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Exploring Case Assignation in Exceptional Case Marking Clauses: an Open Theoretical Discussion in Minimalist Syntax

Treball de Fi de Grau / BA dissertation

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June 2021

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to my supervisor, Dr.Susagna Tubau, for all of her dedication, guidance and expertise. On a more personal note, my most heartfelt thanks go to my parents for their unconditional love. And to my beloved classmates, friends, and Jordi, all of you have always been by my side.

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Abstract

Case assignation in Exceptional Case Marking (ECM) clauses has posed a challenge for generative syntacticians. This construction has long remained an instance of permissiveness for Case theory. The present dissertation aims at reviewing some of the most noticeable literature on this phenomenon, critically identifying theoretical advantages and structural constraints. The inability of the Government and Binding Theory and the Minimalist Program to evade exceptionality has encouraged new proposals of analysis, the default case hypothesis being a relevant case-licensing strategy. Its potential validity is examined jointly with Accusativus cum Infinitivo, a comparable construction in Latin. The results verify its unsuitability for ECM-clauses and unveil a large variety of syntactic behaviours within Accusative Infinitive patterns. The paper concludes that exceptionality cannot yet be repaired, and therefore much more research needs to be conducted.

Keywords: ECM-clauses, AcI-clauses, case assignation, Government and Binding, Minimalist Program.

1. Introduction

With the help of morphological affixes, languages can express the different grammatical relations a noun can bear to its head, inflected case forms being a good example. Rich morphological case-marking languages such as Old English (OE) serve to explain the procedure of case. OE possessed four cases, ultimately arranged into declensions[1], which are systems of opposed values also sensitive to gender (i.e., masculine, feminine, neuter) and number features (i.e., singular, plural), (1).

(1) Declension of *Wer* ('man') from the Strong Masculine Paradigm of OE.

	Singular	Plural
[Nom]inative	*Wer-∅*	*Wer-as*
[Acc]usative	*Wer-∅*	*Wer-as*
[Gen]itive	*Wer-es*	*Wer-a*
[Dat]ive	*Wer-e*	*Wer-um*

The position a cased expression occupies triggers simultaneous changes in morphology, syntax and meaning. For instance, when the noun *wer* surfaces under the nominative case, it is functioning as the subject-agent of the verb *timbrode*, (2). Its combination with features of gender and number allows one to recognize agreement between them. Therefore, case constitutes a many-sided category in grammar since it interacts with morpho-phonological and semantico-syntactic rules.

(2) Se wisa wer timbrode his hus ofer stan.
The wise man[NOM] built his[GEN] house[ACC] on stone[ACC].
'The wise man built his house on stone.'
(New Testament, Matthew 7.24; Smith & Smith 1999, 160)

Over time the case system in English evolved into the gradual loss of inflections, only visibly retaining in Present-Day English (PDE) a remnant of case in personal pronouns and wh-pronouns, as illustrated in Table 1 (Quirk et al. 1985:336). Other

[1] For exposition purposes, only one paradigm of the major ones has been selected.

nominal expressions adopt common and genitive case, the latter being the morphologically marked option.

Nominal Expressions		Personal Pronouns and Wh-Pronouns							
Common	Genitive			Subjective		Objective		Genitive	
Children	*Children's*			Sing.	Pl.	Sing.	Pl.	Sing.	Pl.
		First Person		*I*	*We*	*Me*	*Us*	*My*	*Our*
		Second Person		*You*				*Your*	
		Third P.	Masc.	*He*	*They*	*Him*	*Them*	*His*	*Their*
		Third P.	Fem.	*She*		*Her*		*Her*	
		Third P.	Neut.	*It*		*It*		*Its*	
		Wh-Pronouns		*Who*		*Who(m)*		*Whose*	

Table 1. Case forms in Present-Day English.

Despite the scarce morphology, cased pronouns in PDE entail matching distributional patterns with OE on the basis of, for example, nominative also covering the subject-agent position, (3). This outcome evinces a cross-linguistically shared abstract and structural case configuration (Pesetsky & Torrego 2009:1).

(3) He[NOM] built his house on stone.

Case distribution is regulated by heads which ensure that certain verbal predicates, such as *built*, exclude accusative from the subject-agent position, both in a simple sentence, (4), and a subordinate clause, (5). Nonetheless, what prevents the appearance of an accusative in the subject-agent position of an infinitival embedded clause, (6)?

(4) *Him[ACC] built his house on stone.

(5) *We believe that him[ACC] built his house on stone.

(6) We believe him[ACC] to build his house on stone.

This construction is known as Exceptional Case Marking (ECM) clause since it constitutes an instance of permissiveness concerning case assignation: the same semantico-syntactic properties of the nominative subject/agent role can unexpectedly be covered by accusative. Interestingly, ECM is not an exclusive phenomenon of English.

Early and Classical Latin also present a comparable construction named Accusativus cum Infinitivo (AcI), (7).

(7) Credo eum petisse a Marcello aliquid.
(I) know him[ACC] to-have-asked to Marcello something.
'I know him to have asked something to Marcellus'.
(Cic. *Att*. 13,10,3; Cecchetto & Oniga 2001, 80)

These structures have been of major concern among generative syntacticians. They received considerable attention from the Case Theory of Government and Binding (GB), which developed an exceptional account later recast by the Minimalist Program (MP) in the early 1990s.

The purpose of this paper is to discuss the different approaches the syntax of GB and MP has taken to case assignation in ECM-clauses. This paper is structured as follows. Section 2 reviews the Case theory and assignation of case in ECM-clauses in GB, while section 3 covers and assesses the proposals of MP. Section 4 introduces the default case framework and evaluates its validity in comparison with AcI. Section 5 closes up with the conclusions and new lines of inquiry for further research.

2. Early Accounts of Case and Case Assignation

2.1 Case theory in Government and Binding Theory

In the articulation of GB modular structure, prominently represented in Chomsky (1981), the development of Case theory came to be a basic factor for the understanding of syntactic derivations (Haegeman 1994: 155). The before-mentioned abstract case configuration was considered a distinct attribute from its actual phonologically overt realization. Nonetheless, they were reconciled by means of the Case Filter (CF), which was a theoretic property of lexical noun phrases (NP) in charge of triggering case-marking, (8).

