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Dimitra Grigoriou

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List of Abbreviations

ACAD   Academic document

ARF   Attributive Postmodification Filter

COCA   Corpus of Contemporary American English

FIC   Fiction

MAG   Magazine

NG   Nominal group

NOW   News on the web corpus

NEWS   News

NP   Noun Phrase

PP   Prepositional phrase

VP   Verb phrase

SPOK   Spoken data

List of Symbols

E　　　　　Entity

O　　　　　Object

O_i　　　　　Indirect object

O_d　　　　　Direct object

S　　　　　Subject

P　　　　　Property

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Abstract- Zusammenfassung

Die Modifikation des Englisches Nominalsatzes mit deverbalen Adjektive ist ein Thema, darüber viele Sprachwissenschaftlern haben geschrieben. Die Mehrheit hat über die Stellung und die Bedeutung der Adjektive, die mit *-able* oder *-ible* enden untersucht. Wenige Verfassern haben sich mit der anderen Kategorie der Modifizierers, die sich von dem Partizip Perfekt ableiten beschäftigt. Das wirft Fragen auf, wie die Partizipien Perfekt als Modifizierer in einem Satz funktionieren. Diese Studie konzentriert sich darauf, welche Partizipien Perfekt in pränominaler (d.h. attributiver) oder postnominaler oder beide Stelle erscheinen können und welche die Kriterien sind, die diese Stellung/-en bestimmen. Diese Studie ist eine korpusbasierte Untersuchung und die 74 untersuchte Partizipien befinden sich in einem Grammatikbuch. In dem Korpus ist die Stellung, der Artikel, und das folgende Bestandteil von dem Nominalsatz (d.h. Verb oder Präposition) untersucht. Das Ergebnis dieser Untersuchung zeigt, dass der Typ des Verbes (d.h. transitive oder intransitive Verb) und andere syntaktische, semantische und diskurspragmatische Gründe (d.h. Bestimmtheit, Vorläufigkeit, Restriktivität u.a.) sich auf die Stellung der Partizipien Perfekt als Modifizierer auswirken. Nach den Ergebnissen werden die Modifizierers auf den Markmalen in neue Kategorien eingeteilt. Diese Studie und ihre Ergebnisse sind von großen Bedeutung, weil diese Untersuchung ist die Einzige, die sich ausschließlich auf die Modifikation mit Partizipien Perfekt konzentriert und Ihre Ergebnisse aus realen Data stammen.

Keywords: *Modifikation*; *Nominalsatz*; *Partizip Perfekt*; *attributive Stellung*; *postnominale Stellung*; *transitives Verb*; *intransitives Verb*; *Bestimmtheit; Vorläufigkeit; Restriktivität; Diskurs-Pragmatik*

Abstract

The modification of the English noun phrase by deverbal adjectives has been an issue which has been discussed by many linguists. The majority of them have focused on the position (pre- or post-nominal) and the interpretation of the deverbal adjectives ending in *-able* or *-ible*. Very few linguists have investigated another category of modifiers, that of past participles. This raises the question how past participles behave as modifiers in the English noun phrase. The research focuses on which past participles can appear in prenominal (i.e. attributive) or postnominal position or both, and which criteria determine the position they occur in. This thesis presents a corpus-based study in which the positions of the past participles of 74 verbs are examined. In the study, the article and the element following the noun phrase (i.e. verb or preposition) are also investigated. The result of the study shows that the type of the verb (viz. transitive or intransitive) which the past participle derives from, and certain semantic, syntactic and discourse-pragmatic factors (e.g. definiteness, restrictiveness, temporariness etc.) influence the position of the modifier. After the relevant are identified, the participles are categorized on the basis of their common characteristics concerning whether or not they occur in both positions during modification or in one of them. The importance of this study lies in the fact that it is the only one that focuses on the use of past participles as noun phrase modifiers, using authentic data.

Keywords: *Modification; noun phrase; past participles; attributive position, postnominal position; transitive verb; intransitive verb; definiteness; restrictiveness; temporariness; discourse-pragmatics*

1. Introduction

Noun phrase modification has been a topic of numerous studies in linguistics as it seems to influence the interpretation of the noun phrase. Most linguists agree on at least two positions of the modifier, namely the prenominal position, also known as "attributive", and the subject/object complement which is also called "predicative". The postnominal position is also named "predicative" by some scholars; yet modifiers are not often found in this position. The aforementioned position most frequently occurs with deverbal adjectives, namely the adjectives ending in *-able/-ible*, as well as with past participles. Past participles as modifiers have been a neglected issue so far. The literature does not cover why some past participles can appear in both positions, whereas others can only be found in one position (i.e. prenominal). This project attempts to investigate this phenomenon by taking into consideration syntactic, semantic and discourse-pragmatic factors.

