PASSIVES ARE TOUGH TO ANALYZE

by

SANDRA MCGURY

(Under the Direction of Vera Lee-Schoenfeld)

ABSTRACT

This dissertation aims at providing a uniform analysis to account for both passive

constructions (PCs) and so-called tough constructions (TCs, exemplified in (1)), focusing

on the apparent possibility for the internal argument of an embedded verb to cross

numerous available A-positions as well as CP boundaries (in TCs).

(1)   a. The article was difficult to review.

         b. The article was difficult to convince my editor to read.

         c. The article was difficult to ask my colleague to write a review about.

I assume that TCs are a result of an A-movement operation, and that no (A-bar) null

operator (Chomsky 1977) is at play. I show that TCs allow for long-distance movement

(cf. examples 1b and 1c), and PCs do not. I argue that they are, nevertheless, "the same"

considering their derivation: For both constructions, I posit a derivation based on

suppressed case features, as well as feature inheritance allowing the internal argument of

(a deeply) embedded verb to appear as the grammatical subject of the sentence. Under

my approach the embedded verb enters the base configuration with suppressed case

features that become available after a specific syntactic environment has been constructed

around it. To account for both PCs and TCs, feature suppression is crucial. Consider example set (2) demonstrating the different argument possibilities for the verb *to read* in a non-TC, non-PC sentence.

(2)   a. She is reading.

        b. She was reading a book.

        c. She was reading her sister a book.

The verb *to read* has the same meaning in all three sentences (2a) through (2c), but appears with a different number of arguments, and thus with a different number of [ACC] features in each sentence. The [CASE] availability, however, is not only dependent on the merge of internal arguments at base configuration, but rather, on the syntactic environment (cf. Chomsky 2008). Extending this approach to TCs and PCs, I provide a unified explanation of these constructions.

INDEX WORDS: syntax, passive constructions, tough constructions, tough

                 movement, features, voice, suppressed features, A-movement,

                 English, German, French

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SANDRA MCGURY

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SANDRA MCGURY

Major Professor: Vera Lee-Schoenfeld
Committee: Joshua Bousquette
Timothy Gupton

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
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DEDICATION

Dedicated to the memories of Rolf and Fred.

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TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

A great amount of research has been dedicated to the broader notion of *voice*. In particular, the passive voice has caused a number of scholars to examine not only passive constructions, but the many passive-like constructions that seem to be syntactically related to passives. While passive (and related) constructions have a long history of research, their linguistic analyses within one language and across languages have remained controversial: Is case-assignment to the verbal complement not possible because case is absorbed after the participle is formed? Is the external argument-role transitive Vs normally have also absorbed by the past participle, or is it not assigned at all? Where does the prepositional complement (i.e., the object in the *by*-phrase) in "long passives"[1] derive from?

My dissertation focuses on investigating, contrasting, and comparing the syntax of passive and passive-like constructions in both the English and German languages in order to provide background and supporting evidence for an analysis of so-called tough constructions (see examples (1) – (3)).

(1) a. Tough constructions are difficult to explain.
    b. To explain tough constructions is difficult.
    c. It is difficult to explain tough constructions.

(2) a. This exam will be a bitch to write.
    b. To write this exam will be a bitch.
    c. It will be a bitch to write this exam.

---

[1] Long passives are passive constructions that express a *by*-phrase (e.g. *The movie was shot by the director.*). In contrast, short passives do not overtly express the *by*-phrase (e.g. *The movie was shot.*).

(3) a. The end of the semester is easy to survive.
    b. To survive the end of the semester is easy.
    c. It is easy to survive the end of the semester.

As demonstrated in the (b) and (c) sentences of each set above, the matrix clause Spec TP

of the respective constructions can be occupied by a nonfinite complement (i.e. a clausal

subject), or by an *it* expletive. These examples demonstrate the surface structure of TCs,

and thus the construction's most challenging feature: The matrix subject of the TC (1a,

2a, 3a) seems to be generated as the complement of the embedded verb (see gaps in the a-

examples).

There has been one study which combines German and English tough

constructions and (modal) passives (Demske 1994). However, instead of exclusively

analyzing TCs' syntax, Demske's focus is a diachronic development and comparison of

these (Old High / Middle High) German and (Old / Middle) English constructions. Her

work does not conclude with an analysis that accounts for both passives and TCs.

Many scholars have been concerned with either TCs or with passive voice. Since

research has created so many unresolved issues, especially with regard to case valuation

and theta-role assignment in both TCs and passives, it is necessary to revisit current

proposals. Additionally, most of passive and passive-like constructions have been looked

at separately. Two pieces of work officially combine passive constructions and their

related constructions, namely Kibort (2010) and Shibatani (1985). However, the former

only provides a typological approach neglecting issues that are highlighted within the GB

framework and the Minimalist Program. The latter contrasts passives primarily with

reflexives and reciprocals, and does not consider all related constructions such as pseudopassives, unaccusatives, or TCs.

1.1 FRAMEWORK

As mentioned above, there have been numerous accounts for passives, TCs, or related constructions, and scholars from various frameworks including generative grammar, lexicalist backgrounds, typological and psycholinguistic backgrounds, among others, have focused on the topic. In order to avoid theoretical confusion, I want to briefly highlight the frameworks used throughout my analysis.

1.1.1 SYNTAX

Throughout this dissertation, I analyze different syntactic structures based on the theory of Generative Grammar, in part adhering to the theoretical system, or, as Adger calls it *research agenda,* laid out by the Minimalist Program (Chomsky 1995; Adger 2003). While I should assume that the core concepts used in generative syntactic analyses are known to the reader, I shall briefly define some of the mechanisms and notions that I find most important with respect to the present dissertation.

The word *feature* is used to describe the morphosyntactic or semantic features that are part of a lexical item. Some features represent information about, e.g., tense, person, number, case, category. For example, a case feature such as [ACC] can value the [uCase] feature on a lexical item, rendering it *accusative.* The *u* in [uCase] is an *uninterpretable* feature, a feature that needs to be valued, but that does not add to the meaning of the lexical item.

In order to put together syntactic objects, for example, to form a verb phrase consisting of a verb and a DP, the operation *merge* applies. This word is thusly used to describe either the addition of a syntactic object, to the top of the structure (external merge), or the insertion of a syntactic object into an already existing syntactic position (internal merge).

Throughout the analysis, the notion of *attract closest* holds. This means that the syntactic computation takes the shortest route. For example, the EPP feature requiring the English Spec TP to be filled will attract the closest DP.

Furthermore, it should be noted that the global economy condition *last resort* is applicable throughout my analysis. This means that all transformations must be driven by the need to check a feature.

Finally, my analysis suggests a new concept, namely that of *suppressed features.* They are discussed and defined in chapter 5, but in order to better understand the concepts and some of the ideas behind them, a brief introduction of Distributed Morphology and its core operations should be considered.

1.1.2 DISTRIBUTED MORPHOLOGY

The Distributed Morphology approach implies the existence of vocabulary items connecting morphological features with semantic and syntactic features, and it highlights three distinct core assumptions, namely *Late Insertion*, *Underspecification*, and *Syntactic Hierarchical Structure all the way down.* Unlike other approaches, the syntax within DM combines morpho-syntactic features to generate structures (Harley & Noyer 1999).

Before I explain the three core assumptions, I want to stress that the terms *vocabulary item* and *morpheme* within DM differ from their traditional definitions. Throughout this paper, a *vocabulary item* provides the "set of phonological signals available in a language for the expression of abstract morphemes" (Harley & Noyer 1999, 4), and a *morpheme* is a "syntactic (or morphological) terminal node and its content, not the phonological expression of that terminal, which is provided as part of the vocabulary item" (Harley & Noyer 1999, 4).

Late insertion expresses the idea that syntactic nodes have no phonological content until all syntactic processes are complete. Under this process of *Late Insertion*, vocabulary items are inserted at Spell-Out only. This means that in a syntactic tree, for example, the terminal nodes possess nothing but the semantic and syntactic features (cf. Embick & Noyer 2007).

The property of *Underspecification* in DM assumes that vocabulary items are phonological expressions that are inserted only if there is no other vocabulary item with a more specific set of features. As opposed to other theories, vocabulary items compete for insertion, and they are not dependent on the constraints of their subcategorization frames (as the lexical items are in generative syntax, for example).

As the third DM core assumption, *Syntactic Hierarchical Structure all the Way Down* implies hierarchical syntactic structure, i.e. vocabulary insertion happens syntactically, specifically, between the building of structures and the pronunciation at PF. This essentially means that in DM, morphological and syntactic elements are both discrete constituents instead of the results of morphophonological processes (Harley & Noyer 1999, 3).

In addition to the core assumptions/principles that I just mentioned, DM uses specific terms whose definitions may vary from those in other linguistic sub-disciplines. I refrain from further explanation of these since they are not relevant to the analysis. For a more detailed description of how DM terminology differs from other frameworks, please refer to Harley & Noyer 1999.

1.2 OUTLINE OF DISSERTATION

The present dissertation is structured as follows. Chapter 2 is concerned with tough constructions in English and German. It discusses their characteristics and their syntactic challenges that arise when analyzing them. This chapter also gives an overview of previous research on tough constructions highlighting the works that have been most influential and that seem most important to the scope of the dissertation.

Chapter 3 provides a literature review on passive constructions to the extent necessary for my own analysis provided in chapter 5. I will point to various concepts and notions that I will later dismiss or adapt in my own approach. Due to its importance to my own analysis, the summary of previous research I provide also includes sections on works accounting for *related constructions* such as control constructions and unaccusatives, as well related phenomena such as clause union and tenseless infinitives.

Chapter 4 is considered one of the main chapters of this dissertation, as it combines the two main constructions under investigation. I provide a detailed description of the properties of different passive constructions in both English and German, and I draw a connection between them and TCs. Discussing the main similarities, this chapter concludes by arguing for a unified analysis of the two constructions.

Chapter 5 introduces my new analysis, discussing the distinct components that separate my approach from those previously discussed in the literature, namely, the verbal shell (5.1), the VoiceP/*voice*P projections (5.2), and suppressed features (5.3).

Chapter 6 shall demonstrate the applicability of the analysis outlined in chapter 5. Step by step, the analysis is shown to hold for numerous constructions beyond passives and TCs, for example, active constructions, including control and ECM constructions, gerunds, and unergatives.

A concluding summary of the dissertation, as well as some future considerations are provided in the conclusion.

CHAPTER 2

TOUGH CONSTRUCTIONS

This chapter introduces tough constructions (which, in a transformational system like Principles & Parameters (Chomsky 1977, 1981), Boeckx (2001), Rezac (2006), and Wexler (2012) is referred to as *tough movement*), their characteristics, and the issues related to them. It starts with an exploration of tough constructions, focusing on English and German examples as they are essential to this work. Additionally, the chapter provides an overview of previous research on tough constructions, highlighting the works which are most important to the scope of this thesis.

2.1 INTRODUCING TOUGH CONSTRUCTIONS

Consider example sets (1) – (3). The (a) examples of each set illustrate so-called tough constructions (TCs).[2]

(1)   a. Tough constructions are difficult [PRO to explain __].
        b. [PRO to explain tough constructions] is difficult.
        c. It is difficult [PRO to explain tough constructions].

(2)   a. This exam will be a bitch [PRO to write __].
        b. [PRO to write this exam] will be a bitch.
        c. It will be a bitch [PRO to write this exam].

(3)   a. The end of the semester is easy [PRO to survive __].
        b. [PRO to survive the end of the semester] is easy.
        c. It is easy [PRO to survive the end of the semester].

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[2] In examples (1)-(3), it can be observed that the embedded clause involves a covert subject (an arbitrarily controlled PRO). PRO is discussed in more detail in chapter 5. For now, it shall suffice to note that PRO represents an empty pronoun, i.e. it is phonetically not realized.

As demonstrated in the (b) and (c) sentences of each set, the subject position of the respective constructions can be occupied by a nonfinite, clausal complement (i.e. a clausal subject), or by an *it* expletive. These examples demonstrate the surface structure of TCs, and thus the construction's most challenging feature: The matrix subject of the TC (1a, 2a, 3a) seems to be base-generated as the complement of the embedded verb (see gaps in the a-examples).

The following example sets, (4) through (6), shall stress that there exists a contrast between so-called *TC-triggering* and *non-TC-triggering predicates*.

(4)   a. Parents are tough to please.
        b. This scenery is pretty to look at.

(5)   a. It is tough to please parents.
        b. *It is pretty to look at this scenery.

(6)   a. To please parents is tough.
        b. *To look at this scenery is pretty.

Certain adjectives or nouns trigger TCs, and are thus referred to as *TC-triggers.* Such *TC-triggers* are *tough, difficult, easy, possible, a bitch, a chore* or even verbs such as *suck, bite* and *blow* (refer to Pytlyk 2011 for an exhaustive list of TC-triggering predicates). Only *TC-triggers* allow for a structural variation as discussed above (and presented in (1) through (3)), while those predicates which do not trigger TCs (such as *pretty* in (4) through (6)) do not allow for such structural alternations.

Looking back at sets (1) through (3) and examining the DP occupying Spec TP, or the subject position of the matrix clause, in the (a) sentences (*tough constructions*, *this exam*, *the end of the semester* for (1), (2), and (3) respectively), it becomes clear that this DP, i.e. the subject of the TC-triggering predicate in the (a) sentence, is not selected for by

9

the triggering predicate itself. Instead, it is assigned its thematic role in the base configuration inside the clausal argument of said predicate. The (b) and (c) sentences of example sets (1) through (3) beautifully demonstrate this because said DPs appear as the complements to the embedded verbs.

That there exists an apparent object gap in TCs is one of the main characteristics, and can be stressed again by the following examples (7) and (8).

(7) a. Tough constructions are difficult to explain __.

b. Tough constructions are difficult to try to explain__.

c. Tough constructions are difficult to try to persuade my husband to explain __.

d. Tough constructions are difficult to try to persuade my husband to try to

explain __.

(8) Tough constructions$_i$ are difficult [$_{CP}$ to try [$_{CP}$ to persuade my husband [$_{CP}$ to try [$_{CP}$ to explain __$_i$]]]].

(7) and (8) show this object gap which is referentially dependent on the matrix subject. Additionally, as specifically pointed out in (8), it seems like this relationship can cross several CP-boundaries.

Another important property to point out is that a TC must always contain a nonfinite complement. The necessity of the to-infinitival complement as used in all examples thus far is emphasized by the following examples (9) and (10). Potential TCs triggers actually trigger a TC when followed by this infinitival construction (9a, 10a), otherwise they are APs conveying a different meaning (see 9b, 10b).

(9) a. Math is easy to fail.

b. Math is easy.

(10)   a. Susi is easy to talk to.

        b. Susi is easy.

So far, it has been established that TCs must contain *TC-triggers* which must take infinitival complements. Furthermore, the TC subjects in Spec TP are thematically dependent on the gap in the embedded clause, i.e. their thematic roles are assigned in the base configuration, and not at the surface because i) the TC-triggering predicate does not assign a theta-role to the matrix subject, and ii) the embedded lexical verb needs an internal argument. Additionally, we saw that several, apparent CP boundaries can appear between the matrix subject at the surface and its referential gap in the base configuration, so we are dealing with an A-bar dependency.[3]

One of the first questions to ask when trying to arrive at a uniform account for the analysis of TCs is: where does the content of the matrix Spec TP really originate? As pointed out in the previous section and exemplified by the variations in (1) through (3), the subject of the matrix clause (i.e. the subject of the TC-trigger) is not thematically related to its TC-trigger, but rather to the verb embedded inside the clausal argument of said trigger. This finding was supported by demonstrating that the matrix subject DP is thematically dependent on the object gap in examples (7) and (8), repeated here as (11) and (12).

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[3] Note that I am writing "apparent CP boundaries" as CP boundaries are not present under my suggested analysis.

(11)   a. Tough constructions are difficult to explain __.

b. Tough constructions are difficult to try to explain__.

c. Tough constructions are difficult to try to persuade my husband to explain __.

d. Tough constructions are difficult to try to persuade my husband to try to explain __.

(12)   Tough constructions$_i$ are difficult [$_{CP}$ to try [$_{CP}$ to persuade my husband [$_{CP}$ to try [$_{CP}$ to explain __$_i$]]]].

Considering these examples again, TCs seem to behave similarly to subject raising constructions (examples 13 and 14). There lies, however, a significant difference between the two.

(13)   a. He$_1$ seems [t_1 to [t_1 like her]].
b. It seems that he likes her.
c. *To like her seems.
(14)   a. She$_1$ is likely t_1 to eat pasta.
b. It is likely that she ate pasta.
c. *To eat pasta is likely.

Both examples show subject raising in English. They are similar to TCs because their (a) sentences show the thematic dependency between the matrix subject and their embedded gaps (symbolized as a trace (t_1) in (13) and (14)). As in TCs, the matrix subject is thematically dependent on its embedded gap even when several clause boundaries lie between them. However, there are three major differences to note.

In (13) and (14), the matrix subject is thematically dependent on the subject gap of the embedded verb. In tough constructions, the matrix subject is connected to the gap of the embedded object.

The second difference can be observed in (13b) and (14b). While these alternatives make use of an *it* expletive, the sentence is followed by a finite complement. The expletive

alternatives to TCs do not allow for a finite complement, but require an infinitival complement (cf. examples 1c, 2c, 3c).

As opposed to TCs, raising constructions do not allow for an alternative construction with a non-finite clausal subject. This is demonstrated by (13c) and (14c).

In raising constructions, the moved element (*he* and *she* for 13 and 14 respectively) receives NOM case after movement into the matrix clause. Due to the infinitival complement, no NOM case assignment is possible within the embedded complement. In such constructions, the moved DP thus undergoes A-movement into the matrix clause.

Turning back to TCs, we are facing the following problem: the matrix subject is referentially connected to the object gap in the embedded infinitival complement. In this base configuration, it receives its theta-role and should also get its case feature valued. However, exemplified again in the following examples (15) and (16), the matrix subject appears to have received NOM case, and not ACC.

(15) a. He is tough to love.
      b. It is tough to love him.

(16) a. She is difficult to talk to.
      b. It is difficult to talk to her.

Assuming that *he* and *she* in (15) and (16) are complements to *love* and *talk to* respectively, both DPs should have been assigned ACC case. It would be problematic to assume that they first get ACC case, then move into the matrix clause, and end up with NOM. No current formal syntactic framework allows for an *override of case*, nor do I know of any motivation that would move said DP into the matrix Spec TP position after its case feature has already been valued.

13

The challenges arising from these observations are the following. If the DP under investigation gets case in the base configuration, it would be difficult to motivate movement into a higher A-position (i.e. matrix Spec TP) after A'-movement (to the edge of the clause).[4] This problem is known as *Improper Movement* (Müller & Sternefeld 1993, Müller 1995, Obata & Epstein 2011). Even if we could argue for movement into said position, there would be no motivation for assigning NOM case to it when the need for case assignment was already satisfied in the embedded clause.

2.1.1 TOUGH CONSTRUCTIONS IN ENGLISH AND GERMAN

As discussed above, the subject of English TCs receives NOM case. If the subject DP were to get case in the base configuration, it would, in current frameworks, be impossible to motivate movement into a higher A-position (i.e. matrix Spec TP) after A'-movement (to the edge of the clause) because this would be considered *Improper Movement*, provided that we assume TCs to be the result of movement operations, and not, as some scholars analyze them, external merge operations.

In German, we can observe characteristics similar to the ones mentioned above. Consider the following German examples (17), comparable to the English example set provided in (1).

(17)   a. Der   Wandel ist schwer [PRO ___ zu erklären].
          the-NOM   change is difficult   to explain
          'the change is difficult to explain'

---

[4] The movement would look as demonstrated in (i). The DP would check case in the base position, then somehow move to the edge of the clause and from there move into matrix Spec TP.
        (i) He_i is tough [t_i PRO to please t_i].

b. [PRO den   Wandel zu erklären] ist schwer.
        the-ACC change to explain is   difficult
   'To explain the change is difficult'
c. Es ist schwer [PRO den   Wandel zu erklären].
   it is difficult   the-ACC change to explain
  'It is difficult to explain the change'

The German TC (17a) looks very similar to its English counterpart (1a). The positions of the gaps and PROs in the German examples differ from their positions in English because of German's underlying SOV structure allowing for verb-final subordinating clauses. In cases like (17a), the internal complement of the main verb appears as the subject (marked with NOM case) of the sentence. Just like in English, the direct object, or the complement, is typically marked with ACC case in German. We thus face the same issue in German: once the DP receives ACC case as the complement of the verb, there is no motivation to move the DP into a higher position, let alone assign NOM to an already case-marked DP. However, there is a case in which German TCs can differ from English TCs, that is, when the internal argument of the main verb is assigned DAT case. This is demonstrated in example (18).

(18)   Ihm   ist schwer zu helfen.
        him.DAT   is difficult to help
        'He is difficult to help'

While example (18) is also considered a TC in German, the initial nominal of the sentence, namely *ihm* 'him,' has DAT case. In German, some verbs assign DAT to their verbal complements (as opposed to ACC). Such verbs are, for example, *helfen* 'to help,' *danken* 'to thank,' *raten* 'to advise' and more. German DPs which are the complements of such dative verbs appear in DAT at surface, even if they appear in the topic position Spec CP (to which NOM subjects in German main clauses can move as well). Clearly,

there is a difference between structural cases such as NOM and ACC, and inherent cases such as DAT (Woolford 2006, Lee-Schoenfeld & Twiner 2018). This difference and their influence on TCs is briefly discussed in chapters four and five.

The questions to be investigated then lead to the following: How do we avoid improper movement or double case-assignment in TCs, and how do we justify dative TCs in German such as example (18)? The literature on attempts accounting for TCs is broad (albeit controversial), as TCs have been investigated since as early as the 1970s. The following section provides an overview of this research focusing on the works most notable and important to this present thesis.

2.2 PREVIOUS RESEARCH

There have been numerous attempts to overcome the obstacles leading to a uniform analysis of tough constructions in English. This section briefly presents the most noteworthy accounts outlining their main ideas followed by their flaws.

Both Rosenbaum (1965) and Postal (1974) proposed that TCs involve transformational movement, i.e. the matrix subject of a TC reaches its surface position through raising or reordering.

Lasnik & Fiengo (1974) argue against the two movement approaches. According to them, TCs are not the result of movement, but rather an optional result of complement object deletion. The presence of the TC subject forces the *Deletion Principle* to be applied, leading to the deletion of the lower verbal complement (the object). If the TC is not a *true TC* (such as example 19), then the *Deletion Principle* is not applied, and the internal argument is not deleted.

(19)   It is difficult to convince John.

A notable step into the right direction was work on TCs by Chomsky (1977), according to which TCs involve Wh-movement. Chomsky bases this idea on his general characteristics of wh-movement (Chomsky 1977, 86), as summarized in (20).

(20)   Characteristics of Wh-movement:
        a. it leaves a gap
        b. where there is a bridge[5], there is an apparent violation of the Subjacency
           Condition,[6] the PIC,[7] and the SSC[8]
        c. it observes CNPC[9]
        d. it observes wh-island constraints

Under this approach, the TC matrix subject is base-generated as the subject of the matrix predicate, i.e. it is generated in the surface position. This subject is coindexed with a null operator in the embedded clause as well as the trace element. The null operator is base-generated as the complement to the embedded verb, and moves into the embedded Spec CP via wh-movement. (21) illustrates this idea (taken from Chomsky 1977).

(21) $John_i$ is tough [COMP Op_i [TP PRO to please t_i]]

        Op is the null operator which raises into Spec CP. Chomsky suggests this approach because a derivation through Wh-movement can avoid violation of those constraints listed in (20b), especially the Subjacency Condition and the SSC. Based on the status of the COMP node,[10] these conditions are not violated any longer.

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[5] =an intermediate complementizer
[6] Subjacency Condition: Movement cannot cross 2 cyclic nodes.
[7] Propositional Island Condition: Given ... X ... [$_a$ ... Y ...], no rule can involve X and Y where *a* is a finite clause.
[8] Specified Subject Condition: Given ... X ... [$_a$ ... Y ...], no rule can involve X and Y where *a* contains a specified subject (i.e. a subject not containing Y and not controlled by X).
[9] Complex Noun Phrase Constraint: No element contained in a sentence dominated by a noun phrase with a lexical head noun may be moved out of that noun phrase by a transformation (Ross 1967).
[10] With *special status*, I refer to the property of COMP that allows it to function as an *escape hatch* for, e.g., wh-words, or, in this case, Op.

The idea of a null operator also provides the basis for Hicks' approach (2009) to account for TCs. He makes use of the minimalist notion phase, permitting a reanalysis of null wh-operators (à la Chomsky 1977). While Chomsky's operator undergoes movement within the embedded clause only, Hicks' operator crosses clause boundaries, and is able to circumvent the issue of undergoing both A'-movement and A-movement (in that order) by A-moving only a part of the complex null operator that underwent A'-movement. Hicks calls this smuggling. So, his solution is the implementation of a complex null operator which contains the embedded object and "transports" it to the edge of the embedded phase via A'-movement. There, the embedded object becomes accessible to the matrix predicate and can be probed by the matrix T: Because it is the null operator that enters into the A'-dependency with the clausal phase head, not the embedded object, the latter can undergo A-movement into matrix Spec TP. No improper movement occurs.

Hicks (2009) correctly points out the importance of θ-role assignment in TCs. The clausal argument, i.e. the complement of the TC-triggering predicate, possesses a main verb which assigns a θ-role to the position whose element later moves up into the matrix Spec TP. TC-triggering predicates do not assign an external θ-role, providing an argument against Chomsky's suggestion (1977) that the embedded object is base generated as the subject of the matrix clause. In order to support his suggestion of a complex null operator, Hicks (2009) lists a few arguments against an approach involving only A-movement, and in support of his A-bar-approach. First, Case Theory would not allow the embedded object to escape accusative case assignment. And consequently, it would not be able to lose it in order to receive NOM. Second, locality constraints on A-movement would not allow an element to cross the internal subject position PRO (violation of the SSC and subjacency).

These findings are the exact reasons why Chomsky attempted to explain TCs in terms of Wh-movement.

Hicks (2009) invents a complex operator which allows the embedded object to be *smuggled* into the edge of the embedded phase. There, it becomes accessible to the matrix predicate and can be probed by T. This way, neither the PIC nor the MLC are violated. As an illustration of Hicks' idea, consider his derivation of (22). The complex null operator for (22) is illustrated in (23).

(22)   Everyone$_j$ is tough t$_j$ for us to please t$_j$.

(23)
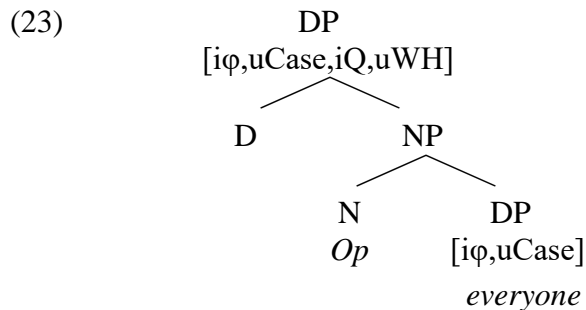
The DP in (23) shows the complex null operator. The [uCase] feature of the more deeply embedded DP cannot be valued within the complex DP because the outer DP's head is unable to license case. As laid out in what follows, by embedding the object into a complex DP as in (23), the fundamental problems as discussed earlier seem to be resolved. After the complex DP is assembled, it is merged as the complement to *please*. At this step of the derivation, *please* can assign a θ-role to the entire DP. When merged with little vP, the complex DP enters into feature agreement with little vP. Here, the case-assigning litte v case-licenses the outer DP of the complex DP. This way, the [uCase] feature on the embedded DP within the complex DP remains unchecked. Next, PRO merges into Spec

vP. Then, the complex DP must move to the edge of the phase because, as an operator, it bears the [uWH] feature which cannot be checked in situ (in English, at least). Since we need successive cyclic movement, it moves into the outer Spec vP. With this move, *everyone* gets pied-piped with the entire DP, and all features are at the phase edge. The next operation involves movement of PRO which moves into the embedded Spec TP and C merges with TP. This C bears an [uQ] feature which is checked with the complex null operator which also checks [uWH] in it. Now, all uninterpretable features on the complex DP are inactive. Driven by the [uEPP] feature on C, the complex null operator then moves into the edge of the CP. While the features on the complex DP are now checked, the unchecked [uCase] on *everyone* can escape and later be transferred to the interfaces at the CP phase. This completes the CP, which can now merge with the aP, i.e. the TC-triggering predicate phase which Hicks names adjective phrase. The aP then merges with TP. Now, due to the feature checking relation (meaning that if there is an unchecked feature, it can motivate movement), an [uEPP] on the merged T requires a goal to move into Spec TP where nominative case is assigned. Since the only remaining active feature is on *everyone* within the complex DP, it is exactly this element which moves into Spec TP. Under the assumption, that aP does not possess a Spec aP, it cannot be considered a phase, so CP is the closest phase that can be accessed by T. The final steps of this operation are demonstrated in (24).

(24)

TP
├─ DP_l [iφ,#Case#] everyone
└─ T'
   ├─ T [#φ,#EPP#] is
   └─ aP
      ├─ a
      │ ├─ tough_j
      │ └─ a
      └─ AP
         ├─ PP for us
         └─ A'
            ├─ t_j
            └─ CP
               ├─ DP_k [iφ,iQ]
               │ ├─ D
               │ └─ NP
               │   ├─ N Op
               │   └─ DP t_l
               └─ ...
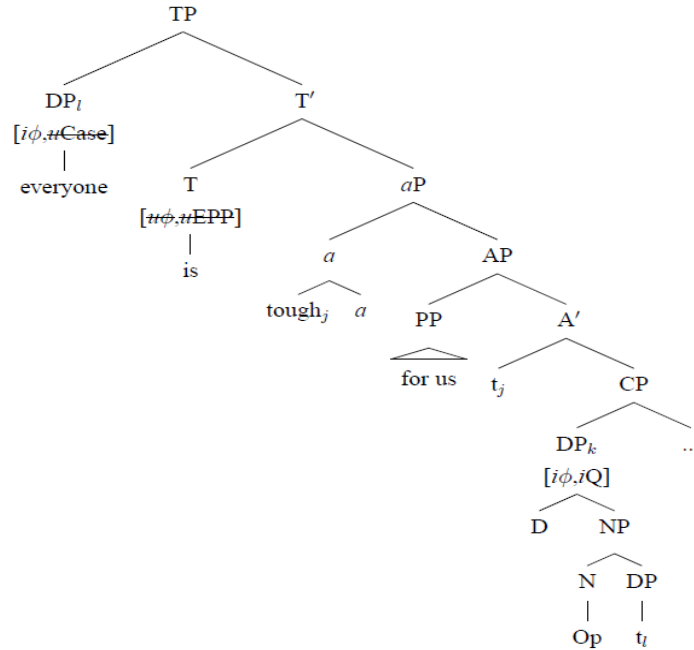
Hicks provides a convincing argument which supports the idea of a complex DP and at the same time refutes Rezac's account (2004) of TCs via copy raising. Consider example (25a) taken from Hicks (2009). The structure of the complex operator is provided in (25b).

(25)   a. [Pictures of himself_i]_j are difficult for [every photographer_i]_k to ignore [t_k ____]_j .
        b. [DP [DP every photographer] [D' [D Ø] [NP [N Op] [DP pictures of himself]]]]

As shown in (25b), *every photographer* occupies Spec DP of the complex DP, and it properly c-commands *himself*. This proves that, at some point in the derivation, *pictures of himself* moves, via remnant movement, from an intermediate position further up in order to reach the matrix Spec TP.

However, these previous attempts at analyzing TCs are not satisfying with regard to the goal of a uniform analysis. My first criticism applies to Rosenbaum (1965), Postal (1974), and Lasnik & Fiengo (1974). These three approaches are problematic in several ways. Postal's suggestion is based on raising. Under current assumptions, this would mean that the embedded object is raised into the subject position, i.e. Spec TP, of the matrix clause. This approach is not satisfactory because it does not account for the problem arising with regard to case assignment.

Rosenbaum's transformational rules clearly show that there is a difference between the deep structure and the surface structure of many instances of English predicate complements. His attempt was to account for different surface structures by writing rules that are ordered and applied cyclically. However, his approach incorporates phrase structure rules as well as unconstrained reordering, and is thus not explanatory. Despite the lack of case and theta-role assignment, he only briefly touches on TCs, shortly discussing/mentioning one TC example (Rosenbaum 1965, 194). He himself concludes that his transformational rules may not be applicable to such constructions.

The complement object deletion approach taken by Lasnik & Fiengo does not satisfactorily address thematic constraints, and must therefore be dismissed. Comparing TCs with those constructions which usually require object deletion, we can see that they differ thematically. Similar to examples (4)-(6), consider (26)-(28). Complement object deletion happens in (26b), and one could wrongly assume that the same happens for (26a), but (27) and (28) clearly illustrate that TCs and complement object constructions differ thematically.

(26) a. Linguists are tough to please.
      b. These flowers are pretty to look at.

(27) a. It is tough to please linguists.
      b. *It is pretty to look at these flowers.

(28) a. To please linguists is tough.
      b. *To look at these flowers is pretty.

While Chomsky's approach (1977) considers the thematic connection between the matrix subject and the embedded complement, it does not seem an ideal solution to TCs. There is no empirical evidence that Wh-movement is involved in the derivation of TCs (cf. Jones 1983), at least under Chomsky's approach. Also, his approach goes against the core properties of TCs as established in this chapter, namely that the TC-triggering predicate does not assign a theta-role to the matrix subject, and that the matrix subject in a TC is thematically dependent on the gap in the embedded clause.[11]

Chomsky supports his proposal by looking at examples involving certain adjectives, or adnominal constructions (Chomsky 1977, 104ff). These are, however, not convincing enough because they do not actually resemble those predicates involved in TCs. Furthermore, his approach to TCs does not account for the relationship between the TC subject and the null operator that is involved in his analysis. Why would John and Op in (19) be related? In order to circumvent this flaw, Chomsky makes use of the Rule of Predication[12] or Reanalysis.[13] However, as many other scholars have said (cf. Jones 1983,

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[11] Under Chomsky, coindexation is supposed to take of this.

[12] The Rule of Predication is not actually defined by Chomsky. He simply applies this *rule* in order to account for a coindexation of the TC's matrix subject, and the filled COMP node, i.e., in order to interpret the operator as a property of the matrix subject (cf. Jones 1983, 130).

[13] Chomsky's Reanalysis rule w.r.t. TCs shall, similar to the *Rule of Predication,* establish a relation between the matrix subject and the embedded complement. Since his approach is based on the external merge of the matrix subject, there is no *traditional* relation between the matrix subject and the trace in the embedded clause.

Bach 1977), Chomsky does not provide a clear explanation of how and why any of these mechanisms should apply.

I now turn back to Hicks' approach to TCs which I demonstrated above in great detail. According to Fleisher (2013), Hicks' solution of a matrix subject that is moved there from a lower embedded clause gives rise to scope reconstruction. However, citing previous research, Fleisher demonstrates that TC matrix subjects cannot take scope below the TC-trigger (Fleisher 2013, 322). Hicks acknowledges this by proposing that, as opposed to the NP head, only the "D head determines scope relations" (Hicks 2009, 553) in tough constructions.[14] With this, Hicks applies Boeckx' (2001) proposal regarding scope in raising and passive A-chains to his analysis of TCs. Fleisher demonstrates that, in fact, there exists a difference in scope reconstruction between TC subjects and those of raising and passive constructions indicating that Hicks' suggestion needs to be revisited.[15]

Zwart (2012) proposes an alternative analysis of TCs against Hicks' approach (in particular, by means of A-chain formation). Based on his understanding of passive constructions, he refutes Hicks' analysis by arguing for reanalysis of TCs. Under this account, the subject of the matrix clause is not a direct result of movement or chain formations. Instead, TCs are reanalyzed as adjectives with a passive reading. Zwart combines the matrix subject with a complex adjective consisting of the "passive predicate." His suggestion of analyzing TCs as *passives*, or at least, connecting the two structures, is

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[14] Hicks assumes that an NP as part of an A-moved DP can optionally reconstruct, but the D head cannot. Since it is the head of a DP that determines scope relations, Hicks' TCs only allow for the surface scope readings, but not for scope readings below the TC-triggering adjective.

[15] Note that scope reconstruction effects are not discussed in this dissertation. As reconstruction effects are of semantic nature, their semantic limitations need to be examined separately. My analysis suggests that semantic limitations be stored in the lexicon, equipping lexical entries with specific features that enter the syntactic configuration (or not).

amongst the goals of this thesis. The connection between TCs and passive constructions are discussed in more detail in chapter 4.

