PP complement itself is not licensed, and the derivation does not converge. The very fact that the PP complement itself is not licensed explains why its movement into [Spec, TP] is not possible at all, with the result that a sequence like (28a) must necessarily be ill-formed. Thus, the need to invoke any reanalysis process to explain (28b) is eliminated.

The analysis of active vs. passive configurations proposed here is compatible with Bowers (2002), which focuses on non-prepositional structures. Bowers argues that both (non-prepositional) active and passive structures are characterised by the

presence of the transitivity category Tr, which agrees with the fact that DP complements are, in the vast majority of cases, passivisable.¹⁰ The author argues that the features of the TrP occurring in (non-prepositional) passives do not match those of the DP complement: in order to prevent the derivation from crashing, the DP complement itself shifts into [Spec, TP]. In the framework presented here, I focus on the fact that, by contrast with DP complements, PP complements are not passivisable, which means that passive structures with PP complements immediately after V are *not* transitive structures. As noted above, this is reflected in the fact that passive structures with PP complements lack the transitivity category PrepTr.

The ungrammaticality of (28a) is imputed in the present approach to the PP complement not being licensed due to the lack of PrepTrP, which means that its Case features are not checked. However, it is interesting to note that [Spec, TP] is itself a position that cannot be filled with just any type of constituent, at least in English. It is typically the case that English DP subjects shift into [Spec, TP] to satisfy their own Case features.¹¹ For a PP (whether of the complement or the adjunct type) to be able to be moved into [Spec, TP], the structure must necessarily be a predicative one or one with the meaning of identification.¹² This is due to the fact that PPs are typically neither agents, nor themes or beneficiaries. As a result, DPs are the only constituents that can freely occupy [Spec, TP]. The structures in (29) illustrate predicative sequences with a PP in [Spec, TP], whereas those in (30) are instances of identificational sequences.¹³ In a standard minimalist framework

¹⁰ It has traditionally been argued that those DP complements that do not passivise are of a locative nature, or otherwise cannot be considered as *affected* entities.

- (i) a. The bottle contains water / *Water is contained (by the bottle)
- b. He has an attic in the centre / *An attic is had in the centre (by him)
- c. John liked tea / *Tea was liked (by John)

¹¹ As argued in Castillo (2001), DPs occurring in passive structures of perception verbs are doubly constrained in that it is not only Case features that they must search for but also tense features. The checking of tense, which takes place within the subordinate structure, makes it necessary for the tense element *to* to be instantiated.

- (i) a. *[...] was seen [_{VP}John jump the fence]]
- b. [...] was seen [_{TP}John to jump the fence]]

¹² Identificational structures are, as a matter of fact, the most permissive as regards the constituents that can occupy [Spec, TP]:

- (i) a. Slowly is how he read the manuscript
- b. Soft was the way the actor's voice should have sounded

From a different perspective, it must be noted that ambiguity can arise between identificational structures and predicative ones (see (29d) in the text).

¹³ Apart from predicative or identificational structures, locative inversion structures are characterised by having a locative or a directional PP complement in initial position, which is arguably identified as [Spec, TP]. Due to lack of space, I do not deal with locative inversion in this paper, though it is well known that there is an immense bulk of literature on the subject. Locative inversion structures are a good example in English that the nominative Case feature and the EPP feature are dissociated from each other (see below in the main text).

- (i) a. Down the hill rolled the ball
- b. On the doorway stood his family
- c. Up goes the flag!

where nominative Case and the EPP feature of T are two separate properties, the constituents in initial position in (29)–(30) above do not arguably check nominative Case, but they all satisfy EPP.

- (29) a. On top of the shelf is a good place for the daffodils
 b. Under the bed is cosy
 c. After September would suit me fine
 d. Before the wedding was agreed to be the best time to take the photos¹⁴
- (30) a. Inside the oven is the place where he hid the present
 b. Down the street was the direction the ball rolled

My focus in the following section is on the behaviour of adverbs in prepositional passive structures. Finally, in 3.2, I deal with Case-checking in prepositional passive structures themselves.