(8) *NP if NP has phonetic content and has no Case (Chomsky 1993: 49).

Therefore, the CF guarantees that all NPs receive abstract Case. The assignation of case occurred in the s(urface)-structure projection, that is, in the post-movement stage and before the Phonetic Form (PF) and Logical Form (LF) (Davies & Dubinsky 2004:179). As a result, the CF determined the movement of NPs and subsequently licensed the theta-role and morphology to ensure interpretability (Markman 2010:846).

Typologically, morphological case finds parametric variation across languages (Coon & Parker 2018:2). As for English, the assignation of case is appreciated solely in the pronouns. They bear nominative (i.e., subjective), accusative (i.e., objective) and genitive case[2]. For English, the functional head tensed INFL(ection) assigns nominative case while the lexical V(erb) provides accusative case (Davies & Dubinsky: 184). Asymmetries between both cases are spotted not only in the nature of the case assigners, but also under which relationship case assignation occurs: nominative assignation is built under m-command (i.e., head-specifier bond), whereas accusative is assigned under c-command (i.e., head-complement bond) (Bobaljik & Wurmbrand 2009: 50).

The rationale of CF allowed one to make predictions concerning the distribution of nominal expressions. Most importantly, it encouraged a consistent account for raising predicates, passive and unaccusative constructions (Bobaljik & Wurmbrand: 47). NPs in caseless positions had to move to a position where they could be case-marked. For example, although a passive V governs and assigns θ-role to its NP complement, it has no case to provide. Accordingly, the caseless NP rises to the specifier (Spec) position of finite subject to obtain case from INFL, (9). The movement is made to a non-θ-position since the NP complement already has its thematic role (Davies & Dubinsky: 186). This analysis was in harmony with the θ-criterion, which restricts arguments to bear only one

[2] For content purposes, the assignment of genitive case is not addressed.

theta-role (Chomsky 1993:36), and with the Extended Projection Principle (EPP), which ensured a subject for every finite clause (Chomsky 1982:10).

(9) She$_i$ was murdered e$_i$

Secondly, as CF applied exclusively to lexical NP, empty categories such as traces or PRO were exempt from being case-marked (Vergnaud 2008:7). To GB, this deduction welcomed a satisfactory explanation for subjects in infinitival clauses. Verbs that select a non-finite clausal complement reject an overt lexical NP in its subject position, (10). This outcome indirectly asserts that the spot is occupied by a phonologically empty NP, or PRO, as it falls out of the CF domain, (11). The matrix subject exerts control and reference over the embedded PRO.

(10) *He tried he[NOM] to murder the mistress.

(11) He$_i$ tried PRO$_i$ to murder the mistress.

In opposition, the realization of an overt subject, (12), is in complementary distribution with the occurrence of PRO, (13). Consequently, the embedded overt subject in (12) must fall under the domain of CF. Indeed, it receives accusative case from the complementizer *for*. Under these circumstances, non-finite clauses do not assign case while complementizer *for* case-marks accusative on the embedded subject.

(12) He arranged for the mistress to attend the dinner.

(13) *He$_i$ arranged for PRO$_i$ to attend the dinner.

Nonetheless, the Case theory of GB faced a setback with ECM-clauses, (14). Noticeably, they are non-finite complement clauses that unseemingly disregard PRO, (15), and the complementizer *for* as well, (16).

(14) The police officer believed him to be the murder.

(15) *The police officer$_i$ believed PRO$_j$ to be the murder.

(16) *The police officer believed for him to be the murder.

In a nutshell, the CF became the intermediary between the syntactic pattern of NPs and its visible morphological realization. Still, the GB fell flat to comfortably explain what lay behind the motivation of an accusative subject in an ECM-clause. Inasmuch as the distribution of infinitival subjects was rightly addressed, ECM-subjects posed a threat to the CF and eventually forced GB theory to acknowledge these constructions under exceptional terms.

2.2 Case assignation in Exceptional Case Marking clauses

In traditional generative syntax, ECM-clauses were treated as raising to object (RtoO) predicates (Rosenbaum 1967; Postal 1974; Postal & Pullum 1988). This analysis stated that the infinitival subject raised to the main clause to receive accusative case at close range from the matrix verb. This procedure constituted an exception in terms of case-marking. Nonetheless, it conveniently captured the nature of the infinitival subject, which thematically relates to the semantics of the infinitival verb while syntactically works as complement of the matrix verb. To Lasnik, the parallel between a simple direct object, (17), and the infinitival subject, (18), supported the matrix verb being in charge of case-marking the latter (2004: 270).

(17) I do not judge him.

(18) I do not judge him to be the murder.

Evidence in favour of the RtoO analysis comes from Binding theory. Coindexated anaphors must be bound in their c-commanding domain, whereas pronouns ought to be free (Chomsky, 1993: 225). The outcome for anaphors, (19), and pronouns, (20), is expected only if the infinitival subject has raised to the object position, and thus shares the same binding domain with the matrix subject.

(19) The murder$_i$ expected himself$_i$ to win the trial.

(20) *The murder$_i$ expected him$_i$ to win the trial.

Similarly, in RtoO particle verbs, such as *figure out*, the infinitival subject surfaces to the left of the particle. This outcome attests its movement to the higher clause, (21) (Lasnik: 271).

> (21) The police officer figured it out to be poison the cause of the mistress' death.

Despite the integration of most of traditional RtoO reasoning, GB rejected the movement of the infinitival subject. It had to assume another instance of permissiveness either to the θ-theory, as an already θ-assigned NP lands in a θ-position, or to the Projection Principle, as the trace of the moved NP cannot be governed (Davies & Dubinsky: 194).

Therefore, the revised analysis of RtoO removed the focus from whether the infinitival subject was surfacing either to the embedded or the matrix clause. Instead, the importance was placed on the type of clause boundary that was separating them (Lasnik: 272). The selected non-inflectional phrase (IP) was not considered to be a barrier for the matrix verb to exert its governance, which favourably did not block case assignation or binding from taking place[3] (Haegeman: 174). This rationale ultimately reconciled the descriptive accounts of RtoO with the newly developed syntax. Good evidence of IP not constituting a barrier derives from it being ruled out as a case assigner.