Another, more prominent flaw of Hicks' analysis is the invention of the complex operator itself. In his minimalist approach, the complex operator is the first DP to be built before it merges as the complement to the verb. This complex operator would not allow ordinary case-assignment (i.e. ACC if the complement DP does not move) in non-TCs because the embedded NP would not receive case. If the complex null operator must be the default configuration for all structures, both TCs and non-TCs, the latter would not be accounted for: while the complex null operator enables us to smuggle the embedded NP into the position of the matrix subject, it would also imply that a non-TC, in which the embedded DP should receive ACC (i.e. as a complement to the embedded verb), would not properly receive case because it would be checked on the complex DP, but not on the embedded NP). In sum, Hicks' idea is TC-specific and cannot be applied to non-TCs, and thus faces a so-called *look-ahead problem.* Specifically, when Hicks' complex operator enters into feature agreement with little *v*P, the outer DP is case-licensed. In a non-TC structure (such as *It is difficult to please him*), however, the embedded DP must be licensed for ACC.

Turning to German TCs, Demske's (1994) work studies German and English TCs with regard to their diachronic development focusing on Old High German, Middle High German, Old English, and Middle English. While she describes their syntactic structures and their development and use over time, she does not to provide a syntactic analysis to explain their derivation.

Haider (2010) discusses non-finite verbs and their constructions in German, briefly touching on some TC examples that he also compares to English TCs. For English, he uses the analysis, which he describes as the *standard analysis*, based on Chomsky (1977). While he criticizes that the empty operator "solves only half the problem since the matrix subject […] is left without a theta role" (Haider 2010, 300), he does not provide or suggest a solution for this flaw. However, he stresses one important contrast between German TCs and English TCs preventing a potential uniform analysis of TCs across both languages. According to Haider's approach to non-finite verb constructions in German, German *TC-triggers* can be analyzed as adverbial modifiers in clustering constructions such as (29) (taken and modified from Haider's (8b) (2010, 301)).

(29)   dass er leicht zu finden war
        that he easy to find   was
        'that he was easy to find'

In this construction, *leicht* 'easy' could be left out, and the subordinating clause would still be grammatical and roughly mean the same thing (except for the adverbial modification, of course), so there is no proof of wh-movement of any kind. Additionally, Haider argues that the construction does not contain an embedded argument because it could be derived from the control construction provided in (30), taken and modified from Haider's (8c) (2010, 301). How exactly such a derivation would look, however, remains unexplained, and, additionally raises the following question: how can *er* in (29) be derived from *ihn* in (30) when *ihn* has accusative case, and *er* has nominative?

(30)   Es war leicht, [PRO anzunehmen, [PRO ihn dort   finden zu können]]
        it   was easy   to-assume   him there find   to   be-able
        'it was easy to assume to be able to find him there'

Under Haider's approach, German TCs also involve verb clustering. To exemplify this a little further, consider the following examples. In (31a), the TC involves a sentential infinitive (like 17b, repeated again below), and in (31b), a *true* TC, the construction involves verb clustering. Note that, when comparing examples (17) and (31), the different word order of AP and copula is the result of German's SOV order in subordinate clauses. (31a-b) are German complement clauses introduced by *dass* 'that'.

(17)　a. Der　　　Wandel ist schwer [PRO ___ zu erklären].
　　　　 the-NOM　change is difficult　　　　to explain
　　　　 'the change is difficult to explain'

　　　 b. [PRO den　　Wandel zu erklären] ist schwer.
　　　　　　 the-ACC change to explain　is　difficult
　　　　　 'To explain the change is difficult'

　　　 c. Es ist schwer　[PRO den　　Wandel zu erklären].
　　　　　 it is difficult　　　the-ACC change to explain
　　　　　 'It is difficult to explain the change'

(31)　a. dass den　　　Hund zu lieben nicht schwer　war
　　　　　 dass the-ACC dog　 to love　not　difficult was
　　　　　 'that it was not difficult to love the dog'

　　　 b. dass der　　　Hund nicht schwer　zu lieben war
　　　　　 dass the-NOM dog　 not　difficult to　love　was
　　　　　 'that the dog was not difficult to love'

According to Haider, *der Hund* in (31b) receives nominative case as an immediate consequence of the monosentential structure of the cluster construction: "accusative case cannot be assigned unless nominative has been assigned. If there is no subject argument as candidate for the nominative, the object is assigned nominative instead" (Haider 2010, 280). How is this different from (31a), where *den Hund* is marked with accusative? In (31a), *den Hund* is the direct object of the infinitive *zu lieben* 'to love', and, since it does

not appear in a cluster with *war* 'was,' it receives ACC. (31a) is not considered a cluster construction, i.e. is bi-clausal, so the *accusative-is-only-assigned-after-nominative-has-been-assigned rule* that comes into effect in a monoclausal cluster constructions only, would not apply to this example. But how does he explain a simple German TCs such as example (32)? Neither the derivation from a control construction (as in 30) nor the argument to account for (31b) seem satisfying, especially when considering examples (33).

(32)   Der   Hund ist nicht schwer   zu lieben.
        the-NOM dog   is not   difficult to love
        'the dog is not difficult to love'

(33)   a. dass der   Hund nicht schwer zu lieben war
           dass the-NOM dog   not   difficult to love   was
           'that the dog was not difficult to love'

        b. dass den/*der   Hund zu lieben nicht schwer war
           dass the-ACC/*NOM dog   to love   not   difficult was
           'that the dog was not difficult to love'

In (33b), we see the topicalization of *den Hund zu lieben* 'to love the dog,' and the DP under investigation is ACC-marked. Haider acknowledges this difference and explains it by arguing that since the entire infinitival clause precedes the *TC-trigger,* the embedded DP must receive ACC. Haider's approach that the subject DPs in German TCs receive NOM because of verb cluster formation is an excellent consideration. However, it is not convincing to assume that examples such as (33a) and (33b) undergo different operations. Essentially, *der Hund* in (33a) and *den Hund* in (33b) both derive from the same position, namely as complement to the lexical verb, as demonstrated in (34).

(34)

```
                    VP
                  /    \
               PRO      V'
                       /    \
                     DP       V
                    /  \     lieben
                 d. Hund
```
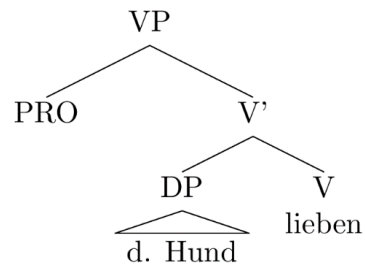
Again, in order to arrive at (33a), Haider states that ACC can only be assigned after NOM has already been assigned, and since the DP under investigation is the only DP, it must receive NOM. Since there is no NOM assigned in (33b), he argues that, since the DP is not part of a verb cluster, the *no-ACC-unless-NOM rule* does not hold (because clauses do not receive case anyway). Haider's suggestion to *fuse* clauses is similar to what my analysis in chapter 5 will suggest, however, a specific *rule* does not need to be implement under my account.

The goal of this thesis is to base an analysis for both German and English TCs on their connections with passive and passive-like constructions that will be further discussed in the following chapters of this dissertation. In particular, the goal is to provide a sufficient, but broad analysis that accounts for a wide range of (syntactically similar) constructions. To arrive at this analysis, Hicks' and Haider's research will be considered, but mostly dismissed.

2.3 SUMMARY

This chapter provided an introduction to English and German tough constructions. It pointed to the main characteristics as well as the problems and controversies that arise when attempting to account for them.

In sum, it can be concluded that TCs in both German and English are problematic with respect to case assignment. The TCs' subject DPs receive NOM case, despite their status as the internal argument of the lexical verb. A movement-based approach involves the issue of *improper* movement.

Previous research on English TCs is split into two approaches, namely the movement-approach and the non-movement-approach. While most scholars agree that there is a semantic relation between the TC's subject DP and the lexical verb, there have been different attempts at relating the two: Chomsky (1977), e.g., suggested an *operator* and Hicks (2014) came up with a *complex DP*. Haider (2010) has suggested that TCs are part of constructions that involve verb clustering, accounting for German TCs, but not English ones. Other scholars oppose the movement-approach by arguing that the subject DP in a TC is simply merged externally.

Throughout the rest of this thesis, I will argue that TCs (and later passive[like] constructions) are the result of operations involving movement.

CHAPTER 3

PASSIVES AND RELATED CONSTRUCTIONS AND PHENOMENA

The syntax of passive constructions has been studied quite intensely, and

numerous scholars have contributed unique analyses dedicated to this particular subject,

however, none of the suggested approaches seems satisfying enough to be referred to as

the *universal* analysis. This chapter provides a literature review on passive constructions

to the extent necessary for my own analysis provided in chapter 5. Due to its importance

to my own analysis, the summary of previous research I provide also includes sections on

works accounting for *related constructions* such as control constructions and

unaccusatives, as well related phenomena such as clause union and tenseless infinitives.

3.1 PASSIVES

A widely accepted analysis of the passive construction suggests that the subject of the

passive construction is the logical/thematic object of the main verb. However, there are

also some opposing views (such as Leiss 1992) arguing for a non-derivational approach

of passives. The following sections provide an overview of selected passive literature in

chronological order.

3.1.1 LANGACKER 1982

Before Langacker 1982, there existed a few generative approaches to passives (such as Wasow 1977 or Perlmutter & Postal 1977), amongst which only few acknowledged the similarity between passive and active sentences in regards to their basic interpretations.[16]

Langacker suggests that the passive construction does not derive from the active (due to a semantic difference), and he makes the auxiliary connected to the passive construction in English a central topic of his work by proposing that there are three different types of verbal participles that can follow the auxiliary *to be*. The first two, PERF 1 and PERF 2, are used to express two kinds of perfective processes. The difference between the two is the relationship between what Langacker calls the trajector (a *thing*) and the landmark (an *entity*) (Langacker 1982: 58). Under his approach, the passive construction falls under PERF 3 in which the relationship between the landmark and trajectory is reversed (Murphy 2004: 50).

In addition to attributing meaning to the passive auxiliary, he also suggests that the optional *by* in passives is meaningful, namely, that *by* in passive constructions carries the same meaning as it does in other English sentences such as *That opera is by Wagner* (Murphy 2004: 51).

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[16] Perlmutter and Postal (1977), for example, discuss that one of the characteristic features of a passive constructions is that "the direct object of an active clause is the 'superficial' subject of the corresponding passive" (Perlmutter & Postal 1977: 400). Their account involves the *Chômeur Condition*, a mechanism which *intransitivizes* active sentences, so that a passive (which they understand as intransitive constructions) can be constructed.
Also note Perlmutter's (1978) approach to impersonal passives and his Unaccusativity Hypothesis which accounts for intransitive constructions, to which he assumes (impersonal) passives to belong. Burzio (1986) bases his work on Italian syntax on Perlmutter's observations, and expands the hypothesis to involve *little vP*, an additional verb layer that has received much attention in the field of generative syntax since (see also chapters 2 and 4).

Langacker's approach to passives is noteworthy because he attributes meaning to the auxiliary. While my proposed analysis is strictly syntactic, Langacker's attribution of meaning does play a role in the analysis for German tough constructions and passives where there is a distinction between auxiliaries.

3.1.2 CHOMSKY 1981 AND 1986

While Chomsky (1981) is not the first to discuss passive constructions (for earlier approaches, see e.g. Wasow 1977, or Perlmutter & Postal 1977), his work on passives from 1981 laid the groundwork for many other scholars to come.

His approach is based on theta role assignment and case theory within the Government & Binding theory. Starting with the first, Chomsky (1981) assumes that argument structure is part of the verb, i.e. part of the lexical entry, so that each of its arguments is assigned a theta role. If we have, for example, a transitive verb such as *to kiss*, it assigns the thematic role of *agent* to its external argument, and the thematic role of *patient* to its internal one (see example (1)). In order to account for and restrict theta role assignment, Chomsky states the projection principle and the theta criterion (given in (2) and (3)).

(1)   NP <Nala>   :   external argument, agent
        NP <Simba>   :   internal argument, patient
        V <to kiss>   :   verb, subcategorized for two NPs

(2)   The Projection Principle
        Representations at each syntactic level (i.e.*,* LF, and D- and S-structure) are
        projected from the lexicon, in that they observe the subcategorization properties
        of lexical items.
                                                                    (Chomsky 1981: 29)

(3)   The Theta Criterion
      Each argument bears one and only one θ-role, and each θ-role is assigned to one
      and only one argument.

<div align="right">(Chomsky 1981: 35)</div>

Concerning case theory, Chomsky states the case filter according to which every NP has

to be case-marked, otherwise the sentence is rendered ungrammatical (cf. (4)), i.e. the NP

is not licensed to appear in the sentence. This means that each argument of the verb is not

only assigned a theta role, but also a case.

(4)   The Case Filter
      *NP if NP has phonetic content and has no Case.

<div align="right">(Chomsky 1981: 49)</div>

Assuming that case assignment happens before A-bar movement, note that this definition

of case filter does NOT exclude case assignment to an empty element such as a trace, for

example, in wh-structures in which the wh-element has moved. This means that there

exists no restriction prohibiting case assignment to an empty element.

Before considering passive constructions, we must take a look at how case

assignment happens in active sentences. According to Chomsky, an NP receives

nominative case after it has moved into the position in which nominative case can be

assigned. This position is Spec TP. Accusative case is assigned to the object position,

namely the complement to the verb. Under this approach, case can be assigned following

specific structural relations which are defined by the notion of c-command.

(5)   c-command
      α c-commands β iff α does not dominate β and every γ that dominates α dominates
      β.

<div align="right">(Chomsky 1986a:8)</div>

Turning to Chomsky's (1981) approach to passive constructions, he suggests that the

passive morphology (*-en*) of the verb absorbs both the external argument's theta role and

(its ability to assign) accusative case:

(6)   I. [NP,S] does not receive a *θ*-role
        II. [NP,VP] does not receive Case within VP, for some choice of NP in VP
                                                                        (Chomsky 1981: 124)

This means that the internal argument of the verb receives its *normal* theta-role (for

example, the role of *patient*), but it does not receive accusative case because the latter has

been absorbed by the passive morphology. At the same time, no agent theta role is

assigned, so there is no external argument to be moved into the subject position at Spec

TP. To exemplify his approach, consider the following sentence (7) and its corresponding

tree in (8). At D-structure, *Simba* enters the derivation as complement to the verb and

receives a theta role. Since the verb contains the passive morpheme, it cannot assign

accusative to *Simba* and no external theta role is assigned. The subject position Spec TP

into which the external argument of an active sentence would move, is now filled by the

NP *Simba* in order for *Simba* to get case.

(7)   Simba was kissed.

(8)   TP
        NP   T'
       Simba
              T   AuxP
             was
                   t   VP
                        V'
                   kissed   t
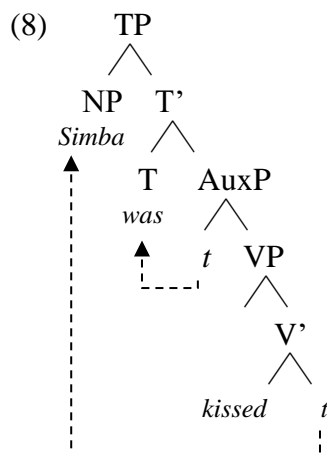
Under this approach, Chomsky stresses that the grammatical subject of a passive sentence is the logical object of the lexical verb, and becomes that subject through case-driven movement.

Note that this approach does not account for long passives, i.e., for sentences such as (9). While the theta role for the internal argument of the lexical verb is accounted for (as shown in (8)), the external argument (*Nala* in (9)) does not get a theta-role from the verb, but is optionally added as an adjunct. The semantic relation between *Nala* and the verb is thusly not accounted for by s-selection or through categorization frames.

(9)   Simba was kissed by Nala.

3.1.3 BAKER 1988 AND BAKER, JOHNSON & ROBERTS 1989

In his 1988 publication, Baker explains numerous syntactic phenomena through *incorporation*. While Baker's (1988) approach involves movement operations that cause the internal argument of the lexical verb to appear as the grammatical subject, it differs from approaches such as Chomsky's (1981) in that Baker's suggests that both active and passive structures share the same D-structure. This is a direct result of his work on noun incorporation and his discussion of morphological causatives constructions (Baker 1988: 530), calling active constructions and their passive counterparts *thematic paraphrases* (Baker 1988: 531). Following this idea, he suggests that the theta roles assigned to the arguments are the same in passives as they are in their active counterparts. He argues that the external argument must be present at deep structure, and that transformational rules are involved deriving a passive construction from its active counterpart. Following his

own *Uniformity of Theta Assignment Hypothesis*, this serves as proof for the same

representation of active and passive structures at D-structure.

(10)   The Uniformity of Theta Assignment Hypothesis (UTAH)
        Identical thematic relationships between items are represented by identical
        structural relationships between those items at the level of D-structure.
                                                                    (Baker 1988: 57)

        In order to account for passives, and basing their work on Baker (1988), Baker,

Johnson & Roberts (1989) argue that the form of the lexical verb at D-structure is the

same for active and passive structures, and that, following Chomsky's (1981) Theta

Criterion, the verb is required to assign its external theta role to something. Their

approach differs from Chomsky's by assigning the external theta role to the passive

morphology (*-en*) which sits in the head of the TP. The possibility of theta role

assignment to the passive morphology is given by way of Baker's (1988) Head

Movement Constraint:

(11)   The Head Movement Constraint
        An X^0 may only move into the Y^0 which properly governs it.
                                                                    (Baker 1988: 46)

This constraint is also applied to passives in Baker, Johnson & Roberts (1989). The

authors argue for the passive morpheme to be an *argumental affix tied to the Infl node*

(Baker et al. 1989: 249) [the head of the TP], attracting the verb (*incorporating* it). This

means that the passive suffix is assigned the argument theta role, and it absorbs

accusative case.

        The idea that the lexical verb assigns an external theta role is part of the basic

understanding of my proposed analysis. However, their solution to suggest that the

external theta role is assigned to the passive morphology is problematic, as this would

imply that the active and passive derivations of a structure are syntactically different.

Additionally, unlike my unified approach to passives and tough constructions, their approach cannot account for the latter as there is no overt morphology in a tough construction that would allow the *absorption* of the external theta role.

3.1.4 ÅFARLI 1989 AND 1992

Åfarli (1992) compares Norwegian and English passive constructions and aims to account for both English and Norwegian passives in a uniform analysis. A big part of his proposed analysis is based on Baker's (1985) account for passives, namely that the verb assigns its external theta role to the passive morphology. In order to strengthen this account, Åfarli proposes that the passive morphology itself is seen as an argument of the verb that must receive a theta role. This would rule out passivization of ergative (unaccusative) verbs which do not assign external roles and thus cannot provide a passive morphology with a theta role (Åfarli 1989: 103). His idea of what the D-structure looks like for active and passive sentences is illustrated in (12a) and (12b) respectively, where *ex* denotes the assignment of the external theta role.

(12)   a. [$_{VP}$ NP$_{ex}$ [V NP]]
       b. [$_{VP}$ --- [V+PASS$_{ex}$ NP]]

                                                            (Åfarli 1992: 24)

Combining this idea with his suggestion that *abstract case assignment* (including *case absorption*) does not take place in Norwegian, but must in English (also based on Baker 1985), Åfarli accounts for the major differences in English and Norwegian passive constructions.

3.1.5 LEISS 1992 AND ABRAHAM & LEISS 2006

In her work on verbal categories in German, Leiss (1992) does not provide a syntactic approach to passive constructions. Instead, she pursues the goal to define their functionality. She concludes that passive constructions follow the 'natural word order' (definite content > indefinite content) while inserting semantic roles in 'reverse order' (Leiss 1992: 286). Additionally, for Leiss *"regular" pass*ive constructions belong to the *definite* category, and *impersonal* passives belong to the *indefinite* category. The definite category includes constructions that presuppose semantic roles (she refers to these as *anaphoric*, meaning that the constructions involve anaphoric semantic expressions, i.e., expressions that presuppose semantic knowledge). Particularly, with respect to passives, this means the ability to realize a definite patient early in the sentence. At the same time, indefinite constructions involve indefinite elements (cataphors) such as the German indefinite pronoun *man* (in English, mostly realized as 'one' or 'you'). Note, again, that Leiss does not aim to syntactically account for passives. Her goal is to describe their functionality.

Nevertheless, she shares her thoughts on how passive constructions are realized. She argues against a transformational analysis (from their active counterparts), and claims that passive constructions are part of a so-called *intransitivation process* (Leiss 1992: 87-88). This process goes against a derivational approach of passive constructions, and instead suggests that passives are the result of a lexical process that makes a transitive verb intransitive, and with it, gets rid of the agentive role of the external argument. Leiss supports this approach by looking at a specific Russian passive example (Leiss 1992: 87): in Russian the reflexive passive construction is formed by suffixing the

reflexive pronoun -*sja,* while -*sja* is also an intransitivity marker. Thus suffixing -*sja* can either form active intransitive reflexive verbs or passive verbs. Leiss also demonstrates a similar behavior in German: the transitive verb *waschen* 'to wash' can be used as the intransitive Verb *sich waschen* 'to wash oneself' with the addition of the reflexive pronoun *sich*. A passive-like (middle) construction such as *Das Kleid wäscht sich gut* 'the dress washes well'[17] with a passive interpretation along the lines of *the dress is being washed* serves as a comparison to the Russian example.

While Leiss (1992) contributed to the interpretation and categorization of passive constructions, my analysis argues against her approach by positing that passive constructions are, in fact, the direct result of a syntactic derivation.

Concerning impersonal passive constructions, which will be part of my analysis, I will show that my syntactic approach suggested in chapter 5 does not hold. I will then side with the claim made by Abraham & Leiss (2006) that *impersonal passives* are mislabeled and do not share the semantic properties of "regular" passive constructions, requiring a completely different analysis. As shown throughout their work, impersonal passives show aspectual dependency in that they are always interpreted as imperfective. To compare, stative passives are interpreted as perfective, and verbs that allow impersonal passive constructions do not permit stative passivization (Abraham & Leiss

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[17] Note that this is another interesting example that points out the similarity between passive constructions and tough constructions. Compare the reflexive passive provided by Leiss in (i) with the TC in (ii). Both interpretations require the reader to process the dress as the internal argument that is undergoing the action of washing.

    (i)   Das Kleid wäscht sich   gut.
                    the dress washes REFL good
    (ii)   Das Kleid ist leicht zu waschen.
                    the dress is easy to wash

2006, 514). Thus, impersonal passives can be analyzed separately from "regular" passives.

3.1.6 KRATZER 1996

Based on Marantz's (1984) work on argument structure in which he shows that the external argument is not as closely connected to the verb as internal arguments are (Marantz 1984, 50 ff.), Kratzer (1996) shows that a verb is never sensitive to the semantic characteristics of external arguments, and thusly agrees with Marantz in that the external argument is not a true argument of the verb. Throughout her paper, Kratzer follows a Neo-Davidsonian approach (Stranahan 2012) in that she assumes that there exists *an ordered argument association in the syntax but not the semantics* (Stranahan 2012, 3). Syntactically, verbs can thusly be three-place predicates, while semantically, they are either two- or one-place predicates.

In her discussion of the syntax and semantics of *Voice*, in the second section of her 1996 work, she seeks to explain where the external argument comes from, considering it is not a true argument of its verb. She argues that the external argument of a verb is generated in a Spec VoiceP position of a functional projection VoiceP which is located directly above VP. Voice heads can either be *active,* introducing an (external) argument and assigning accusative case, or they can be *non-active*, in which case they function to stress the event argument. The active structure is sketched in (13).

(13)   VoiceP

external
argument   Voice   VP

                    verb   *internal*
                                  argument
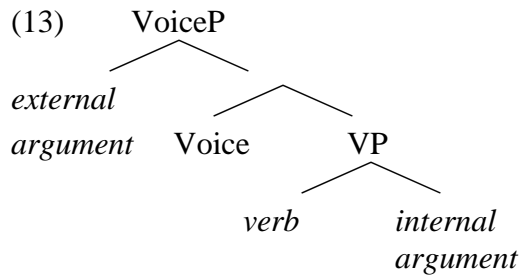
Kratzer's notions of *Event Identification* and her *Realization Principle* foster her

argument to abolish the term *external argument* as it is not part of a verb's arguments any

longer. *Event Identification* is a rule that combines two separate semantic functions into

one. With that, the individual argument of the first function receives the agentive

meaning of the combined function, as exemplified in (15) and (16), showing the semantic

interpretation of VoiceP for sentence (14).

(14)   Mittie fed the dog.

(15)   Event Identification Example

f	g	$\rightarrow$	h
$\langle e, \langle s, t \rangle \rangle$	$\langle s, t \rangle$		$\langle e, \langle s, t \rangle \rangle$
$\lambda x_e \lambda e_s$ [Agent(x)(e)]	λe_s [feed(the dog)(e)]		$\lambda x_e \lambda x_s$ [Agent(x)(e) & feed(the dog) (e)]

(ex. (24) from Kratzer 1996, 122)

(16) VoiceP: semantic interpretation
  1. feed* = $\lambda x_e \lambda e_s$ [feed(x)(e)]
  2. the dog* = the dog
  3. (the dog feed)* = λe_s [feed(the dog)(e)]
    from (1), (2) by Functional Application
  4. Agent* = $\lambda x_e \lambda e_s$ [Agent(x)(e)]
  5. (Agent (the dog feed))* = $\lambda x_e \lambda e_s$ [Agent(x)(e) & feed(the dog) (e)]
    from (3), (4) by Event Identification
  6. Mittie* = Mittie
  7. ((Agent (the dog feed)) Mittie)* = λe_s [Agent(Mittie)(e) & feed (the dog) (e)]
    from (5), (6) by Functional Application

(ex. (22) from Kratzer 1996, 121)

Going back to her syntactic representation of (16), Kratzer posits that [ACC] assignment

to (valuation of) *the dog* in (14) comes from the *active* Voice head, as [ACC] is a

structural case which is always assigned (valued) given a certain syntactic configuration.

Thusly, her approach implies that there exists a syntactic layer accounting for [ACC]

assignment to the internal argument (in a non-passive sentence). A lack of such layer, by

means of a *nonactive* Voice head would lack [ACC] assignment, which would account

for unaccusative constructions, and passives.

While Kratzer's work has an important impact on understanding semantic

relations between the verb and its arguments, it does not seem to be syntactically sound in

deriving passive constructions with an overt *by*-phrase in the way that I am setting out

throughout the dissertation. Consider the following passive construction of (14).

(17) a. The dog was fed.
    b. The dog was fed by Millie.

While Kratzer's approach can easily account for (17a), there is no derivationally possible

approach to (17b). This goes hand in hand with her separation of the external argument

43

from the verb, and she can stipulate that *Millie* in (17b) is generated as the object of the preposition.

Kratzer's idea of separating the external argument from its verb seems, in fact, conflicting with respect to my proposed analysis. While she argues that the meaning of the VP is dependent on the combination of the verb and its internal argument, and that the external argument plays no role, my approach rejects the idea that the external argument is not part of the verb. This also goes against Marantz's conclusion; while he convincingly shows that the external argument does not alter the meaning of idiomatic chunks, and thusly suggests that the external argument is not part of the verb's semantic domain, I side with Grimshaw (1990) in that the derivation does not require such drastic measures. Rather, it suffices to posit that the external argument composes last. This implies that the (idiomatic) meaning is accounted for; merging the internal argument before the external argument automatically means that the meaning composed by merging the internal argument cannot be affected by the external argument. This way, one could see the merge of the external argument and its assigned theta role as a semantic relationship between the external argument and the predicate consisting of the verb and its internal argument. In the syntax, this goal is easily achieved by the specific order in which arguments enter the configuration.

Turning back to Kratzer's proposal, I partially side with her analysis. Just like her, my analysis suggests there is an *active* or a *nonactive* functional VoiceP above the verb. However, my proposed VoiceP does not host the external argument. Instead, the Voice head provides a merging site for a lexical item rendering the construction either an active or a passive construction.

3.1.7 COLLINS 2005

Not in line with works such as Baker' (1988), Baker et al.'s (1989), Åfarli's (1992), and

Kratzer's (1992), Collins (2005A) argues against the passive morphology being assigned

the external theta role, and he holds up the *traditional view* that the external argument is

generated in Spec *v*P. Additionally, he proposes that the external theta role is assigned to

the Spec *v*P (where the external argument is merged) and that accusative case is valued

by the (optionally pronounced) *by*-phrase which is directly merged above the verb phrase

as VoiceP (headed by *by*).

In order to account for this, and to allow movement of the internal argument over

the external argument, Collins suggests a *Smuggling* approach which allows movement of

the VP over the *v*P, permitting the internal argument to move into Spec TP to value

nominative case. He defines the process of Smuggling as follows:

(18)   Smuggling
        Suppose a constituent YP contains XP. Furthermore, suppose that XP is
        inaccessible to Z because of the presence of W (a barrier, phase boundary, or an
        intervener for the Minimal Link Condition and/or Relativized Minimality), which
        blocks a syntactic relation between Z and XP (e.g., movement, Case checking,
        agreement, binding). If YP moves to a position c-commanding W, we say that YP
        smuggles XP past W:
        Z … [$_{YP}$ XP] …W… <[$_{YP}$ XP]>
        └───OK──┘

                                                                    (Collins 2005A: 97)

Furthermore, Collins assumes that the passive participle *-en* merges externally into the

head of a PartP projection, and that V later adjoins to Part°. This PartP projection is the

complement to the verb. Everything below the VoiceP shell, according to his smuggling

account, thusly looks as in (19). The PartP that is later moved into Spec VoiceP is a layer

projected between the VP and the *v*P.

(19) VoiceP
  Voice'
    by   *v*P
        DP   *v*'
        Paul
          v   PartP
            -en   VP
              write the book
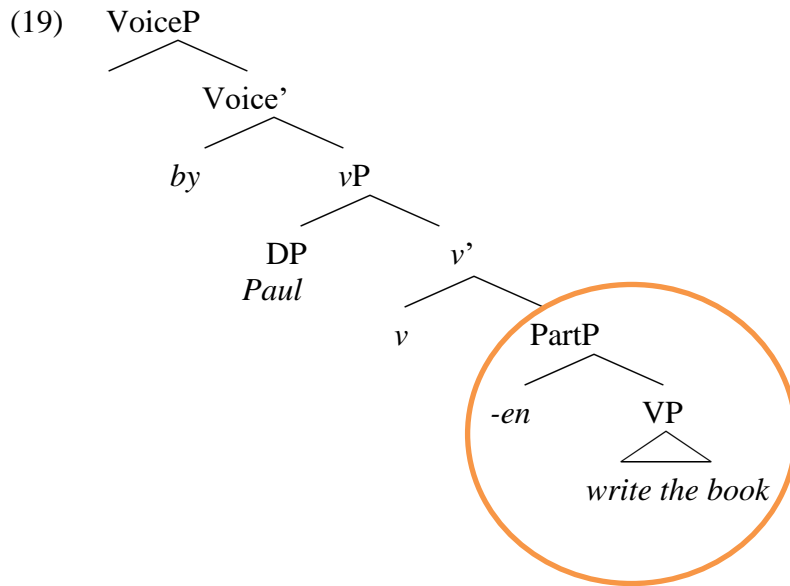
While Collins' argument for an XP-movement solution to passive constructions seems

convincing, his approach still seems rather problematic in some ways. First, if we take

into consideration the *traditional* theta-role assignment, assuming that the external theta

role is, in fact, assigned by the verb, and merges into the specifier position of a verbal

shell, it is difficult to assume that there is a PartP projection between the VP and the *v*P.

This so-called *operator phrase* is not part of active constructions, and seems therefore

unlikely. There is no motivation to argue for such a layering except in passive

constructions. He fails to show that his approach can be universally applied, for example,

by accounting for active constructions. His solution is only applicable to passives, and

requires the derivation to be programmed as *passive* from the very start.[18] This is

---

[18] Note that Collins published a squib following his (2005a) work on passives in which he explains to apply this smuggling approach to raising constructions. Additionally, as mentioned in chapter 2, Hicks' (2009) adapts his smuggling approach to account for TCs. While all of the constructions share the idea that XP-movement is involved in order to front or extrapose a DP, none of them are derived the same. The respective operator phrases are specific to their derivations and cannot be considered a uniform approach to all of them.

comparable to the traditional Chomsky approach in that the passive needs to be part of the predicate of the sentence in form of a passive auxiliary.

My second problem with Collins' work concerns case valuation. Under Collins' approach, the passive participle and the past participle are identical (Collins 2005a, 94), so he needs to account for why the verb does not value the [uCase] feature on its DP sister. He only provides a mediocre solution to this problem, again, one that is specific to passive constructions and that cannot be applied to other derivations. He suggests that the features that are traditionally part of the verb come apart in passive constructions, positing the following conditions.

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

(ex. (31) taken from Collins 2005a)

(21) Suppose X (v or P) has a Case-checking feature [uF], then it is possible for [uF] to be dissociated from X, and for [uF] to be added to the numeration as part of the functional head VoiceP.

The condition in (21) is highly specific to passive constructions, and would, for example, fail to account for a raising construction such as *Tom seems to Mary to enjoy ice cream* in which *ice cream* must get accusative case. Additionally, it would not account for how passives work in other languages. Consider a simple German passive, as in (22).

(22) Das Eis   wurde von dem   Jungen   komplett   aufgegessen.
      the ice cream was   by the.DAT boy.DAT.SG   completely   eaten up
      'The ice cream was completely eaten by the boy'

In German, *von* assigns [DAT] and not [ACC], but the direct object of *aufessen* 'to eat up' usually receives [ACC] in an active sentence. If we applied Collins' (21), it would

not hold here because the [ACC] from *aufessen* would be added to the functional Voice, and we would arrive at the ungrammatical (23).

(23)   *Das Eis   wurde   von den   Jungen   komplett   aufgegessen
           the ice cream   was   by   the.ACC   boy.ACC.SG   completely   eaten up

This example shows that [ACC] case assignment in English passives' *by*-phrases, or [DAT] in German *von*-phrases, must be the lexical case features that the lexical items *by* and *von* possess, respectively. Collins' explanation that the verb's case assignment feature simply becomes part of the Voice head is thusly not convincing.

To sum up, Collins' work provides several ideas that I will adapt in my approach, e.g., that *by* does not form a constituent with the external argument DP, and that it is externally merged into Voice. Just as Collins, the external argument in my approach is generated in the same syntactic position as it is in active sentences. However, I seek to provide an approach that holds across constructions and across languages, so some of Collins' conditions are not ideal to incorporate, for example, that there exists a functional layer between VP and *v*P, or that Voice simply *inherits v*'s case assignment feature.

3.1.8 RAMCHAND 2008

In her monograph, Ramchand proposes a specific decomposition of the verbal domain arguing that both the structure of events and the event participants are directly represented in the syntax (Ramchand 2008: 211). She summarizes her approach as follows:

(24)   The first phase syntax:
        The first phase syntax explored here is a binary branching structure for a
        particular functional sequence of heads, where structure and category label
        correspond systematically to meaning. In particular, specifiers are interpreted as
        the semantic subject of Head-complement complex, and embedded eventuality
        descriptors are interpreted as being unified by a generalized 'cause' or 'leads-to'
        relation. The other important semantic correlate of structure within the event
        domain is 'homorphic unity': a phrase in the complement of an event-denoting
        head must co-describe that event, and I have proposed that natural language does
        this by imposing a matching requirement between the event-scale and a scale
        introduced by that complement.

                                                                    (Ramchand 2008: 211)

In particular, Ramchand divides the verbal domain into three distinct *event* projections,

namely *init*P, *proc*P, and *res*P. The specifier of *Init*P (the causing projection) represents

the causation event and licenses the external argument, i.e. the *initiator* of an event. The

specifier of *proc*P (the process projections) is connected with the subject of process, and

specifies the nature of the action (change or process), thus licensing the *undergoer* of the

process or action. The specifier of the third projection, the result projection, provides the

result state of the event and licenses the entity that comes to hold the result state, i.e. the

resultee. To visualize this in a binary-branching structure, see (25), directly taken from

Ramchand (2008: 212).