3.1. THE PLACEMENT OF VP-ADVERBS IN PASSIVE STRUCTURES

It was noted in the Introduction that prepositional passive structures – a sequence-type that will be dealt with in 3.2 below – differ from their active counterparts in that VP-adverbs cannot be placed immediately to the right of V, which in passive structures is of course a participle. In the present section it will be argued that the approach based on the presence/absence of PrepTrP is compatible with the behaviour of VP-adverbs.

In the traditional account, the ungrammaticality of (31a) below (former (4)) is imputed to the adjacency requirement imposed by reanalysis: since V and P become a complex verb, no item can interrupt the sequence V-P.

In a framework like the present one where no reanalysis is invoked, the behaviour of the adverb is explained as follows. Since *v* is occupied by passive *be*, the participle must remain within VP; as for the VP-adverb, which originates to the left of V in VP, it remains likewise there. If a PrepTrP were projected, then the participle could move into its head; however, as argued in the present approach, no PrepTrP is projected in passive configurations, with the result that the verb cannot move over the adverb. This way, claiming that prepositional passive configurations lack any PrepTrP agrees with the order of constituents within VP not getting altered.¹⁵ Sequences like (32) below, where the adverb occupies final position, could be explained on the same grounds as the active sequence (24) above – the reader is referred to section 2.2.

¹⁴ Note that the passive sequence (29d) is one where the PP – which happens to be an adjunct – is originally the subject of a predicative structure, and therefore cannot be grouped with **To her was spoken* or **At John was looked in a tender way*.

¹⁵ Bowers (2002: 211) argues that passive structures where adverbs are placed to the left of V are stative in character, and therefore more adjectival-like than verbal-like. It must be emphasised that he refers all the time to non-prepositional passives (*The ball was perfectly thrown*, *The song was beautifully sung*).

- (31) a. *Mary was laughed mercilessly at
 b. Mary was mercilessly laughed at
 b'. [..._[vP]Mary was [_[vP]mercilessly [_[v]laughed]_[pat]]]]
 (32) Mary was laughed at mercilessly

3.2. THE PREPOSITIONAL PASSIVE

PP complements are not able to passivise; by contrast with PP complements, and in a similar fashion to DP complements subcategorised by V (33), DP complements of P can become passive subjects (see (11b) above and (34) below). As a matter of fact, it is not only complements within PPs that are themselves complements of V that can passivise (34a), but also complements of PPs that are adjuncts (34b).¹⁶ As noted in the Introduction, a detailed study of the topic is deferred to future work; in the present paper, I will limit myself to acknowledging the connection that exists between structures like (34) and the approach that has been proposed for the licensing of PP complements.

- (33) Mary was kissed tenderly
 (34) a. Mary was laughed at
 b. This house has been lived in
 (35) *It was laughed at Mary

Sequences like those in (34), which are commonly referred to as *prepositional passives* or *pseudopassives*, have traditionally been used by descriptivists as an argument in favour of analysing prepositional verbs as *multi-word Vs*. As argued in the preceding section, the process or mechanism invoked within generative grammar to explain such configurations is reanalysis or incorporation, which is not particularly favoured from a minimalist perspective. I propose to show that (34a) is first of all made possible by the ungrammaticality of a sequence like (35) (former (28b)), though there must be additional mechanisms deciding over which prepositional objects (or DP complements of P) can become passive subjects and which can not (see note 16 above).

In the present framework, the ungrammaticality of (35) is due to no PrepTrP being instantiated in between vP and VP. As a result, PP cannot check its Case features, and the derivation does not converge. The DP complement of P or

¹⁶ Also, it must be acknowledged that not all objects of PP complements are passivisable. Two such notions as *agentivity* and *affectedness* seem to be relevant for prepositional objects to become passive subjects. The reader is referred to such works as Bolinger (1974), Vestergaard (1977), or Couper-Kuhlen (1979).

- (i) a. He looked at the French woman
 b. The French woman was looked at (by him)
 (ii) a. The cattle fed on grass
 b. *Grass was fed on (by the cattle)

prepositional object is in principle expected to be merged with P and form a PP; instead, it is forced into leaving its base-generated position and moving into [Spec, TP], where it checks nominative Case.