Accordingly, the subject position of the non-finite clause seems to be a blindspot for any available case assigner. Therefore, PRO is licensed, (22). The non-terminal projection, that is, the S(entence) intermediate node, with an empty complementizer obstructs the domain of the matrix verb (Davies & Dubinsky: 196).

[3]Problematic data for the non-movement analysis such as word order in ECM particle verbs were accounted for by a cliticization process instead (Chomsky 2004: 274).

(22) He$_i$ tried [$_{s'}$ ∅ [$_s$ PRO$_i$ to cover up the electoral fraud]].

Contrarily, the overt realization of ECM-subjects suggests that its spot must fall explicitly under the domain of CF seeing that PRO is dismissed (cf. (15)). Therefore, Chomsky invoked the S'-deletion rule that lifted the barrier of the null complementizer[4], so that the matrix verb could licitly govern inside the embedded clause (2004: 193). Ultimately, due to the nature of IP, the S node no longer prevented the case-marking from occurring. As a result, accusative is to be licensed by the matrix verb, (23).

(23) The police officer believed [$_s$ him to be the murder].

The fact that S'-deletion was assumed to be the device responsible for ECM-clauses welcomed a unified analysis for other raising constructions, such as *seem*-type verbs, (24), or *likely*-structures, (25). The removal of the S' node enables these verbs to govern the trace left by the moved NP, which has raised to the Spec position of the higher verb (Davies & Dubinsky: 191).

(24) The mistress$_i$ seemed [$_s$ e$_i$ to have uncovered the electoral fraud].

(25) The body$_i$ is likely [$_s$ e$_i$ to have been moved after the actual murder].

Concisely, ECM-clauses constitute an instance of exceptionality for the CF. Their subject is predicted to surface as PRO considering that it is an ungoverned spot for the CF due to the blocking projection of the S' node. Nonetheless, it surfaces under accusative case, which forced GB to look for a higher Probe to assign [acc]. The matrix verb suited as a pleasing candidate as per its inherent properties. Therefore, GB invoked operations that could explain the scope of the matrix verb. Although the movement of the subject was first proposed, the rule of S'-deletion proved to be conceptually superior. Furthermore, the productive tools of CF and S'-deletion were mainstreamed for the analysis of other constructions.

[4]To Chomsky, the S intermediate node equals a clausal complement, which takes the shape of a CP, the maximal projection of a complementizer (Davies & Dubinsky: 168).

3. Towards a Minimalist Approach

3.1. Case feature and case valuation in the Minimalist Program

In the early 1990s, a new approach to syntax seized generative linguistics, mainly represented in Chomsky's *Minimalist Program* (1995; 2000; 2001). The major departure from the GB framework was the disappearance of D-Structure and S-Structure in favor of a human language computational system that solely contained two interfaces, the Phonetic Form (PF) and the Logical Form (LF), both respectively in charge of mapping rules for the articulatory-perceptual and the conceptual-intentional subsystems. The conditions of representation, or Bare Out put Conditions (BOC), constrained the interfaces, the Principle of Full Interpretation (PFI) being a paradigmatic BOC. The PFI requires all lexical items that reach the interfaces to be interpretable for these cognitive subsystems.

The outcome of this rationale dismissed the Case theory of GB and the resultant CF. To Chomsky, Case was a syntactic feature of uninterpretable sort since it did not contribute semantically to the interpretation of lexical items (1995:119). Not to violate the PFI, uninterpretable and consequent unvalued features ought to be deleted (Chomsky 2001:5), a process achieved through feature checking (i.e., getting rid of uninterpretable features) and agreeing (i.e., valuing unvalued features). Case was assigned via Agree, a probe-goal relationship of feature deletion, formalised in (26). One must notice the employment of *instance* when identifying features in view of Brody's (1997) Thesis of Radical Interpretability. It effects the semantic participation of every feature involved at least once.

(26) Agree in Chomsky
(i) An unvalued feature F (a probe) on a head H scans its c-command domain for another instance of F (a goal) with which to agree.

(ii) If the goal has a value, its value is assigned as the value of the probe.

(Chomsky 2000; 2001 quoted in Pesetsky & Torrego, 2)

Nonetheless, Pesetsky and Torrego alerted that this formula did not capture the developed bond between the two features under Agree (2004:6). They reformulated Agree as a conferral operation of values between by now matching features, yielded in (27). They can continue to participate afterwards in further syntactic processes.

(27) Agree in Pesetsky & Torrego
(i) An unvalued feature F (a *probe*) on a head H at syntactic location α (F_α) scans its c-command domain for another instance of F (a *goal*) at location β (F_β) with which to agree.
(ii) Replace F_α with F_β, so that the same feature is present in both locations.

(Pesetsky & Torrego, 5)

The reformulation of Agree forced the detachment of interpretability from valuation (Pesetsky & Torrego: 8). The fact that syntactic Probes recognize whether a feature is valued or not indirectly evidences that (un)interpretable and (un)valued features are of different sort and independent. Advantageously, the fruit of this analysis provides a range of four features illustrated in Table 2. Hence, not only does it set uninterpretable unvalued features as candidate Probes but also interpretable unvalued ones.

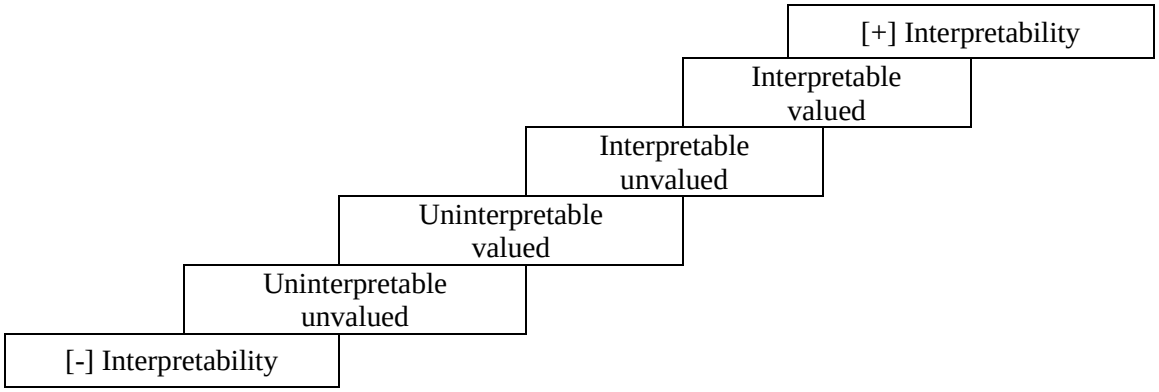

Table 2. Hierarchy of features.