(25)

```
        initP  ( causing projection)
       /    \
    DP₃      \
 subj of 'cause'
          init    procP    (process projection)
                 /    \
              DP₂      \
          subj of 'process'
                    proc    resP    ( result proj)
                           /    \
                        DP₁      \
                   subj of 'result'
                              res    XP
                                     /\
                                    /__\
                                     ...
```
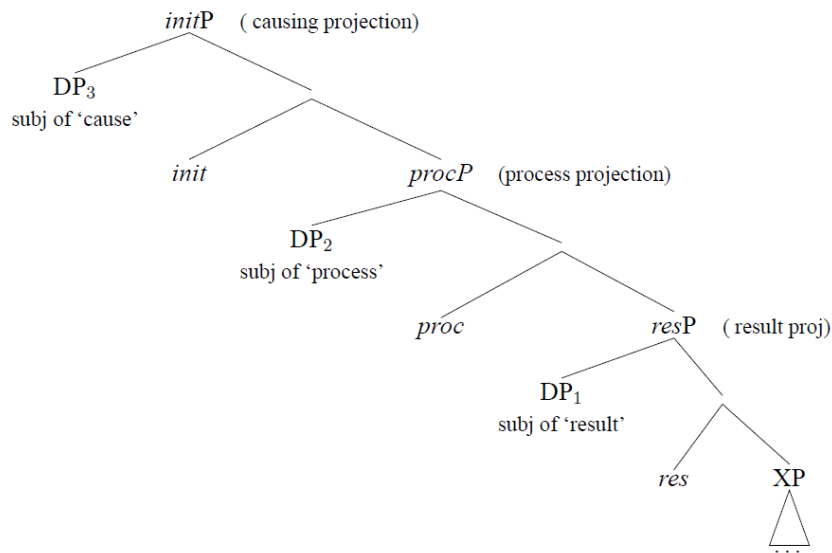
Ramchand's approach allows us to correlate specific verb types in English with certain

participant relations, but, as opposed to allowing such relations to be part of the lexical

entry, the verbal domain builds up compositionally. Consider, for example, the

(di)transitive verb *throw* which may allow a 'simple' transitive construction, as seen in

(26), or a ditransitive such as (27a-b).

(26)   She threw a ball over the fence.

(27)   a. She threw the ball to him.
         b. She threw him the ball.

Within Ramchand's sketched structure, the subject *she* in the transitive construction (26)

denotes the *initiator,* in Spec *init*P, and the direct object *a ball* can occupy Spec *proc*P as

well as Spec *res*P, as *a ball* can represent both the *undergoer* of the process of being

thrown and the *resultee* because *a ball* reaches a different/final state after having

undergone the process.

With regards to ditransitives, or double object verbs, Ramchand accounts for the

difference in (27a) and (27b) along the lines of Harley 2002, positing that the two

alternate constructions require different base configurations. Based on her examples (73) and (74) (see Ramchand 2008: 111ff.), the derivation of (27a) and (27b) looks as follows.

(28a)

```
            initP
           /    \
        She      \
          init    procP
          init   /    \
         throw  a ball  \
                  proc    resP
               <throw>[res]  \
                      <a ball>  \
                            res    PP
                            to    /  \
                                 P    DP
                                <to>  /\
                                      him
```
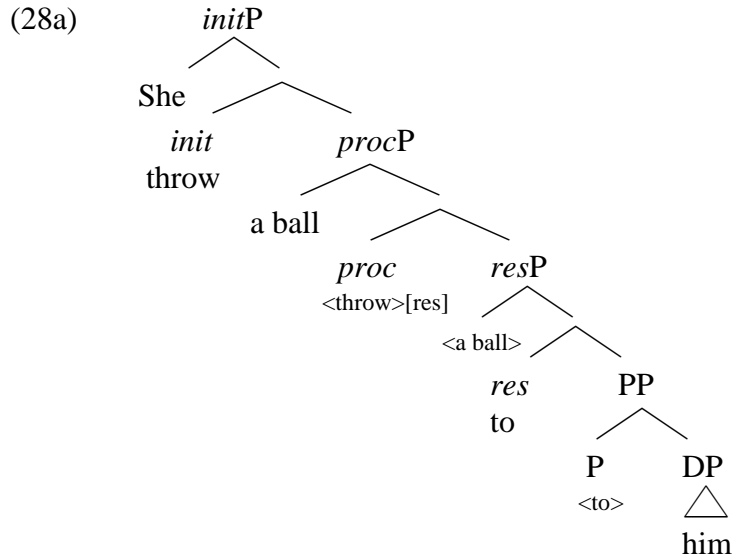
Ramchand assumes that verbs like *throw* possess a *res* feature (as part of their lexical entries) and that the directional preposition *to* in English also contains such feature. Since both possess the same feature, merging of the verb with a PP containing *to* is possible thus satisfying the *res* feature on *throw* by Agree and unification (Ramchand 2008: 110).

On the other hand, in the double object construction, it's understood that the verb itself identifies *res* and must take a stative PP complement. Ramchand follows Harley's (2002) suggestion of PPs headed by a null possessional P and a DP complement. Since the verb both has a *res* and a *proc*, the result of the action happens at the same time as the action is carried out:

(28b)

```
                 initP
               /      \
            She        \
                 init    procP
                 throw  /     \
                      proc     resP
                     <give>   /    \
                           him      \
                                res   PP
                               <give> /  \
                                     P    DP
                                   P_have  /\
                                         the ball
```
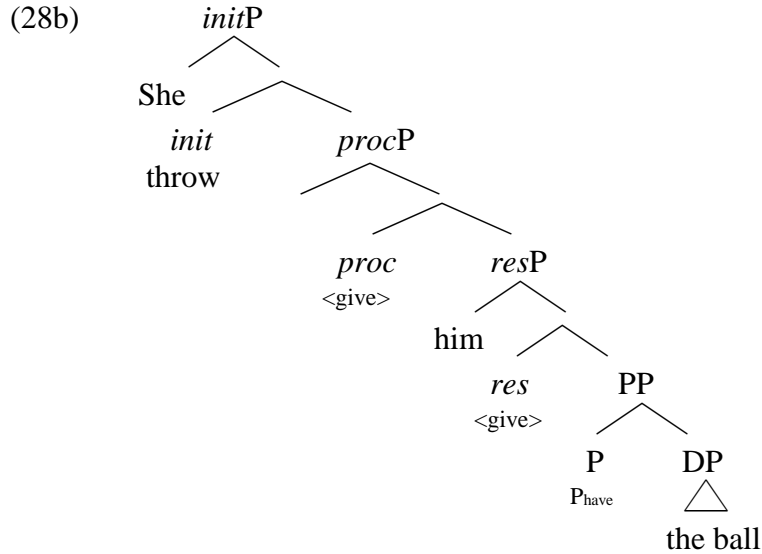
Ramchand's two accounts for the sentences above differ from each other as follows: in the double object construction, the verb identifies the result. In the prepositional alternant (see 28a), the verb identifies the preposition as the result, allowing the merge of a PP.

A thorough investigation of English passive constructions is not included in Ramchand's monograph, however, she briefly touches on them when discussing the derivation verb classes (Ramchand 2008: 97 ff.). While passive constructions can create non *initiator* predications, "[…] *the transitive verb still retains and projects its [init] feature, although the passive morphology existentially binds off the actual INITIATOR position*" (Ramchand 2008: 2009). She leaves open how exactly a passive construction would be derived within her proposed analysis.

Overall, Ramchand's work explores the composition of verbs and their arguments, and how argument roles and subsevents can be reflected in the syntax. She does not invent anything particularly *new*, as the correlation between semantics and syntactic structures has been made in the past. However, her proposed verbal structure allows for clear predictions and is convincingly logical. I am drawn to her proposal as

Ramchand is offering a uniform underlying structure that holds for all kinds of constructions. So far, this chapter has only discussed passive-specific contributions (and I have discussed approaches to TCs in chapter 2), but my analysis is also supported by other constructions (see chapters 5 and 6). Ramchand's approach, as opposed to the ones mentioned above, holds across constructions, providing a uniform structure that can be manipulated to account for numerous syntactic constructions. For example, under her approach, intransitive, transitive, and ditransitive constructions all *find a place* in the syntax. On the other hand, she also assumes the lack of a generative lexicon, accounting for multi-valency readings of a verb (for example (26) and (27)) to be stored as part of the lexical items. I side with Ramchand with respect to the semantic (thematic) roles, but I will not adapt her semantic layering in the syntax. As mentioned above, Ramchand does not analyze passives in detail, for example, she does not discuss the derivation of optional *by*-phrases in passives. One is only left to speculate that the *by*-phrase is derived similarly to the PP-alternant of a ditransitive constructions such as (28a). If this were the case, however, the semantic relation between the PP object and the lexical verb is not defined by theta-role assignment.[19]

3.1.9 GEHRKE AND GRILLO 2009

Gehrke and Grillo's take on passive constructions involve an explanation based on event structure. Their approach is sketched in (29) below.

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[19] This chapter is not concerned with tough constructions, but it should be noted that Ramchand's (2008) approach cannot satisfactorily account for them, as the optional *for*-phrase does not appear extraposed (sentence-finally), but rather, in between the TC trigger and the infinitive.

(29)   Sketch of Gehrke & Grillo's passive analysis

```
            AspP
           /    \
      ASST-T     Asp'
                /    \
             Asp      VoiceP
                     /      \
                EVT-T        Voice'
                            /      \
                        Voice       VP₁
                                   /    \
                              DP_ext     V₁'
                                        /    \
                                      V₁      VP₂
                                             /    \
                                        DP_int     V₂'
                                                  /    \
                                                V₂      (XP)
```
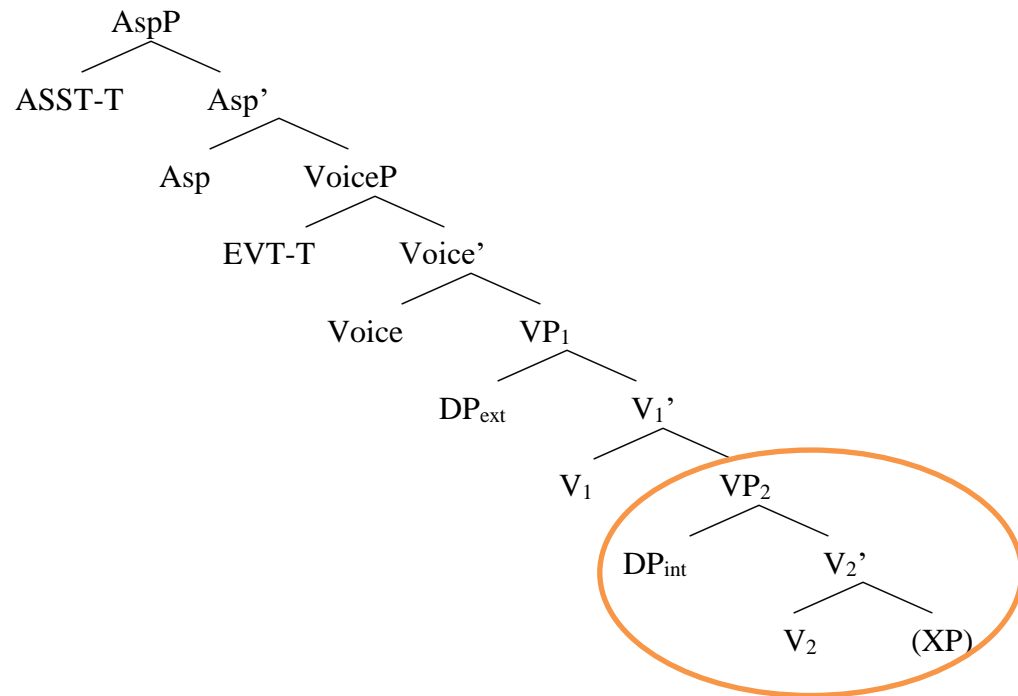
Gehrke and Grillo implement a verbal shell of which V_2, which introduces the end-point

of an event, hosts the theme argument DP_{int} and V_1, which causes a subevent, introduces

the external argument DP_{ext}. They thusly allow a consequent state to be structurally

represented within a verbal shell. Motivated by *event time*, as a semantic requirement, the

lower VP moves into Spec VoiceP in a passive construction. This movement into Spec

VoiceP is additionally motivated by a discourse-related property that singles out an

element of a complex event to be topicalized: the VP moves into what they refer to as a

discourse-related position at the edge of the verb phrase from where the internal

argument can move into a subject position (for example Spec TP).

Their analysis accounts for structures such as (30) or (31), which is, for example,

not accounted for by Collins' (2005) smuggling analysis.

(30)   There was a Swabian killed.

(ex. (7), Gehrke & Grillo 2009)

(31)   The boys were both given a good talking to.

(Quantifier Floating, ex. (26), G&G 2009)

Gehrke and Grillo's suggestion addresses Collins' (2005) smuggling approach, which, again, does not provide enough motivation as to why the operator (PartP) moves into Spec VoiceP, or why it exists where it exists at all. However, while Gehrke and Grillo draw a connection between their VP_2 and event time, which is realized in AspP above VoiceP, they also lack a convincing syntactic argument as to why this is the case. *Focus,* or topicalization, are not convincing enough to be part of the syntactic structure, at least, not if one's goal is to stay within a generative syntactic framework. On the one hand, they do not elaborate on the syntactic features that would cause the entire VP_2 to move up. On the other hand, if we assume that a TP projects above AspP, then their account would predict improper movement. Focus-movement, like Wh-movement, is an instance of A-bar movement, which would happen before movement into Spec TP (A-movement). Their account thusly does not hold.

In line with Collins, Gehrke and Grillo argue for an XP-movement to allow the internal argument to internally merge into a higher position, but they do not separately address the passive *by*-phrase. Instead, they side with Collins' (2005) analysis, namely, that *by* heads their VoiceP. Additionally, they explicitly do not give an account of *accusative case absorption*, i.e., an explanation of why the internal argument does not receive [ACC].

My analysis will address exactly these missing pieces. It will exclude VP-movement, and it will account for *by*-phrases, albeit similar to Collins (2005). However,

55

it will explain why and how [ACC] is not valued on the internal argument in passive (and other) constructions.

3.1.10 INTERIM SUMMARY

Section 3.1 served as an introduction to how passives have been approached in the past. This is, by no means, an exhaustive literature review of passive analyses, as there are numerous more. However, this section suffices to support the most important ideas laid out in my analysis in chapters 5 and 6. Additionally, I will reference other influential approaches (e.g., Burzio 1986) in chapter 4 when I connect the analyses of passive constructions and tough constructions.

From the past section, there are several notions, approaches and principles that I will dismiss throughout the following chapters. While Langacker's (1982) approach to passives was noteworthy because he attributes meaning to the auxiliary, I will not include this discussion in my approach. Meaning, or rather, choice of auxiliary will be brought up again throughout the analysis of some French examples, but with respect to German and English, auxiliary meaning is not considered any further.

Contra Baker (1988) and Baker et al. (1989), who suggest that passive and active constructions do not share the same underlying syntactic structure, and contra Leiss (1992), who suggests that passives are not syntactically derived from their active counterparts, my approach is based on the understanding that passive constructions are always derived from active constructions, that is, from the same base configuration as active constructions. This assumption also goes against Kratzer's (1996) idea to separate the external argument from the verb: the external argument is, in fact, part of my verbal

shell, and part of the verb's theta-assignments, but it is merged after the internal

arguments are merged. In this way, I side with Grimshaw (1990).

Deriving passives and other constructions from the same base configuration also

goes (partly) against Collins' (2005a) smuggling approach as he suggests a PartP that is

specific to the derivation of passive constructions. Additionally, he assumes that the past

participle and the passive participle of a verb are identical, which I will not assume.

Support for my assumption to view them as two separate verb forms comes from other

languages such as French, whose passive participles agree with the subject in person,

number, and gender, while the past participle does not (unless it is a verb of motion or

change of state, or a reflexive). Additionally, my analysis seeks to provide an approach

that is not passive-specific. As laid out in the introduction, this work is dedicated to

providing a uniform analysis that holds for both passive and tough constructions, and,

ideally, also for active constructions and other constructions that manifest similar

behavior. The smuggling approach would not allow for this goal as it is passive-specific.

For example, the ideas that there exists a functional layer between VP and *v*P, or that

Voice simply *inherits v*'s case assignment feature [ACC] would not allow this approach

to account for other constructions.[20]

Contra Ramchand (2008) and Gehrke & Grillo (2009), I will not discuss

semantics and event structure, or rather, syntactic operations such as *merge* and *move* will

not be driven by (sub-)events, focus, or topicalization. I will also refrain from labeling the

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[20] Note that Hicks (2009) convincingly adapted the smuggling approach and accounted for TCs (as explained in chapter 2). However, when comparing the two analyses, we notice that Hicks simply used the *mechanics* of smuggling to account for TCs. If we took the lexical and semantic information of a TC and *plugged it into* Collins' (2005a) syntactic frame, the derivation would crash. There is no binary (or tertiary) feature distinguishing the two, in fact, the two analyses are completely different because different parts of the syntax are targeted. While Hicks focuses on smuggling a DP, Collins smuggles a verb-DP combination.

verbal layers within the verbal shell according to their semantic roles. Whether or not the verbal layers have different labels (such as *init* or *proc*, or *VP₁*) will have no impact on the syntactic behavior in deriving the respective constructions.

Let's now turn to some of the concepts and mechanisms that I adapt throughout my analysis. I will copy Collins' (2009a) implementation of *by* into the head of Voice, which allows for *by* to value [uCase] on the external argument of the verbal shell. *By*'s position in the syntax is supported by the fact that it appears in complementary distribution with *for* in TCs (see chapter 5). I also side with Collins' idea that the verb assigns theta roles to its arguments, i.e., that the external argument always gets its (agentive) theta role from the verb, even when it is omitted at PF (this is also in line with Baker 1988). Every construction whose active version can include an overt external (agentive) argument will always enter the derivation with one, even when changed into a passive or TC.

While Chomsky's (1981) approach to passives suggests that the passive morphology (*-en*) *absorbs* both the external argument's theta role and (its ability to assign) accusative case, I agree with him in the broad sense. In my approach, the passive morphology does not *absorb* [ACC], but it does not allow [ACC] to *unveil* this feature on the verb.

3.2 RAISING, CONTROL, AND ECMs

There are some similarities between raising, control and passive constructions that I want to point out as they will directly influence my proposed analysis, or rather, will serve as examples to strengthen the applicability of my approach.

Consider the following examples, directly taken from Davies and Dubinsky (2008:vii).

(32)   a. Barnett seemed to understand the formula.
        b. Barnett believed the doctor to have examined Tilman.

(33)   a. Barnett tried to understand the formula.
        b. Barnett persuaded the doctor to examine Tilman.

Examples (32) are raising constructions, namely raising-to-subject in (32a) and raising-to-object in (32b).[21] (33a) represents a subject control construction, and (33b) an object control construction. While the analyses and the status of raising and control constructions have undergone quite a few developmental steps (consider Davies and Dubinsky 2008 for an important overview of said development), I am only going to focus on the work that plays a role in the development of my analysis in chapter 5.

Let's start with a brief discussion of raising constructions. Throughout the next chapters, I side with a mix of suggestions made by Chomsky (1989), (Lasnik and Saito (1991), and Davies and Dubinsky (2008). To account for (32a), I follow the analysis that the lack of external argument role assignment by the matrix verb in addition to the lack of case assignment to the external argument of the embedded verb causes the subject of the embedded verb to *raise* into the Spec TP of the matrix clause.

(34)   [Barnett seemed [___ to understand the formula]].

Note that the analysis for (32b) must differ. While a raising analysis of (32b) could look as follows, scholars widely agree that raising-to-object constructions should rather be treated as ECM constructions, i.e., exceptional case marking constructions (cf.

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[21] Note that this example will be analyzed as an ECM construction below.

37). Evidence to support this idea stems from the alterations for such examples, as shown

in (36), in which the matrix verb assigns a theta-role to an entire proposition.

(35)   [Barnett [believed the doctor] [___ to have examined Tilman]].

(36)   Barnett believed that the doctor had examined Tilman.

(37)   [Barnett believed [the doctor to have examined Tilman]].

Moving on to control constructions such as (33). Considering Adger (2003) as well as

Davies and Dubinsky (2008), subject control and object control sentences are analyzed

by positing that the subject or the object of the matrix verb *control* the empty subject

PRO in the embedded verb:

(38)   a. [Barnett$_i$ tried [PRO$_i$ to understand the formula]].
        b. [[Barnett persuaded the doctor$_i$] [PRO$_i$ to examine Tilman]].

While there have been attempts to argue against a *control* relation between a matrix DP

and an embedded PRO and for a raising analysis of sentences such as (33) (e.g. Hornstein

1999), scholars have convincingly argued to analyze them as two different constructions

(e.g., Landau (1994; 2003), Davies and Dubinsky (2008)).

        If they are so different, then why consider them at this point at all? On the one

hand, my main goal is to account for passives and TCs, yet, supporting my analysis by

showing that and how it accounts for other constructions that demonstrate similar

phenomena strengthens its importance. Therefore, let's briefly contrast the similarities

between raising, control, ECMs, passives and TCs, and point out what a unified analysis

will have to consider. Compare the constructions in (39).

(39) a. <u>She</u> seemed *to* **buy** a hundred cats.   Raising-to-subject
      b. He believed <u>her</u> *to* **buy** a hundred cats.   ECM
      c. <u>She</u> tried *to* **buy** a hundred cats.   Subject control
      d. He persuaded <u>her</u> *to* **buy** a hundred cats.   Object control
      e. A hundred cats were **bought** (<u>by her</u>).   Passive
      f. A hundred cats were easy (<u>for her</u>) *to* **buy**.   Tough construction

The most striking parallel is that the underlined item, the external argument of the

embedded verb, always appears "far" away from the theta-role assigning verb ***buy***.

Additionally, as the external argument of *to buy*, it is expected to be NOM-marked. This

is only the case in the raising-to-subject construction (39a) and in the subject control

sentence in (39c). In all other four instances, the external argument of the embedded verb

is ACC-marked.

Another striking similarity is manifested in the appearance of the embedded verb.

In all but one construction the verb is marked as infinitival as it is preceded by the

infinitive marker *to* (all constructions except the passive construction in (39e)).

My proposed analysis allows the constructions above to be mapped onto the same

syntactic base configuration. Movement and other suggested operations such as the

notion of (*the* [*default*] *unveiling of*) *suppressed features* will account for these

constructions.

3.3 UNACCUSATIVES

A section on unaccusatives should not be left out at this point, as they represent the

opposite of passive constructions in the sense that they cannot form passives. Consider

the following examples of unaccusatives, and their ungrammatical passivized

counterparts.

61

(40) a. The bottle fell.
      b. *The bottle was fallen.

(41) a. Three trains arrived at the same time.
      b. *Three trains were arrived.

In order to analyze short passives, i.e., those passive constructions that do not include an overt *by*-phrase, scholars have often drawn a parallel between them and unaccusative constructions (e.g., Perlmutter 1978; Levin & Rappaport 1989; Embick 2004), relating the lack of an external argument to the promotion of the internal argument to subject position in passives. This is directly comparable to the behavior of unaccusative verbs which possess as their only arguments an internal argument which receives NOM case.

While my analysis should be applicable to as many constructions as possible, the list of unaccusative verbs is so limited (for an overview, see Perlmutter 1978) that unaccusatives may be treated as special in the sense that they deserve their own analysis, or rules, that allow for their derivation. My analysis in chapters 5 and 6, for example, argues for a lack of [ACC] on unaccusative verbs.

However, there are other attempts that could account for unaccusatives, such as Kratzer's (1996) and Ramchand's (2008) works, as described in section 3.1, or the analysis by Embick (2004). In fact, Embick combines unaccusative structures with passive and reflexive constructions (see Leiss 1992) and concludes that his morphosyntactic approach is applicable to these constructions, taking a distributed morphology approach to analyzing them. The underlying structure that they share (cf. (43)) is based on the transitive underlying structure provided in (42).[22]

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[22] Note that Embick takes the feature [AG] from Kratzer (1996), denoting a semantic feature for an argument with the properties

(42)

```
            vP
          /    \
        DP        v
                /    \
              v        √P
            [AG]      /  \
            [Case]   √DP
```

(43)

```
            vP
          /    \
        v        VP
                /  \
           … Verb … DP
```
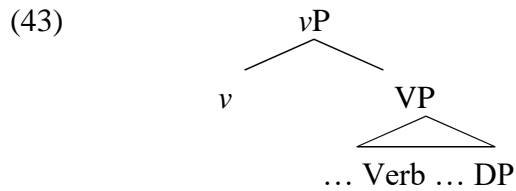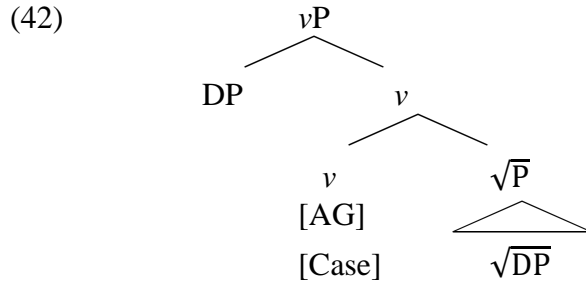
I am not going to discuss Embick's approach in detail here, but it is important to mention that he treats the lack of an external argument and their similar underlying structure as *syncretism.* In order to account for this syncretism, he applies *underspecification* (a theory specific to DM (see introduction)). While the underspecification rule does hold across the three constructions Embick investigates (unaccusatives, passives and reflexives), I do not side with him because I posit that passive constructions always involve an external argument that can optionally be left out.

3.4 RELATED PHENOMENA

This section shall turn away from specific constructions that are related to passives and provide an introduction to two of the main assumptions that my analysis is based on, namely *clause union* and *tenseless infinitives*.

3.4.1 CLAUSE UNION

Clause union is a process which aims to eliminate clause boundaries, that is, to reduce a clause containing an embedded clause to the structure of one simple clause (see e.g., Evers 1975; Rizzi 1982; Haider 2003).

The reason for considering the notion of *clause union* stems from the problematic constraints in several frameworks that restrict certain movement possibilities from crossing clausal boundaries. Consider the tough construction in (44), for example. If clause union could be achieved somehow, it can be accounted for more straightforwardly.[23]

(44)   She was tough to try to convince to read the book.

In order to be able to reanalyze constructions, clause union must be achieved in order to account for German control constructions such as (45) by way of (46b), taken from Bayer et al. (2005).

(45)   *dass der Mann mir das Lexikon zu kaufen empfohlen   hat.*
          that the man me the lexicon to buy   recommended has
          'that the man as recommended to me to buy the lexicon.' \

(46)   a. [… [CP … V$_2$] V$_1$]   bi-clausal
          b. [… V$_2$ V$_1$]   mono-clausal

Carrying out an empirical investigation involving a corpus study, a questionnaire study and a processing experiment, Bayer et al. provide evidence that a sentence such as (45) is preferably analyzed as coherent, i.e., as a mono-clausal construction. Note that this concerns a *processing* experiment, and that we cannot convincingly argue that this is also how language is computed.

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[23] In order to believe that, one must, of course, be convinced that clause boundaries are at play in this construction. My analysis will show that clause boundaries can be avoided in different ways.

Further use of *clause union* has been proposed for numerous restructuring accounts, for example Rizzi (1978) or Haider (2003). Haider provides numerous German examples that require these clause union effects, especially in constructions involving verb clustering.

Basing my analysis on the assumption that clause union can be triggered, for example, through selective features of the matrix verb (through C- or S-selection), clause union is achieved in all constructions investigated in chapters 5 and 6.

Clause union goes hand in hand with the next section discussing tenseless infinitives. In particular, Wurmbrand (2007) combines the two ideas when she argues for tenseless infinitivals.

3.4.2 TENSELESS INFINITIVES

Mainly based on Wurmbrand's work (2001; 2007; 2014), my analysis adapts the idea that infinitivals are tenseless. With that, I reject that the infinitive marker *to* is merged into T, and I adopt that there is no TP projection above bare infinitivals at all.

Wurmbrand (2007) provides numerous examples showing that infinitivals are indeed tenseless. She argues that infinitivals are not interpreted as pertaining to any particular tense other than the tense predicted by the matrix verb, and that they do not contribute to the computation of any sequence of tense of a construction (Wurmbrand 2007, 8). It can thusly be concluded that the syntax does not require a TP above the embedded verbal shell, which can be expected to not require a CP (=clause boundary) either.

The lack of a TP raises one important question, namely, how the infinitive marker *to* is merged, if it is not the head of TP. I argue that the English infinitive marker *to* is part of the verb's base form, and it differs from its use as a preposition (as demonstrated below), giving rise to the suggestion that *to* can occupy different syntactic positions and merge into different syntactic slots. (48a) stresses its function as a directional preposition, so heading a PP makes sense. In (47), on the other hand, *to* cannot head a PP, but rather, it is the infinitive marker that is part of the verb.

(47)   a. *They tried [PP to song].
       b. They tried [VP to sing].

(48)   a. This is the direction [PP to the airport].
       b. *This is the direction [VP to drive to the airport].

(49)   a. [VP To sing] is fun.
       b. [PP To song] is fun.

                                                                (cf. Pullum (n.d.))

While this may be obvious, consider the *to* in the following sentences.

(50)   a. She loves [DP cake].
       b. She loves [VP to bake].

(51)   a. He wants [DP cookies].
       b. He wants [VP to bake].

The nominal nature of (50b) and (51b) stress that the *to* in both VPs do not require a TP to project above them because they are tenseless. Rather, *to* in a bare infinitive is part of the lexical entry of a verb.

3.5 SUMMARY

Throughout this chapter, I have reviewed and highlighted the most important accounts that (partially) influence my own analysis. The notions and assumptions to be dismissed

and to be used were summarized in the interim summary in section 3.1.10. The second part of the chapter included a short section on related constructions as well as noteworthy phenomena that impact the development of my analysis in chapters 5 and 6.

In a nutshell, my analysis will argue that the external argument in passive and other constructions is part of the derivation, even when it is not pronounced at PF. By positing that infinitivals are tenseless, and through clause union, passives and related constructions can be accounted for in a unified manner.

CHAPTER 4

A PASSIVE APPROACH TO TOUGH CONSTRUCTIONS

In this chapter, I describe the main properties of passive constructions in both English and German, and relate them to TCs. First, different *kinds* of passive constructions are examined, i.e. I will look at the syntactic behavior and challenges of each kind. Literature regarding the respective constructions is only briefly mentioned, as they were already discussed in the previous section. In 4.2, I summarize the similarities and differences between passive constructions and TCs, arguing for a uniform analysis of both construction types by showing that a simple consideration regarding the analysis of TCs, namely the creation of clause union by elimination of opacity-inducing phrases, will align their underlying structures with those of passive constructions. This TC analysis is then provided discussing potential flaws that require a more thorough investigation of passive and passive-like constructions.

4.1 PASSIVE CONSTRUCTIONS AND TCs

The basic understanding of passive constructions cross-linguistically invokes the concept of *voice* and concerns the relationship between the action expressed by a verb and its arguments (such as agent, patient, etc.).

There exist numerous approaches to the syntactic analysis of passive constructions. They can be split into two major branches. While the majority of scholars argue for derivations through movement, and thus emphasizing the semantic connection between the

complement of the optional *by*-phrase (e.g., 'The lion king was killed *by a mischievous relative*') and the external argument of the lexical verb, others take a different approach stressing that there is no need for an external argument, or PRO, to be connected with the complement of *by,* and that the passive construction does not need to derive from its active counterpart, at least as far as the object of the *by*-phrase is concerned.

4.1.1 *"REGULAR" PASS*IVES

The most *common* passive constructions are sentences such as (1) and (2). *Short passives* are sentences such as (1a) and (2a) in which no agentive role is expressed. In a *long passive*, the agentive role is lexicalized in the form of a *by*-phrase in English, or a *von*-phrase in German (cf. (1b) and (2b)).

(1)   a. The paper was written slowly.
          b. The paper was written slowly by Anne.

(2)   a. Der Aufsatz wurde langsam geschrieben.
             the paper   was   slowly   written

          b. Der Aufsatz wurde langsam von Anne geschrieben.
             the paper   was   slowly   by Anne written
           'The paper was written slowly by Anne'

These "regular" passive constructions are often understood to be the passive versions of their active counterparts, suggesting that the passive constructions are directly, i.e. semantically and syntactically, related to their active opposites. The active counterparts for (1a, b) and (2a, b) would be (3) and (4) respectively.

(3)   Anne slowly wrote the paper.

(4)   Anne schrieb langsam den Aufsatz.
          Anne wrote   slowly   the paper

Comparing the passives of (1) and (2) with the active sentences in (3) and (4), one can retrace the common assumption that (1) and (2) share the same argument structure as, and are derived from (3) and (4). In both (1) and (3), the lexical verb is *write* which is a transitive verb requiring two arguments, namely an external argument and an internal argument.[24] As clarified in (3), the external argument is *Anne* (NOM) and the internal one is *the paper* (ACC). In the passive counterparts, the object *the paper* is promoted to the grammatical subject of the sentence (with NOM case), and the external argument, or subject, *Anne* can optionally appear in a *by*-phrase (see example (1b)). Considering that ACC case marking usually happens to the internal argument, the interesting issue when analyzing passive constructions has been to account for its subject-like appearance in the NOM case in sentences such as (1) and (2). The same is true for German.

The passive auxiliary that combines with the past participle of the lexical verb are *be* and *werden* for English and German respectively. However, English has an alternative auxiliary that syntactically behaves just like *be* (see examples in (5)).

(5)   a. Mufasa was killed (by Scar).
        b. Mufasa got killed (by Scar).
        c. She was arrested.
        d. She got arrested.

There is a semantic difference between (5a) and (5b) as well as between (5c) and (5d), but syntactically, they do not differ, so they can be analyzed the same.

Regarding the common assumption with respect to the active/passive counterparts, it can be said that both essentially concern the same action and arguments with the only difference being the surface structure (this view as well as opposing views are discussed in

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[24] Note that *write* can also take two internal arguments and be a ditransitive verb. I will expand on them later in this chapter as well as in chapter 5.

chapter 3). In order to account for the demotion of the subject and the promotion of the object (if the transformation of a passive construction is derived from its active counterpart), the most notable early generative approach was published by Chomsky (1981). It is *most notable* because his approach has since been adopted by many researchers as the *standard* for analyzing passive constructions as exemplified in (1) through (5). Chomsky suggests that the passive morpheme possesses a unique property that essentially *absorbs* accusative case (Chomsky 1981: 124ff.). This is in line with Burzio's Generalization (Burzio 1986) stated in (6).

(6)   *Burzio's Generalization*
        All and only the verbs that can assign a theta-role to the subject can assign
        (accusative) case to an object.

If a little *v* does not assign a theta-role to its external argument, then it does not assign case to the verb's complement. According to this, the internal argument in English passives then moves into Spec TP (not because of the passive morphology, but because of the case filter) where it gets nominative case. In German, the internal argument gets nominative case valued at a distance, and, if it ends up as topic in initial position, moves into Spec CP in German main clauses.

        While this approach was initially satisfying, it lacks the relation between the external argument of the lexical verb and the prepositional object in the optional *by*-phrase in a passive construction. It also does not account for double-object constructions such as (7)[25] which demonstrates that the lexical absence of an external argument theta-role does not always imply an absence of accusative case.

(7)   Simba was given a difficult task (by Timon and Pumba).

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[25] Double-object constructions are discussed again in section 4.1.5 below.

Based on this and other examples, the assumption building on Chomsky's (1981) and Burzio's (1986) works regarding the missing theta-role assignment and the lack of accusative case assignment has since been refuted (see, e.g., Goodall 1993) and replaced by alternative approaches focusing on the semantic relation between the external argument and the prepositional object of the optional *by*-phrase (see chapters 3 and 5).[26] For now, it shall suffice to assume that in passive constructions, ACC assignment to the internal argument is avoided by some kind of *defectiveness.*

Comparing *"regular" pass*ives with TCs, it can be observed that they share certain properties, suggesting that both TCs and passive constructions can be accounted for by a uniform analysis: TCs and "regular" passives both involve the problem of case assignment, namely that the internal argument of the lexical verb shows up with NOM on the surface. Furthermore, both structures allow for an optional prepositional phrase, the *by*-phrase for passives and the *for*-phrase for TCs, whose prepositional object is the external argument of the lexical verb.

The main difference these two structures exhibit are the apparent CP/TP layers. For TCs, it is generally assumed that the matrix predicate takes an embedded infinitival/non-finite clause as its complement, so the complement is a whole CP/TP, leading to the problematic *improper movement* (see chapter 2). In contrast, the analysis of passive constructions assumes that the internal argument of the lexical verb does not need to cross a clause boundary because there is none between the passive auxiliary and its complement. However, if clause union in TCs can be achieved, TCs and passives will also share this property, which is an additional argument for a uniform analysis of the two.