Studies considering the noun phrase modification claim that the position of the modifier attributes different characteristics to the noun or modifies different aspects of the noun (see e.g. Bolinger (1967); Larson (1998)). Additionally, it has been suggested that when past participles function as modifiers they denote different actions based on the verb they derive from (see e.g. Radden & Dirven (2007); Sleeman (2014)). These explanations towards understanding past participles as modifiers mainly focus on the semantic and syntactic aspect of the phenomenon. Pragmatic factors have also been proven to influence the modifier's placement within the noun phrase. In particular, it is claimed that pragmatic elements such as anaphora and focus influence the structure of the noun phrase by affecting the order of the constituents, namely the modifiers (see e.g. Ferris (1993); Šaldová (2005); Blöhdorn (2009)).

Most of the literature concerning modifiers rarely mentions the issue of past participles, there has not yet been, at least to my knowledge, a study that investigates the past participles as modifiers in respect to syntactic, semantic and discourse-pragmatic factors. This study is primarily qualitative in nature as it largely rests on the classification of the past participles based on the factors mentioned above. In order to offer a fair description of the phenomenon the following topics will be addressed:

1. Unaccusative and unergative verbs
2. Telicity

3. Anaphoric reference
4. Topic and focus

An attempt will be made to investigate the behavior of past participles as modifiers by taking into consideration the criteria above by using data from the Corpus of Contemporary American English (Davies 2008-) (henceforth: COCA).

This thesis is divided into two parts, a theoretical and an empirical part. The first part provides an overview of the relevant literature on adjectives in English. Then issues related with modifiers and their interpretation are addressed. The last section of the theoretical component includes a brief presentation of different types of verbs in English as well as a brief discussion of the concepts of reference, telicity and focus. In the second part if the thesis, the methodology used in order to retrieve the data from the corpus and to analyze the data set is described. Finally, the results are interpreted in the light of the literature before summarizing the main findings and offering suggestions for further research.

2. Aspects of modification in English

In this section, the sources which provide the theoretical background to the topic of the paper will be reviewed. First, the literature on adjectives and verbs in general, and then on modification in the noun phrase in particular will be outlined; note that the focus will be on studies which explicitly explore the postmodification in the noun phrase. Although no attempt is made at providing an extensive account of the research on pre-modification, the sources which are deemed relevant to the paper at hand will be presented in some detail.

2.1. Adjectives in English

Adjectives are words which facilitate the understanding of the concepts represented by nouns by providing additional information to the speaker about the referent. In other words, adjectives offer experiential information which allow people to express an entity based on how they experience or perceive it (Downing 2006: 402). In some languages, such as in English, adjectives constitute separate words within the sentences; in others such as Korean, the entity originally denoted by an adjective is attached to the verb. For example:

(1)   a. Mary is pretty. (in English)

b. 메리가 이쁘나요. (in Korean)

Mary-ka ibeu-nayo

Mary pretty(is). (in Korean)

Adjectives are a core element of the English noun phrase (NP) along with the determiner (D) and the noun (N); however, they are not as important in the NP as the former two elements. Most of the time they are placed next to the noun in order to facilitate its understanding or to make the entity distinct from others of the same category. When they do not accompany a noun, or have a specific suffix, such as -al, -ive etc. adjectives are often mistaken for an adverb. It is generally agreed that there are cases where the distinction of adjectives cannot be easily detected, as in:

(2)   Don't drive so *fast.*

As can be seen from above *fast* ostensibly appears to be an adjective, as it lacks the characteristic *-ly* ending that designates the word an adverb. However, during the interpretation of the phrase it becomes clear that the adjective *fast* functions as an adverb of manner, meaning it tells us something about the action of driving that is being performed. Sentences as in (2) illustrate that adjectives are difficult to be identified solely based on their form. Other parameters which will be looked at are, morphological, syntactic and semantic characteristics. All which need to be set in order to facilitate the identification of adjectives. Such instances (2) have led the grammarians to create a set of tests in order to determine if a word can be designated adjective. Quirk et al. (1985) and Biber et al. (1999) both propose some diagnostic parameters which a word needs to fulfill in order to become a member of this word class. These include:

- its ability to appear before the noun (i.e. attributive function)
- its occurrence to fill the subject or object complement position (i.e. predicative function)
- its modification-intensification by *very*
- its ability of being gradable by adding inflections denoting comparative or superlative forms, namely *-er* and *-est*, respectively or the premodifiers *more* and *(the) most* which achieve the same semantic effect.