Retrieving Chomsky's claim that T(ense)[5] assigns nominative case in English, to these authors it enters the derivation as an interpretable but unvalued feature, (i.e., *i*T[ ]) (Pesetsky & Torrego: 17). Expectedly, T probes, matches and checks the uninterpretable counterpart subject DP in the Spec position of little *v*. Nonetheless, Agree does not hold seeing that they are both unvalued. Therefore, *i*T[ ] probes again and Agrees with the finite verb that certainly bears an uninterpretable but valued feature *u*T[nom]. Hence, not only does it value T but also the subject DP owing to the previous feature sharing. The concluding remark of this procedure is that matching features proves insufficient for valuation if both counterparts are unvalued.

Most of the outlined assumptions were incorporated into Adger's (2003) *Core Syntax: a Minimalist Approach*, which constitutes a concise manual of the current prevailing Minimalist theory. In line with Chomsky's inference of the feature nature of Case, Adger stipulates that case features belong to weak uninterpretable unvalued non-categorical features. In opposition to strong uninterpretable features that are checked off via Merge (i.e., in a local sisterhood configuration with an interpretable counterpart feature of the matching sort), weak uninterpretable features are valued off via Agree (i.e., at a distant c-commanding configuration with a valued counterpart feature of the matching sort).

Because of case features being uninterpretable and unvalued, they require a counterpart feature of the matching sort to establish a checking configuration. To avoid Pesetsky and Torrego's pattern in which valuation cannot occur, (28), Adger assumes that case assigners, such as T or little *v*, enter the derivation naturally valued, (29).

(28) X [ ] . . . X [ ]

(29) X *val* . . . X [ ]

[5]The former functional category tensed INFL(ection) was reintroduced as an uninterpretable feature hosted in little *v*. Instead, the functional category tensed was renamed as T(ense) (Adger 2003:170).

As a result, the subject or object DP carrying an unvalued case feature probes its valued counterpart Goal respectively on T or little *v*. Remarkably, this Agree chain works in the reverse direction considering that the Goal is in higher position than the Probe. This new syntactic scheme has already been acknowledged by Zeijlstra who termed it Reverse Agree (2012: 509), opposing Chomsky's and Pesetsky and Torrego's proposals.

Another variation from GB is that movement no longer equates with case. While GB justified raising the subject DP to the Spec TP due to case-marking necessities, Adger's analysis manages to account for nominative assignation without resorting to movement. Instead, the EPP requirements of English are satisfied by a strong EPP feature (Adger: 215). The standpoint of strong features being movement boosters stems from Marantz (1991) and Chomsky (1993; 1994; 1995). Chomsky regarded them as independent categorial features (Zwart 1998: 220), whereas Adger treats strength as a property of uninterpretable features, which move to be checked off via Merge (Adger: 168).

The grounds of MP have proved to be so far superior to the Case theory of GB. To start with, deeming case as a feature brought about a more abstract account of cased expressions. Divorcing morphological case from case licensing favored a comfortable approach to cross-linguistic case-marking variation. The unnecessary requirement of reaching the structural subject position (i.e., Spec TP) to check nominative case on the subject permitted explaining non-nominative subjects, which no longer rested unjustified (Sigurðsson 1992: 1). Furthermore, the transition from case assignment to a case valuation pattern succeeded in providing a symmetric account for nominative and accusative valuation.

Nonetheless, inconsistencies are spotted as well. Firstly, although Adger maintains that case features have no effect on semantic interpretation, he has yet to overcome the unintuitive configuration of unvalued-unvalued (cf. 28). As a result, he resorts to the Hierarchy of Features (cf. Table 2) to prescribe that one of these uninterpretable counterparts is actually valued, and does so with respective functional heads T and little *v*.

Although case is preserved as a purely syntactic feature that fits in the MP checking/valuing-feature system, one is legitimately entitled to ask what is in charge of naturally valuing T and little *v* despite their uninterpretability. This way-out solution is theoretically problematic seeing that uninterpretable valued Goals behave as interpretable features. Why are they not regarded as interpretable in the first place?

Strong evidence on maintaining the twofold feature of Goals in Agree comes from its need to interact with Probes. For instance, Adger notices that if Tense does not confer its value to the uninterpretable feature with an open case value in the subject DP, the derivation collapses:

> The forcing of a nominative nominal to appear in the structure follows from the assumption that finite T always bears a [nom] feature. This means that, were there no nominative in the remainder of the sentence, then the [nom] feature on T would never be checked, and the derivation would crash. (Adger: 213).

In line with Adger's counterexample, revised works from Svenonius have pointed out to case being a syntax-semantics interface feature (2006: 3). These types of features participate in syntactic and semantic operations but are uninterpretable and, as a result, behave as such. In other words, they cannot be ignored owing to their uninterpretability. Seemingly, this outcome does not occur when an interpretable feature does not participate in a checking relationship.

Briefly summarized, the MP has impeccably succeeded in recasting Case as a feature. To Adger, case belongs to uninterpretable formal features and is decoded via

Agree, which traces the interpretable-uninterpretable feature pattern. Nonetheless, the feature valuation chain of case has broader implications with interpretability by virtue of uninterpretable Goals being naturally valued. This outcome mirrors the complexity of case, which is relevant for both scopal and thematic argumentative relations. Eventually, the grammatical formation of case satisfies the PFI, moderately equivalent to the old CF since it also filters which lexical items access the interfaces.

3.2. Relocating exceptionality in Exceptional Case Marking clauses

As a consequence of the tenets of Minimalist case, the analysis of case assignation in ECM-clauses was reexamined. While GB concluded that the distribution of infinitival subjects depended on the accessibility of the CF, the MP instead vouches for the availability of a naturally valued Goal to confer case features to these embedded subjects. To Adger, in non-finite clausal complements, complementizers (C) are considered valued Goals while non-finite T bears no case features (Adger: 311). Therefore, the difference between *for*-clauses, control clauses and ECM-clauses relied on whether the clausal complement is headed by CP or TP, that is, by a valued Goal.