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[26] Note that Burzio's Generalization (1986) still accounts for unaccusative structures. However, I aim at providing a unified account, so Burzio's Generalization is not a part of my analysis.

4.1.2 CAUSATIVE (PASSIVES)

Let us now turn to a different kind of passive construction, namely causative passives. In English, such constructions are usually formed by combining the causative auxiliary *have* (to a lesser extent also *get* [cf. example 5], as well as *need* and *want*) with the past participle of the lexical verb. This is demonstrated in (8).

(8)   a. Scar had Mufasa killed.
        b. Scar got Mufasa killed.
        c. Scar needed Mufasa killed.

The structures from example (8) result from the combination of the respective auxiliaries and the past participles of any transitive verb. In German, a true equivalent to these sentences can only be expressed by a *lassen* 'let/habve' structure, as demonstrated in (9). Note that this German *lassen* structure is an *Accusativus cum Infinito* (AcI) construction, that is, *lassen* plus an infinitive complement, consisting of a verb and one or more of its arguments.

(9)   Scar ließ Mufasa umbringen.
        Scar let M.   kill.INF?[27]
        'Scar had Mufasa killed'

Lassen cannot combine with a past participle. It combines with a form of a verb that resembles the German infinitive. However, the interpretation of the lexical verb, *umbringen* in (9), must be a passive one because *Mufasa* is the patient of *umbringen,* and not the agent. This passive reading arises when *lassen* combines with a transitive verb and just its object in German.[28] If combined with verbs lacking an internal argument, no

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[27] INF? is used here to mark that ambiguity of the term *infinitive* in this specific environment. Since the form of the verb receives a passive interpretation in this sentence, it is not clear if this is the actual infinitive form, or if this infinitive-like form should receive a different status. This is more thoroughly discussed later on.

[28] Compare (i) to example (9). An AcI construction as presented in (9) forces a passive interpretation. This is stressed when considering that constructions of this kind also allow active transitive constructions such (i).

73

passivized reading is possible (see example (10)), and the English equivalent would consist of *let + infinitive*.

(10)   Scar ließ die Hyänen lachen.
        Scar let   the hyenas laugh
        'Scar let the hyenas laugh'

The main difference between causative passive constructions (in both English and German) and the *"regular" pass*ives is that the internal arguments of the lexical verbs (*Mufasa* in (8) and (9)) are licensed for ACC case.[29] Consider (11) and (12).

(11)   a. Mufasa/He (NOM) was killed.
        b. Scar had Mufasa/him (ACC) killed.

(12)   a. Mufasa/Er wurde umgebracht.
        b. Scar ließ Mufasa/ihn umbringen.

While the internal argument of the lexical verb receives NOM case in the *"regular" pass*ive constructions (a), the internal argument of the embedded verb in a causative passive does not. In order to account for the ACC in structures such as (11b) and (12b), one may compare these structures to English ECM (exceptional case marking) constructions.

Consider again example (8c) and compare it to (13). (13) exhibits an ECM construction in which *Mufasa* is the subject of the embedded clause, but is licensed for ACC by the main verb *need.* Arguably, the past participle of *kill* in (8c) can be interpreted as an adjective, but this is ruled out when looking at (14) which demonstrates the passive

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(i)   Scar ließ die Hyänen Mufasa umbringen.
         Scar let   the hyenas M.   kill
         'Scar had the hyenas kill Mufasa'

[29] Note that this ACC does not come from the embedded verb, but from *lassen*. In a transitive AcI construction such as (i) from footnote 4, *Mufasa* receives ACC from the embedded verb. In (9) and (12b), the case is assigned by *lassen*.

nature of (8c), arguing for a different analysis, namely a passive analysis, of the examples

listed in (8).[30]

(8c)   Scar needed Mufasa killed.
(13)   Scar needed Mufasa (to be) gone/dead (*by the hyenas).
(14)   Scar needed Mufasa (to be) killed (by the hyenas).

When comparing (8c) and (14) to those constructions represented in (15), we come to the

conclusion that we are dealing with perception/causative constructions whose case

licensing resembles ECM-constructions.

(15)   a. Scar saw Mufasa (be) killed (by the hyenas).
        b. Scar saw the hyenas kill Mufasa.
        c. Scar made Mufasa *be/?get killed (by the hyenas).
        d. Scar made the hyenas kill Mufasa.

Turning back to the German causative passive example involving *lassen*, it should be noted

that a passive reading is only achieved when *lassen* is combined with the restricted class

of verbs that can form a "regular" passive (Gunkel 1999, 134). One of the main problems

that arises with this construction is the fact that the morphological form of the lexical verb

differs from the traditional passive form, namely the past participle. Rather, it appears as

the infinitive. This has caused some different approaches to an analysis of the structure.

For now, it shall suffice to say that it requires some kind of passive analysis to be accounted

for. Taking into consideration its properties, and comparing them to TCs, we can see the

similarities that, again, allow us to argue for a unified analysis of TCs and passives.

To sum up this section, consider the following examples again and note their

syntactic similarities. Examples (16), (17), and (19) exhibit an infinitive construction of

some kind (to kill, *umzubringen*, *umbringen*). In the two TCs in (16) and (17), the internal

argument of the lexical verb appears as the subject of the sentence, and it is case licensed

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[30] Note that *need* can also invoke a non-passive reading such as *He needed him happy.* However, only the

for NOM. Comparing (17) with (19), both structures exhibit an infinitive construction. Since (19) has a passive reading, it should be analyzed as a passive construction, supporting the argument of German TCs to be analyzed as such.

(16)   Mufasa was difficult to kill.

(17)   Mufasa war schwer   umzubringen.
        M.   was difficult   to-kill
        'Mufasa was difficult to kill'

(18)   Scar had Mufasa killed.

(19)   Scar ließ Mufasa umbringen.
        S.   let M.   to kill
        'Scar had Mufasa killed'

While *Mufasa* is licensed for ACC in both the English (18) and German (19) causative structures, they are nevertheless passive constructions that need to be analyzed as such. Additionally, in order to account for German causative passives such as (19), Gunkel (1999) argues for an monoclausal analysis. This goes hand-in-hand with my approach to a monoclausal analysis of TCs discussed below.

4.1.3 PSEUDOPASSIVES

Turning to another type of passive construction, this section discusses pseudopassives. They are different from the "regular" passive constructions in that their DPs seem to originate as complements to a preposition rather than as internal arguments to the lexical verb. Consider the English pseudopassive in (20a) and the pied-piped version in (20b). The German examples in (21) demonstrate that pseudopassives are not grammatical in German. Instead pied-piping is obligatory.

(20)   a. His death was talked about.
        b. ?About what did they talk?

(21)   a. *Sein Tod   wurde über   geredet.
             his   death was   about   talked

         b. Über   seinen Tod   wurde geredet.
           About   his   death   was   talked.

In English, the crucial difference between (20a) and a "regular" passive is the position of the DP at base configuration. Since the DPs in (20) and (21) are complements of a preposition at base configuration, one could argue that they are not "real" direct objects.[31] In the non-passive counterpart, *his death* and *sein Tod* would check case with their respective Ps (cf. 22 and 23), which, for German, does not pose a problem because pseudopassives are not allowed.

(22)   They talked about his death.

(23)   Man redete über seinen Tod.
        one talked about his   death
        'One talked about his death'

Drawing a parallel between TCs and passives, it becomes clear that with respect to structures such as the English example (20a), the problem is similar to the one we are facing concerning TCs. The pseudopassive DPs should get case in the base configuration. After case is assigned, motivating movement into a higher A-position, i.e. Spec TP, is problematic. Just like for TCs, even if the DP were to simply move into Spec TP, there would be no motivation for assigning NOM case to the DP when the need for case assignment had already been satisfied in the prepositional phrase. The proposed analyses of constructions similar to (20a) have thus focused on isolating the DP object of the preposition from its head P in order to justify its appearance in Spec TP. They will be discussed more in chapter 6; for now, it shall be sufficient to stress the similarities between

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[31] A *real* direct object would be a complement to the verb, and would check case features with little v.

pseudopassives and TCs as an argument for a uniform analysis between TCs and passive constructions.

Since pseudopassive constructions do not exist in German, we cannot establish such a similarity in German.

4.1.4 UNACCUSATIVES

To stress the importance of unaccusatives again, consider the following examples and their description. In both English and German, unaccusative/ergative verbs such as *arrive* or *decease* cannot be passivized (**The lion was died*). This can be attributed to the fact that unaccusatives do not assign an external theta role, i.e., there is no external argument in the argument structure of an unaccusative. The grammatical subject of an unaccusative verb is, in fact, its internal argument.

(24)   The king fell.

(25)   The king died.

(26)   Der König fiel.
        the king   fell

(27)   Der König starb.
        the king   died

Since there is no external argument, structures such as (24) - (27) can be analyzed by proposing the lack of the little vP leading to a lack of ACC assignment.[32] Considering that the   subject   of   the   sentence   is   not   performing   the   action,   but   rather,

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[32] Note that this is an instantiation of Burzio's Generalization (1986), which my analysis will reject. However, taking into consideration current literature, this widely accepted assumption still emphasizes the similarities between unaccusatives and passives and TCs in that the internal argument appears as the matrix subject that gets NOM case.

undergoing/experiencing it, it shares syntactic properties with the grammatical subject of TCs as well as passive constructions.

4.1.5 DOUBLE-OBJECT PASSIVES

I will now turn to double-object passives which exist in both German and English. Such constructions are possible with ditransitive verbs such as *give someone something* or the German *jemandem eine Aufgabe stellen* 'to assign a task to someone'. Consider the examples (28) and (29). In (28a), the indirect object *Simba* appears inside a PP, but it can also appear in the position of the grammatical subject (NOM-marked), as demonstrated in (28b). In the German counterparts, however, the indirect object (interpreted as the Recipient) is mostly DAT-marked, and only the passivized object, that is, the noun phrase which is the direct object (interpreted as Theme/Patient) of the lexical verb (*eine schwierige Aufgabe* 'a challenging task'), receives NOM. (28c-d) provide the active sentences.

(28) a. A challenging task was given to Simba.
      b. He was given a challenging task.
      c. Someone gave a challenging task to Simba.
      d. Someone gave him a challenging task.

(29) a. Eine schwierige Aufgabe   wurde ihm   gestellt.
         [a   challenging task].NOM was   he.DAT assigned
         'A challenging task was assigned to Simba'
      b. Ihm   wurde eine schwierige Aufgabe   gestellt.
         he.DAT   was [a   challenging task].NOM   assigned
         'He was assigned a challenging task'

Due to the absence of an overt morphological NOM/ACC distinction of determiners and nouns in English, is difficult to tell whether the English *a challenging task* in (28b) is marked for ACC or NOM. Replacing the DP in question with a masculine or feminine pronoun, we get the following, albeit semantically questionable results:

(30)   a. He was given/handed the baby girl.
        b. ?He was given/handed her.
        c. *He was given/handed she.
        d. *Him was given/handed her.
        e. *Him was given/handed she.

(30b) may be questionable, but it is more grammatical than (30c), demonstrating that

English double-object passive constructions undergo different case-assignments than their

German counterpart. While the German construction always requires the direct object of

the lexical verb to receive NOM (but not the indirect object), the direct object of the English

passivized double-object construction receives lexical ACC (see e.g. Lee-Schoenfeld &

Twiner 2018) when the non-PP indirect object undergoes passivization because it doesn't

get structural ACC. Note that ungrammatical (30d-e) are comparable to the German (29b).

Concluding this description with a comparison of double-object passives and TCs,

it can be noted that both constructions bare similarities. Compare German examples (29),

here repeated as (31), with (32).

(31)   a. Eine schwierige Aufgabe   wurde ihm   (von ihr) gestellt.
           [a   challenging task].NOM was   he.DAT (by her) assigned
            'A challenging task was assigned to him (by her)'

        b. Ihm   wurde eine schwierige Aufgabe   (von ihr) gestellt.
           he.DAT   was [a   challenging task].NOM (by her) assigned
            'He was assigned a challenging task (by her)'

(32)   Eine schwierige Aufgabe   war ihm schwer zu stellen.
        [a   challenging task].NOM was him difficult to assign
        'A challenging task was difficult to assign to him'

As demonstrated by (31) and (32), the DP *eine schwierige Aufgabe* receives NOM case in

all three examples, even though it is one of the internal arguments of the lexical verb *stellen*

suggesting a similar analysis for both constructions.

Looking at English, such a relation cannot be attested. This absence can be ascribed to the fact that once the specifier position of a CP or TP is filled with a DP other than the direct object of the verb, the latter must remain in the complement position and be case-licensed there. To clarify, *a task* in (34b) and (34c) cannot follow the TC-triggering predicate and at the same time precede *to give* (cf. 34d), and remains in the position reserved for ACC case assignment.

(33)   a. A challenging task was given to Simba (by them).
       b. He was given a challenging task (by them).

(34)   a. A task was difficult (for them) to give to him.
       b. He was difficult (for them) to give a task to.[33]
       c. ?He was difficult (for them) to give a task.
       d. *He was difficult (for them) a task to give.

The similarities between English double-object passives and TCs are then that in the two constructions, both the indirect and the direct objects of the lexical verbs can appear sentence-initially, i.e., as the grammatical subject of the sentence, where the DP checks NOM case, depending on whether the indirect object is expressed as a DP or a *to*-PP.

4.1.6 IMPERSONAL/EXISTENTIAL PASSIVES

In the previous sections, it has been emphasized that the grammatical subjects of passive constructions and TCs are the thematic objects of the lexical verb. Since unergative verbs are intransitive verbs that possess an external argument, they cannot be passivized in the same way as *"regular" pass*ives. By inserting an *es* 'it', German provides a mechanism to passivize these verbs resulting in so-called *impersonal passives* (cf. 35).[34] While these

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[33] This example is similar to the pseudopassive examples above.
[34] Note that *es* is only needed in German main clauses (V2) which do not allow an empty Spec CP.

constructions are restricted to German, English allows for similar structures headed by the expletive *there* (cf. 36). In English, these constructions are, like the common passives, restricted to transitive verbs, and are not possible with unergative verbs. As demonstrated by accompanying English translation of the German example involving the unergative verb *kämpfen* 'to fight' in (35), the English meaning cannot be expressed using a passive construction. Instead, if we want to express (35) in English, it needs to be done using active voice and nominalization (a gerund).

(35)   Es   wurde gekämpft.
        it/there was   fought
        'There was fighting'

In (36), the English impersonal, or existential, passive involves *there*-insertion. Contrary to the double-object examples (34a) and (34b), here repeated as (37a) and (37b), the internal argument of the lexical verb in (36), *a lion*, precedes the lexical verb and gets NOM case (Radford 2000). This indicates a movement operation of *a lion* away from its base configuration as complement of *kill*.

(36)   There was a lion killed.

(37)   a. A task was difficult to give to him.
        b. He was difficult to give a task to.

Just like in (37), (36) is an example for movement of an internal argument into a higher position in which it receives NOM case, even though it initially appears as the complement of the lexical verb. One particularity to note in (36) is that the DP follows the passive auxiliary *be* and does not appear sentence-initially.

Turning to German examples of impersonal passives similar to the one in (36), consider (38). Expletive *es* can only be inserted into the German *Vorfeld*[35] and it cannot appear following the finite verb (as shown in (38b)).

(38)   a. Es   wurde ein Löwe   getötet.
            it/there was   a   lion.NOM killed
            'There was a lion killed'

        b. Ein Löwe wurde (*es)   getötet.
            a   kion was   *it/there killed
            'A lion was killed'

(39)   a. Der Löwe war schwer   zu töten.
            the lion   was difficult   to kill
            'The lion was difficult to kill'

        b. Es war schwer,   den Löwen   zu töten.
            it   was difficult [the lion].ACC to kill
            'It was difficult to kill the lion'

Comparing (38) with the TC and its alternation in (39), *es* in (39b) cannot appear anywhere else than sentence-initially, i.e., in the *Vorfeld*, either. However, (38a) and (39b) differ in case-marking: the internal argument receives NOM in the passive construction (38a), but ACC in (39b).

Resulting from the description in this section, one can summarize that TCs and impersonal/existential passive constructions share case-assignment similarities: In English and German, existential passives such as (36) and (38a) and TCs such as (37) and (39a) both show NOM case in DPs that originate as complements to the lexical verb. Together with other parallels discussed throughout 3.1, these similarities shall support the argument that TCs can be accounted for by using an analysis for passive constructions.

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[35] In generative grammar, the German *Vorfeld* is the Spec CP position. This position can be filled by any constituent, and, as opposed to English Spec TP, does not require said constituent to be assigned NOM case.

4.2 TOUGH CONSTRUCTIONS ARE PASSIVE CONSTRUCTIONS

While the description of phenomena in 4.1 do not discuss every kind of passive construction, they shall suffice to support the argument for a passive analysis of tough constructions.

The following paragraphs summarize the descriptive similarities between TCs and passives, as illustrated in the previous section leading to the conclusion that TCs can be sufficiently analyzed using a passive account. This is followed by further support of a passive analysis of TCs taking into consideration the previous research discussed in chapters 2 and 3 of this dissertation.[36]

The most prominent similarity between passive constructions and TCs concerns case assignment. The internal argument of the lexical verb, which usually receives ACC case in both languages, receives NOM in both constructions. This causes not only actual passive constructions, but also TCs to receive a passive interpretation. This argument can be supported by the second similarity between the two, namely, the optional possibility of a prepositional phrase containing as its prepositional object the external argument of the lexical verb.

A brief look at English pseudopassives demonstrated that an analysis of such a construction faces the same problem as we observed in TCs: the extraction of the DP from a position in which it is case-licensed for a case other than the one it receives in the end.

Having touched on *improper movement* as well as on previous analyses to passive constructions in the previous chapter, I have presented processes and approaches that can

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[36] In what follows, I will focus on the similarities w.r.t. to the English examples, providing supportive arguments from research on English. German TCs will be discussed again in more detail in chapter 6 where a German account for passives is also provided.

relate tough constructions with passives. Recall Zwart (2012) and Wurmbrand (2001, 2007) from chapter 2. With *clause union* in mind, Zwart's attempt suggested a reanalysis of the embedded clause of a TC as an adjectival complement of the matrix clause. While this suggestion accomplishes clause union, Zwart states that his attempt would not account for what he calls *long* TC, as shown in the following example.

(40)   Passives are difficult to try to persuade a linguistics student to try to explain.

Additionally, Zwart's adjectival approach to TCs does not include a derivational relationship between the matrix subject and the embedded object. To summarize the flaws of the adjectival reanalysis, while it does achieve clause union, the embedded object and the matrix subject are not related by movement, and long TCs as shown in (40) cannot be accounted for.

Susi Wurmbrand's work, as explained in chapter 2, would suggest that the embedded phrases of TCs are analyzed as bare verbal phrases. That is, the embedded clause does not contain opacity-inducing projections such as CP or TP. With the lack of the two, there would exist no boundary that would interfere between the embedded object and the matrix subject, however, the potential presence of little *v*P is at odds with the embedded object to move for case reasons. If we argued that the embedded clauses of TCs were bare VPs, then we would have the problem of accounting for sentences such as (41) because the *for*-phrase would be part of the VP.

(41)   John is difficult [(*$_{VP)}$ for his sister to convince].

Contra the non-TP approach, it could be argued to stick with the widely accepted analysis, or assumption, that *to* is an infinitival marker merged as the TP head.

While reanalysis can be used to reinterpret the embedded clause as an adjectival complement as suggested by Zwart, it can also be used to detach syntactic entities from one another. As discussed in the previous chapter, PP-reanalysis would allow for such a syntactic detachment. Examples such as (42b) and (43b) are indeed possible, so the approaches to "simple" pseudopassives (42a) and (43a) should be considered.

(42)   a. The thesis was talked about.
          b. The thesis was difficult to talk about.
(43)   a. Mary was talked to.
          b. Mary was tough to talk to.

Applying this approach to the derivation of a TC, the first step is the detachment of the embedded prepositional objects, i.e. *the thesis* and *Mary* for (42) and (43) respectively, from their PP-heads by reanalyzing the preposition as part of the V. The DP then merges with the combined V-P, as demonstrated in (44).

(44)

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          VP                              VP
         /  \                            /  \
        /    \                          /    \
       /      \    DP        →     V+P        DP
      V      PP                        (reanalysis)
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In the pseudopassive environment above (cf. 42a and 43a), *the thesis* and *Mary* would not check accusative at any point in the derivation if it is assumed that there is no agentive *v*P in passive constructions. If there were only a bare VP, then the DP could not check ACC.

As the derivation builds up, the DP would have to satisfy the EPP feature on T (in English) and move into Spec TP of the embedded clause.[37] In passives like (42a and 43a),

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[37] Recall that at this point in the chapter, I am skipping back to square one, considering different options that help work towards a uniform analysis of TCs and passives. Since many of the previous attempts involve the presence of a TP, I will use it throughout the next paragraphs. However, as already mentioned

the DP checks NOM in this position, and the derivation ends there (there is only one clause). With regard to TCs, however, the derivation cannot end here because the TC's DP must end up in the matrix Spec TP. Recall that TCs have non-finite embedded clauses, so NOM case cannot be checked in Spec TP of the embedded clause. In order to circumvent this issue, let us consider subject raising once again. In subject raising environments, the raising of an embedded, caseless DP into matrix Spec TP assumes that a raising verb like *seem* does not select an external argument, i.e. it does not assign a theta role to an external argument. Instead, it takes a complement clause, a TP, as its only argument. One of the tests for this is the insertion of *it* when the complement is finite, meaning that there is no caseless DP available to be raised (see examples (45a) and (45b).

(45)   a. She seems to like jazz.
        b. It seems that she likes jazz.

Contrasting TCs with (45) one more time, we see that (46a) is a *true* TC, and (46b) includes an inserted *it* when the embedded object appears in-situ.

(46)   a. Mangoes are difficult to hate.
        b. It is difficult to hate mangoes.

The only difference to be found between the b-sentences of examples (45) and (46), is the finiteness of the embedded verbs. Putting this difference aside, it could be argued that TC-triggers, just like raising verbs, do not assign an external theta-role, but rather take a non-finite complement as their only argument (this would also allow Zwart (2012) to reanalyze the construction as an adjectival complement). The fact that TCs take non-finite complements as their arguments was discussed in chapter 2. To reiterate, consider one more

in chapter 3, my analysis gets rid of this layer for infinitival structures, siding with Wurmbrand (2007; 2012).

time examples (47) and (48). Note the difference in meaning between the TCs (examples (47a) and (48a)) and their non-TC counterparts (47b) and (48b). Semantically, the TCs entail[38] that *one can fail Math* and that *one can talk to Susi* in (47a) and (48a) respectively, so their arguments are the embedded clauses.

(47) a. Math is easy to fail.
      b. Math is easy.

(48) a. Susi is easy to talk to.
      b. Susi is easy.

Combining PP-reanalysis with raising, our derivation would work and not violate the improper movement constraints: For sentence (42b), the derivation would then be like in (42a) with the difference being that the embedded object does not check NOM case in Spec TP of the *talk-about*-clause because we are dealing with a non-finite TP. After merging the matrix clause, and with no external argument selected, the embedded, caseless DP moves into the higher Spec TP in order to check NOM case. But it is not as simple as that. This approach suggests that the embedded clause is a TP only (as opposed to a full CP), and it presumes that the embedded object does not check ACC case at an earlier point in the derivation. While this can be avoided in pseudopassives by PP-reanalysis, in (46a), there is no passive morphology involved. However, if we treat the embedded clause of TCs as passives[39] have commonly been treated, and then analyze the matrix clause as we do raising constructions, TCs can be analyzed. Integrating this into an analysis of a sentence such as (49), we will see that this combined approach is still problematic because we are dealing

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[38] for (47a), *Math is easy to fail* ⊨ *someone fails Math,* and for (48a), *Susi is easy to talk to* ⊨ *someone talks to Susi*

[39] For now, it should suffice to assume that the *common* passive analysis disallows ACC assignment to the embedded object before its movement into a higher position. In the following chapters, this approach will be revised.

with an extended TC which includes both a *for* complementizer and a pseudopassive construction.

(49)   She was difficult [$_{CP}$ for [$_{TP}$ John to [$_{VP}$ talk [$_{PP}$ to __]]]].

As emphasized before, an analysis of the embedded *for John to talk to* in terms of the common passive fails because, in contrast to passive constructions, the embedded clause in (49) consists of an external argument and an overt complementizer. The implementation of PP-reanalysis for (49) results in improper movement: if the embedded prepositional object is disconnected from its preposition after the verb and the preposition are reanalyzed as one element, i.e. [talk to$_i$ [t_i __]], the DP would have to move into Spec CP in order to become available to the matrix clause. Movement from there into matrix Spec TP is not possible because it means movement from an A'-position into an A-position, i.e. improper movement.

It seems that the solution to this issue is a reconsideration of the idea that a TC-trigger takes a whole CP as its complement. Up until now, I have argued for such an embedded CP, mainly basing my assumptions on the previous research discussed in chapter 2. The only argument supporting an embedded CP is based on sentences such as (50) and (51) because they contain the optional *for*-phrase and it is assumed that *for* is the head of the CP. The implementation of PP-reanalysis in combination with a raising analysis then fails because of the presence of a CP boundary.

(50)   The thesis is tough for the students to write.

(51)   The food is difficult for the chef to prepare.

Looking back at the derivation provided by Hicks (2009), his analysis does not include a

for-CP, but rather, his *for*-PP is adjoined as an optional AP complement to the TC-trigger.

In his description of the derivation, he does not comment on this choice for analyzing *for*.

A similar analysis regarding the optional *for*-PP was also briefly discussed in Chomsky

(1977: 102-104). His goal was to allow for examples exhibiting two *for*-phrases such as

(52) and (53).

(52)   It is a waste of time (for us) [for them to teach us Latin].
(53)   It is pleasant (for the rich) [for the poor to do the hard work].
                                                                (Chomsky 1977: 103)

Replacing Chomsky's matrix predicates with TC-triggers, we get examples (54a) and

(55b). Note that these examples cannot be rearranged as true TCs (see (54b) and (55b)).

We do, however, find *true* TCs that allow fronted or extraposed PPs, such as the example

in (56).

(54)   a. It is difficult for us for them to teach us Latin.
        b. *Latin is difficult for us for them to teach.

(55)   a. It is easy for the rich for the poor to do the hard work.
        b. *The hard work is easy for the rich for the poor to do.

(56)   a. For us, these constructions are difficult to PRO analyze.
        b. It is difficult for us to PRO analyze these constructions.
        c. To PRO analyze these constructions is difficult for us.
        d. For us to PRO analyze these constructions is difficult.
        e. These constructions are difficult for us to PRO analyze.
        f. ?For us, these constructions are difficult for them to analyze.

Contrasting (56a) through (56f), it becomes clear that the readings in all of the sentences

only allows for the PRO in the embedded clause to be interpreted as the object of the

preposition, namely *us* (see example (56f)). Instead of treating *for* as the complementizer

head, it can be analyzed as a preposition heading an optional PP. It can then be argued that

the PRO in the embedded clause is controlled by the object of the prepositional phrase.[40]

As illustrated in Hicks' derivation, the TC-triggering adjective is generated in the head of the adjective phrase AP whose specifier contains the optional *for*-PP. With this in mind, we can include a projection AP à la Hicks allowing a PP phrase whose object controls the embedded PRO, thus eliminating the CP-boundary between the embedded clause and the matrix clause in TCs. Having eliminated the CP, we are left with two possible representations of the embedded clause. The first option suggests an embedded TP in which the infinitival marker *to* occupies the head of the TP. As an alternative, taking into consideration Wurmbrand's work on infinitives, the complement could be a bare vP or VP. Following one of Wurmbrand's tools to determine where to include the infinitive marker (which, so far, has been assumed to be the head of TP), consider the following example exhibiting negation.

(57)   a. These constructions are difficult not to love.
        b. ?These constructions are difficult to not love.

While speakers do not agree on the grammaticality in (57b), (57a) is definitely considered to be grammatical. Assuming that NegP must be merged below TP, I conclude that the infinitival marker *to* is not part of the CP or TP because it must follow the negation in (57a).

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[40] Controlled refers to the relation in a control environment such as (iv) and (v), in which the subject or an object of a clause determines or controls the subject of the embedded non-finite clause, cf. also the previous chapter.

    (iv) She agreed to buy him a car.
    (v) He persuaded her to buy him a car.

With the elimination of the embedded functional layers, namely the CP and the TP, improper movement is not a problem for the analysis of TCs any longer.[41] Case-assignment, however, seems to remain problematic, and can be analyzed in two different ways. First, the embedded clause is a bare VP, i.e. there is no external argument assigned. Choosing this approach, the complement of the verb cannot receive case within the verbal domain and must move into Spec TP. This option is illustrated in (58).

(58)   They$_k$ are tough [$_{VP}$ to love [$_{DP}$ ___$_k$]].

The second possibility is arguing for a *v*P complement to the TC-trigger and thus allowing for an external PRO to merge into the embedded verbal domain, which can optionally be controlled by the object of a *for*-PP. This derivation is represented in (59).

(59)   They$_j$ are tough (for me) [$_{v}$P PRO to love [$_{DP}$ ___$_j$]].

However, a little *v*P allows case assignment to the complement of the verb, unless there is no external argument (cf. Burzio's (1986) generalization), or the case-assigning function is in some other way rendered defective.[42] If only a VP were involved, ACC case assignment could be avoided, but the argument structure of verbs such as *love* in (59) require an external argument, even if it is just PRO, so just a VP would not solve the problem. However, as stressed in example sets (54) and (55), the insertion of an optional *for*-PP does not require the PP object to bind or control (c-command) any element in the complement, so an analysis excluding a *v*P seems feasible. It would not be too far-fetched to support this idea with an example from passive constructions. Compare examples (60a) with example (60b).

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[41] Note that the presence or absence of a TP does not make a crucial difference with respect to TCs. As long as there is no embedded CP boundary, improper movement is avoided.
[42] The following chapters will discuss a revised analysis to replace Burzio's Generalization (1986) in more detail.

(60)   a. The contract had been signed.
         b. The contract had been signed by her mother.

Basing the structure of the passive in (60a) on the understanding that passive constructions consist of 'traditional' *defective v*Ps, there is no necessity of an external argument PRO within the verbal domain. In (60b), *her mother* is interpreted as the external argument of *sign*, even though *her mother* does not control any PRO. It can thus be argued that TC complements should be analyzed as passivized clauses, namely verbal phrases which do not select external arguments and which do not assign ACC.

Let's consider a piece of evidence for the argument that tough constructions share (numerous of) the same properties of passive constructions, stemming from the field of language acquisition. Wexler (2004 and 2012) provides a convincing argument to support phase theory in syntax by showing that tough constructions (*tough movement*) are slow in development attributing it to the *Universal Phase Requirement (UPR)* as defined below.

(A)   *Universal Phase Requirement* (Wexler 2004): Children (to about age eight) take *all* vP and CP to define phases, rendering passives, unaccusatives, and (subject-to-subject) raising structures ungrammatical.

In his more recent paper (2012), Wexler focuses on tough constructions, arguing that tough constructions, much like passives, unaccusatives, and raising constructions, adhere to the UPR, thus agreeing with Hicks' (2009) approach to TCs. For the purpose of my analysis, it is relevant to stress that TCs demonstrate parallels with other passive and passive-like constructions, not only semantically and syntactically, but also with respect to acquisition. Following Wexler's (2012) conclusion, I argue that the derivation of both passives and TCs must share the same main properties with respect to their syntactic derivation.

4.3 SUMMARY

To summarize, the problem of tough constructions has been problematic to solve mainly because of the difficulties regarding case assignment and improper movement. Having shown the similarities between passive constructions and TCs in this chapter, I suggested a passive analysis of TCs, basing my arguments on previous research on both passive constructions and passive-like and TC-like constructions (mostly discussed in chapter 3).

Applying various approaches to English TCs and TC-like constructions, I suggested that TCs be analyzed based on the following assumptions. TC-predicates take bare infinitival complements, particularly, their complements are vPs lacking the functional CP and TP layers. This way, clause union is created, and, due to the passive-like *defective* vP, no case assignment can happen to the verbal complement. Additionally, I showed that the *for* is not a complementizer, but rather a preposition, so it does not fill a complementizer position but should rather be interpreted as an optional addition to the entire predicate in the form of a prepositional phrase (or something alike). The analysis is exemplified again in (61).

(61)   (For her), he$_k$ is tough [$_{vP}$ to love [$_{DP}$ ___$_k$]].

Yet, this conclusion is not completely satisfying as it leaves several unsolved issues open to discussion. The conclusion drawn in this part of my dissertation is based on the assumption that there is no external argument of the lexical verb, and that it can appear as part of an optional PP. However, the fact that we interpret the object of said optional PP as the external argument of the lexical verb, leads me to assume that it should be part of the derivation, as the suggested approach will show in chapter 5. Additionally, as mentioned in the previous chapter and earlier in this chapter, passive constructions themselves are in

need for a new analysis, and the fact that the optional PP object in both TCs and passives is always interpreted as possessing the agentive role of the lexical verb, can serve as an argument against the analysis above lacking an external argument.

The following chapter will outline and argue for an overall new approach to deriving both passive and tough constructions, involving a completely new mechanism, namely *the unveiling of suppressed features.*

CHAPTER 5

A NEW ANALYSIS

In the previous sections, I have reviewed previous literature on tough constructions, on passive constructions, as well as constructions related to both passives and TCs. I established a similarity between passives and tough constructions leading to this chapter, throughout which I present my account for both passives and TCs.

The proposed analysis has been influenced by the works of Collins 2005, Ramchand 2008, as well as Gehrke & Grillo 2009. It holds for passive constructions, tough constructions, and active constructions (including the embedded nonfinite complements of control constructions and ECM constructions). The three distinct components of my analysis are the following: (i) a semantic composition of the verbal shell, (ii) a VoiceP(/*voice*P) projection above the verbal shell, and (iii) suppressed features as part of lexical items (here: the main verb) that can only become available in certain (feature unveiling) environments. Like Collins (2005), my account rejects Burzio's Generalization (1986) in regards to passive constructions: under my account, an external theta-role is in fact assigned to an *initiator* or *agentive* argument of the lexical verb, however, [ACC] case-licensing is, at base figuration, prevented by feature suppression. Since finiteness on the verb allows it to value a DP's [uCase] feature, I will appeal to my version of default case.

Additionally, my account assumes that the infinitive marker *to* is part of the lexical item of the verb, and that only a checked [uForm] feature[43] on the verb causes it to appear in a different form (without *to*) such as the passive participle or the gerund, following Wurmbrand's (2007) work on tenseless infinitive constructions.

This chapter is structured as follows. Throughout sections 5.1 – 5.3, I will present and discuss the three distinct components featuring my account of passive constructions. The subsequent sections will outline specific English and German examples of passive, active, and tough constructions for which the provided analysis can account.

The following schematic tree in (1) is a sketch of the new approach focusing on the phrasal layers and their heads, excluding any DP positions.[44]

(1) TP
      ├── T
      └── (VP/AuxP)
            ├── (V/Aux)
            └── (AP)
                  ├── (A)
                  └── (*voice*P)
                        ├── (*voice*)
                        └── VoiceP
                              ├── Voice
                              └── VP
                                    └── V

---
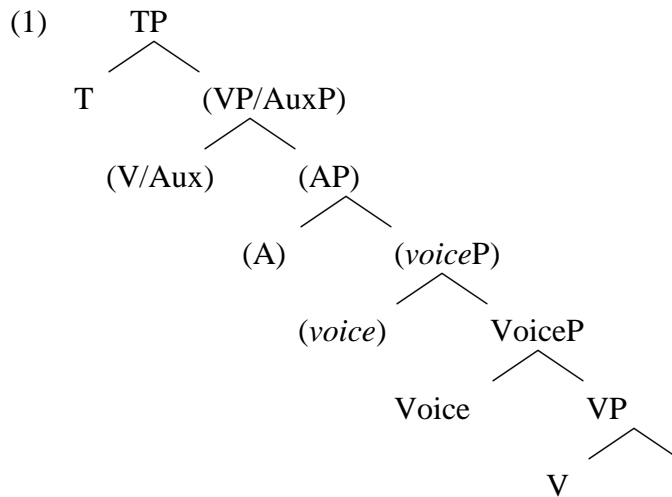
[43] As will become clear later, a [uForm] feature on the verb can be valued by a passive or active feature, allowing the verb to change form accordingly.