Tests such as these are deemed a useful yardstick for recognizing adjectives. However, one of the limitations of such an approach is that the diagnostic tests cannot be applied to all lexical units

labelled as adjectives, such as *awake* and *asleep*.[1] Adjectives of this type cannot occur in prenominal positions as shown in **the awake/asleep child*; neither do they allow any premodification as in **the wake or asleep child*; nor are they considered to be gradable as **the child is very/more awake or very/more asleep*; **the child is the most awake or asleep.* Another problem with these tests is that the use of the intensifier *very* can also be used with adverbs (Carnie 2013: 50) as in *he responded to the message very quickly*. Yet there are examples which these tests are considered helpful, such as *happy*, *fat* etc. Overall, the tests may be reliable concerning adjectives which do not derive from verbs. The exceptions also include adjectives which have the same written format with adverbs.

Having presented the general grammatical features of adjectives according to the English grammar, I will now turn to the adjectives in the noun phrase. In this part of the literature review concepts associated with the semantic functions of the adjectives will be discussed. It is generally accepted that adjectives can be placed either before the nouns which they modify or after them. In the next section, the prenominal and postnominal positions of adjectives will be presented. An attempt will be made to analyze the syntactic characteristics and semantic interpretations of each of the two positions based on the published literature.

2.2. Premodification

In the premodification position speakers place adjectives and participles as modifiers. For this reason, it was deemed necessary to discuss how adjectives influence the interpretation of the noun when it occurs in the prenominal position.

When adjectives are used as premodifiers, they attribute either properties/qualities to the head or suggest categorical specifications for the designation of the referent (Ghesquiere 2009: 313). Ferris (1993) investigated in depth the attributes of adjectives in relation to NP modification. He presents different internal patterns of adjectival constructions which illustrate the modifying relations of

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[1] According to the Alexiadou et al. (2007:295) adjectives with the prefix a- attached in front of them have evolved throughout the years from the phrase "*at state of …*". Thus, adjectives such as *awake* or *asleep* were originally phrases which denoted manner as in *at state of waking up* and *at state of sleeping*. As a result, it can be inferred that this idiosyncratic category of adjectives has retained the aspect of its original form, namely prepositional phrases can only be used postnominally.

adjectives and nouns. In particular, he suggests that linguistic structures are built upon relations of qualification, equation and absence of relation (Ferris 1993: 8). In the case of adjectives, the relations which are created are mainly those of qualification and assignment. In the former case the modified entity can be used for the identification of a single entity or of a single property corresponding to a larger group, whereas in the latter case the property assigned may not represent the whole (Ferris 1993: 10). Consider the following:

(3)   a. *Milan* style   b. *fairly* useful

In (3a) the binary relation is considered a relation of qualification, because *Milan* is a complex entity which remains the principal element in the noun phrase; the noun is treated as an extension of this entity. In (3b) there is a relation of assignment; the property of the subordinate element, namely *fairly,* ascribes certain properties and entities to the noun (even in adjectives, too) which helps the audience understand the utterance for the purpose of communication. The application of properties to entities is evident in the two types of adjectival use, namely "ascription" and "association" (Ferris 1993: 27), which are illustrated in what follows.

Adjectives in the prenominal position can be identified into two groups: "ascriptive" and "associative" (Ferris 1993: 24). The term "classifier" seems to be more widely used than "associative" (See also Warren (1984); Ghesquiere (2009)). This distinction was introduced to capture the semantic impact of the adjective on the modified noun. Ascriptive adjectives modify nouns by expressing a "property to the entity instantiated by the noun" (Ferris 1993: 24). This statement could be interpreted as meaning that these modifiers modify the noun at the stage level (Larson 1998) (See section 3 for further analysis. Associative adjectives, on the other hand, do not directly modify the denotation of the noun but some entity which is related with it (Pullum & Huddleston 2002: 556). To illustrate this semantic difference, Ferris (1993: 24) offers the following example:

(4)   a. *symphonic* overture   b. *operatic* overture

In the first construction the adjective is labelled as ascriptive because it refers to a property which draws up the same semantic field of the noun (i.e. music). As far as (4b) is concerned, operatic does not describe the nature of overture but identifies what kind of overture it is.[2] It can also be

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[2] These are also called Classifiers (c.f. Halliday & Matthiessen 2014).

inferred that noun phrases like the latter could be developed into holistic constructions like compound words and fixed phrases.[3] Finally, another interesting observation about the semantic effect of the prenominal position has been made by Huddleston and Pullum (2012) and is related to adjectives with complements. They observe that when occurring prenominally some adjectives of this type change their original sense (ibid: 560). To support the aforementioned statement, they provide some examples in which the sense change becomes clear as in:

(5)   a. They are *able* to talk.   b. an *able* worker

        c. I was *conscious* of the danger   d. a *conscious* effort

Another issue related to the noun phrase modification is the order which adjectives are placed, both inside and outside the NP. The order in which they can be found is a result of a combination of syntactic, semantic and pragmatic parameters. In what follows the prenominal position of the adjectives in relation to their function towards the identification of the referent will be discussed.

According to the theory of Systemic Functional Grammar (SFG) adjectives in the prenominal position can function as post-deictic (Deictic2), epithet or classifier (c.f. Halliday (1994) [1985]; Halliday & Matthiessen (2014); Downing (2006)). The three categories are created based on semantic criteria which decide the order of the premodifiers. This suggests that a Post-deictic (Deictic2) immediately follows the determiner and is placed on the left-most side within the nominal group (i.e. noun phrase), whereas a Classifier is closest to the head. Furthermore, adjectives may also function as qualifiers when they appear after the Thing (i.e. the nominal group). A Qualifier can be either a prepositional phrase or a clause which also facilitates the understanding of the thing, by providing more information. In addition, it is argued that, in cases where a noun is preceded by more than one adjectives, speakers of the language use the semantic criteria of "permanence" and "objectivity" to allocate the adjectives in the suitable prenominal position (Downing 2006: 444). In brief, it is believed that speakers place a modifier closer to the noun when it expresses a property which is generally accepted by the speaker community and cannot be changed throughout the years. Based on these semantic criteria the noun group (NG)[4] is structured in the following figure:

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[3] See also Harris's (2012) analysis of the semantic attributes of the adjectives preceding the head.
[4] Nominal group (NG) is term coined by the Systemic functional grammarians to represent the noun phrase (NP) and its constituents. It is called this way because a NG consists of group of words along with their complexities which are

NG

d	e	clas.	h	post-head
those	beautiful	Persian	carpets	we bought
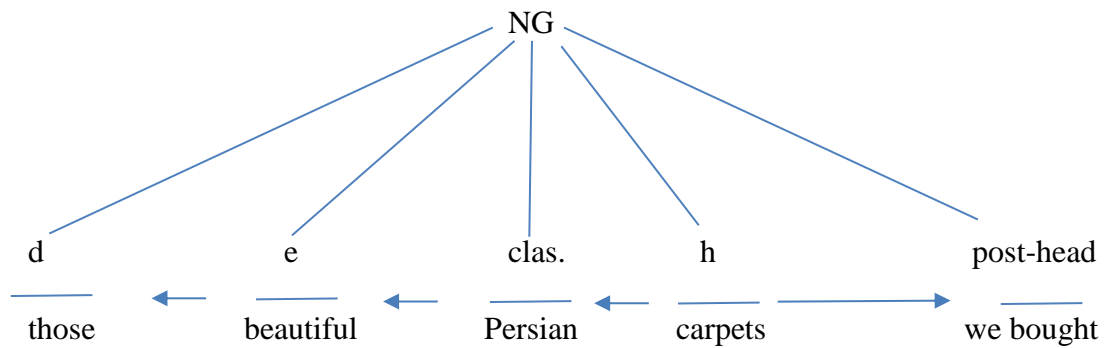
Figure 1 Nominal Group structure

(Example adapted from Downing 2006: 444)

As can been seen in Figure 1, the two adjectives, namely *beautiful* and *Persian*, are labelled as Epithets and Classifiers, respectively. Drowning (ibid: 444) suggests that properties perceived as permanent, intrinsic and undisputed are placed closest to the head of the nominal group (cf. Bolinger (1967)), in this case *carpets*. *Persian* denotes a property that is inherited and is considered objective, whereas beautiful describes the personal preference of the speaker, which signifies something relatively subjective. Both of these adjectives can also be labelled as ascriptive, because they modify the head with the use of adjectives from the semantic field related to carpets.