Regarding *for*-clauses and control clauses, the infinitival subject sitting in the Spec position of the embedded little *v* has an open case value. It probes up for its counterpart valued Goal, which happens to be respectively overt C *for*, (30), or empty C, (31). Since they enter the derivation naturally valued with a respective [acc] and [null] case feature, they can establish an Agree chain.

(30) He arranged for her to attend the dinner.
[$_{CP}$ for[~~acc~~] [$_{TP}$ [$_{T'}$ T [$_{vP}$ DP[3,sing,fem,~~acc~~] [$_{v'}$ *v*[~~acc~~] [$_{VP}$ [$_{V'}$ DP[~~acc~~]]]]]]]]
for to her attend the dinner

(31) He tried to murder her.
[$_{CP}$ ∅[~~null~~] [$_{TP}$ [$_{T'}$ T [$_{vP}$ DP[~~null~~] [$_{v'}$ *v*[~~acc~~] [$_{VP}$ [$_{V'}$ DP[3,sing,fem,~~acc~~]]]]]]]]
0 to PRO murder her

Noticeably, the final word order of (30) mismatches its schematic structure. The movement of the accusative subject to Spec non-finite TP, that is, surfacing to the right of C *for*, is explained by a strong EPP feature on non-finite T, (32), (Adger: 309).

(32) [$_{CP}$ for[~~*acc*~~] [$_{TP}$ DP[~~*acc*~~] [$_{T'}$ T[~~*uD*~~*] [$_{vP}$ <her>]]]]
for her to <her>

Concerning ECM-clauses, Adger firstly regards them as TP clauses with an accusative embedded subject (Adger: 312). As previously stated, non-finite T does not possess case features, and therefore it cannot act as a Goal. Accordingly, the DP subject in need of case features probes upwards and Agrees with the matrix little *v*, which has an [acc] feature. Resultant valuation occurs, (33).

(33) The detective believed him to confess the murder.
[$_{vP}$[$_{v'}$ *v*[~~*acc*~~][$_{VP}$[$_{V'}$[$_{TP}$[$_{T'}$T[$_{vP}$ DP[~~*acc*~~] [$_{v'}$ *v*[~~*acc*~~] [$_{VP}$ [$_{V'}$ DP[~~*acc*~~]]]]]]]]]]
believed to him confess the murder

Again, the strong EPP property of non-finite T drives the surfacing position of the subject, (34). This outcome explains why ECM-subjects work with expletives as they are inserted in a non-θ-position, (21) copied as (35).

(34) [$_{vP}$ [$_{v'}$ *v*[~~*acc*~~][$_{VP}$[$_{V'}$[$_{TP}$ DP[~~*acc*~~] [$_{T'}$T[~~*uD*~~*] [$_{vP}$ <him>]]]]]]]
believed him to <him>

(35) The police officer figured it out to be poison the cause of the mistress' death.

Nonetheless, attention is drawn to non-standard English dialects, such as Belfast English, which permits the co-appearance with an overt C *for*, (36), (Adger: 314). The embedded subject follows the C *for*, ergo it departs from the standard behavior of the previously-mentioned complementizers.

(36) The police officer believed him for to confess the murder.

Consequently, Adger recognizes that ECM-verbs can categorically select either a C-feature or a T-feature. Indeed, supposing ECM-clauses were CPs, the C *for* could plausibly case-mark the embedded subject with [acc], such as it does with *for*-clauses

(cf. 30). Yet, the predicate structure ought to specify the null realization of C (i.e., *u*C[acc]), albeit overt in some dialects (i.e., *for*C[acc]).

To the author, this proposal of analysis repairs the exceptionality of case assignation in ECM-clauses since it employs "the same case assigning mechanism as is at play in standard verb object structures" (Adger: 252). Instead, "the exceptional property" of these verbs is placed in their competence of either selecting a non-finite CP or TP (Adger: 314). Even so, the weakness of these two suggested claims must be underlined. Irregularities are encountered regarding, on the one hand, the case and theta theory and, on the other, the non-finite complementation.

Firstly, the Agree chain between the embedded subject and little *v* proved to be a fruitful bond. As for the Case theory, not only does case valuation satisfy the need of unvalued ECM-subjects to receive an [acc] feature but it also meets the requirement of valued Goals to interact. As for the thematic theory, the conferral of [acc] value from little *v* harmonizes with the thematic properties of ECM-verbs as double-place predicates. As is also spotted in the GB's descriptions, most of them can also select in their transitive forms an [acc] functioning as a standard theme/object.

Nonetheless, there is no symmetric alignment of theta-roles between the object complement of a transitive verb compared to its ECM version. Though *him* in (37) assumes the role of theme, in (38) it does not. It rather takes the agent role from the embedded verb *confess*. Consequently, in terms of predicate structure, it is the whole infinitival clause that covers the second argument position of the ECM-verb *believe*. It receives the theta-role of propositional theme, (39).

(37) The police officer believed him.

(38) The police officer believed him to confess the murder.

(39) *Believe* (verb) [1 <NP, Agent>, 2 <Clause, Propositional theme>]

Furthermore, these examples reveal another mismatch. The simple transitive verb *believe* confers case to the same DP to which it also assigns a theta-role, whereas the ECM-verb *believe* assigns case to the embedded subject whose theta-role is rather dictated by the subordinated verb. In other words, ECM-subjects cannot be assimilated to standard transitive objects since they are not case-marked by their predicator.

Secondly, and in reference to the nature of the non-finite clausal complements, the optionality of choosing between non-finite CPs or TPs leaves no room for good prediction. What prevents *for to* in (33) but motivates it in (36)? To Adger, there is no difference between either analyzing ECM-verbs with a C-feature or a T-feature in terms of the s(emantic)-selection (Adger: 314). Notwithstanding, what reconciles the co-occurrence of *u*T or *u*C concerning the c(ategorial)-selection of an ECM-verb?

To begin with, ECM-clauses seem to structurally behave as TPs. The fact that they cannot undergo pesudoclefting, (40), while clauses headed by a C can, (41), is irrefutable evidence (Adger: 313). Nevertheless, although the non-finite TP explains the syntactic behavior of ECM-verbs, it does not capture its variation with a complementizer *for* (cf. 36).

(40) *What the detective believed was him to confess the murder.

(41) What he arranged was for her to attend the dinner.