(36) [_{TP}Mary_i was_v [_{VP}t_v [_{VP}laughed [_{pat}] [_{DP}t_i]]]]

In the approach presented here, reanalysis or incorporation is therefore not the cause or explanation of the phenomenon of preposition stranding: P does not incorporate into V, it is simply left *stranded* as a result of no PP being instantiated. Recall from the discussion in 3.1 above that the inability of VP-adverbs to appear in between V and P in passive structures is explained through the absence of a PrepTrP for V to be moved into. As argued on that occasion, reanalysis is not the cause of the restriction on adverb placement, but the very configuration that results from a prepositional structure without a PrepTrP. Preposition stranding is therefore considered to be the *negative* evidence of the existence of Case features on PP complements.

For no full PP to be licensed is a prerequisite in order for a prepositional passive configuration to be conformed. However, there are two additional aspects relating to the issue of the prepositional passive. One refers to the range of prepositional objects that can passivise: as noted above, not all prepositional objects of original PP complements passivise, and the same, it is possible for prepositional objects of original PP adjuncts to passivise. Though this is a topic that deserves careful study, I would like to make the point that the possibility for a prepositional object of a PP adjunct to passivise agrees with the approach that has been proposed here on the licensing of PP complements. That is, it was noted above that the full PP is not licensed in a sequence like (35) because there is no PrepTrP and that, as a result, the DP is free to search for its own Case (34a). Since the transitivity projection PrepTrP has been argued in this paper to be instantiated in structures with PP complements, but not in structures with PP adjuncts, it follows that no full PP is licensed either in the structure that eventually results in (34b). The DP *this house* is therefore free to check its own features, in a similar fashion to *Mary* in (34a). Let me note once again that exactly which prepositional objects will be able to shift into [Spec, TP] is a matter that seems to have to do with additional factors like the nature of P itself, or with interpretive notions such as *affectedness* or *agentivity* (see note 16 above).

The other major aspect that has to do with prepositional passive configurations, or rather with the phenomenon of preposition stranding generally speaking (relative clauses, interrogative structures,...), is that it is not allowed in a great variety of languages, among which is Old English or Spanish. Whereas the ungrammatical status of (37) is shared by English (see (35) above), that of (38) is not (see (34)). The ill-formedness of (38) used to be explained in GB frameworks by resorting to government. Thus, prepositions in a language like Spanish were argued not to be able to lexical-govern the traces left by their complements. However, lexical government is no longer part of the apparatus of the Minimalist Program. In Castillo (forthcoming), it is argued that the key factor responsible for the ban on preposition stranding in both A-movement

structures (or passives) and A'-movement configurations (like interrogatives or relative clauses) seems to be the *type* of *inherent* Case that is checked by prepositions.¹⁷

- (37) *Fue reída de María (vs. Juan se rió de María)
 was laughed of María Juan himself-laughed of María
- (38) *María fue reída de
 María was laughed of
 'María was laughed at'

4. A SUMMARY OF THE PROPOSAL

I have tried to show in this paper that the hypothesis that PP complements check structural Case is one worth exploring, since it seems to account for the sharp differences or contrasts existing between active and passive prepositional structures. My focus has been mainly on (i) the presence vs. absence of PrepTrP, which is in charge of licensing the Case properties of PPs, and (ii) the placement of VP-adverbs. I have argued that the fact that passive structures lack any PrepTrP is to be held responsible for the inability of PP to be instantiated as such phrasal projection within ν P, and that both the prepositional passive configuration itself and the behaviour of VP-adverbs in prepositional passives can be analysed without resorting to any reanalysis rule, which would seem to evidence the present approach as more advantageous than traditional accounts.

The semantic concept backing up the syntactic mechanism of Case-checking through PrepTrP is transitivity: prepositional active structures have been argued to be transitive structures, in a similar fashion to non-prepositional (ordinary) transitive structures. By contrast with DP complements, PP complements cannot passivise since no transitivity category is included in the derivation.

The placement of VP-adverbs either to the left or to the right of PP in active structures, which has traditionally been used as an argument against PP complements checking Case properties, has been claimed to respond to the covert or overt movement of PP into the corresponding functional node, namely [Spec, PrepTrP]. As for topicalisation phenomena, these have been used as a kind of reinforcement of the assimilation process of PP complements to DP complements.

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¹⁷ The ban on preposition stranding that characterises the grammar of Old English disappears in Middle English, a time period when structural Case is generally assumed to replace inherent Case as assigned or checked by prepositions.

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