Furthermore, Halliday & Matthiessen (2014) further subdivide the concept of Epithet, by forming subgroups and outlining their characteristics. They notice that Epithets can differ with regard to the quality they ascribe as well as the speaker's attitude towards the entity represented by the noun. In accordance with these observations the two subgroups are distinguished labelled as "experiential Epithets" and "interpersonal or attitudinal Epithets" (ibid: 376). Examples of these categories are given in:

(6) a. the girl played with the *big red* balloon b. the *lovely irresistible* young man

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constructed as such in order to represent a particular logical relation (Halliday & Matthiessen 2014: 2). Apart from NG there two other major groups: the verb phrase (VP) and adjectival phrase (AP); terms which tend to be used in most other theoretical frameworks, as well as traditional grammars. Throughout this paper, the traditional term noun phrase (NP) will be used.

In (6a) the underlined adjectives correspond to experiential Epithets,[5] because they relate to the nature of the entity, whereas in (6b) the adjectives are considered to be attitudinal Epithets since their interpretation depends on the speaker's perception and is strong prosodically.[6] However, it is difficult to find objective, reliable criteria for distinguishing the two subgroups.

The second subgroup is called "Classifiers". As it has already been illustrated, this subgroup tends to be placed nearest to the noun and can be distinguished from Epithets, because their functions may vary due to grammatical and semantic factors. Halliday & Matthiessen (2014: 377) point out that Classifiers do not allow any degrees of comparison or intension, as in *more Persian* or *very Persian.* Halliday and Matthiessen ([1984]; 2014: 377) along Downing (2006: 440) univocally hold that Classifiers differ in meaning in comparison to Epithets on account of being organized "into mutual exclusive and exhaustive sets". They provide the example of *electrical trains* to support their claim; *electrical* is a Classifier owning to the facts that trains can also use steam, coal etc.

A third prenominal category which can occur between the determiner and the noun is called Post-Deictic (Dectic$_2$). Post-Deictic is proposed by Halliday & Matthiessen (2014) as a separate function which determines the position of the adjective, due to the unique properties they add to the noun. Their attributes differentiate them from Epithets and Classifiers. Post-Deictics have the tendency to immediately follow the article and to serve as an extra identification device. Adjectives of this group subcategorize the modified noun by creating a sub-class of the referent and providing further information towards its status, such as similarities/differences, familiarity etc. On account of their interpretation, these adjectives can be divided into two categories, namely the categories of expansion and projection (Halliday & Matthiessen 2014: 373). The aforementioned terms are considered to have a kind of relationship between clauses; for example, projection is contrasted with expansion (Bas Aarts et al. 2014: 149, 335-336). The two subcategories of Epithets are further divided into smaller subtypes depending on the semantic interpretation, such as identity, exemplification, probability, obligation etc. The authors also point out that such adjectives are

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[5] Epithets have also been called "descriptors" by other grammarians (c.f. Biber et al. 1999); their semantic functions remain the same.

[6] See e.g. Poynton (1996) for the relation between attitudinal modification in nominal group and grammatical prosody.

often used as Epithets but they differ in the sense that they are being used (Halliday & Matthiessen 2014: 373). Some examples of this category are the following:

(7)   a. The *well-known* British actor, Daniel Radcliff.

         b. A *typical* elution curve is illustrated in Figure 5.

         c. This is the *necessary* introductory books for the study of language.

The aforementioned examples show a designated subset based on the characteristics which differentiate the modified entities from others of the same category.