Certainly, were one to keep the matrix verb as an active case assigner and yet uniformly stipulate that ECM-verbs c-select the bundle *for*C[acc], the derivation would crash. On the one hand, the locality of matching with the matrix verb would not apply due to the intervening effects of the [acc] value on C *for*, (42). On the other hand, the employment of the [acc] case feature of *for*C[acc] would result in missing the interaction of the matrix verb, the other valued Goal at play.

(42) Locality of Matching
Agree holds between a feature F on X and a matching feature F on Y if and only if there is no intervening Z[F].
(Adger: 218).

As a result, in an effort to overcome these barriers, it seems reasonable to conclude that ECM-clauses bear no case at all, that is, *u*C is [null]. Therefore, ECM-subjects would be PROs controlled by the matrix object, whose case has been provided as expected by the matrix verb. Consequently, to satisfy the Uniformity of θ-Assignment Hypothesis (UTAH), this new proposed syntactic relationship is to assume another thematic structure (Adger: 138). Accordingly, ECM-verbs would be treated as three-placed predicates. The previously wrongly-analyzed ECM-subject would now be part of the argument structure of the matrix clause. Hence, it would receive the theta-role of patient as the embedded clause headed by *u*C[null] takes already the role of propositional theme, (43).

(43) *Believe* (verb)[1<NP,Agent>, 2<NP,Patient>, 3<Clause, Propositional theme>]

Nonetheless, this reasoning confronts former data. ECM-subjects can be filled with an expletive (cf. 35), which is well known for not occupying argument positions. To that end, the assumption that ECM-clauses work equally well as TPs or CPs is questionable seeing that inconsistencies are found in both sides. Furthermore, Adger's feature bundle *u*C[acc], in which a null C carries an [acc] value, is a moot solution. Despite capturing variation, it seems not to be an available bundle in other non-finite CP clauses. The author himself recognizes its non-minimalist quality since such complex structures are not usually c-selected (Adger: 311). The shape of *u*C[acc] echoes uninterpretable Goals being naturally valued (i.e., *u*T[nom] and *uv*[acc]) considering that they have a semantic counterpart active during a syntactic process. Finally, the

decision of fitting ECM-clauses in the scheme of *for*-clause (i.e., *for*C[acc]) and object-control clauses (i.e., *u*C[null]) proves no better.

To recapitulate, Adger's proposal of analysis cannot discard exceptionality at all. Although case valuation via Agree brings a symmetric account for marking [acc] in both ECM-subjects and standard transitive objects, asymmetry is encountered concerning their respective thematic assignation. In terms of structure, unresolveness must again be preserved since it is not agreed whether ECM-verbs select a T-feature or a C-feature. Overall, Adger's approach does not substantially differ from GB's scheme. The need to resort to valuing uninterpretable Goals to guarantee case-marking can be also acknowledged as an instance of permissiveness seeing that Case is to be purely syntactic. Moreover, deeming in the first place ECM-clauses as TPs, instead of CPs, resembles the operation of S'-deletion. In both approaches, a layer of the tree projection is deleted to ensure the locality of matching between the matrix verb and the embedded subject. Briefly, the exposed behavior of ECM-clauses undeniably evinces that ECM-subjects are not argument positions but derived NPs semantically linked to the infinitival verb and yet that syntactically attach to the matrix clause.

4. A new scope: the default case

4.1. The Framework of the default case

Up to now, the different approaches that Generative syntax has taken to case assignation in ECM-clauses have not avoided an explanation under exceptionality terms. In both accounts, the matrix verb is responsible for case-marking the [acc] feature on the embedded subject due to the caseless nature of non-finite T. Nonetheless, the complication of GB and MP seems to lie in the inapplicability of their regular tools

to achieve it. Therefore, one is legitimately entitled to ponder if, within this scenario, the morphological appearance of [acc] is at all syntactically licensed.

Certainly, an unexploited type of morphological case, which might be of interest here, is the default case hypothesis (Marantz 1991, 29). When structural cases, such as [acc], cannot remain in effect, the last-resort mechanism of default case comes in useful. Interestingly, the default case of English is accusative (McFadden 2007: 230). Furthermore, the utilization of [acc] as the default case is already attested as an available operation in English speakers. Evidence comes from the AGR/TNS Omission Model (ATOM) active during the Optional Infinitive stage in children (Schütze & Wexler 1996: 678). Whenever a native-English child does not project agreement but tense (i.e., +TNS, -AGR), the default case [acc] surfaces.

Undeniably, the attractiveness of this proposal is the morphological coincidence of [acc] as the default case of English in respect to the hard-to-license [acc] on ECM-subjects. Moreover, Cecchetto and Oniga defend that infinitives own the inflection +TNS –AGR (2001:18), which has been previously acknowledged as a potential context for the default case. Therefore, this mechanism becomes a hypothetically valid new strategy for explaining the appearance of [acc] as the case of an embedded subject in an infinitival clause.

Given the compelling logic of the default case strategy, some authors have extended this proposal to Accusativus cum Infinitivo (AcI), a comparable construction of Early and Classical Latin (Goldbach 2003; Lasnik 2004; Calboli 2005). Similar to ECM-clauses, AcI-clauses case-mark with [acc] the subject of a non-finite clausal complement, (7) copied as (44).

(44) Credo eum petisse a Marcello aliquid.
(I) know him[ACC] to-have-asked to Marcello something.
'I know him to have asked something to Marcellus.'
(Cic. *Att*. 13,10,3; Cecchetto & Oniga 2001, 80)

Conceptually, the default case strategy indirectly asserts the independence of the embedded subject from the matrix verb, which has been the core of both GB and MP reasoning. In other words, the application of the default case untangles the syntactic bond between these two elements, which are under the relationship of Probe-Goal. Supposing this approach works out well, there will be enough evidence to dismiss the matrix verb as the counterpart member in this chain.

4.2. Exceptional Case Marking versus Accusativus cum Infinitivo

To test the viability of the default case strategy in these two constructions under the umbrella of the Accusative Infinitive syntax (AI), it is worth finding a context in which the matrix predicate does not display its transitive qualities. Strictly speaking, to GB and MP the conferral of [acc] from the matrix verb to the infinitival subject stems from its capability to also case-mark standard object complements (cf. 17, 37). It seems that the passive version of the matrix verb fulfills this criterion since passive verbs "absorb" accusative case-marking on their complement (Chomsky 1993:124). Accordingly, if default case applies, the [pass] feature on the verb and the [acc] feature on the embedded subject ought to be compatible since they are no longer to be syntactically linked. Even though the outcome of Latin is the expected one, (45), it runs into ungrammaticality in English, (46). Therefore, the case default only suits AcI.