[44] The higher clause including (VP/AuxP) and (AP) takes a reduced complement clause. Regarding TCs and passive constructions, the higher clause hosts the TC trigger or the passive auxiliary respectively.

5.1 THE VERBAL SHELL

Ramchand (2008) and Gehrke & Grillo (2009) approach passive constructions by positing that event structure and event participants are directly represented in the syntax, establishing a 'cause' or 'leads-to' relation between the arguments (Ramchand 2008, 211), or a CAUSE or BECOME label for the different verbal layers (Gehrke & Grillo 2009, 239 ff.). A similar layering was presented by Lee-Schoenfeld & Diewald (2017) suggesting that there be two distinctive *v* layers above V, namely *affectee v* and *agentive v*, in order to account for case-licensing in passivized double-accusative constructions. They conclude with a distinction between two types of nonstructural cases, i.e. *idiosyncratic lexical* and *regular/predictable inherent* cases, both accounted for by their proposed base configuration within the verbal layers. A distinction between lexical case, inherent case and argument structure (see Woolford 2006, Lee-Schoenfeld & Twiner 2018 and Lee-Schoenfeld & Diewald 2017) is not necessary in my suggested approach, at least not for English.

In my analysis, a verb enters the derivation with suppressed features (see below). The verb's s-selective features determining the number of arguments are part of the lexical entry. They determine how many DPs, for example, become part of the numeration. For example, a verb like *read*, which can be a true ditransitive or a benefactive verb, can potentially build up to three verbal layers, one for the theme, one for the benefactor, one for the agent (see the following example).

(2)   a. He is reading.
        b. He reads.
        c. He is reading a fairy tale.
        d. He is reading her a fairy tale.

In a tree, the different verbal layers for the different sentences containing *read* can take shape as follows (corresponding to the base configuration for sentence (2d)).

Example (3) demonstrates the verbal configuration necessary to arrive at (2d). The lexical entry *to read* possesses three s-selective features requiring three DPs to enter the numeration, thusly building an additional benefactor verbal layer to accommodate the benefactor.[45]

(3)

```
              VP
           /      \
         DP         \
         he    to read  \
                      /    \
                    DP       \
                   her    /    \
                        t_v      DP
                             a fairy tale
```
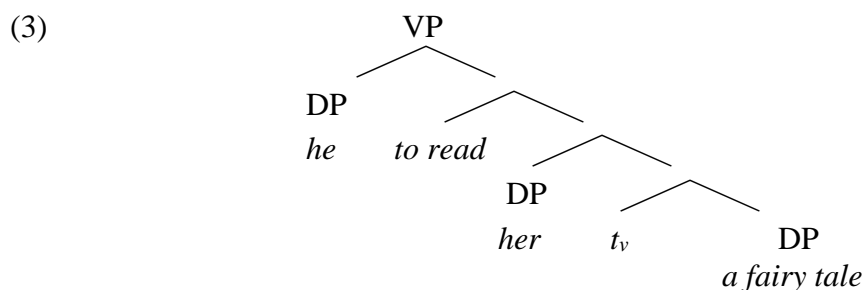
In sentence (2c), no benefactor is required, and only two DPs are part of the numeration. The verbal configuration thusly looks as presented in (4).

(4)

```
            VP
          /    \
        DP       \
        he   to read  DP
                   a fairy tale
```
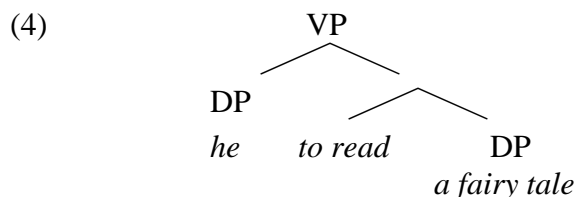
As opposed to Ramchand (2008) and Gehrke & Grillo (2009), I refrain from labeling the different layers within the syntax. It shall suffice to assume that the derivation builds

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[45] Note that it is not necessary to mark these layers specifically as they are all part of the verbal shell. Since layers, or their heads, do not possess any specific functions (such as case assignment, as [ACC] case is valued by the verb only), I refrain from labeling the different layers.

from the bottom up, and, DPs are merged in the traditional way, i.e. with the direct object

merging as the complementizer, and the next argument merging as the Spec.

Only once the verbal shell is completely built, the suppressed features on the verb

may become available (see below) and case licensing may happen.

Briefly summing up this section, my analysis consists of a verbal shell that can

host different verbal layers preselected by the semantic features on the verb (as in

Ramchand 2008). Contra other accounts, I refrain from labeling the different layers *little*

v, cause or *become*, but instead simply summarize them under one verbal shell.[46] Also

note that a transitive construction does not require numerous verbal layers, as seen in (4).

In addition to the verbal shell, my account involves a required Voice projection above the

verbal shell, to be introduced in the next section.

5.2 THE VOICE(/*voice*) PROJECTION(s)

Following numerous previous accounts (Kratzer 1996, Collins 2005, Gehrke & Grillo

2009)[47], my analysis includes an obligatory VoiceP above the verbal shell. Arguing

against an XP movement approach to passives, but rather, for a head-driven movement

approach, I additionally propose a *voice*P projection above VoiceP in order to account for

a landing site for the passive participle as the VoiceP is headed by what I will call a *voice*

marker.

In English (and German), the *voice markers* merged into Voice can be *by* (*von*),

for (*für*) and Ø (Ø) depending on whether it is a passive construction, a tough

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[46] Note that ditransitives will not be taken into consideration, so all constructions discussed do not require
an additional verbal layer.

[47] Collins 2005 and Gehrke & Grillo 2009 employ VoiceP for different reasons. I base my VoiceP on
Collins' VoiceP, but expand his approach by implementing an additional *voice*P layer.

construction, or an active construction. In a passive or tough construction, caused by the

merge of *by* (*von*), or *for* (*für*) into Voice, *voice*P merges above, headed by the moved

and newly merged lexical verb.

(5)

```
              voiceP
             /     \
        voice      VoiceP
                  /     \
                DP      /  \
                     Voice   VP
```
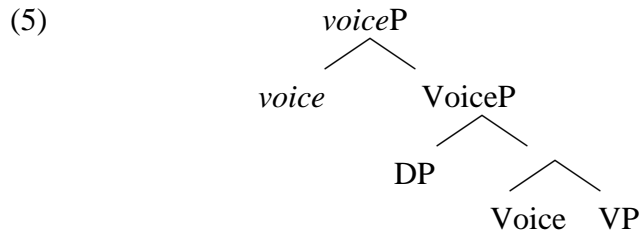
An example to argue for this distinctive *voice*P is provided by Collins' evidence

for a VoiceP (cf. Collins 2005, 6). He borrows the Kiswahili sentences from Hinnebusch

and Mirza (1998, 111).

(6)   a.   Mama yangu a-li-tengenez-a   shati langu
                mother my   SM-past-made-fv shirt   my
                "My mother made my shirt"
        b.   Shati langu li-li-tengenz-**w**-a   na mama yangu
                shirt my   SM-past-made-**pass**-fv   by mother my
                "My shirt was made by my mother"

Collins argues that the Kiswahili passive marker *–w* heads the VoiceP projection,

assuming that the same projection exists in UG. With regard to English, he concludes that

by heads VoiceP, which I am adopting in my approach. However, returning to example

(6b), there exists a Kiswahili equivalent to the passive *by*-phrase, namely the *na*-phrase.

Treating English *by,* German *von*, and Kiswahili *na* equally, I argue that in Kiswahili,

too, the VoiceP projection is headed by *na*. This suggests the need for an additional

projection above VoiceP allowing for the verb to receive its passive marker: In Kiswahili,

this marker is *–w*, whereas in some languages, such as German and English, there is no

overt morphology distinguishing the passive participle from the past participle. In French

passive constructions, the passive participle agrees with gender and number of the

passive subject, arguably requiring an additional head to introduce these unchecked

features.

For sentence (6b), the VoiceP/*voice*P layers would look as follows.

(7)

```
                    voiceP
                   /      \
            voice          VoiceP
        tengenz-w-a        /     \
                   ↑    Voice      VP
                   ┊     na       /  \
                   ┊           mama yangu ... shati langu
                   └┄┄┄┄┄┄┄┄┄┄┄┄┄┄┘
```
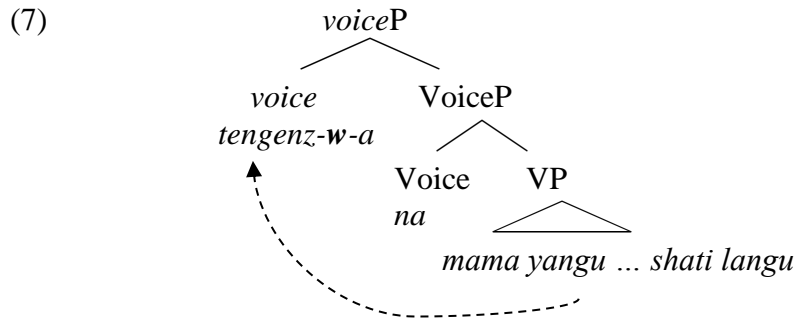
As demonstrated in (7), the additional projection *voice*P is built above the VoiceP

projection if a Voice head forces the structure to be a passive construction. In (7), *na* is

the VoiceP head forcing the *voice*P projection above,[48] whose head introduces the passive

marker -*w*.[49] To support the existence of this projection, consider French. *voice*P

conveniently allows for French passive participles to get their gender and number

features valued. Consider the following examples.

(8)   a.   J'ai   mangé deux pommes.
             I have   eaten two   apples
             'I ate two apples.'

---

[48] Consider the following overview of features, forecasting the specific features involved in passives and TCs.

	Features		
Lexical Entry	Category	Inflectional	Selectional
voice	[*voice*]	[Form: PassPart]	[uVoice: *by*]
by	[Voice]	[ACC],	[u*voice*], [uV]
for	[Voice]	[ACC]	[uV]

[49] Note that the -*a* at the end of the verb is not a suffix, but rather a particle that is considered a basic verb ending in Swahili. The passive marker is thus infixed.
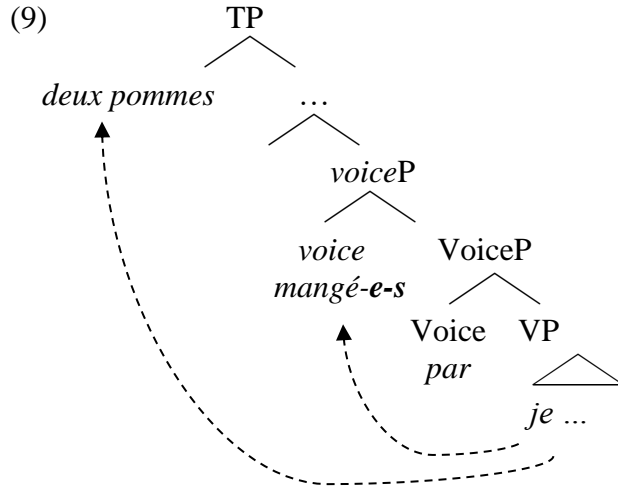
b.   Deux pommes ont   été mangé-e-s par moi.
          two   apples   have been eaten-F-PL by me
          'Two apples were eaten by me.'

Mind the difference between the participles used in (8a) and (8b). In (8a), the perfect

tense is formed by the auxiliary *avoir* 'have' and the past participle. The latter does not

agree in gender or number with neither the subject nor the object of the sentence.

Consider now example (8b), the passive counterpart to (8a). The passive construction is

formed by using the auxiliary verb *être* 'be' and the past participle, however, the

participle here agrees with the sentential subject in both gender and number. This

example not only justifies the distinction between past participle and passive participle,[50]

but furthermore, serves as evidence for an additional projection, i.e. landing site for the

verb, above VoiceP. By adding *voice*P above, *voice* can introduce the uninterpretable

features for gender and number which can later be checked, once the theme DP moves

into a c-commanding position above *voice*P (exemplified in (9) below).[51]

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[50] In French, (not all) unaccusatives, unergatives, directed motion verbs, and reflexive verbs use *être* 'be' as the auxiliary verb to form perfect tense, and they, too, agree with the grammatical subject. It is, however, important to note that the passive participle of a regular transitive or ditransitive verb differs from its past participle.
[51] A note on the term *uninterpretable feature:* Throughout this work, I follow the assumption that uninterpretable features on a linguistic entity render it active in the sense that it can be targeted by syntactic operations (Chomsky 2000:123). I also assume that, as long as there exists an uninterpretable feature in the derivation, this feature must be checked, or else the derivation crashes.

(9)

```
                          TP
                        /    \
              deux pommes      …
                            /     \
                         voiceP
                        /      \
                   voice        VoiceP
                   mangé-e-s    /     \
                            Voice   VP
                             par    /\
                                  je …
```

Turning to non-passive constructions now, VoiceP is necessary, however, there is no need for an additional *voice*P projection above it. Consider the merge of *for* into the head of VoiceP. A verb following *for,* which the literature has often treated as a complementizer,[52] can only occur in non-finite, infinitival form, as the examples below demonstrate.

(10) a. The papers are tough for the TAs to grade.
      b. I intended for the TAs to grade the papers.
      c. I intend to grade the papers.
      d. I believe him to be reliable.

(10a) is a tough construction, while (10b) shows an ECM verb taking a *for*-infinitive clause complement (without the latter, it would be a *true* ECM construction). Recall that I assume the infinitival marker *to* in English to be part of the lexical item that merges into V, i.e., part of the verb. Under my approach, *to* is only deleted once the [form] features agree and cause the verb to either appear as its past participle, its present participle, its passive participle, or as a finite verb. It shall also be noted that ECM verbs can take either

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[52] Note the semantic difference between *for* as a complementizer and *for* as a conjunction denoting the meaning *because*. The latter is irrelevant to the present paper and will thusly be ignored.

a *for*-clause as seen in (10b), or simply an infinitival clause whose external argument corresponds to the same entity as the external argument of the sentential subject (i.e. as a subject control construction), as seen in (10c). Then, there are also *true* ECM verbs (see 10d) which cannot occur with *for* and assign ACC to the external argument of the embedded verb. In the following paragraphs, I will show that they can all be analyzed following my proposed analysis involving a VoiceP projection, but no *voice*P projection.

As mentioned above, the literature has been analyzing the *for* in example (10b) as a complementizer heading a CP. Under my suggested approach, and in order to avoid an intervening clause boundary, I follow Wurmbrand (2007) in that infinitival complements are tenseless (that is, missing a TP), and I expand her analysis by positing that there are no CPs connecting the embedded clauses with the main clauses, as long as the embedded clauses are of infinitival nature. Embedded CPs are thus reserved for tensed clauses introduced by C *that* or C Ø (see examples 11).

(11)   a.   She thought (that) they would grade the papers.
          b.   He found that she was an excellent student.

Of course, the presence or absence of the CP does not play a role in passive constructions, as they do not consist of an embedded clause. However, it is necessary to stress its absence when looking at active constructions with embedded clauses and tough constructions, such as given in (10 a-b), repeated here as (12 a-b).

(12)   a.   The papers$_j$ are tough [for the TAs to grade ___$_j$].
          b.   I intended [for the TAs to grade the papers].

The two sentences differ as follows. In (12a), we can observe the common characteristics of a TC: *the papers* is the sentential subject, but also the internal argument of the lexical, embedded verb *to grade*. In (12b), the embedded clause *for the TAs to grade the papers*

contains all the embedded verbs' arguments, and the clause above contains the verb *to intend* and its external argument. The entire embedded clause is an argument of the matrix verb *to intend.* When analyzing these two constructions, and in order to argue for a unified analysis accounting for active and passive constructions, VoiceP nicely justifies the absence of a CP for infinitival complements. The derivation of (12b) does not differ greatly from the one of (12a), at least regarding the presence of the VoiceP projection and the absence of CP. In both cases, *for* is merged into the head of VoiceP, rendering the verbal shell infinitival and allowing a case-checking relation between *for* and the external argument of the embedded verb, as seen in the following example. The next section will expand on the mechanics involved in case-assignment in more detail.

(13)
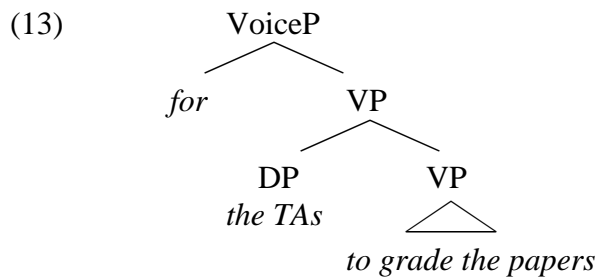
The tree in (13) shows the base configuration of both constructions given in (12) stressing that, at base configuration, they are the same. To arrive at the sentence in (12a), an AP is merged above, introducing the TC-trigger *tough*, followed by the merge of a verb (allowing verbs which fulfill the semantic requirements to form a TC predicate, such as *to be, to seem, to appear*).[53] The verb then causes the internal argument of the embedded verb to move up in sentential position (to check case), but more on that later.

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[53] It seems that almost all verbs that allow for an AP-complement and do not assign an external theta role allow to form TC predicates:
      (i)   The papers were tough to grade.
      (ii)   The papers seemed tough to grade.
      (iii)   The papers appear tough to grade.

Regarding the steps in order to arrive at (12b), the base configuration (13) is formed, followed by the merge of a verbal shell introducing any of the semantically possible verbs (i.e. verbs that take an infinitival complement introduced by *for*, such as *to intend, to like, to arrange*). Since these verbs assign theta-roles to their own external arguments, an external argument is merged as well, causing all arguments of the embedded verb to stay low, and, finally, check case. For now, let us not focus on why the DP *the papers* receive NOM as the sentential subject in (12a) and ACC case as the direct object in (12b). I will explain this further in the following section on *suppressed features*.

Before turning to the next section, let us consider sentence (10d), here repeated as (14a), as well as a construction requiring a *that*-complement as in (14b).

(14)   a.   I believe him to love his dog. [*true* ECM]
        b.   I believe that he loves his dog. [embedded finite that-clause]

The two examples do not differ greatly in meaning: the matrix verb *to believe* s-selects the proposition *he loves his dog.* However, their syntactic realizations are different. In (14a), the proposition appears as an infinitival complement whose external argument receives ACC from the matrix verb. In (14b), the embedded clause is a *regular* finite clause introduced by the complementizer *that*. My proposed analysis accounts for the two possibilities as follows. While the merge of *for* as the Voice-head in TCs satisfies the verb's [uForm] feature rendering the verb *infinitival*, the merge of Ø as the Voice-head does not possess features to satisfy any of the features on the components contained in its c-commanding DPs or VPs. This is comparable to the merge of *by*. The latter causes the *voice*P projection to merge, in whose head the verb moves to check its [uForm] feature

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(iv)   The papers prove tough to grade.
For a more detailed exploration of the possibilities of TC predicates and TC-triggers, see Pytlyk (2011).

107

and become the *passive participle*. Concerning the merge of Ø as the Voice-head, the mechanisms involved in *feature suppression* come into play. Following the economy principle of *merge over move* within the minimalist framework (Chomsky 1995), I assume (14b) and all other finite clauses to be the default computation of examples as (14). Based on this principle, a TP merges above VoiceP (as long as it's headed by Ø), and the computation may continue as expected. The features on T check the [uForm] feature of the verb, making it active, and thus unveiling its suppressed features such as features for tense, person and number, as well as its case feature to check [uCase] on the embedded DP (in 14: *his dog*). The external argument moves into Spec TP in order to satisfy its [uCase] feature and receive NOM from T. Having a tensed embedded clause, C merges above, allowing for the presence of the complementizer *that*.

In order to arrive at (14a), I posit that no TP is merged above the embedded Voice projection. The lack of a TP above VoiceP, and the merge of another V, namely that of the matrix verb *to believe*, causes the suppressed [Inf] feature on Ø to become available, checking the embedded verb's [uForm] feature, rendering it an infinitive. This is comparable to the case feature on *for* in TCs and similar constructions; however, this feature is different inasmuch as it is not yet available at the time Ø merges as the VoiceP head. Rather, the feature becomes available in a specific syntactic environment, i.e., a VP projection above VoiceP. In section 5.3, I explain the unveiling of suppressed features, or the availability of features, in more detail.

Case checking of the external DP of the embedded verb happens later in the derivation, once the projections for the matrix clause have been added, allowing the finite matrix verb to check [ACC]. The more deeply embedded DP *his dog* has so far not been

able to check its [uCase] feature. Obeying two other economy conditions in Minimalism, namely *last resort* and the *procrastinate principle* (Chomsky 1995), this DP can only at this point in the derivation move to a higher case position. However, there are no possible landing sites for the DP to move up to in order to value its [uCase] feature, so it stays low. Syntactically, the derivation does not crash, in fact, it is syntactically well-formed. However, a DP needs to be case-licensed by the time it arrives at PF. The next section on suppressed features will clarify that the [ACC] feature on a verb is only unveiled, i.e., only becomes available, when its verb is rendered finite. My analysis will thus include *default case:* if a DP with a [uForm] feature cannot move into a higher case position to value said feature, *default case* is morphologically realized. By incorporation of this notion, I build on previous literature such as Schütze's (2001) work on the nature of default case, Halle & Marantz' distributed morphology (1993, 1994), as well as Rezac's (2013) examination on case licensing (see the following sections).

Briefly summing up this section, my analysis suggests a VoiceP projection, similar to the projections involved in previous accounts. I posit that this VoiceP merges above all verbal layers.

When a passive *by* (or *na* in Kiswahili, *par* in French) is merged into its head, the construction is rendered *passive* and another projection *voice*P is merged above, into whose head the verb can move in order to check its [uForm] feature and become a passive participle. Note that German *von* has been left out in this part of treating passives. The German passive construction has a different surface word order from the others, and requires a few different parameter settings. German passives under my approach will be discussed later in this chapter.

When a *for* merges into Voice, the construction is considered active and is rendered *infinitival. For* allows the verb to check its [uForm] feature (that is, *infinitive*) at a distance. There is thus no necessity for an additional *voice*P projection, and no further verbal movement takes place.

The third option for the head of VoiceP is Ø, and it can cause three different outcomes: the two examples seen in (14) as well as a *regular* active sentence such as in (15). However, a *that*-clause as seen in (14b) only differs from (15) in that a complementizer heads the CP.

(15)   She ate an apple.

In all three circumstances, the embedded verbal phrases are semantically interpreted as *active*, but the [uForm] feature on the verb has not been checked rendering it *tensed active* for (14b) and (15), or *infinitival* for (14a). Here, the *suppressed features* come into play, which are unveiled once a specific syntactic environment has been built. Assuming that (14b) and (15) are the default order of an English sentence, i.e. an unmarked English construction, I stipulate that (14a) is a marked construction, which can be built only if a VP is added directly above VoiceP. It must be noted here, again, that (14a) looks similar to a tough construction, but it is important to stress that they show two major differences. One, the TC's sentential subject is the embedded verb's internal argument, whereas the ECM verb's embedded internal argument stays low, and is ACC marked. Second, a TC's external argument can be optionally left out as part of the *for-phrase* (e.g. *The paper was difficult (for the students) to finish in time*) while the external argument of the embedded verb in an ECM(-like) construction with or without *for* must always be overtly present at PF, receiving ACC either from the matrix verb, or from *for*.

5.3 SUPPRESSED FEATURES

Throughout this section, I present the third distinct mechanism involved in my suggested

analysis, namely *suppressed features.* These features are necessary in order to account for

specific word order and case-licensing issues that have not yet been accounted for

uniformly in the literature. In this section, I exemplify this mechanism while focusing on

the same constructions discussed throughout section 5.2, i.e., tough constructions, passive

constructions, ECM-constructions and *regular* active constructions.

Under Burzio's Generalization (1986), the lack of ACC assignment to the internal

DP of the embedded verb results from a missing external argument of the embedded

verb. The missing little *v*P layer renders the verbal construction *non-agentive* and no

ACC can be assigned to the internal argument. Looking for case valuation, the DP moves

into a higher position where NOM is valued (at least in English). My account rejects this

generalization, but instead, proposes that an external theta-role is, in fact, assigned to the

initiator/agentive argument of the verb, but [ACC] case/licensing is prevented by feature

suppression. This means that a verb's ability to check [ACC] against a [uCase] feature on

a DP, is suppressed unless the syntactic environment allows it by unveiling this feature

on the verb.

My idea of *suppressed features* is derived from Distributed Morphology and how

it works in the narrow syntax (see Embick & Noyer (2005) and Harley & Noyer (1999)).

More specifically, I compare this syntactic mechanism to Halle's (1997) *Subset*

Principle: "The phonological exponent of a Vocabulary Item is inserted into a position if

the item matches **all or a subset of the features specified in that position**. Insertion

does not take place if the Vocabulary Item contains features not present in the morpheme.

Where several Vocabulary Items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen" (Halle 1997, 427). While the *subset principle* is concerned with the insertion of phonological content into a syntactic node, I propose the mechanism of *suppressed features* to work similarly: instead of the insertion of phonological content, the availability of a feature is dependent on the features around it, that is, on the syntactic and feature environment.

(A)   **Suppressed feature**
A suppressed feature (indicated as [^FEATURE]) is a potential feature on a lexical item. Only a specific syntactic environment, or the presence or the *unveiling* of a higher feature in the feature hierarchy causes an unveiling of the suppressed feature. Once the feature is unveiled and becomes available, its abilities are effective immediately.

To exemplify (A), consider the features on a finite verb that must be valued: [uPers], [uNumber], [uTense]. However, these features cannot become available (and thus valued) if the [uForm] feature, which is higher in the feature hierarchy, is valued by a [PassPart] feature, rendering the verb form a passive participle. The different features as well as the feature hierarchy will be discussed later in this section.

Let's, for now, briefly turn back to another approach to analyze passive constructions. Such an approach was, amongst others, discussed by Woolford (2003), arguing that an object "gets nominative case when there is no [nominative] subject" (Woolford 2003, 301). My approach partially sides with her suggestion in that I propose that "*something*" happens when there is "*something*" missing and the derivation is about to crash. I propose that the verb carries case features for [ACC] (and [DAT] in other languages such as German), and that they only become available in certain syntactic

environments, or after certain syntactic rules and conditions such as *last resort* and *merge over move* have applied, as seen above.

To exemplify exactly what these suppressed features are in specific constructions, consider example set (16), similar to the examples in (2).

(16)   a. He is reading.
         b. He was reading a fairy tale.
         c. He was reading her a fairy tale.

The verb *to read* possesses the same meaning in all three sentences, but appears with a different amount of arguments in each sentence. *To read* may create a grammatical sentence with as little as zero internal arguments (a), with one (b), or two internal arguments (c). As demonstrated in (3) through (5) in section 5.1 above, the verbal shell is built in the traditional way. With each argument that is selected by the verb for a given sentence, the verb possesses a case feature [ACC] that is suppressed as the base configuration comes together. To exemplify, sentence (16c) contains two internal arguments, and with each DP that enters the derivation, the suppressed case features on the verb build up as well. The verb *to read* first merges with the theme DP *a fairy tale* as its internal argument (complementizer). The verb thus possesses one suppressed [^ACC][54] feature that may become available later. With the merge of the 3.sg.fem pronominal DP (which becomes *her* once its [uCase] feature is valued), the verb now possesses two suppressed [^ACC] features. There is no suppressed feature on the verb that corresponds to the merge of the agentive DP into Spec. For (16b), the verb thusly only possesses one [^ACC] feature by the time the verbal shell is completely built.

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[54] Throughout my dissertation, I will use the caret grapheme '^' to indicate a suppressed feature.

5.3.1 SUPPRESSED FEATURES IN PASSIVES

Consider again a passive construction and the verb's arguments. Sentence set (17) shows the verb *to write* with its two arguments, *a famous Berliner* (the external, agentive argument) and *the book* (the internal theme argument). (17a) shows a *regular* active construction, and (17b) shows its passive counterpart.

(17)   a.   A famous Berliner wrote the book.
           b.   The book was written by a famous Berliner.

For both sentences, the derivation is the same until the merge of the Voice-head. The following tree shall visualize the process.[55]

(18)

```
                    VP
             _____/_____
          DP₂            /\
                        /  \
   a famous Berliner   to write      DP₁
                       [uForm]    a fairy tale
                       [^ACC]
```
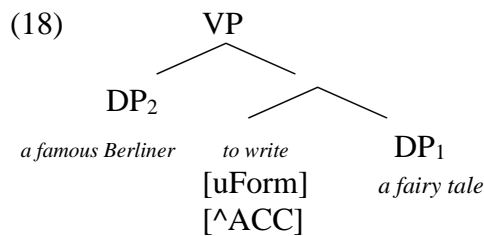
In the first step, the internal argument DP_1 merges with the verb. With that merge, the verb gains a suppressed [^ACC]. Note that the uninterpretable feature [uForm] is part of the lexical entry of the verb – every verb enters a configuration with this feature. A second DP is merged into the specifier. The verb does not receive an additional [^ACC] because the merge of an agentive DP, i.e., the merge of the external argument, does not cause an additional [^CASE] feature to become part of the verb.[56] The next projection to

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[55] Throughout the remaining chapter, I am not providing trees depicting entire derivations. Instead, I am only providing the parts of the trees that seem to be most important to the specific mechanisms. For example, tree (18) shall only stress the suppressed case feature on the verb. Trees demonstrating all mechanisms involved in the derivation of entire sentences are provided in chapter 6.

[56] See section 5.3.2 for a detailed explanation on how this is regulated.

merge above the verbal phrase is the VoiceP projection. Depending on what merges as the Voice-head, the outcome of the construction can be either (17a) or (17b).

To account for (17a), Ø merges as the Voice head. It does not possess any (un)interpretable features, and it allows a TP to merge above. T possesses the [finite] feature, valuing the verb's [uForm] feature. With this valuation, the verb's suppressed features are unveiled and become accessible, namely [uTense], [uPerson], [uNumber], and [ACC]. Since the [ACC] can value the closest c-commanded [uCase] feature, the internal argument *the book* receives case. The verb's other features that are now available can now be valued as well: T values [uTense] because of its [past] feature, and the external DP *the famous Berliner* possesses the necessary features to value [uPerson] and [uNumber] on the verb. In English, said DP moves into Spec TP because of the [EPP] feature on T. It also gets its [uCase] feature valued by [NOM] on T.

The derivation looks slightly different to arrive at the passive construction (17b). After the verbal shell and the VoiceP have been built, *by* merges as the Voice head. It possesses two features: (i) an [ACC] feature, valuing the [uCase] feature on the external argument *the famous Berliner*, thus *locking* this DP into place, and (ii), a [u*voice*] feature, causing the functional projection *voice* to merge. The verb moves through Voice into *voice* and gets its [uForm] valued by a [PassPart] on *voice*. By rendering the verb a *passive participle,* all suppressed features on the verb stay suppressed, including [^ACC]. The next steps include the merge of AuxP and a TP into whose head the internal argument *the book* moves. Note that *merge over move* does not hold here anymore because it would cause the derivation to crash, as there are no other DPs to be assembled from the content of the numeration.

The examples discussed so far lead us to conclude that, in passive constructions, the unveiling of suppressed features is prevented by the *passive participle* form of the verb. In active constructions, the suppressed [^ACC] becomes an available [ACC] feature once the verb becomes a *finite* verb. In the next section, I provide more evidence supporting the mechanism of suppressed features, or their unveiling, by exemplifying how they work in tough constructions, ECM constructions with *for,* and gerunds.

5.3.2 SUPPRESSED FEATURES in TCs, ECMs WITH *FOR*, AND GERUNDS

The *voice*P/VoiceP projections together with the mechanics of suppressed features allow the internal argument of the verb in a tough construction to receive [NOM] in Spec TP, similar to the passive constructions discussed in the previous section. As an example, consider the following example.

(19)   The book was difficult (for the famous Berliner) to write.

The verb *to write* enters the thematic verbal phrase in the base configuration with a [uForm] feature, and it gains a suppressed [^ACC] feature with the merge of the theme argument into its specifier position. For (19), this argument is the DP *the book* which possesses a [uCase] feature.

The next verbal step in building the verbal shell causes the merge of a DP into the specifier of the verbal phrase, however, it does not cause the verb to gain an additional suppressed case feature (as it does when the theme DP is merged). Associating semantically distinct features such as *theme, benefactor, agent* etc. with the respective DPs, the CASE features on a verb are associated as well. A theme DP is associated with [ACC]. The verb thus receives the suppressed [^ACC]. Assuming that a [NOM] feature

on T values a [uCase] on those DPs which are merged as agentive DPs, the merge of such

an agentive DP is not associated with an additional case feature,[57] so no new suppressed

case feature becomes part of the verb's features. So far, no [uCase] features are valued

because the available case features are still suppressed, meaning they are not available

yet.

Focusing back on (19), *for* merges as the head of VoiceP. *For* enters the

derivation with an [ACC] feature, allowing the agentive DP *the famous Berliner* to value

its [uCase] feature right away, rendering the DP accusative. The [Inf] feature on *for* can

value the verb's [uForm] right away, causing the verb to stay in its infinitive form (here:

to write). By checking the [uForm] with [Inf], the suppressed [^ACC] cannot become

available and stays suppressed, so the only unvalued case feature left is the [uCase]

feature on the internal argument (here: *the book*), which will later be checked as the DP

moves into Spec TP.

ECM constructions with *for* such as (20) behave just like TCs in this respect, the

only difference being that the internal argument of the embedded verb actually does

receive ACC case. Note that this example excludes *true* ECM constructions such as given

in (14a), which I briefly discussed above.

(20)   He really loved for her to bake a cake for his birthday.

With respect to suppressed features, the embedded verb *to bake* possesses a suppressed

[^ACC] feature which does not become available due to the [Inf] form feature on *for*. The

external argument of the subordinate clause receives case from *for* in (20), but *a cake*

checks [ACC] case as well. This can be explained as follows. As the rest of the derivation

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[57] This is in line with the standard assumption that Spec vP, the traditional external argument position, is not a case position.

is built (merges), the DP *a cake* stays low (due to *merge over move* and *last resort*) and cannot value its [uCase] feature. Here, the derivation would crash unless the DP gets its [uCase] valued somehow. As briefly touched on above, this is where *default case* comes into play accounting for the valuation of [uCase] and preventing crash of the derivation. I expand on the implementation of default case in section 5.3.5 below.

To further exemplify the mechanism involved in *suppressed features*, I want to look at gerund constructions such as (21). As opposed to the ECM constructions with *for* or infinitival subjects (e.g., <u>To cook the meal</u> *was extremely enjoyable*), the internal argument of the verb in a gerund construction does not value its [uCase] feature with the help of *default case*. Rather, the suppressed features on the verb are unveiled by converting the verbal shell into a nominal, by means of suffixing *-ing*. It follows that it is not only strict *finiteness* that causes an unveiling of features.[58]

(21)   a. **Baking a birthday cake** has been on my agenda all week.
       b. Lea enjoys **baking cakes**.

In (21a), *baking a birthday cake* is the subject of the sentence, while *baking cakes* in (21b) is the object.

Now, consider (22) which should emphasize the *nominal* readings of the gerund forms that I alluded to above (examples (22) do not include a gerund *-ing*, but rather a participial marker, not causing an unveiling of any kind). The verbs function as attributive adjectives, and the interpretation of them clearly imply the *active happening* at the same time as the time that is being referred to.

(22)   a. The baking cake is in the oven.
       b. We fed the starving puppy.

---

[58] In a non-gerund, nonfinite construction *default unveiling* comes into play because there is an unsatisfied [uCase] feature on a DP.

Baking in (22a) implies the *active* action of *baking* that the cake is undergoing (as an internal argument of the verb) at the same time as expressed by the finite verb (here: present). The same is true for (22b); *starving* was the active experience that the puppy underwent at the time of reference (here: simple past).

Having considered the attributive adjective form *-ing*, I stressed the semantic *activeness* that correlates with gerund verb forms. I attribute this reading to the gerund marker *-ing,* which allows the [^ACC] feature to *unveil,* that is, to become available and value the [uCase] feature on the internal argument.

At this time, I am refraining from a thorough analysis of how gerunds become gerunds, but I attribute the unveiling of the suppressed case to the morphological merge of *-ing* and will explain this further in chapter 6.

5.3.3 SUPPRESSED FEATURES OTHER THAN [^CASE]

So far, I have only discussed and exemplified *suppressed features* concerning [CASE] features: according to the semantics of a DP in relation to its verb, certain suppressed case features become part of the verb, and, dependent on the syntactic or feature environment, they are unveiled and may value case on a c-commanded DP.

Other features undergo this mechanism as well. As briefly mentioned above, the verb possesses other features such as [uTense], [uPers], [uNumber], or [uGender] that need to be valued.