Following Halliday & Matthiessen's analysis of the function of adjectives, Ghesquiere (2009) addresses the issue of NP modification through adjectives. In particular, she notices that the NP is a speech-event which begins with the determination zone, continues with subjective descriptive modifiers and ends with the objective meanings at the right end of the NP (Ghesquiere 2009: 315). According to her classification, adjectives can be placed further from or nearer to the noun depending on the meaning they bear. The author classifies the adjectival uses into: determining, strengthening and emphasizing, descriptive and classifying usages. For the purpose of this paper, the second adjectival use (i.e. strengthening and emphasizing) will not be addressed. Ghesquiere does not use the same labels and terminology[7] as Halliday & Matthiessen ((1985); (2014)), yet she agrees with the syntactic and pragmatic functions of adjectives. Thus, she divides the NP into zones where secondary determiners, subjective/objective descriptive modifiers and classifiers correspond to Post-Deictics, Epithets and Classifiers, respectively. The author also points out that adjectives which function as classifiers along with their head, constitute a "functional unit" (Ghesquiere 2009: 319). The functional unit shows a group of a specific kind which the head is part of. Borrowing the example from Figure 1, the *carpets* are members of the category which is created by the classifier *Persian*; they are of Persian origin. As a final remark, the functional unit which is constituted by a Classifier and a head expresses a concept which is "objective in nature' (Ghesquiere 2009: 314). In other words, there is no speaker's subjectivity to interfere.

All in all, it can be concluded that the position of the premodifiers is highly depended upon the subjectivity and/or objectivity the entities bear. Classifiers are the modifiers which are closest to

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[7] Ghesquiere (2014), however, uses the term noun phrase (NP) to refer to what Halliday & Matthiessen (2014) label the nominal group).

the head as they denote an objective attribute. These modifiers together with the head are treated as one functional unit. Past participles as modifiers are placed closest to the noun, therefore it would be interesting to see how they are interpreted in this position.

2.3. Postmodification

The prenominal position is the primary position of an adjective in the English language. There are, however, two other options available for adjectives, namely the postnominal and the subject or object complement position. The latter occurs with copulative verbs such as *to be* or *become* and denote predicative expressions. However, a note needs to be made that this construction is typically true for subject complements, but not for object complements. For the purpose of this study, predicatives are not relevant and will not be discussed.

The second less frequent adjectival position is the postnominal position. Adjectives in English are positionally flexible enough to be placed after the head of the noun phrase which they modify. In fact, linguistic studies have shown that English is the only Germanic language which permits this unique construction. Therefore, it is deemed crucial to discuss this idiosyncratic phenomenon and to see how it has been tackled in previous studies. This section will therefore be devoted to the use of adjectives in the postnominal position.

Quirk et al. (1985: 418) call the postnominal position "postpositive". In particular, they point out that the modifier follows the head when the head is an indefinite pronoun (8a), (8b) or when the head and the modifier constitute an institutionalized phrase (8c), (8d):

(8)   a. Something *problematic* appeared on the computer screen.
        b. I do not want to try anything *new*.
        c. attorney *general*
        d. time *immemorial*

However, constructions as in (8d) could be considered as loan translations (i.e. calque). In this case, for example, the phrase is originated from French, which allows postnominally modification (temps immemorial). The postnominal position is more frequently used with deverbal adjectives, especially those ending in the suffix *-able/-ible*, and participles. Ferris (1993: 43) underlines that associate adjectives do not normally occur in the postnominal position, due to the kind of

modification they provide an explanation of the referent. In addition, Downing (2006: 452) states that postpositives can be perceived as an economical way of expressing relation in which tense and aspect do not need further specification. This characteristic is related to the concept of restrictiveness of the two positions which is discussed in the chapter to follow.

All in all, it can be concluded that adjectives facilitate the understanding and interpretation of the noun phrase. They also serve different purposes depending on the position they are found. When occurring before the head adjectives they can be characterized as Post-Deictic, Epithet and Classifier, depending on their semantic impact on the noun, whereas elements which follow the head tend to be called Qualifiers. Many linguists maintain that their positions (i.e. prenominal or postnominal) have an effect on the structure. This issue will be addressed in the section to follow.

3. Modification in the Noun Phrase; positions and interpretations

The Noun Phrase in English (NP) has been an object of investigation in many linguistic studies, and modification within the noun phrase has long been a controversial issue. Modification takes place when the noun itself has been proven not sufficient enough to identify the entity under consideration by the interlocutor; thus, the adjective is used to facilitate the process of understanding (Ferris 1993: 21). As seen in the previous sections (2.1 and 2.2), different linguistic studies have led to the generalization that in Germanic languages such as English, adjectives prototypically precede the noun, whereas in Romance languages adjectives either precede or follow nouns (Cinque 1996: 22). English scholars have agreed on the two syntactic uses of the adjectives; the attributive and predicative (Quirk et al. (1985); Huddleston & Pullum (2002); Biber et al. (1999)).