(45) Traditum est etiam Homerum caecum fuisse.
related is also Homer[ACC] blind[ACC] to-have-been.
'It was related that Homer was blind, too.'
(Cic. *Tusc*. 5,39,114; Cecchetto & Oniga 2001, 89)

(46) *The police officer is believed him to be the murder.

Furthermore, it has also different effects on both constructions concerning co-indexation with the main subject. The default [acc] of AcI can be co-indexed with the main subject, (47), yet such condition does not hold for ECM-subjects, (48). Indeed, the

default case seems not to prevent the syntax from generating an unneeded subject in English since its grammatical version would look like (49). The subject raises to the matrix clause to satisfy the EPP requirements of finite T, leaving a co-indexed trace in its place of origin which cannot later host default [acc]. Case default shows once more its impotence in predicting English structures.

(47) Ego me amare hanc fateor.
I$_i$ me$_i$[ACC] love her confess[6].
'I confess that I love her.'
(Ter. *An*. 898; Haug, Jøhndal, & Solberg 2019, 1)

(48) *He$_i$ is believed him$_i$ to be the murder.

(49) He$_i$ is believed <him$_i$> to be the murder.

Not only does the default case unveil that it does not work out well for ECM-clauses but also that there are different [acc] subjects within the spectrum of AI constructions. ECM-subjects exhibit dependency to the higher predicate, whereas AcI-subjects show no linkage at all. This seems to be a consistent pattern observing that AcI-clauses can function independently from verbal predicates. They can complement other categories such as nouns, (50), while ECM-clauses cannot depart from complementing an ECM-verb, (51).

(50) Rem te valde bene gessisse rumor erat.
Affair you[ACC] very well to-have-handled rumor was.
'There was a rumor that you had handled the affair very well.'
(Cic. *fam*. 1,8,7; Cecchetto & Oniga 2001, 86)

(51) *There is a rumor him to be the murder.

Retrieving the before-mentioned, despite the initial resemblance between AcI and ECM constructions, variation is encountered concerning the application of the default case strategy. The reviewed data evinces the good results of this mechanism for AcI-subjects. Nonetheless, to some authors, the systematic appearance of [acc]

[6] The Latin predicate *fateor* is a deponent type of verb, that is, it behaves as a passive verb but has an active meaning. Hence, its PDE translation is not passive (i.e., *is confessed*).

confronts the nature of the default case being a last-resort operation (Danckaert 2016: 27). Furthermore, nominative has also been suggested as the morphological default case for Latin owing to the existence of a topicalised construction termed Nominative Pendens (Cecchetto & Oniga: 23). Even so, the lack of empirical data makes it difficult to discern. On the other hand, as for ECM-subjects, the results attest that they are dependent on ECM-predicates since the default case hypothesis does not hold. Therefore, ECM-verbs are to remain as counterpart members in the Goal-Probe chain with the infinitival subject. To conclude, GB and MP proposals have taken the right path in maintaining ECM-subjects syntactically linked to the matrix verb seeing that they cannot behave independently.

5. Conclusions

The present study aimed at reviewing the relevant literature on case assignation in ECM-clauses. The paper has attempted to critically offer a historical overview of the different approaches taken by generative syntax, namely in the mainstream currents of the Government and Binding Theory (GB) and the Minimalist Program (MP).

To GB, the articulation of the Case Filter (CF) reconciled the intuitive thought that abstract Case was responsible for NPs distribution and their visible morphological realization, even in a language with scarce morphology such as English. Even though the CF proved to be a productive tool in explaining infinitival subjects, it could not address the surfacing of an accusative ECM-subject without invoking exceptional procedures to preserve its locality with the matrix verb. In line with this reasoning, the MP also relied on the inherent transitive properties of the higher verb to account for the accusative licensing on ECM-subjects. The recast tenets of Case as a feature and Agree as a case-licensing mechanism were regarded as the final step towards removing

exceptionality. Nonetheless, under closer examination, this paper acutely unfolds theoretical irregularities with the semantic implications of case feature Goals, with the theta theory concerning the case-marking of ECM-subjects, and eventually with the suggested syntactic optionality within non-finite clausal complementation.

The major contribution has been to test the viability of the default case strategy as an alternative analysis. Its failure regarding ECM-subjects fortuitously dismantled the existence of various types of infinitival subjects. While AcI-subjects fit in the default case scheme and asserted independence from the matrix verb, ECM-subjects strongly showed structural dependence on certain verbal predicates. Furthermore, the data reviewed also pointed out that ECM-subjects were derived NPs, whereas it seemed not to be the case for AcI-subjects.

These results open several new lines of inquiry for further research. Firstly, there exists parametric variation across languages within accusative subjects in infinitival clauses. Data from other languages with AI constructions may shed light on recurrent syntactic patterns and favor an explanation in typological terms. Secondly, in English, the infinitival accusative subject has proved to be a particularity of a reduced number of predicates. An approach to their semantic structure might disclose more information about their properties and construality regarding the parallelism with a subordinate clause headed by the complementizer *that*. Lastly, ECM-clauses can serve to identify the weak enterprises of the language theory of MP. The behavior of ECM-subjects suggests a non-minimalistic disposition of case features seeing that they exert pressure on both thematic and syntactic relations. Therefore, it seems worth asking if abstract Case features should be kept as syntactic features in languages such as English where case is barely marked.

Finally, this paper has explored the running theoretical discussion of case assignation in ECM-clauses under the syntax of MP. It has corroborated the need to approach traditional accounts and new strategies to fully comprehend its proposal of analysis, spot benefits and drawbacks, and undeniably assume that ECM-clauses have yet to preserve exceptionalness.

References

Adger, David. (2003). *Core Syntax. A Minimalist Approach*. Oxford: Oxford University Press.

Bobaljik, Jonathan. & Susi Wurmbrand. (2008). Case in GB/minimalism. In A. Malchukov & A. Spencer (Eds.), *Oxford handbook of case* (pp. 44-58). Oxford: Oxford University Press.