In English and German, [^uTense] becomes available if no [Perf] or [Inf] or [PassPart] has valued the [uForm] on the verb, so the verb is [active] and the [uTense]

feature becomes available, to be valued by, e.g., [Past] or [Present]. Once this valuation

has happened, the suppressed [^uPers] and [^uNumber] can become available.

French behaves similarly to English and German with respect to the suppressed

uninterpretable tense feature. However, the French verb's [^uPerson]/[^uNumber] and

[^uGender] features behave differently:

Recall the French examples (8a-b) demonstrating number and gender agreement

of nonfinite verb forms such as the past and passives participles. Reconsider example (8),

repeated here as (23a-b), in addition to examples (23 c), (24), (25), and (26).

(23)   a.   J'ai   mangé deux pommes.
                 I have eaten two   apples
                 'I ate two apples.'
        b.   Deux pommes ont   été   mangé-e-s par moi.
                 two   apples   have been eaten-F-PL by me
                 'Two apples have been eaten by me.'
        c.   Les jambons ont   été   mangé-Ø-s par moi.
                 the hams   have been eaten-M-PL by me
                 'The hams have been eaten by me.'

(24)   a   Elle y   est allé-e.
                 She there is   gone-F
                 'She has gone there.'
        b.   Nous y   sommes   allé-e-s
                 we   there have.3PL gone-F-PL
                 'We have gone there.'

(25)   a   Il y est   allé-Ø.
                 He is there gone-M
                 'He has gone there.'
        b.   Nous y   sommes   allé-Ø-s
                 we   there have.3PL gone-M-PL
                 'We have gone there.'

(26)   a.   Il/elle a   mangé une pomme.
                 He/she has eaten an   apple
                 'He/she has eaten an apple.'

The examples highlight the difference between a passive participle and a perfect

participle. A perfect participle does not agree in person, number, or gender with the

subject of the sentence (see example 26) unless it is a BE-verb, i.e., a verb forming its

perfect with *être* 'to be' rather than *avoir* 'to have' (as seen in examples 24 and 25). A

passive participle, however, always has a person feature, a number feature, and a gender

feature valued.[59] Thus, these features become available either once a [uForm] is valued

by a [PassPart] feature, or later in the derivation for constructions in perfect tense.[60]

5.3.4 CONCLUSIONS ABOUT THE UNVEILING OF FEATURES

Sections 5.3.1 through 5.3.3 outlined the idea behind my proposed *suppressed features,*

whose definition is provided in (A) above, here repeated as (B).

(B)   **Suppressed feature**
         A suppressed feature (indicated as [^FEATURE]) is a potential feature on a
         lexical item. Only a specific syntactic environment, or the presence of a higher
         feature in the feature hierarchy causes an unveiling of the suppressed feature.
         Once the feature is unveiled and becomes available, its abilities are effective
         immediately.

Focusing on the unveiling of suppressed features, especially with regard to suppressed

case features in the constructions under investigation, they can be summarized as follows.

In passive constructions, the [PassPart] feature on *voice* values the verb's [uForm]

feature, and the [^ACC] stays suppressed. This way, in English, the internal argument DP

moves further up in the derivation in order to value its [uCASE], arriving in Spec TP,

where it receives [NOM].

Similarly, the [^ACC] on the embedded verb in a tough construction is prevented

from becoming available because the verb is rendered an infinitive form by the merge of

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[59] While this observation allows us to draw a parallel between the "agentivelessness" of unaccusative verbs
and passive constructions, I want to focus on the suppressed uninterpretable number, person and gender
features in this section. I will touch on the *agentivelessness* again later while discussing the derivation of
German impersonal passives and German TCs.
[60] I will not discuss in detail the syntactic environment of unaccusative perfectives. It shall suffice to state
that the merge of the unaccusative auxiliary verb *être* 'to be' causes the unveiling of the suppressed features
on the embedded verb.

for as Voice. Again, the internal argument DP can thus move into Spec TP where its

[uCASE] is valued by [NOM]. Contrary to TCs, the internal arguments of the verb in

infinitive constructions with *for* appear with valued [uCASE] features. The suppressed

[^CASE] features on the verb are not unveiled, however, until the last step before the

crash of the derivation during which *default case* allows an unveiling of suppressed case

features, as will be explained in the next section.

In gerund constructions, the merge of the gerund marker *-ing* causes an unveiling

of the suppressed case features on the verb. Note that, while a gerund is a nonfinite verb

form (but not a past participle), the status of it needs to be distinguished from other

nonfinite verb forms. Together with its internal arguments, it functions as a nominalized

element in a sentence, that is, as an external argument of another verb, or as an internal

argument of another verb (see 27 and 28).

(27)   a.   Reading a book helps when you are restless.
       b.   Books help when you are restless.
(28)   a.   She thoroughly enjoys reading love stories.
       b.   She thoroughly enjoys love stories.

Looking at *regular,* active constructions, the suppressed [^CASE] features on the verb

are unveiled once it is rendered a *finite* verb.

Turning away from case features, I discussed other features such as [uTense],

[uPerson], [uGender], or [uNumber]. The French examples above emphasize that the

different languages require different solutions. French passive participles, for example,

agree in gender and number with the sentential subject of the sentence. In a French

passive construction, the change from the lexical verb form to the passive participle

(through the validation of [uForm] on the infinitive), causes an unveiling of the

uninterpretable features [uGender] and [uNumber] on the verb, whereas the verb's suppressed features such as [uPerson] and [uNumber] are only unveiled in English active structures.

To conclude this section, it is also necessary to discuss the hierarchy of features. While a DP possesses a [uCase] feature, I have drawn attention to the (suppressed) features of a verb. The features that a verb may possess are case features such as [ACC] and [DAT], [uForm], [uTense], [uPerson], [uNumber], [uGender]. All of these features are initially suppressed features, except [uForm] because once the verb form is established, other features can be unveiled or not. Since some features only become available, or necessary, after another feature has been valued, a hierarchy that establishes the dependence of features on other features seems necessary. Such hierarchies can be observed across languages, in numerous ways, not only in the syntax or morphology of a language.

For example, French has two third person plural pronouns, *ils* 'they.M' and *elles* 'they.F'. However, *ils* is not exclusively used for male nouns. It is also used to refer to two or more nouns when at least one of them is male (see example 29). This suggests that there exists a hierarchy with respect to gender.

(29)   Les filles et   les garçons jouaient au foot.   Ils   sont fatigués.
         the girls   and the boys   played   soccer. They.M are   tired

Russian noun inflection is dependent on noun class, case, and number. Accounting for the syncretism in the Russian noun inflection paradigm, Müller (2005) argues for a feature hierarchy of Number > Class > Case, calling this hierarchy a ranking of feature classes (Müller 2005, 9). His approach uses the Distributed Morphology framework, on which I base my hierarchy of features as well.

Recall the subset principle from above. To extend said principle to account for lexical items (or *vocabulary items*) or grammatical markers which compete for insertion, the Distributed Morphology framework implements the rule of *specificity of vocabulary items*, which I want to extend to *specificity of feature activation* in the context of my analysis. The rule, as it is used for vocabulary items within Distributed Morphology, states the following.

(C)   **Specificity of vocabulary items**
        A vocabulary item V_i is more specific than a vocabulary item V_j iff there is a class of features F such that (i) and (ii) hold.
        (i) V_i bears more features belonging to F than V_j does.
        (ii)   There is no higher ranked class of features F such that V_i and V_j have a different number of features F.

                                          (Müller 2005, 9ff., citing Noyer 1992)

Assuming that the rule in (C) presupposes a ranking of features, I argue that in my analysis, too, a similar rule applies, that is, a rule to rank the order of the unveiling of features. For each feature on the verb, another feature must first be *checked, valued,* or *added to the derivation* until it may become available. The [uForm] feature on an English verb must be ranked highest in comparison to, for example, person and number features. Since the [CASE] features are involved in other instances in the derivation, and number and person features are not unveiled unless we have a finite verb, they rank (equally) lowest on the scale.

(D)   **Feature hierarchy on English verbs**
        Form > Tense > Case > Person/Number

Note that (D) does not account for features in other languages. As we can conclude from the French examples throughout the chapter, languages differ with respect to how person,

124

number and gender features are manifested on the verb.[61] In French, [uGender] and [uNumber] features rank higher than [uPerson] because gender and number features are manifested on the passive participle, while [uPerson] is not.

Having summarized (the unveiling of) suppressed features as well as the feature hierarchy, the following section discusses the mechanisms involved in what I have been referring to as *default case*, arguing for the application of such a process as a final operation before the potential crash of a derivation.

5.3.5 ON DEFAULT CASE, or: THE DEFAULT UNVEILING OF SUPPRESSED FEATURES

Throughout this chapter, I have been referring to *default case* as an operation that is considered part of my analysis. In the following section, I will provide the necessary arguments supporting this idea.

Consider the following scenarios in which, under my proposed analysis, *default case* comes into play. The DPs are always the internal arguments of a verb. In passive or tough constructions, these DPs appear as the subjects and are NOM marked. To account for the subject's ability to move into Spec TP (case-driven movement), I posited above that the verb's suppressed case features stay suppressed when the verb form [uForm] is valued by an [Inf] feature in the Voice head. However, as the constructions in (29)

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[61] The verbal hierarchy of features in English only provides one example of how a feature hierarchy works given my account. The mechanism of the unveiling of suppressed features and the existence of the latter, should also be applicable to other phrases throughout the morphosyntactic interface. For example, when a German adjective is inflected according to case, gender of the modified verb, and preceding determiner. The fewest inflection possibilities for German attributive adjectives can be found in genitive marked DPs, providing an argument for a feature hierarchy ranking [CASE] above, for example, gender and determiner.

demonstrate, the internal DPs' [uCase] features must be valued by [ACC], even though

their respective verbs appear as infinitives.

(29)   a.   He would really love for her to bake [DP **a cake**] for his birthday.
       b.   To remember [DP **his whole story**] was rather difficult (for us).
       c.   She wants her neighbor to shut [DP **the door**].

In order to keep the derivations in (29) from crashing, I posit an operation that

causes the unveiling of [^CASE] on the verb. Up until now, I have been referring to it as

default case. This approach differs from Schütze's (2001) work in two aspects. One, it is

not a late insertion mechanism on the affected DP, but rather a mechanism applied to case

valuing heads. And two, the DPs under investigation differ thematically.

Consider Schütze's definition of *default case* in (E), and the kind of expression

under his investigation, as provided in (30), which were provided by Murphy (2017).

(E)   The default case forms of a language are those that are used to spell out nominal
      expressions (e.g., DPs) that are not associated with any case feature assigned or
      otherwise determined by syntactic mechanisms.

                                                                    (Schütze 2001: 206)

(30)   a. We can't eat beans and *him* caviar.   (Gapping)
       b. *Him* and *me* are gonna rumble tonight.   (Coordination)
       c. The real *me* is finally emerging.   (Modified pronouns)
       d. *Him*, he is my brother.   (Left dislocation)
       e.   A: Who brought these books?   (Fragment answers)
            B: Me.

                                                                    (Murphy 2017: 1)

Schütze investigates ACC marked pronouns in apparent subject positions, and

argues that, since they do not occur in a NOM valuing position, accusative case is the

default case of a *caseless* DP (Schütze 2001). The DPs that I am investigating are internal

arguments of the verb, not external arguments.

He accounts for the default ACC case marking by making use of *late insertion*, a feature within the Distributed Morphology framework, allowing for a postsyntactic spell-out that all vocabulary insertion is a part of. My proposed analysis differs from his view as my approach requires the morphology to happen step-by-step throughout the syntax. For example, whether or not a suppressed feature is unveiled is dependent on the feature that values the [uForm] on a verb, so, in this sense, my *default mechanism* is not a *default case* per se, but rather an operation on a case valuing head.

Remember that a DP possesses a [uCase] feature that needs to be valued. In infinitival verb phrases, the suppressed case features on the verb cannot value case on, let's say, the internal theme argument. This way, said argument may move into a higher position as last resort, as it does, for example, in tough constructions. When something is externally merged into that higher case position, however, said DP has no possible landing site, so I propose a "last-last resort mechanism," an operation on a case valuing head, that makes available a potential suppressed case feature. A DP looking for case triggers this operation, right before spell-out.

So why consider Schütze (2001) at all? While both his and my accounts take into consideration different kinds of syntactic and thematic positions, they do not exclude each other, and they share the idea that there exists some kind of default mechanism, in his case, a *default case* through *late insertion,* or, in my case, a *default operation*.

Additional support for this *default unveiling* comes from distributed morphology. The operation *underspecification* allows the insertion of a vocabulary item (phonological expression) if there is no other item with a more specific set of features. Loosely applying this to the present situation, it can be argued that the suppressed [^ACC] on a verb fights

for an *unveiling*. Considering that the syntactic feature environment does not allow it to be unveiled, a rule of underspecification determining the specific environment could be applied, for example: [^ACC] is underspecified for the syntactic environment where one [uCase] feature is left unvalued right before the crash of a derivation, as schematized in (31). This means that, once this environment is constructed, [^ACC] is unveiled.

(31)   [^CASE] → [CASE] / [uCase]<T[NOM]✓>
        'a suppressed [^CASE] is unveiled in the syntactic environment where
        a [uCase] exists in the derivation by the time [NOM] is valued'

5.4 SUMMARY

Throughout sections 5.1 – 5.3, I discussed and highlighted my assumptions, operations and mechanisms to account for passive and tough constructions in both English and German. In line with Ramchand's (2008) and Gehrke & Grillo's (2009) accounts, my approach requires a verbal shell. I also introduced and argued for the obligatory VoiceP projection above the verbal shell, and the *voice*P projection in passive constructions allowing the passive participle to move above the "by-phrase". Part of my proposed system involves *suppressed features* which can be *unveiled* in certain syntactic environments, or by application of a *last-last resort* rule, i.e. a rule that is applied when a DP's [uCase] feature has not been valued yet.

Throughout the remaining chapter, the English and German examples shall demonstrate further that the suggested approach can very well account for a not only passive and tough constructions in a unified way, as well as other constructions such as ECM(-like) constructions with *for*, which I discussed in the previous sections.

A note on the remaining sections of this chapter: while I exemplified and briefly discussed multi-valency verbs such as *to read* earlier in this chapter, I refrain from

discussing their non-active ditransitive derivations in this dissertation. I am also

refraining from discussing the passive derivations of true ditransitive verbs such as *to*

give. My decision to neglect these specific passive constructions stems from the

disagreement regarding their analysis. There have been numerous attempts towards a

unified analysis regarding (active) ditransitive constructions, many of them arguing that

the two examples in (32) are derived differently.

(32)   a. She gave her mom the book.
        b. She gave the book to her mom.

English ditransitive constructions manifest two syntactic structures, namely the

double object construction (32a) and the dative construction (32b), and some verbs are

even restricted to appear only in one of the two (cf. Harley & Miyagawa 2016). Also,

double object constructions are not attested to be used uniformly by a wide range of

speakers. Comrie (n.d.) highlights the lacking consensus by providing an overview of

complications involving pronouns in double object constructions:

(33)   a. I gave it to him.
        b. I gave him it.
        c. I gave it him.

                                                                (Comrie n.d.: example 77)

According to Comrie (n.d.), grammaticality judgements differed with regard to the

examples provided in (32). Some found only (a) acceptable, others the combinations (a)

and (b), (a) and (c), and again others all of (a), (b), and (c). He uses this survey to stress

the inconsistency about what a *ditransitive* verb can and cannot do (syntactically).

Recall that one of my base assumptions is that passive constructions and tough

constructions are both derived by movement from their active and finite counterparts.

Due to the wide range regarding DOCs and dative constructions, I leave the analysis of passive and tough constructions involving ditransitive verbs for future research.

CHAPTER 6

APPLYING THE NEW ANALYSIS

In chapter 5, I have presented and discussed the basic assumptions and the three

main distinctions involved in my analysis. This chapter shall exemplify this new

approach by applying both the old and the new mechanisms to passive constructions and

tough constructions. The examples focus on English and German. However, other

languages and constructions other than passives and tough constructions are considered

as well.

The following tree shows example (1) from chapter 5, representing a skeletal

sketch of the new analysis.[62] This sketch includes obligatory VoiceP and optional *voice*P,

as well as the different verbal phrases. The nominals involved are not included here.

(1)   TP
      /\
     T   (VP/AuxP)
          /\
    (V/Aux)   (AP)
             /\
          (A)   (*voice*P)
                /\
          (*voice*)   VoiceP
                     /\
                Voice   VP
                        /\
                       V

---
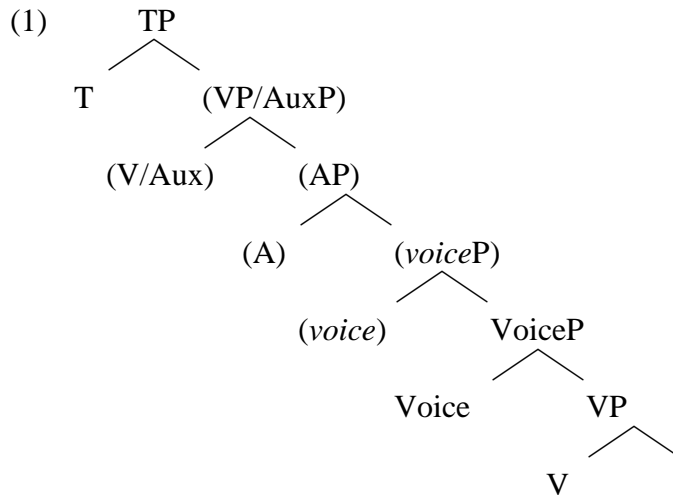
[62] The higher clause including (VP/AuxP) and (AP) takes a reduced complement clause. Regarding TCs
and passive constructions, the higher clause hosts the TC trigger or the passive auxiliary respectively.

The chapter starts by applying the analysis to "simple" transitive active sentences in both English and German, and then continues to look at passive constructions, tough constructions, and other (active) constructions that have been discussed in the previous chapters.

6.1 SIMPLE ACTIVE CONSTRUCTIONS

Let's start by considering one of the English examples from the previous section, namely a transitive sentence involving the verb *to read* taking the internal theme DP *a fairy tale* and the external argument *he*.

(2)   He read a fairy tale.

As already presented in example (4) in chapter 5, the verbal shell for a transitive construction looks as follows.

(3)
```
                  VP
            _____/\
         DP         /\
         he    to read    DP
                      a fairy tale
```
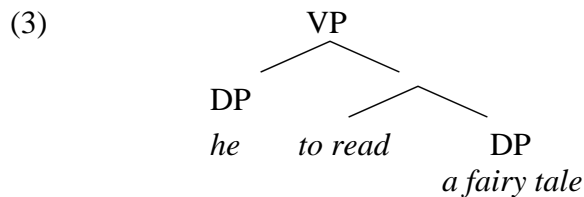
To arrive at (3), and in order to fully explain the step-by-step derivation, let me comment on the features involved in the composition of the verbal shell.

The verb *to read* enters the configuration from the numeration. It is assumed that there exist three different *to read* items in the numeration, (i) the intransitive verb, (ii) the transitive verb, and (iii) the ditransitive verb. For (2), the transitive verb is chosen from the numeration, entering the derivation with two [uDP] features. These two features are valued by the merge of the internal theme DP and the external agent DP.

To exemplify, consider the first step in the derivation, as demonstrated in example (4). The verb *to read* enters the derivation from the numeration with two [uN] features because it is a transitive verb, as well as a [uForm] feature because every verb needs its *form* valued.[63]

The first [uN] is valued (marked with a ✓ to visualize) with the merge of the internal argument, the theme DP *a fairy tale.* Additionally, because of the merge of one internal argument, the verb possesses a [^ACC] feature. The theme DP enters the derivation from the work space with a [uCase] feature. This feature cannot be valued at the time the DP merges, as there is no available [CASE] feature at this point in the derivation.

(4)
```
                VP
           ┌─────┴─────┐
           V           DP
        to read    a fairy tale
        [uN] ✓        [N]✓
        [uN]         [uCase]
                     [uForm]
                     [^ACC]
                     [^uφ]
```
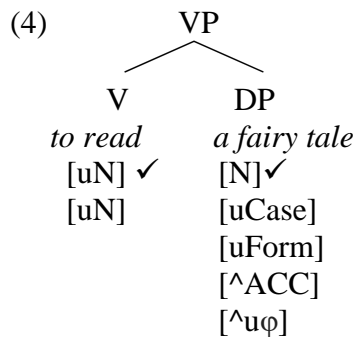
In the next step, the external argument merges, valuing the verb's second [uN] feature. With that, the verb does not gain another [^CASE] feature because an agent DP cannot cause the verb to gain such a feature. Just like the theme DP in the derivation, the agent DP *he* possesses a [uCase] feature that cannot be valued at this time in the derivation. With the merge of the external argument DP, the verbal shell is complete, and the only

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[63] The verb also possesses uninterpretable features for person, number, and tense. I refrain from adding every single one of them to example (4) in order to keep the tree simple and clear. Instead, they are summarized as suppressed phi features: [^uφ].

movement-causing features left at this point are the uninterpretable case features on the

DPs.

(5)   VP
        ╱   ╲
    DP   ╱ ╲
    he   V   DP
    [N]✓ *to read*   *a fairy tale*
    [uCase] [uN] ✓   [N]✓
             [uN] ✓   [uCase]
             [uForm]
             [^ACC]
             [^uφ]
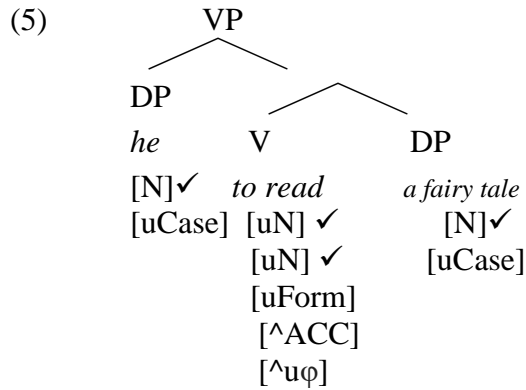
As explained in chapter 5, a VoiceP is projected above every verbal shell, whose head is

the merging site for the *by* and *for* necessary in passive constructions and TCs

respectively. Since we are looking at an active transitive construction, a Ø merges as the

Voice head. Ø possesses no features that can value the verb's [uForm] feature. Recall that

the merge of Ø as Voice can cause different outcomes: a true ECM construction (see

section 6.4), a finite *that*-clause, a *regular* active sentence such as (2), or control

constructions (see also section 6.4). Since a finite *that*-clause only differs from a *regular*

active sentence in that it has a *that* as its complementizer, it is worth including it right

here. The rest of the derivation will thusly show the derivation of (6).
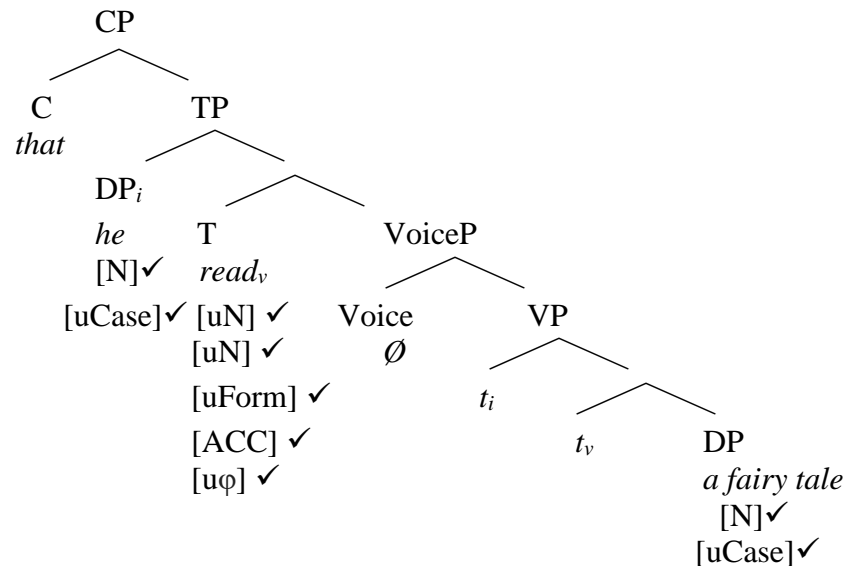
(6)   …that he read a fairy tale.

When a Ø merges as Voice, no *voice*P projects above VoiceP, (cf. the overview of

features listed on page 101). In order to arrive at the outcome listed in (6), a TP is merged

134

above VoiceP.[64] The T head possesses a [finite] feature rendering the [uForm] on the verb active. With that, the [^ACC] and the [^uφ] features are unveiled and become available. As soon as the [ACC] is unveiled, it values the next c-commanded DP, in this case *a fairy tale*. The unveiling of uninterpretable phi-features on the verb causes movement into a higher head position, namely T, where all of them are valued.

At the same time, Spec TP provides a landing site for the external DP, whose movement is driven by its [uCase] feature.[65] Finally, the complementizer *that* is merged and projects a CP. The tree in (7) demonstrates all of these last steps.

(7)

```
                    CP
              ┌──────┴──────┐
              C             TP
            that      ┌──────┴──────┐
                    DPᵢ
                     he      T              VoiceP
                    [N]✓    readᵥ     ┌───────┴────────┐
                 [uCase]✓  [uN] ✓    Voice            VP
                           [uN] ✓     Ø         ┌──────┴──────┐
                          [uForm] ✓            tᵢ
                          [ACC] ✓                    ┌────────┴────────┐
                          [uφ] ✓                    tᵥ              DP
                                                              a fairy tale
                                                                 [N]✓
                                                               [uCase]✓
```

Having discussed an active English example, I now turn to a German example in order to demonstrate that the same mechanisms can account for German constructions. German is

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[64] Recall that in order to account for an ECM construction, not a TP, but rather a VP is built above VoiceP. This will be exemplified in 6.4, but for now be neglected. The same is true for raising and control constructions.
[65] There is also an [EPP] feature on T that requires some XP to fill Spec TP.

verb-final, so its underlying syntactic structure is distinct from the English inasmuch as it has right-headed TPs and VPs. The sketch of my German analysis thusly differs from the English one as follows.

(8)

```
                        CP
                      /    \
                    C       TP
                          /    \
                  (VP/AuxP)      T
                    /    \
                 (AP)    (V/Aux)
                 /   \
              (A)    (voiceP)
                     /     \
                 VoiceP    (voice)
                 /    \
             Voice    VP
                     /  \
                    V
```
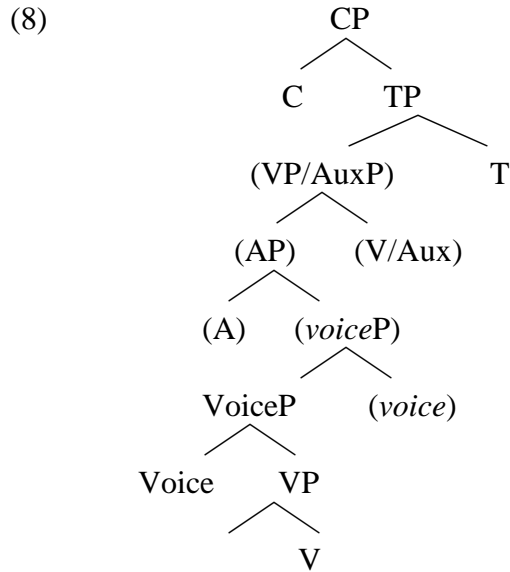
The passive projection *voice*P is also right-headed, as it is part of the verbal domain. VoiceP, however, cannot be right-headed because of the restrictions on overt sentence structure in some constructions. I will expand on this issue below.

To exemplify the German syntactic frame in (8), let's consider example (9), a direct translation of the English (6).

(9)   …dass er ein Märchen las.
       …that he a   fairy tale read
       '…that he read a fairy tale'

Just like in English, the German construction (9) begins with the merge of a verbal head and an internal argument, the theme DP *ein Märchen*.[66] Both the verb and the DP possess the same features as their English counterparts, see (10).

(10)
```
              VP
            /    \
        DP          V
   ein Märchen    zu lesen
      [N]✓         [uN] ✓
     [uCase]       [uN]
                   [uForm]
                   [^ACC]
                   [^uφ]
```
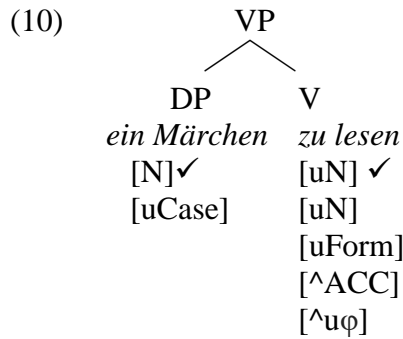
The next steps are also as described for English above. The external argument enters the configuration in the specifier position of the VP. The Voice-head Ø merges,[67] followed by T, and then C. The form feature on T also renders the verb *active,* allowing its unveiled [ACC] to value the [uCase] on the next DP it c-commands, here: *ein Märchen.* This valuation happens before the verb moves into T, just like in English, because the unveiled [uφ] feature on the verb drives V-to-T movement. T values its next c-commanded DP's [uCase] with [NOM].

The complementizer *dass* 'that' merges as C, thus blocking a potential verbal landing site. Overall, the derivation of (9) only differs from the derivation of (6) in regards to the headedness of their TPs and VPs. Also note that, in German, there is no [EPP] feature on T that requires movement into Spec TP. In German, as opposed to

---

[66] Note that the German verb *lesen* 'read' only exists as either a transitive or an intransitive item in the numeration. A ditransitive sentence would require the verb *vorlesen* 'read out loud'.
[67] In German, there is no ECM construction that could be built above VoiceP. There is a similar construction, namely AcI constructions. They will briefly be considered in 6.4.

English, only the verb undergoes movement, no DPs need to move in order to get their

[uCase] features valued (see for example Wurmbrand 2006, who provides German

examples for the necessity of case-valuing operations at a distance, namely, Agree, while

at the same time showing that there is no EPP feature requiring Spec TP to be overtly, or

covertly, filled).

(11)
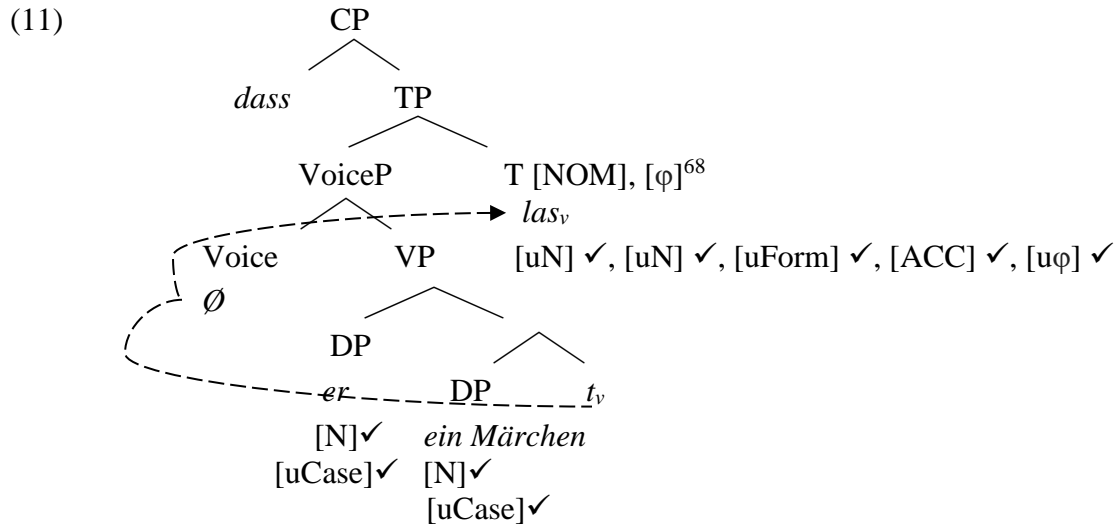
Having considered an English and German example, the suggested analysis seems to hold

for both languages. While other languages are not part of this dissertation, it is worth

looking at a non-Germanic language to see the potential universal application of my

suggested analysis. A French equivalent of (6) and (9) is the sentence in (12). Just like in

English, French *lire* 'to read' can be used both transitively and ditransitively. Example

(12) represents the transitive use of the verb.

(12)   …qu'elle lisait un conte
          that she read a   fairy tale

---

[68] Note that it is assumed throughout this dissertation that T possesses a [NOM] feature, along with [φ]. To make the following syntactic trees less cluttered, I refrain from indicating these features on T.

Assuming that French and English share the same underlying syntactic structure, the derivation for (12) looks as demonstrated in (13). As far as the suppressed features and their unveiling are concerned, they follow the same pattern as in English.

(13)

```
                    CP
              ┌──────┴──────┐
              C             TP
             que      ┌──────┴──────┐
                    DPᵢ             
                    elle      T          VoiceP
                    [N]✓    lisaitᵥ  ┌──────┴──────┐
                  [uCase]✓ [uN] ✓   Voice         VP
                          [uN] ✓     Ø       ┌──────┴──────┐
                         [uForm] ✓          tᵢ
                         [ACC] ✓                  tᵥ        DP
                         [uφ] ✓                          un conte
                                                          [N]✓
                                                        [uCase]✓
```
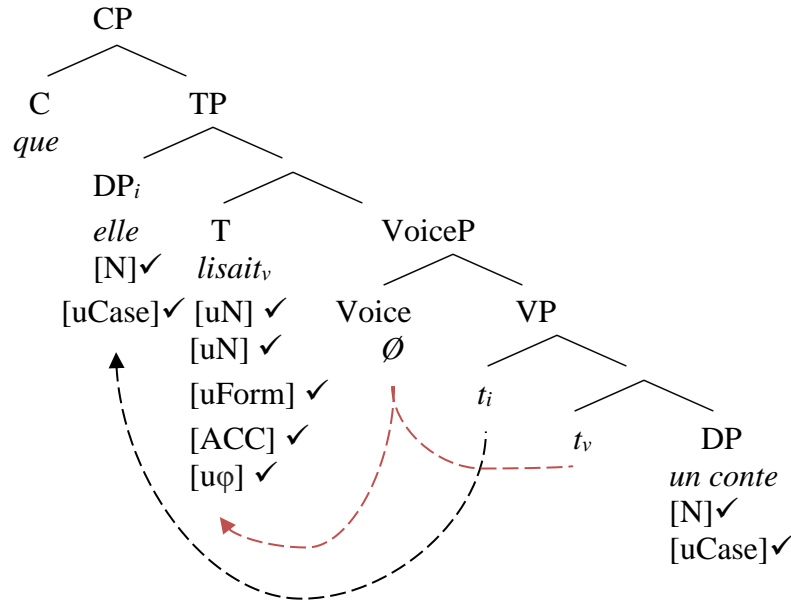
Just like in German and English, the French active transitive construction does not require a *voice*P projection above Voice because the *voice*P only projects in passive constructions in order to account for the passive marker. In French, this marker manifests itself through its agreement with the sentential subject (in person, number, and gender).

This section allows us to conclude that my analysis and all its mechanisms account for active transitive constructions in English, German, and French. Keeping in mind the goal of this dissertation, i.e., to account for passive and tough constructions, the derivations of this section (6.1) will serve as the basis for the derivations throughout the remaining chapter.

6.2 PASSIVE CONSTRUCTIONS

This section shall demonstrate that the mechanisms outlined in chapter 5 account for passive constructions in both English and German. Before looking at specific examples and their derivations, let's briefly recall some of the discussion from chapter 4, which served as an overview of (dis)similarities of passive and tough constructions.
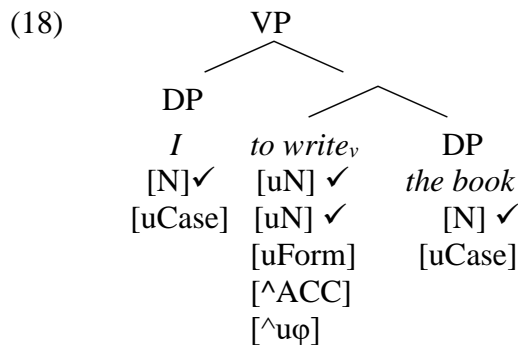
In chapter 4, I discussed regular transitive passive constructions, causatives, pseudopassives, unaccusatives, double-object constructions, and impersonal (existential) passives, all of them in comparison with tough constructions, highlighting their similarities to argue for a similar, or unified, analysis. Having outlined the particularities of each of the different kinds of passive constructions, let's consider them again now, in direct connection with my proposed analysis from chapter 5.