Brody, Michael. (1997). Perfect chains. In L. Haegeman (Ed.), *Elements of grammar* (pp. 139-167). Dordrecht: Kluwer Academic Publishers.

Calboli, Gualtiero. (2005). The accusative as a 'default' case in Latin subordinate clauses. *Indogermanische Forschungen,* 110:235–266.

Cecchetto, Carlo. & Renato Oniga. (2002). Consequences of the Analysis of Latin infinitival Clauses for the Theory of Case and Control. *Lingue e Linguaggio*, 1:151-189.

Chomsky, Noam. (1982). *Some concepts and consequences of the theory of government and binding.* Cambridge, MA: MIT Press.

Chomsky, Noam. (7th Ed., 1993). *Lectures on Government and Binding: The Pisa Lectures*. Berlin: Mouton de Gruyte.

Chomsky, Noam. 1994 [1995]. Bare phrase structure. *MIT Occasional Papers in Linguistics, 5*. Cambridge, MA: MIT Department of Linguistics and Philosophy. Reprinted 1995 in Gert Webelhuth, (Ed.), *Government and Binding Theory and the Minimalist Program*, (pp.383–439). Oxford: Blackwell Publishing Ltd.

Chomsky, Noam. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.

Chomsky, Noam. 1999 [2000]. Minimalist inquiries: The framework. *MIT Occasional Papers in Linguistics*, 15. Cambridge, MA: MIT Working Papers in Linguistics. Reprinted (2000) in Roger Martin, David Michaels, & Juan Uriagereka, (Eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, (pp.89–155). Cambridge, MA: MIT Press.

Chomsky, Noam. 1999 [2001]. Derivation by phase. *MIT Occasional Papers in Linguistics, 15*. Cambridge, MA: MIT Department of Linguistics. Reprinted 2001 in Michael Kenstowicz, (Ed.), *Ken Hale: A life in language* (pp.1–52). Cambridge, MA: MIT Press.

Coon, Jessica. & Clinton Parker. (2019). Case interactions in syntax. *Oxford Research Encyclopedia of Linguistics*. http://shorturl.at/vwG02.

Danckaert, Lieven. (2016).Under review. Changing patterns of clausal complementation in Latin: a parametric approach to 'constructional' changes. Submitted to É. Kiss, Katalin, Barbara Hegedus Egedi & Veronika (Eds.), Title TBA, Oxford: Oxford University Press.

Davies, William D. & Stanley Dubinsky. (2004). Chomsky's Lectures on Government and Binding and the ECM Analysis of Raising. *The Grammar of Raising and Control: A Course in Syntactic Argumentation* (pp.177-199). Oxford: Blackwell Publishing Ltd.

Goldbach, Maria. (2003). Repercussions of morphology on syntactic checking: the Latin accusativus cum infinitivo. *Linguistische Berichte* 193:57–90.

Haegeman, Liliane. (2nd Ed., 1994). Case Theory. *Introduction to Government and Binding Theory*. (pp. 153-194). Oxford: Blackwell Publishing Ltd.

Haug, Dag Trygve Truslew., Jøhndal, Marius., & Erik Solberg. (2019). An unexpected root clause. *Linguistic Inquiry,* 50(3):649-661.

Lasnik, Howard. (2004). The position of the accusative subject in the accusative-infinitive construction. In Peri Bhaskararao & Karumuri V. Subbarao (Eds.), *Non-nominative Subject: Volume 1* (pp. 269-281). Amsterdam: John Benjamins.

Marantz, A. (1991). Case and licensing. In G. Westphal, B. Ao, & H.-R. Chae (Eds.), *Procedings of the 8th Eastern States Conference on Linguistics (ESCOL 8)* (pp. 234–253). Ithaca, NY: CLC Publications.

Markman, Vita. (2010). Case theory: A historical overview. *Language and Linguistics Compass,* 4: 846–862.

McFadden, Thomas. (2007). Default case and the status of compound categories in Distributed Morphology. *University of Pennsylvania Working Papers in Linguistics,* 13(1):18.

Pesetsky, David. & Esther Torrego. (2004*). The Syntax of Valuation and the Interpretability of Features*. UMass/Boston; Reprinted in 2007 S. Karimi, V. Samiian, & W. K. Wilkins (Eds.), *Phrasal and Clausal Architecture* (pp. 262-294). Amsterdam: John Benjamins.

Pesetsky, David. & Esther Torrego. (2011). Case. In C. Boeckx (Ed.). *The Oxford Handbook of Linguistic Minimalism*. (pp.52-72). Oxford: Oxford University Press.

Postal, Paul M. (1974). *On Raising: One rule of English grammar and its theoretical implications* .Cambridge, MA: MIT Press.

Postal, Paul M & Geoffrey K Pullum (1988). Expletive noun phrases in subcategorized positions. *Linguistic Inquiry*, 19:635–70.

Quirk, Randolph.; Greenbaum, Sidney.; Leech, Geoffrey. & Jan Svartvik. (1985). *A comprehensive grammar of the English language.* London: Longman.

Rosenbaum, Peter S. (1967). *The grammar of English predicate complement constructions.* Cambridge, MA: MIT Press.

Schütze, Carson. & Ken Wexler. (1996). Subject case licensing and English root infinitives. In *Proceedings of the 20th annual Boston University conference on language development* 2: 670-681.

Sigurðsson, H. A. (1992). The case of quirky subjects. *Working Papers in Scandinavian Syntax*, 49:1-26.

Smith, J. Jeremy. & Jeremy Smith. (1999). *Essentials of early English*. London: Routledge.

Svenonius, Peter. (2007). Interpreting Uninterpretable Features. *Linguistic Analysis,* 33:375-413.

Vergnaud, Jean-Roger. (2008).Letter to Noam Chomsky and Howard Lasnik on "Filters and Control," April 17, 1977. In Robert Freidin, Carlos P. Otero, & Maria Luisa Zubizarreta (Eds.), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud* (pp.3-15). MIT Press.

Zeijlstra, Hedde. (2012). There Is Only One Way to Agree. *The Linguistic Review*,

29:491–539.
Zwart, Jan-Wouter. (1998).The minimalist program. *Journal of Linguistics*, 34: 213-226.