"Regular" passives are those constructions that allow passivization of transitive verbs. The same verbs usually also allow the formation of a TC, see examples (14) – (15) for English, and examples (16) – (17) for their German counterparts. For now, I abstract away from the ungrammatical *für*-phrase in the German TC examples in (17). They will be discussed in section 6.3 below.

(14)   a. The book was written by me.
            b. The car was stolen by them.
            c. Passives were investigated by the author.
            d. The exams were proctored by TAs.

(15)   a. The book was difficult (for me) to write.
            b. The car was easy (for them) to steal.
            c. Passives were not easy (for her) to investigate.
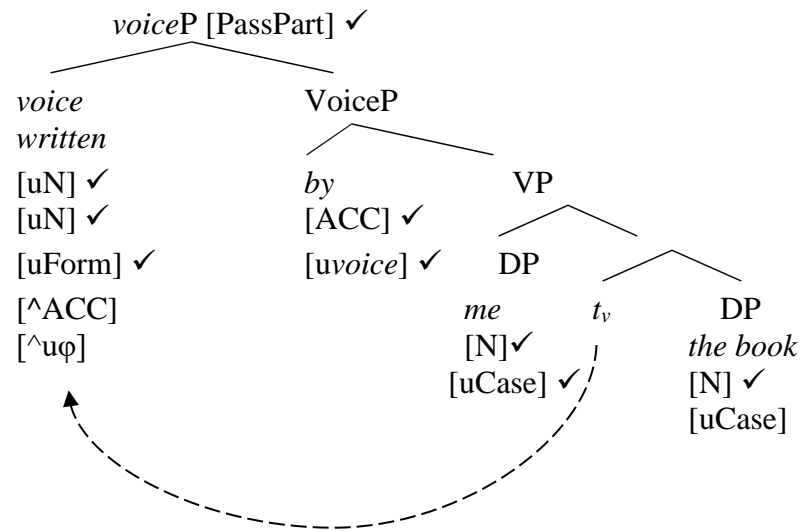   d. The exams were tough (for the TAs) to proctor.

(16) a. Das Buch wurde von mir geschrieben.
      b. Das Auto wurde von ihnen gestohlen.
      c. Passive wurden von der Autorin untersucht.
      d. Die Klausuren wurden von den Assistentinnen beaufsichtigt.

(17) a. Das Buch war schwer (?für mich) zu schreiben.
      b. Das Auto war leicht (?für sie) zu stehlen.
      c. Passive waren nicht leicht (?für sie) zu untersuchen.
      d. Die Klausuren waren schwer (?für sie) zu beaufsichtigen.

Let's exemplify the derivation of English (14a) and its German equivalent (16a), starting
with the English example. With regards to the verbal shell, all heads and DPs are merged
as they are in an active construction. For (14a), this means the merge of the theme and
agent DPs. The verb's two [uN] are valued by these merges, but it still possesses a
[uForm], a [^ACC], and a [^uφ] at this point in the derivation.

(18)

$$
\begin{array}{c}
\text{VP} \\
\overbrace{\quad\quad\quad\quad\quad\quad\quad\quad}
\end{array}
$$

| DP		
I	*to write$_v$*	DP
[N]✔	[uN] ✔	*the book*
[uCase]	[uN] ✔	[N] ✔
	[uForm]	[uCase]
	[^ACC]	
	[^uφ]	

As demonstrated in (19), the passive Voice-head *by* merges above the verbal shell. The
[ACC] on *by* values the [uCase] feature on the external argument, in this case on the DP
I. An additional feature [u*voice*] on *by* causes little *voice*P to be built. Driven by its
[uForm] feature, the verb *to write* moves into the functional head *voice* where [uForm] is
valued by a [PassPart] and becomes *written*. In English, the passive participle does not
allow an unveiling of [^ACC] or [^uφ]. The only active, movement-driving feature in this
derivation is [uCase] on the theme DP.

(19)

```
                    voiceP [PassPart] ✓
                 ╱                    ╲
           voice                      VoiceP
           written                  ╱        ╲
           [uN] ✓                 by           VP
           [uN] ✓                [ACC] ✓     ╱    ╲
           [uForm] ✓             [uvoice] ✓  DP       ╲
           [^ACC]                          me     tᵥ      DP
           [^uφ]                          [N]✓           the book
                                         [uCase] ✓       [N] ✓
                                                          [uCase]
```

Next, an AuxP, a TP and a CP are built above *voice*P. The theme DP *the book* moves up into Spec TP, driven by its [uCase] feature, and also because an [EPP] on T causes this position to be filled. A C merges to account for sentence type (e.g., to signal a question, or an embedded *that*-clause). (20) illustrates a root declarative clause with a null C [-Q].
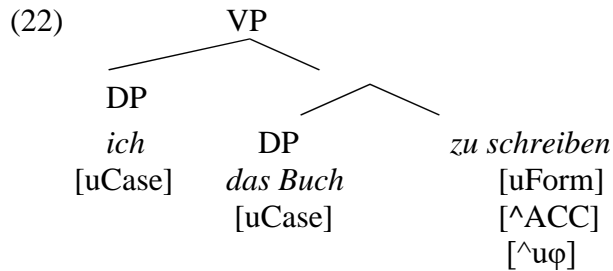
(20)
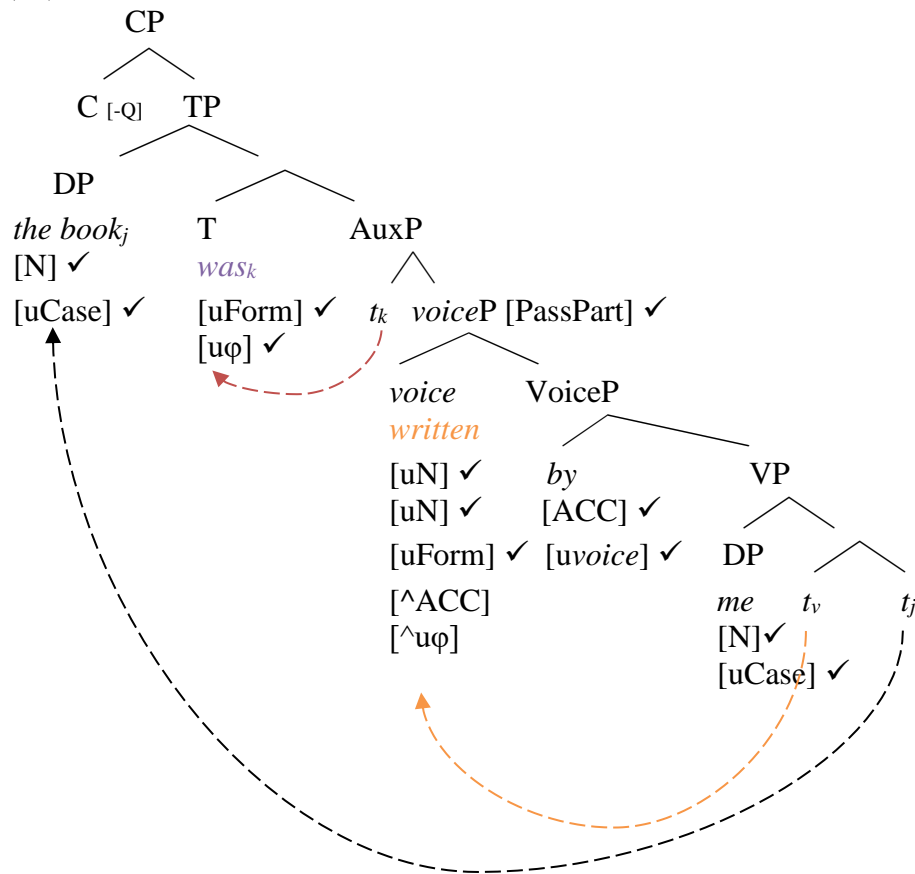
Turning away from English, let's look at the derivation for the German example (16a), here slightly changed to (21).[69] The verbal shell contains two arguments, an agentive and a theme argument. The respective DPs merge into their respective spots. From now on, I will not indicate the [N] and [uN] features on the DPs for space reasons. The verb enters the configuration with the same (suppressed) features as above: a [uForm] feature, and the suppressed [^ACC] and [^uφ]. The verbal shell for (21) is provided in (22).

---

[69] In order to account for the underlying SOV structure in German, my derivation examples will always consider subordinate clauses. The finite verb and the subordinating complementizer are in complementary distribution to one another, i.e., if the C head is not a complementizer, the finite verb moves into the slot. Additionally, there exists an [EPP]-like feature requiring the Spec CP to be filled with an XP if C is occupied by the finite verb (see e.g. Vikner 1995).

(21)   …dass das Buch von mir geschrieben wurde.
       …that the book by me written   was
       '…that the book was written by me.'

(22)   VP
            ╱   ╲
         DP   ╲
                       ╱   ╲
        ich   DP   *zu schreiben*
      [uCase]   *das Buch*   [uForm]
                 [uCase]   [^ACC]
   [^uφ]

Similar to the derivation in English, the VoiceP and *voice*P projections are built, the latter
as a direct result of the [u*voice*] feature on *von* 'by'. In German *von* has a [DAT] feature
that values the [uCase] on the external argument. Since the projected *voice*P has a
functional head directly associated with the verb, it must be head final in German, just
like the verb and tense phrases are. The verb checks its [uForm] in *voice*, and its
suppressed features stay suppressed. The AuxP, the TP and CP are built above: the TP
providing a landing site in Spec TP for the theme DP *das Buch*, and the C being merged
as the complementizer *dass* 'that'. The DP gets its [uCase] valued by [NOM] on T.
Recall that I referred to Wurmbrand (2006) earlier, stressing that German [uCase] does
not always drive movement, and that there are instances in which Case-valuation must
happen through Agree, that is, through valuation at a distance. For example (21), if the
[uCase] is valued by T through Agree, the DP can still scramble into Spec TP.[70]

---

[70] It should be noted that German example (21) is also grammatical if the internal argument does not move,
but if it stays low, as in (i). In fact, the canonical position of the object in German is to the right of the
subject. However, a passive construction changes the semantic object into the grammatical subject, which
may be the reason why (21) is more common.
    (i)   …dass von mir das Buch geschrieben wurde.
             that by me the book written   was
             '…that the book was written by me'

The tree in (23) shall exemplify the derivation for (21). Also note that, for clarity, the arrows now only connect an item's base position with its final position in the syntax tree, and not the intermediate positions.

(23)
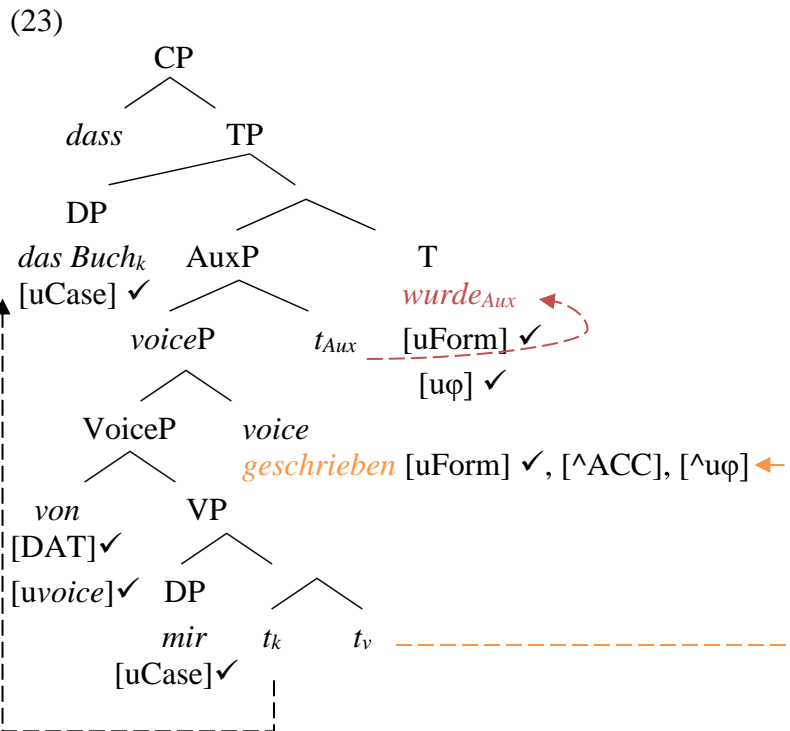
As mentioned above, the German structure involves a right-headed *voice*P projection, but a left-headed VoiceP above VP. This necessity is highlighted by examples (22)-(23) because the optional *von*-phrase in passives (and the optional *für*-phrase in German TCs) occur in the midfield. In English, the optional *for*-phrase in TCs behaves similarly, however, the *by*-phrases in English occur sentence-finally. In order to account for this difference in passives between English and German, the functional VoiceP projection

needs to be left-headed, even in German. Only *voice*P is an extension of the verbal shell, and therefore right-headed.[71]

What has been shown so far is that for regular transitive passives, my account holds for both English and German. With regards to its language specificity, it can be concluded that the passive-specific *voice*P can be head-final in German, but it can also be treated as an extended functional projection, which would require it to be head-initial (see footnote 60).

Turning away from regular transitive passives, let's reconsider causatives. In chapter 4, I discussed *causatives* in English and German, highlighting their passive interpretations. They differ syntactically in that the German equivalent can only be expressed using a *lassen*-construction. Recall the following examples.

(24)   Scar had Mufasa killed.
(25)   Scar ließ Mufasa umbringen.
        S.   let M.   kill
        'Scar had Mufasa killed'

While it is obvious that *Mufasa* is the direct object of *killed* and *umbringen* in (18) and (19) respectively, English (24) exhibits a participle, and German (25) exhibits an infinitive without *zu* 'to'. At this point in the chapter, (25) should not be considered

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[71] Note: For German passives, there is an alternative treatment of *voice*P. Assume that *voice*P is not a verbal projection, but rather, an extended functional projection of VoiceP. As mentioned earlier, there is no consensus about whether there is V-to-T-movement in German embedded clauses. If we side with Wurmbrand (2006), and the verb can get its [uFeatures] valued at a distance through Agree, then the VoiceP/*voice*P projections may both be left-headed in German as well (together with T, which, in embedded clauses, it could also be left-headed). This way, the verb's [uForm] feature can be valued at a distance, and the VoiceP/*voice*P projections are not considered verbal projections, but functional projections. Additionally, in German main clauses, the finite V must move into the second position, so it has to move into C, which is on the left. In order to get there, the V must move through Voice, *voice*, and T, and it does not matter the headedness.

because it is syntactically an active construction.[72] Regarding the English example (24), my analysis should still hold, albeit with a few necessary adjustments. Consider example (26) showing that there is one important semantic difference between a "regular" passive construction a causative as in (24).

(26)   Scar$_s$ had Mufasa$_m$ _____ *s/*m killed ___m/*s.

In a "regular" passive construction, the subject is one of the internal arguments of the "embedded" verb. As demonstrated in (26), the subject *Scar* can be interpreted as either the external nor the internal argument of the lexical verb *to kill.* As far as *Mufasa* is concerned, this DP can only be interpreted as the internal argument of *to kill,* and not as the external argument. Additionally, this specific construction is very limited in regard to its semantic possibilities. Consider the following examples.

(27)   a. She had him arrested (?by the police).
        b. ?He had her called (by the headmaster).
        c. She had him punished (?by the police).
        d. *He had her loved.
        e. *She had him found.
        f. ?He had her talked to (*by the police).
        g. *He had the milk bought.
        h. ?She had the book read (by her students).

The ungrammatical, or unusual, examples show that there is a limit to the possibilities for this construction. The lexical verbs provided in examples (27) may not all work in a causative construction with *have,* but they can all be passivized (e.g., *She was called; they were loved; he was found*). Additionally, the matrix subject is not semantically (and derivationally) related to the lexical verb because the latter does not assign a theta-role to it. Leaving aside the semantic restrictions, a grammatical causative can be accounted for

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[72] In fact, the *lassen* construction in German is known as a *Passiversatzform*, i.e., an active substitute for a passive construction.

by positing that they need to be analyzed as ECM constructions (see 6.4). The verbal shell all the way up to *voice*P would be built as usual, and instead of moving into the Spec TP to get its [uCase] valued by [NOM], the internal argument would move to the edge of *voice*P to receive [ACC] from the matrix *to have*. This will be exemplified in section 6.4, where ECM constructions are discussed.

The next passive construction that I discussed in chapter 4 are pseudopassives. Pseudopassives differ from "regular" passives in that they involve preposition stranding (28a), an option only possible in English, as German requires pied-piping (29a). Pied-piping is also possible in English, and does not manifest any issues concerning case assignment. However, preposition stranding triggers the same questions as "regular" passives, i.e., how and why the sentential subject appears NOM-marked, even though the preposition should already value its [uCase] feature. Note that preposition stranding is also possible in tough constructions in English (28b), however, tough constructions with pied-piping sentences are possible in neither German nor English (29b and 28c).

(28)   a. The presidential campaign was talked about.
        b. The presidential campaign was easy to gossip about.
        c. *About the presidential campaign was easy to gossip.
(29)   a. Über die Kampagne wurde gesprochen.
            about the campaign   was   talked
        b. *Über die Kampagne war nur   schwer zu lästern.
            about the   campaign was only difficult to gossip

How would the proposed analysis then account for pseudopassives in English? My analysis would account for (28a) in the same way as it accounts for regular transitive passives. However, I argue that those verb-PP combinations that allow for preposition stranding are analyzed as one lexical chunk rather than two separate chunks (i.e. verb + PP). To clarify, consider the following examples.

148

(3o)   a. The boys saw a tiger.
        b. A tiger was seen by the boys.
(31)   a. The boys saw to the animals.
        b. The animals were seen to by the boys.

The verb *to see* does not have the same meaning in (30) and (31). By combining the verbs

with specific prepositions, they change meaning, and thusly require a different approach.

They are separate entries in the lexicon. The meaning of the verb *to see* (=to perceive

with the eyes) differs from *to see to* (=to care for), so it is wrong to say that *to see* can

select an optional PP as its complement instead of an internal argument. It can therefore

be argued that strictly idiomatic phrasal combinations have to be reanalyzed not as V+PP,

but as V-P+DP, and thus form a verbal head.

Something similar, but slightly different, is exemplified in (32). As opposed to

(32a-b), in which the verb needs to get two [uN], or [uDP] features valued, requiring a

theme and an agent DP, the verb in (32c-d) combines with a prepositional phrase. While

the meaning of the verb *to read* is the same in all sentences (32a-d), the combination with

the PP alters the meaning of the sentence, and a difference between (32a) and (32c) is

clear.

(32)   a. She read the book.
        b. The book was read.
        c. She read about a book.
        d. The book was read about.

Under a strict syntactic approach, to arrive at the slightly different meanings when

combined with a certain preposition (as in 32c), one could also argue for a reanalysis of

the verb and the preposition. This becomes particularly clear when trying to analyze the

pseudopassive construction in (32d). The verb would combine with the preposition, and

this combination would then be reanalyzed as its own, new head, just like in (31). Note

that this excludes sentences such as (33) because *regular* preposition stranding does not

involve passivization, but ordinary Wh-movement. There is no irregularity in case-

assignment of the fronted subject, so I am not concerned with this kind of construction.

(33)   a. The class I eat lunch after ___ ...
        b. I each lunch after this class.

The possibility to have pseudopassives or TCs with preposition stranding can then be

accounted for in the same way that "regular" passives are explained under my account.

To arrive at (31b), for example, the crucial difference can be found at base configuration

within the verbal shell (cf. 34). The rest of the derivation follows the same mechanisms

as discussed above.[73]

(34)
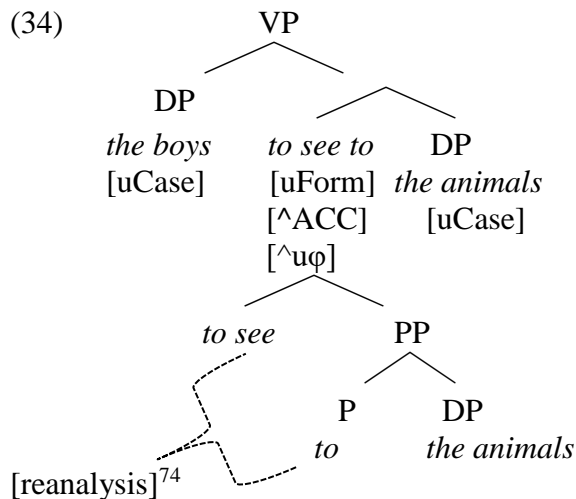
Turning to unaccusatives, I stressed in chapter 4 that they can neither be passivized nor

worked into a grammatical TC (cf. the English examples in 35 and its direct German

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[73] For more literature and different approaches to reanalysis, see Baltin & Postal (1996), Baker (1988), or Drummond, A., & Kush, D. (2011).

[74] Also compare to example (44) on page 85

translations in 36), which can be attributed to the verbs' lack of a semantic agent. Let's

also take a brief look at unergatives (examples 37-38) because German unergative

constructions allow passivization by form of so-called impersonal passives (see example

38c), while English unergatives do not allow it.

(35)   a. She died last month.
        b. *She was died last month.
        c. *She was difficult to die.

(36)   a. Sie starb letzten Monat.
          she died last   month

        b. *Sie wurde letzten Monat gestorben.
          she was   last   month died

        c. *Sie war nur schwer zu sterben.
          she was just hard   to die

(37)   a. He danced at the party.
        b. *He was danced at the party.
        c. *It/*there was danced at the party.
        d. *He was tough to dance at the party.

(38)   a. Er tanzte   auf der Party.
          he danced at   the party

        b. *Er wurde auf der Party getanzt.
          he   was   at   the party danced

        c. Es wurde auf der Party getanzt.
          it   was   at   the party danced
          'There was dancing at the party'

        d. *Er war schwer zu tanzen.
           he was hard   to dance

Section 6.4 will pick up the unaccusative and unergative constructions again, but at this

point in the chapter, which discusses passives, the only focus shall be the possibility to

create impersonal passives with unergative constructions in German.

Impersonal passives in German are accounted for when considering that *merge-over-move* holds (Chomsky 1995), and the expletive *es* is a last resort phonological filler of the initial position. An unergative passive, i.e., an impersonal passive, in German may contain an optional *von*-phrase, as demonstrated in the following examples.

(39)   Es wurde (von allen) auf der Party getanzt.
        it was   by all   at   the party danced
(40)   Es wurde (von den Gästen) gegessen.
        it was   by the guests eaten

In order to account for (39) and (40), a "regular" passive construction is derived, just as demonstrated above. However, once the *von* 'by' in Voice renders the constructions a passive construction, and after it values the external argument's [uCase] with [DAT], there is no additional DP in the configuration that can move into the Spec CP above the finite passive auxiliary in C. With no remaining DP, the German expletive *es* 'it/there' is spelled out in Spec CP to save the derivation from crashing.[75] Note the subordinate versions of (39) and (40) in (39') and (40') below. No *es* is inserted, as the Spec CP in a subordinate clause headed by a subordinating complementizer may not contain anything.

(39')   …dass (von allen) auf der Party (von allen) getanzt wurde.
           that by all   at   the party (by all)   danced was
(40')   …dass (von den Gästen) gegessen wurde.
           that by the guests eaten   was

The account of German unergative passives, however, would also allow for the following ungrammatical passivized sentences of unaccusatives, in both English and German, in addition to the ungrammatical passivized unergative English constructions.

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[75] Note that (i) is an alternate for (39), where information-structure related fronting has happened.

(i)   Auf der Party wurde von allen getanzt.
         at   the party was   by all   danced

152

(41) Passivization of unaccusatives in English and German
a. *It/*there was died by her last month.
b. *Es wurde von ihr gestorben.

(42) Passivization of unergatives in English
a. *It/*there was danced at the party.
b. *It/*there was eaten at the party.

There needs to be a restriction to prevent these ungrammatical sentences. The ability to passivize or to become a TC is semantically pre-determined, and not dependent on the syntax. Recall that my account already suggests that the DP merged in the derivation always correspond to the semantic arguments that a verb s-selects. I exemplified this in chapter 5 by discussing the intransitive (unergative), the transitive and the ditransitive options for the verb *to read.* Of all different options, consider the possibilities to form (un)grammatical passive and tough constructions.

(43) a. He reads.   (unergative)
b. *He was read.
c. *It was read by him. [impersonal passive]
d. *He was tough to read.

(44) a. He read a book.   (transitive)
b. The book was read by him.
c. The book was difficult for him to read.

(45)[76] a. He read her a book.   (ditransitive)
b. She was read a book.
c. *A book was read her. (cf.: A book was read to her.)
d. *She was difficult for him to read a book. (cf.: She was difficult to read a book to.)
e. *A book was difficult for him to read her. (cf.: A book was difficult to read to her.)

---

[76] Note that these double object constructions always possess a PP-alternative allowing different passive constructions and TCs. Due to the inconsistent approach to DOCs, however, they are not considered in this dissertation.

These examples point out that, in English, TCs and passives in their "true" forms are only allowed with transitive verbs (cf. 44), but not with intransitive, and thusly also unergative verbs. Ditransitive verbs only allow the indirect object as the subject of a passive sentence, and all other grammatical options require a different base configuration involving prepositional phrases. Among the four constructions "active unaccusative", "passive unaccusative", "active unergative" and "passive unergative", only the German impersonal "passive unergative" behaves similarly to the *regular* TCs and passives that have been discussed. Hence, the German impersonal should be treated rather as an exception than the norm, and shall not be discussed here any further. I will suggest an explanation of impersonal passives in German in the concluding chapter.

As this subsection has shown, my suggested approach can be applied to both English and German passives, and it holds for French as well. In chapter 4, I argued for a unified analysis of passives and TCs, so the following subsection will demonstrate my approach's implementation when it comes to deriving TCs in both English and German.

6.3 TOUGH CONSTRUCTIONS

Having established the parallelism between passives and tough constructions in chapter 4, my account also provides a satisfactory account of tough constructions.

Before looking at a specific example, recall the differences between passives and TCs requiring that TCs have a slightly different derivation from passives. TCs contain an infinitival complement, and not a passive complement, and, in English, the optional PP identifying the agent of the lexical verb needs to be headed by *for* in TCs, as opposed to *by* in passives.

As outlined in chapter 5, the difference is accounted for by positing that *for* renders the VP infinitival, and that there is no *voice*P projection. To visualize, consider example (46) and its derivation in (48). (47) lists all items involved in the derivation, including their features which are not included in the tree in (48) to avoid cluttering the tree with features.
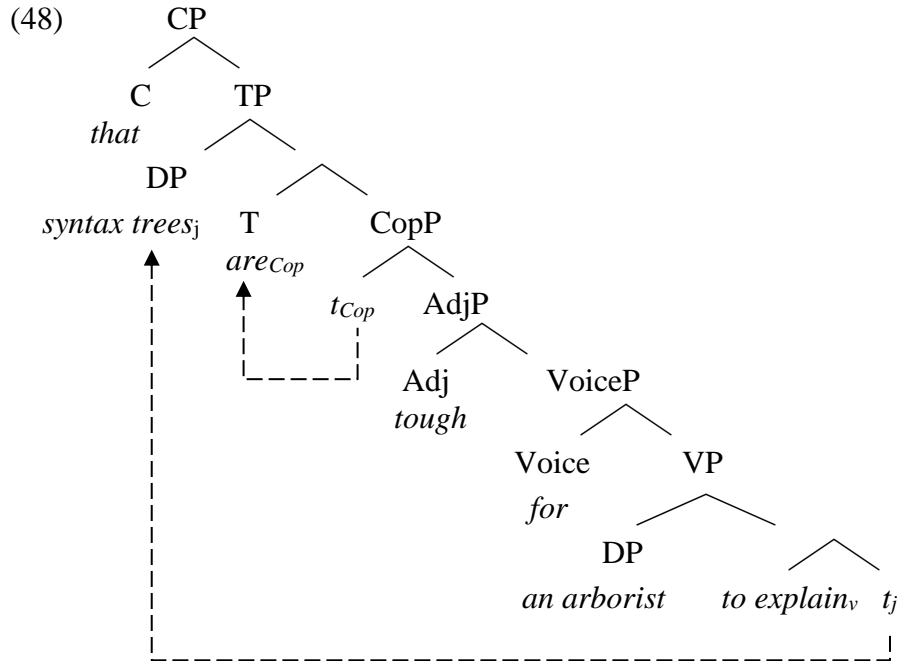
(46)   … that syntax trees are tough for an arborist to explain.

(47)   verb: *to explain* [uForm], [^ACC], [^uφ]
        theme DP: *syntax trees* [uCase]
        agent DP: *an arborist* [uCase]
        Voice head: *for* [ACC], [Inf(initive)]
        TC-triggering adjective: *tough* [uInfVoice]

As (47) shows, there are only two suppressed features involved in this derivation, and they are both on the verb. The verb enters the derivation, and the verbal shell is constructed, first by merging the internal argument with the verb, followed by the merge of the external argument into the specifier position of the verb shell. The Voice-head merges as *for* and projects VoiceP. *For* enters the derivation with an [ACC] feature, allowing the agentive DP *an arborist* to value its [uCase] feature right away, rendering the DP accusative. The [Inf] feature on *for* can value the verb's [uForm] right away, causing the verb to stay in its infinitive form (here: *to explain*). By checking the [uForm] with [Inf], both the suppressed [^ACC] as well as [^uφ] cannot become available and stay suppressed. Now, the only unvalued feature left is the [uCase] feature on the internal argument (*syntax trees*).

There is no *voice*P which projects above VoiceP (recall that *voice* contains the passive participle (morpheme), and it only merges above VoiceP if VoiceP contains a *by*-head). Instead, an AdjP merges above. This AdjP contains the TC-triggering predicate

that possesses a [uInfVoice] feature, which can be satisfied by the infinitival VoiceP. The copula *to be* merges as Cop and projects CopP, followed by the merge of T.[77] The EPP feature on T as well as the [uCase] feature on the internal argument DP cause *syntax trees* to move into Spec TP. Lastly, the CP is projected with the complementizer *that* in C.

(48)

```
                 CP
                /  \
              C      TP
            that    /  \
              DP
        syntax treesⱼ   T      CopP
                      areCop   /   \
                          tCop     AdjP
                                  /    \
                                Adj     VoiceP
                               tough    /    \
                                     Voice    VP
                                      for     /  \
                                            DP      \
                                       an arborist  to explainᵥ  tⱼ
```
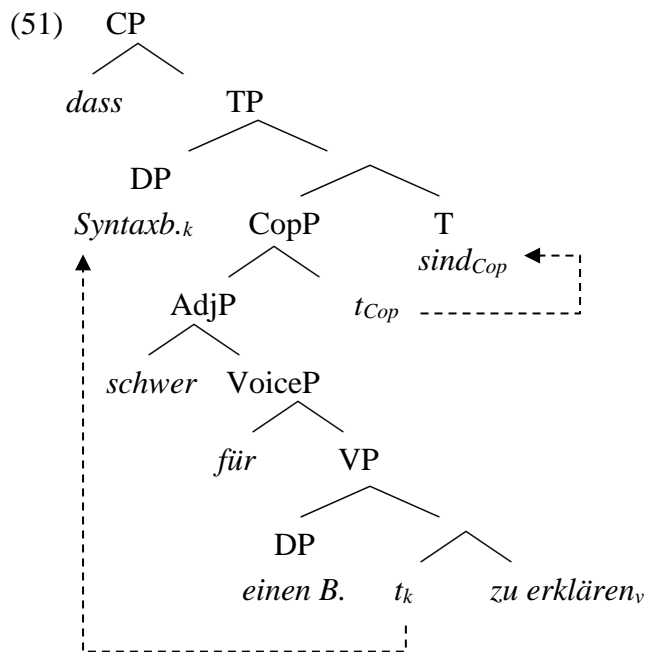
Turning away from English, consider the German equivalent of (47), provided in (49). (50) provides an overview of features that are part of the derivation. Again, I will refrain from listing all the features in the syntactic tree in (51). Here again, I included a CopP, a copula phrase, to account for the copular *sein* in the main clause.

(49)   …dass Syntaxbäume schwer (für einen Baumpfleger) zu erklären sind.
       that   syntax trees   difficult for a   arborist   to explain are

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[77] Of course, the copula, too, possesses [uForm] and [^uφ] features, and they are valued, unveiled and valued on T, through subject-verb agreement once *syntax trees* moves into Spec TP. I adapt Lohndal's (2006) approach to copulas in that they have their own phrase. For an overview of approaches to copula phrases, see Mikkelsen (2011).

(50)   verb: *zu erklären* [uForm], [^ACC], [^uφ]
       theme DP: *Syntaxbäume* [uCase]
       agent DP: *ein Baumpfleger* [uCase]
       Voice head: *für* [ACC], [Inf(initive)]
       TC-triggering adjective: *schwer* [uInfVoice]

(51)   CP
       ├─ *dass*
       └─ TP
          ├─ DP
          │ *Syntaxb.$_k$*
          ├─ CopP
          │ ├─ AdjP
          │ │ ├─ *schwer*
          │ │ └─ VoiceP
          │ │   ├─ *für*
          │ │   └─ VP
          │ │   ├─ DP
          │ │   │ *einen B.* t_k
          │ │   └─ *zu erklären$_v$*
          │ └─ t_{Cop}
          └─ T
             sind$_{Cop}$

As shown in (51), my suggested analysis accounts for German TCs just in the same way as it accounts for passives. While (49) is a very acceptable grammatical construction, TCs in German deserve a brief discussion due to some discrepancies concerning their acceptability judgments.

For example, in an unofficial survey, the following German sentences were rated as acceptable, unacceptable, or marginal. The accepted sentences are listed in (52), the marginal ones in (53), and the rejected sentences are listed in (54). Consider the optional *für* 'for' phrase.

(52)   *Accepted*
        a. Der Hund war wirklich schwer zu lieben.
          the dog   was really   hard   to love
        b. Die Hyänen waren leicht zu fangen.
          the hyenas were easy to catch
        c. Scar war schwer zu überzeugen
          Scar was hard   to convince
        d. Die Hyänen waren nicht leicht für Pumba zu fangen
          the hyeanas were not   easy for Pumba to catch

(53)   *Marginal*
        Scar war nur   schwer für die Hyänen zu überzeugen.
        Scar was MOD.PRT. hard   for the hyenas to convince

(54)   *Rejected*
        Der Hund war wirklich schwer für mich zu lieben.
        the dog   was really   hard   for me   to love

(52d) contains a *für* 'for' phrase, and it is accepted to be a grammatical construction,

while the other two constructions containing an overt *für* 'for' phrase are only rated

marginal or *unacceptable* altogether. Consider now examples (55), examples containing

the *für* phrase which are completely acceptable.

(55)   a. Die erste Maschine war schwer für mich zu bedienen.
            the first machine was hard   for me   to operate

        b. Die Lage   ist schwer für mich einzuschätzen.
           the situation is difficult for me   to.assess

        c. Reue   ist nicht leicht für dich zu verstehen.
           remorse is   not   easy for you to understand

        d. Die Frage   ist schwer für mich zu beantworten.
           the question is   hard   for me   to answer

        e. Diese Sprache ist leicht für ihn zu lernen.
           this   language is easy for him to learn

The judgement irregularities presented in (52)-(55) may stem from the fact that there is a left-headed non-verbal VoiceP just above the right-headed VP. However, a right-headed VoiceP would not account for the correct word order, neither in passives nor in TCs in German.

Rephrasing marginal and rejected (53) and (54), and "disguising" them in subordinating clauses with more semantic information seem to improve their acceptability (see (56)-(57)).

(56)   Nala erzählte in ihrer Geschichte, dass Scar nur schwer für die Hyänen zu
       Nala told   in her   story   that Scar only hard   for the hyenas to
       'Nala told in her story that Scar was hard for the hyenas to convince.'
       überzeugen war.
       to convince was

(57)   Wir adoptierten den Hund, der wirklich nicht schwer für uns zu lieben war.
       We adopted   the dog   that really   not hard   for us to love   was
       'We adopted the dog that was really not hard for us to love.'

For now, I refrain from further investigating in which contexts an overt *für* is acceptable and will leave this issue open to future research.

In this section, I have shown that the proposed account holds in both English and German tough constructions. Throughout the previous chapters, however, I made use of various other constructions, either to argue for the proposed analysis, or to draw a parallel between passives and TCs. These constructions are reconsidered in the following section, showing that the analysis is flexible enough to accommodate them as well.

6.4 OTHER CONSTRUCTIONS

Throughout this section, I am working through constructions that have been discussed in chapters 3 and 5. For some of them, a more or less unified analysis already exists, however, I want to show that my suppressed features and their *default unveiling* can also account for them. I am going to discuss ECM constructions, gerund, control constructions, as well as unaccusatives and unergatives.

 Starting with ECM constructions, consider examples (58)-(59). While (58) is considered a *true* ECM construction, in which the bold-faced *him* gets its case valued by the ECM verb *believe*, (59) is not. For comparative reasons, also consider the tough construction in (60).

(58)   I believe **him** to love his dog.   [*true* ECM]
(59)   a. She really wanted for the TAs to grade the papers.   [?]
    b. She really wanted the TAs to grade the papers.   [*true* ECM]
(60)   a. Trees are easy for syntacticians to build.   [*true* TC]
    b. Trees are hard for arborists to take down.   [*true* TC]

As already highlighted and discussed in chapter 5, all examples share similar properties because they consist of a main clause and an infinitive complement. I argued that the external argument of the infinitive in TCs has its case valued by *for* in Voice (or, in passives, by *by* in Voice), and in ECM-like constructions such as (59a), this analysis works as well.[78] In *true* ECMs, the external argument of the infinitive gets its case valued by the main verb. What we are left with, then, is the internal argument of the infinitive whose [uCase] features get valued after the *default unveiling of features* has taken place, right before the derivation would crash. I described the derivation of (58) in prose,

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[78] It follows that a verb like *want* in (59) then no longer takes a CP-complement, but a VoiceP-complement.

following example (14) in chapter 5. In order not to repeat myself here, I only provide an

overview of features in (61), and a tree to exemplify the derivation, see (62).

(61)   main verb: *to believe* [uForm], [Inf], [^ACC], [^uφ]
        external argument main verb: *I* [uCase]
        infinitival verb: *to love* [uForm], [^ACC], [^uφ]
        external argument infinitival verb: *he* [uCase]
        internal argument infinitival verb: *his dog* [uCase]

(62)
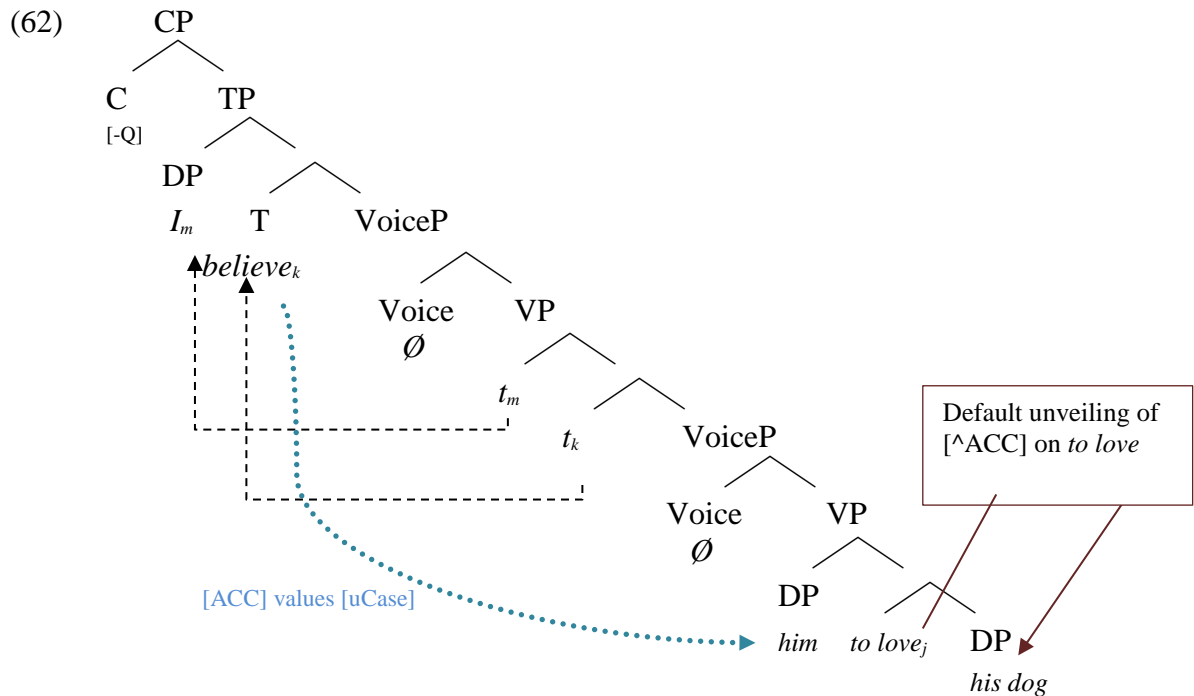
(62) visualizes the movement operations involved in the derivation. The internal,

infinitival verb and its complements stay low, and the [uCase] on the external argument is

valued by *believe* once its [^ACC] is unveiled. The last step in the derivation is the

unveiling of features, which makes available the suppressed [^ACC] on the infinitive *to

love.* Once it's unveiled, it values case on the DP it c-commands, *his dog*, and the

derivation is complete.

    The DP *the papers* in examples (59) also gets its [uCase] feature valued by the

infinitival verb after [^ACC] is unveiled through the mechanism of default unveiling.
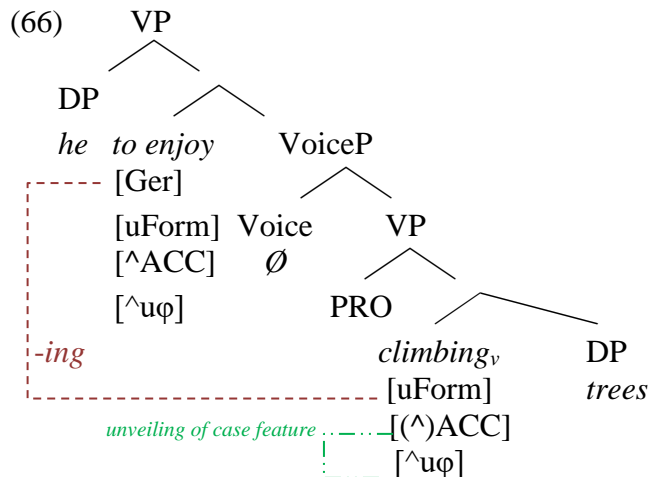
However, this mechanism does not always come into play. Consider examples (63), gerund constructions similar to the ones discussed in chapter 5.

(63)　　a. <u>Losing my keys</u> always got me into trouble when I was a child.
　　　　b. He always enjoyed <u>climbing trees</u>.

The derivation involving gerund constructions as seen in (63) are different in that their internal arguments cannot be passivized or appear in a TC, as seen in (64). General extraction, of course, is possible as long as it is not extracted out of the sentential subject (see 65).

(64)　　a. *My keys were lost ___ always got me into trouble.
　　　　b. *Trees were difficult to always enjoy climbing ___.

(65)　　a. *What did losing always get you into trouble?
　　　　b. What did he always enjoy climbing ___ ?

These examples highlight that if the internal argument of a gerund is extracted to form a grammatical sentence (in 65b), its [uCase] feature is still valued by the [ACC] on the gerund form, so I argued in chapter 5 that the *-ing* suffix actually causes an unveiling of the suppressed [^ACC]. Not further commenting on how sentential subjects involving gerunds (cf. ex. 63a) are derived, gerunds such as in (63b) are derived as follows.

(66)

```
        VP
      ╱    ╲
   DP        ╲
   he   to enjoy      VoiceP
  ┌----- [Ger]       ╱    ╲
  ┊       [uForm]  Voice    VP
  ┊       [^ACC]    Ø      ╱  ╲
  ┊                      PRO   ╲
  ┊       [^uφ]              ╱    ╲
  ┊-ing                 climbingᵥ    DP
  └- - - - - - - - - - - - [uForm]   trees
     unveiling of case feature --·-[(^)ACC]
                          └--·- [^uφ]
```

Once the [uForm] is valued by the main verb's [Ger(und)] feature, the suppressed
[^CASE] on the gerund verb is unveiled, and case valuation on the c-commanding DP
happens. Note that the verb *to enjoy* possesses a [Ger] feature. As is it considered a
partial control predicate (cf. Pearson 2016), it can also select a DP, or noun, as its
complement, to form constructions such as (67).

(67)   a. He enjoys trees.
       b. He enjoys nature.
       d. He enjoys food.

Combining everything discussed so far, consider now the following examples. *To like* can
select an infintival complement, a DP, a gerund construction, a *for*-complement, an ECM
construction, and even a TC.

(68) a. She likes to buy houses.   infinitival complement
      b. She likes houses.   DP
      c. She likes buying houses.   gerund
      d. She likes for her husband to buy a house.   *for*-construction
      e. She likes him to buy a house.   ECM[79]
      f. She would like the house to be easy for her
         husband to buy.   TC (*for*-construction)

So far, all of the possible constructions have been discussed and I demonstrated that my

analysis can account for all of them. Regarding the specific examples in (68), it becomes

clear that the valuation of the [uForm] feature is often dependent on the main verb.

    Finally, let's briefly look at unaccusative verbs again. As already highlighted

earlier, unaccusatives and unergatives in English cannot be passivized, and they cannot

form tough constructions. I also mentioned that German allows an impersonal passive

construction of unergatives, but not of unaccusatives. According to my analysis,

unergative verbs select external, agentive arguments, so, they do not possess [^ACC]

features. It follows that, semantically, a passive construction is not possible. However,

the syntax must also be adjusted in order to prevent ungrammatical constructions such as

(69).

(69) a. *She was danced.
      b. *He was read.

Considering that neither TCs nor passives are possible constructions to derive from

unergatives, it would make sense to posit that VoiceP does not project above unergatives.

However, this would prevent sentences such as (70).

(70) a. I want her to dance.
      b. She wants him to read.

---

[79] Note that there are also ECM-constructions allowing for gerunds, e.g., *She defended him stealing the car.*

164

Therefore, the more elegant solution would be to suggest that the passive Voice-head *by* as well as the TC Voice-head *for* are subcategorized by s selecting two or more DPs.[80] This would ensure that the VP contains at least two arguments, of which at least one is the external one.

The challenge now is to account for active unaccusatives, whose internal arguments become the subjects of the sentence, as well as for the prevention of their passivization and formation of TCs. In the following unaccusative constructions, *the clumsy boy* in (71a), or the German equivalent *der tollpatschige Junge* in (71b) appear with NOM case although they are semantically undergoing the action (receiving the patient theta role).

(71)   a. The clumsy boy fell.
         b. Der tollpatschige Junge fiel.

As argued throughout the last chapters, the suppressed case features on a verb are dependent, ultimately, on the selectional features of the verb when taken from the numeration. If that were the case for unaccusatives, however, the derivation would crash as it would produce sentences missing a subject, but containing an ACC marked DP, and, arguably, an expletive:

(72)   a. *There fell him.
         b. *Fell him.
         c. *Es fiel den tollpatschigen Jungen.
         d. *Fiel den tollpatschigen Jungen.

The logical conclusion of these observations, then, is to posit that unaccusative verbs either lack the suppressed feature [^ACC], or that this feature stays suppressed and is not

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[80] To remind the reader: the *by* and *for* Voice heads in passive and tough constructions are optionally pronounced at spell-out. Under my account, they are always syntactically derived, but optionally omitted at spell-out.

unveiled. The latter cannot be argued for, as the merge of Voice as Ø, in addition to the

merge of a TP above it would cause the verb to be rendered active finite, simultaneously

unveiling the suppressed [^ACC]. The analysis does not contain any additional feature

that would allow the [^ACC] to stay suppressed, unless it is an *unaccusative*-specific

feature. Thusly, the lack of a suppressed [^ACC] seems more likely. Recall the examples

of multi-valency verbs, i.e., verbs such as *to read,* which come in intransitive, transitive,

and ditransitive versions. When the intransitive version is used, or the unergative reading,

the verb does not enter with a suppressed [^ACC]. Since [NOM] case is never valued by

the verb, and unaccusative verbs never value [ACC] on any DP, my approach accounts

for unaccusative constructions by simply stating that an unaccusative verb enters from the

numeration lacking a [^ACC].

6.5 SUMMARY

This chapter has exemplified the new approach, taking into account "simple" active

constructions, passive constructions, and tough constructions. Furthermore, to emphasize

its applicability to other constructions, the chapter discussed examples such as ECM

constructions and object control. This chapter lets us conclude that a verbal shell, a

VoiceP(/*voice*P) projection, and the mechanism of (unveiling) suppressed features can

account for a wide range of constructions. First and foremost, it highlighted the similarity

between derivations of passives and TCs, the main goal of the dissertation.

CHAPTER 7

CONCLUDING REMARKS

This dissertation started with the goal of providing enough evidence to support a

unified A-movement analysis of passive constructions and tough constructions.

Following the introductory section, chapter 2 established an overview of tough

constructions and their characteristics. Furthermore, it introduced previous attempts at

analyzing TCs, highlighting the most important approaches involving both A-movement,

A-bar-movement, or a combination of the two (e.g. through the smuggling approach).

Building on chapter 2, chapter 3 discussed passive and passive-like constructions

such as raising and control constructions, as well as unaccusatives. It served as a

literature review regarding previous attempts at accounting for passives, and it introduced

some preliminary assumptions important to the analysis suggested in chapter 5. The idea

that the external argument is present in the underlying structure of passive constructions

and that *by* merges into the head of a VoiceP above the verbal shell stems in part from

Collins' (2005a) smuggling approach. Other distinct features in my analysis come from

Wurmbrand's (2007) work on tenseless infinitives and the notion of clause union (Bayer

et al. 2005; Haider 2003). I have established similarities between raising, control, ECM

and unaccusative constructions, all of which were returned to in chapter 6.

Chapter 4 merged the characteristics of TCs and passives from chapters 2 and 3,

establishing a similarity between the two constructions to support a unified analysis, or

rather, an analysis whose Voice-head can distinguish between passives and tough

constructions (and their active counterparts). The most prominent similarity between passives and TCs are the constructions' subjects, which are interpreted as the internal arguments of the lower, more embedded verbs. Another similarity is the optional phrase headed by what looks like a preposition whose object corresponds to the external argument of the lexical verb. It was then stressed that children acquire TCs and passives at approximately the same time, and that, in the German second language classroom, TCs are explicitly taught to be substitute forms of passive constructions.

Chapter 5 introduced my suggested analysis, discussing the mechanisms that distinguish my approach from previous attempts. Improper movement is avoided through clause union, as neither passives nor TCs (nor other infinitival complements) are complements of CPs. The features of my analysis include a Voice Phrase which projects above every verbal shell. The mechanism in my account that stands out most in comparison to the existing literature evolves around *suppressed* features which are part of the verb, and which are *unveiled* in certain syntactic environments. Additionally, the analysis for passive constructions includes a *voice*P projection above VoiceP, which is not present in any other construction. To exemplify the adaptability of my analysis, chapter 6 provided numerous examples of various constructions demonstrating the versatility of my account.

While the account holds beyond the two constructions under investigation, I discovered some discrepancies with respect to certain constructions, requiring further research in the future. First, ditransitive constructions are, and have been for some time, complicated to account for. The widely spread disagreement regarding their syntactic analyses stress their distinguished status (see, e.g., Bruening 2010; Harley 2002;

Ramchand 2008; Anagnostopoulou 2001). Additionally, their varied (in)ability to become TCs or passive constructions (see chapters 4 and 6) lead me to exclude them from the discussion in chapters 5 and 6. However, it should be noted that their "pure" active construction not involving a prepositional object, is accounted for by the analysis provided in chapter 5. To exemplify, consider the following sentence, with (2) being the German counterpart of (1).

(1)   Her parents bought her a new car.

(2)   Ihre Eltern kauften ihr ein neues Auto.

Instead of one suppressed case feature, *to buy* or *zu kaufen*, possess two, namely [^ACC] and [^ACC], and [^DAT] and [^ACC] respectively. The suppressed features are unveiled after the [uForm] on the verb is checked, and it is considered finite (active). Note that the rules for feature unveiling, such as the default unveiling, also prevent (3) and (4), as all possible case features on the verb are unveiled after this mechanism takes effect.

(3)   *Her parents bought she a new car.

(4)   *Ihre Eltern kauften sie ein neues Auto.

Turning away from ditransitive constructions, unaccusative constructions have also posed a challenge throughout the last chapters. One of their characteristics is the inability to form tough constructions and passives, allowing me to exempt their analysis from this present dissertation, as I am concerned with a (uniform) analysis of passive constructions and TCs. However, their *regular*, active constructions should also be accounted for, and I posited, at the end of chapter 6, that unaccusative constructions simply do not possess a

[^ACC] feature. Since this class of verbs never assigns [ACC], this suggestion is not far-fetched. To account for (5), I would suggest, then, that the verb enters the derivation with only a [uForm] and a [^uφ]. Unaccusative verbs never possess a [^ACC].

(5)   Her grandfather died a few years ago.

While analyzing unaccusative constructions, unergative verbs as well as their German impersonal passive counterparts were part of the discussion throughout chapters 5 and 6. Recall that German allows impersonal passives of unergative verbs (ex. 7), but English does not (ex. 6). French (ex. 8) patterns like German, and also allows impersonal passive constructions of unergative verbs. The following examples are all direct translations of each other.

(6)   a. *It was already responded (to the questions).

        b. *It will be spoken (about you).

(7)   a. Es wurde bereits (auf die Fragen) geantwortet.

        b. Es wird (über Sie) gesprochen werden.

(8)   a. Il a déjà été repondu (à ces questions).

        b. Il sera parlé (de vous).

(cf. Legendre 1990, 85)

I am sketching two ideas to account for (7) and (8), but they will require more extensive further research. One, in German and French, all verbs (but unaccusatives) can be passivized, and when there is no overt internal argument, or when the internal DP is not raised (as exemplified in German (9)), an expletive is inserted instead. However, in

German, this is only needed to fulfill the V2-requirement, and in French, the EPP feature on T needs to be satisfied. It will nevertheless be worth looking into with respect to the analysis developed in this dissertation.

Second, as mentioned in 6.4, the VoiceP projection is reserved to those verbs that can be passivized (or turned into a TC). This would prevent unaccusative constructions from forming ungrammatical passives, and it would allow unergatives to be passivized. However, this approach may be too broad to account for the possibilities in both French and German.

Note that the impersonal passive headed by *es* can also be used for *"regular"* passivized transitive constructions in German (cf. example 9).

(9)   Es wurde ein Mann (von der Polizei) verhaftet.
        it   was   a   man   by   the police   arrested

My suggestion to analyze constructions such as (9), namely, the passivization of a transitive verb involving an expletive subject, compares to the broadly accepted expletive insertion for constructions such as raising constructions (the requirement to fill Spec CP in German main clauses). For (9), this would mean that, *es* is inserted into Spec CP before *ein Mann* moves there. Case assignment happens at a distance, as *ein Mann* gets its [uCase] valued by [NOM].

Finally, it can be concluded that the new, A-movement approach to analyzing passive constructions and tough constructions can account for the most common, transitive constructions in both English and German. Suppressed features prevent improper movement, and clause union is achieved by siding with Wurmbrand's (2007)

work on tenseless verbal phrases. The infinitive markers *to* and *zu* are part of the lexical

verb, and a TP is not projected above VoiceP if the verb is marked infinitival.

REFERENCES

Abraham, W., & Leisiö, L. (Eds.). (2006). Passivization and Typology: Form and function (Vol. 68). John Benjamins Publishing.

Abraham, W., & Leiss, E. (2006). The impersonal passive: Voice suspended under aspectual conditions. *Typological Studies in Language*, *68*, 502.

Adger, D. (2003). Core syntax: A minimalist approach (Vol. 33). Oxford: Oxford University Press.

Åfarli, T. A. (1992). *The syntax of Norwegian passive constructions* (Vol. 7). John Benjamins Publishing.

Aissen, J. (1979). *The syntax of causative constructions* (Vol. 10). Garland Pub..

Aissen, J., & Perlmutter, D. M. (1976, October). Clause reduction in Spanish. In *Annual Meeting of the Berkeley Linguistics Society* (Vol. 2, pp. 1-30).

Alexiadou, A., Anagnostopoulou, E., & Schäfer, F. (2006). The properties of anticausatives crosslinguistically. *Phases of interpretation*, *91*, 187-211.

Anagnostopoulou, E. (2001). Two classes of double object verbs: the role of zero morphology. *Progress in grammar*, *20*.

Aschermann, E., Gülzow, I., & Wendt, D. (2004). Differences in the comprehension of passive voice in German-and English-speaking children.*Swiss Journal of Psychology*, *63*(4), 235-245.

Authier, J. M., & Reed, L. A. (2009a). French Tough-movement revisited. *Probus*, *21*(1), 1-21.

Authier, J., & Reed, L. A. (2009b). French Tough-Movement Infinitives as Deverbal Nominals. *University of Pennsylvania Working Papers in Linguistics*, *15*(1), 3.

Baker, M. C. (1988). Incorporation: A theory of grammatical function changing. Chicago: Chicago University Press.

Baker, M., Johnson, K., & Roberts, I. (1989). Passive arguments raised. *Linguistic inquiry*, *20*(2), 219-251.

Baltin, M., & Postal, P. M. (1996). More on reanalysis hypotheses. *Linguistic Inquiry*, 127-145.

Bayer, J., Schmid, T., & Bader, M. (2005). Clause union and clausal position. *The function of function words and functional categories*, 79-113.

Bhatt, R., & Keine, S. (2015). Verb cluster formation and the semantics of head movement. In *Proceedings of the 32nd Coast Conference on Formal Linguistics (WCCFL 32). Somerville, MA: Cascadilla*.

Bejar, S., & Massam, D. (1999). Multiple case checking. *Syntax*, *2*(2), 65-79.

Boeckx, C. (2001). Scope reconstruction and A-movement. *Natural Language & Linguistic Theory*, *19*(3), 503-548.

Boeckx, C., Hornstein, N., & Nunes, J. (2010). *Control as movement* (Vol. 126). Cambridge University Press.

173

Bowers, J. (1993). The Syntax of Predication. *Linguistic Inquiry, 24*(4), 591-656. Retrieved from http://www.jstor.org.proxy-remote.galib.uga.edu/stable/4178835

Bošković, Ž. (2008). On successive cyclic movement and the freezing effect of feature checking. *Sounds of silence: Empty elements in syntax and phonology*, 195-233.

Bruening, B. (2010). Double object constructions disguised as prepositional datives. *Linguistic Inquiry*, *41*(2), 287-305.

Bruening, B. (2014). Precede-and-command revisited. *Language*, *90*(2), 342-388.

Burchert, F., & De Bleser, R. (2004). Passives in a grammatic sentence comprehension: \ A German study. *Aphasiology*, *18*(1), 29-45.

Burzio, L. (1986). *Italian syntax: A government-binding approach* (Vol. 1). Springer Science & Business Media.

Carnie, A. (2013). *Syntax: A generative introduction*. John Wiley & Sons.

Chomsky, N. (1977). On WH-movement. Formal syntax, ed. by Peter W. Culicover, Thomas Wasow, and Adrian Akmajian, 71-132.

Chomsky, N. (1981). Lectures on binding and government. *Foris, Dordrecht*.

Chomsky, N. (1986a). *Barriers* (Vol. 13). MIT press.

Chomsky, N. (1986b). *Knowledge of language: Its nature, origin, and use*. Greenwood Publishing Group.

Chomsky, N. (1995). *The minimalist program,* MIT Press, Cambridge, Massachusetts/London.

Chomsky, N. (2008). On phases. *Current Studies in Linguistics Series*, *45*, 133.

Collins, C. (2005a). A smuggling approach to the passive in English. *Syntax*,*8*(2), 81-120.

Collins, C. (2005b). A smuggling approach to raising in English. Linguistic Inquiry, \ 36(2), 289-298.

Comrie, B. (n.d.). *Why ditransitives?* Retrieved from the Max Planck Institute for Evolutionary Anthropology Website: https://www.eva.mpg.de/lingua/conference/07_DitransitiveConstructions/pdf/handouts/Handout_Comrie.pdf

Cormack, A., & Smith, N. (1996). Checking theory: features, functional heads, and checking-parameters. *Working Papers in Linguistics*, *8*, 243-281.

Davies, W. D., & Dubinsky, S. (2008). *The grammar of raising and control: A course in syntactic argumentation*. John Wiley & Sons.

Doherty, M. (1996). Passive perspectives; different preferences in English and German: a result of parameterized processing. *Linguistics*, *34*(3), 591-644.

Drummond, A., & Kush, D. (2011). Reanalysis as raising to object. *Ms. University of Maryland*.

Dumin, L. M. (2010). *Changes in the Use of the Passive Voice over Time: a Historical Look at the American Journal of Botany and the Changes in the Use of the Passive Voice from 1914-2008* (Doctoral dissertation, Oklahoma State University).

Embick, D. (2004). Unaccusative syntax and verbal alternations. *The unaccusativity puzzle: Explorations of the syntax-lexicon interface*, 137-158.

Embick, D., & Noyer, R. (2007). Distributed morphology and the syntax/morphology interface. *The Oxford handbook of linguistic interfaces*, 289-324.

Gehrke, B., & Grillo, N. (2009). How to become passive. *Explorations of phase theory: Features, arguments, and interpretation at the interfaces*, 231-268.

Glück, H. (2010). Metzler Lexikon Sprache. 4., aktualisierte und überarbeitete Auflage. *Stuttgart: Metzler*, *2*(3), 225-226.

Goodall, G. (1993). On case and the passive morpheme. *Natural Language & Linguistic Theory*, *11*(1), 31-44.

Goodall, G. (1999). Accusative case in passives. *Linguistics*, *37*(1), 1.

Goto, S., & 後藤さやか. (2010). On the Tough Construction: Event Suppression and Null Operator Predication. *英米文学*, *54*, 62-82.

Gunkel, L. (1999). Causatives in German. *THEORETICAL LINGUISTICS-BERLIN AND NEW YORK-*, *25*(2/3), 133-160.

Grimshaw, J. (1990). *Argument structure*. the MIT Press.

Haegeman, L., & Van Riemsdijk, H. (1986). Verb projection raising, scope, and the typology of rules affecting verbs. *Linguistic inquiry*, *17*(3), 417-466.

Haider, H. (2003). V-Clustering and clause union. *Verb constructions in German and Dutch. John Benjamins Publishing Company, Amsterdam*, 91-126.

Haider, H. (2010). *The syntax of German*. Cambridge University Press.

Halle, M., & Marantz, A. (1993). Distributed morphology and the pieces of inflection.

Harley, H. (2002). Possession and the double object construction. *Linguistic variation yearbook*, *2*(1), 31-70.

Hartman, J. (2011). (Non-) intervention in A-movement: Some cross-constructional and cross-linguistic considerations. *Linguistic Variation*, *11*(2), 121-148.

Haspelmath, M. (1990). The grammaticization of passive morphology. *Studies in language*, *14*(1), 25-72.

Haspelmath, M. (1994). Passive participles across languages. *Voice: Form and function*, 151-177.

Hicks, G. (2009). Tough-constructions and their derivation. *Linguistic Inquiry*, *40*(4), 535-566.

Hirsch, C., & Wexler, K. (2006). Children's passives and their resulting interpretation. In *The proceedings of the inaugural conference on generative approaches to language acquisition–North America, University of Connecticut Occasional Papers in Linguistics* (Vol. 4, pp. 125-136).

Landau, I. (2001). *Elements of control: Structure and meaning in infinitival constructions* (Vol. 51). Springer Science & Business Media.

Legate, J. A. (2003). Some interface properties of the phase. *Linguistic inquiry*, *34*(3), 506-515.

Legendre, G. (1990). French impersonal constructions. *Natural Language & Linguistic Theory*, *8*(1), 81-128.

Leiss, E. (1992). Die Verbalkategorien des Deutschen: Ein Beitrag zur Theorie der sprachlichen Kategorisierung. Walter de Gruyter.

Levin, B., & Rappaport, M. (1989, November). An approach to unaccusative mismatches. In *Proceedings of the Nineteenth Meeting of the North Eastern Linguistic Society* (Vol. 19, pp. 314-328).

Jespersen, O. (1965). *The philosophy of grammar* (No. 307). University of Chicago Press.

Jones, M. A. (1983). Getting 'tough' with Wh-movement. *Journal of Linguistics*, *19*(01), 129-159.

Juzek, T., Jana Haussler & Thomas Wasow (2016). *To be grammatical or not to be grammatical. Is this the question?*

Keine, S., & Bhatt, R. (2014). Interpreting verb clusters. *Ms., University of Massachusetts Amherst.*

Keine, S. (2014). Improper Agree. *Ms., University of Massachusetts, Amherst.*

Kibort, A. (2005). *Passive and passive-like constructions in English and Polish* (Doctoral dissertation, University of Cambridge).

Kiparsky, P. (2013). Towards a null theory of the passive. *Lingua*, *125*, 7-33.

Kirby, S. (2010). Passives in first language acquisition: What causes the delay?. *University of Pennsylvania Working Papers in Linguistics*, *16*(1), 13.

Kratzer, A. (1996). Severing the external argument from its verb. In Phrase structure and the lexicon (pp. 109-137). Springer Netherlands.

Langacker, R. W. (1982). Space grammar, analysability, and the English passive. *Language*, 22-80.

Langacker, R. W. (1987). *Foundations of cognitive grammar: Theoretical prerequisites* (Vol. 1). Stanford university press.

Lasnik, H., & Fiengo, R. (1974). Complement object deletion. *Linguistic Inquiry*, *5*(4), 535-571.

Lasnik, H., & Saito, M. (1991). On the subject of infinitives. In *27th regional meeting of the Chicago Linguistic Society* (Vol. 27, pp. 324-343).

Lee-Schoenfeld, V. (2007). *Beyond coherence: The syntax of opacity in German* (Vol. 114). John Benjamins Publishing.

Lee-Schoenfeld, V. & Diewald, G. (2017). Passivization possibilities in double-accusative constructions. *Proceedings of the Linguistic Society of America*, 2, 9-1.

Lee-Schoenfeld, V. & Twiner, N. (2018). Variation involving non-canonical accusative case features in German and English. Germanic Linguistics Annual Conference (GLAC) 24, University Park, PA.

Lohndal, T. (2006). The phrase structure of the copula. *Working papers in Scandinavian syntax*, *78*, 37-75.

Maekelberghe, C. (2018). Present-day English gerunds: A multilayered referential model. *Folia Linguistica*, *52*(1), 39-74.

Manning, C. D., & Sag, I. A. (1998). Argument structure, valence, and binding. *Nordic Journal of Linguistics*, *21*(02), 107-144.

Manzini, M. R. (2009). PRO, pro and NP-trace (raising) are interpretations. *Explorations of Phase Theory: Features and Arguments. Berlin: Mouton de Gruyter*, 131-80.

Manzini, M. R. (2017). Passive, smuggling and the by-phrase. A Schrift to Fest Kyle Johnson, 233.

Marantz, A. (1981). *On the nature of grammatical relations* (Doctoral dissertation, Massachusetts Institute of Technology). *Semantics: An international handbook of natural language meaning* (pp. 1805-1829). Walter de Gruyter.

Mikkelsen, L. (2011). Copula Clauses. In C. Maienborn, K. von Heusinger & P. Portner (Eds.). *Semantics: an international handbook of natural language meaning* (pp. 1805-1892). Walter de Gruyter.

Müller, G. (1995). *A-bar syntax: A study in movement types* (Vol. 42). Walter de Gruyter.

Müller, G., & Sternefeld, W. (1993). Improper movement and unambiguous binding. *Linguistic inquiry*, *24*(3), 461-507.

Müller, S. (2001). The passive as a lexical rule. In *Proceedings of the 7th International Conference on HPSG* (pp. 247-266).

Murphy, P. M. (2004). *Passive prototypes, topicality and conceptual space* (Doctoral dissertation, University of North Carolina at Chapel Hill).

Obata, M., & Epstein, S. D. (2011). Feature-Splitting Internal Merge: Improper Movement, Intervention, and the A/A′ Distinction. *Syntax*, *14*(2), 122-147.

Pearson, H. (2016). The semantics of partial control. *Natural Language & Linguistic Theory*, *34*(2), 691-738.

Perlmutter, D. M., & Postal, P. M. (1977). Toward a universal characterization of passivization. In *Annual Meeting of the Berkeley Linguistics Society* (Vol. 3, pp. 394-417).

Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. In *annual meeting of the Berkeley Linguistics Society* (Vol. 4, pp. 157-190).

Pires, A. (2006). *The minimalist syntax of defective domains: Gerunds and infinitives* (Vol. 98). John Benjamins Publishing.

Pollard, C., & Sag, I. A. (1988). *Information-based syntax and semantics: Vol. 1: fundamentals*. Center for the Study of Language and Information.

Postal, P. M. (1971). Cross-Over Phenomena, New York: Holt, Rinehart and Winston.

Postal, P. M. (1974). *On raising: One rule of English grammar and its theoretical implications* (Vol. 5). The MIT Press.

Potsdam, E., & Runner, J. (2001). Richard returns: Copy raising and its implications. *Proceedings of CLS*, *37*, 453-468.

Pullum, G. (n.d.). What is infinitival 'to'. Retrieved from http://www.lel.ed.ac.uk/~gpullum/grammar/infinitive_sli.pdf.

Pytlyk, C. (2011). This sentence sucks to analyse: Are suck, bite, blow, and work tough-predicates?. *The Canadian Journal of Linguistics/La revue canadienne de linguistique*, *56*(2), 247-266.

Ramchand, G., & Svenonius, P. (2004). Prepositions and external argument demotion. *Demoting the agent: Passive and other voice-related phenomena*, 93-99.

Ramchand, G. C. (2008). Verb meaning and the lexicon: A first phase syntax (Vol. 116). Cambridge University Press.

Radford, A. (2000). On object displacement in English passives. *Essex Research Reports in Linguistics*, *33*, 33-49.

Rezac, M. (2006). On tough-movement. *Minimalist essays*, *91*.

Rezac, M. (2013). Case and licensing: evidence from ECM+ DOC. *Linguistic inquiry*, *44*(2), 299-319.

Rizzi, L. (1978). A restructuring rule in Italian syntax. *Recent transformational studies in European languages*, (3), 113-158.

Roberts, I. (1997). Restructuring, head movement, and locality. *Linguistic Inquiry*, 423-460.

Rosenbaum, P. S. (1965). *The grammar of English predicate complement constructions* (Doctoral dissertation, Massachusetts Institute of Technology).

Sells, P. (2001). Form and function in the typology of grammatical voice systems.

Shibatani, M. (1985). Passives and related constructions: A prototype analysis. *Language*, 821-848.

Stranahan, L. (2012). *Angelika Kratzer: "Severing the External Argument from its Verb (1996)"* [Online handout]. Retrieved from http://www.lainestranahan.com/wp-content/uploads/2012/11/Kratzer_handout_public_2.pdf

Svenonius, P. (2006). Interpreting uninterpretable features. *Linguistic Analysis*.

Taraldsen, T. (2016). On by-passive and why unaccusatives don't passivize. 50 years later, 255.

Thornton, H. (2016). *Topics in the Syntax and Semantics of Infinitives and Gerunds*. Routledge.

van der Auwera, J., & Noël, D. (2011). Raising: Dutch between English and German. *Journal of Germanic Linguistics*, *23*(01), 1-36.

Vikner, S. (1995). *Verb movement and expletive subjects in the Germanic languages*. Oxford University Press on Demand.

Williams, A. (2015). Arguments in syntax and semantics. Cambridge University Press.

Webelhuth, G. (1995, May 25). Head-Driven phrase structure grammar [Online Forum comment]. Message posted to http://hpsg.stanford.edu/hpsg-l/1995/0101.html

Wexler, K. (2004). Theory of phasal development: Perfection in child grammar. *MIT Working Papers in Linguistics*, *48*, 159-209.

Wexler, K. (2012). Tough-Movement Developmental Delay: Another Effect of Phasal. *Rich Languages From Poor Inputs*, 146.

Woolford, E. (2006). Lexical case, inherent case, and argument structure. *Linguistic inquiry*, *37*(1), 111-130.

Wurmbrand, S. (2001). *Infinitives: Restructuring and Clause Structure* (Vol. 55). Walter de Gruyter.

Wurmbrand, S. (2006). Licensing case. *Journal of Germanic Linguistics*, *18*(3), 175-236.

Wurmbrand, S. (2007). Infinitives are tenseless. *University of Pennsylvania Working Papers in Linguistics*, *13*(1), 31.

Wurmbrand, S. (2014). Tense and aspect in English infinitives. *Linguistic Inquiry*, *45*(3), 403-447.

Zwart, C. (2012). Easy to (re) analyse: tough-constructions in minimalism.*Linguistics in the Netherlands*, *29*(1), 147-158.