This section forms an attempt to investigate the issue of past participles' behavior as modifiers in the NP along with which factors influence their position (pre-and postnominal) within the NP. This will be achieved by describing the analyses of English noun phrase as proposed in the theoretical framework of generative and cognitive grammar. In this literature review, concepts associated with nominal modification by adjectives and past participles will be outlined. The focus of this review will solely be on the position of the modifier within the NP; therefore, the copulative use and its relation to subject and/or object complement will not be addressed.

The prenominal and postnominal position of the adjective is an issue researched in particular by generative grammarians. By focusing primarily on the attributive and predicative use of the adjectives in the NPs, they form two schools of thought; namely, the derivational (e.g. Chomsky (1957); Kayne (1994); Cinque (1990); (2010)) and the non-derivational school (e.g. Bolinger (1967); Wasow (1977); Lamarche (1991)). Alexiadou et al. (2007: 290) have labelled the two schools 'reductionists and 'separationalists' respectively. Separationalists claim that the two uses of adjectives are distinct in terms of the position they are found. They have observed that in prenominal and postnominal positions adjectives exhibit different interpretational patterns. The reductionist approach, on the other hand, suggests that the two adjectival functions share an underlying structure (Alexiadou 2014: 90). More specifically, the positional variation is brought about by the movement of the adjective from the left side of noun to the right side. The derivationalists claim that the postnominal adjectival position is a result of a 'reduced' relative clause containing the copular verb to be (Chomsky 1957: 73); the adjective functions as the predicate of the head in this sentence. The particular claim is also supported by Ferris (1993) who argues that the postnominal construction is characteristic of relative clause reduction. As a final remark, Matthews (2014: 168) points out that adjectives in this position are necessarily restrictive, unlike their prenominal counterparts.

This explains why the postnominal position is termed "predicative" by some generative grammarians. Alexiadou et al. (2007: 294) provide the following example (adapted):

(9)   a. the man who is old →the man old

The example illustrated (9a) is considered as an intermediate step before the completion of the reduction of the relative clause. According to the "reductionalists" the next and final step of the derivation involves the predicate being fronted (i.e. moved to the left of the noun):

(10)   the man who is old → the man old→ the old man

However, the theory of adjectival "fronting" faces some problems, which suggests that it cannot be considered as entirely correct. More specifically, this derivation is not applicable to all adjectives. In most cases the intermediate step (9a) is not available. This formation could be

applied to deverbal adjectives such as *-able*/*-ible* and past participles when functioning as modifiers.[8]

The adjectival position in NPs and the problems involved were thoroughly discussed by Lamarche (1991), who looked at data from French; this perspective of the noun. The so-called "N-movement" analysis and its problems were firstly pointed out by Lamarche (1991). Based on his analysis, prenominal adjectives behave syntactically as zero-level entities, both in English and in French NPs, whilst postnominal adjectives are maximal projections in French (Lamarche 1991: 227). To put it in a simpler way, adjectives in the prenominal position are placed in a higher node in the structure which suggests that they function as specifier of the NP, whereas in the postnominal position the adjectives functions as the head which take the NP as their complements. Alexiadou et al. (2014: 348) agrees with the former statement, arguing that in English only postnominal adjectives allow complements in their syntactic structure, whereas prenominal adjectives, as a rule, cannot. In similar fashion function past participles, as stated by Radden & Dirven (2007) support the final part of Alexiadou et al.'s statement. More specifically, they notice that past participles as modifiers usually require further specification; the speaker has to provide information about the time, the manner or the conditions in which the NP took place as *the flower show held last month* (*the flower show held) (Radden & Dirven 2007: 156).

The position of the adjective within the NP is a problematic issue which becomes more problematic when semantics are taken into consideration. In the article *Adjectives in English: attribution and predication* Bolinger (1967) presents his theory by taking into consideration not only the adjectival positions themselves but also the semantic interpretation associated with these positions; this holistic approach seems to be more acceptable, as Bolinger presents his ideas by taking into consideration the discourse in which the NP is used. To begin with, he points out that there is a "clear functional difference" between predicative and attributive modification (1967: 1). To support his claim, Bolinger (1967: 2-3) argues that there are attributive adjectives which lack a predicative function and vice versa. This is the problematic area which was earlier mentioned about the reductionalist approach. Consider the following example:

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[8] This issue will be described towards the end of this section.

(11)   a. an *angry* storm; *the storm is *angry*

         b. the man is *asleep*; *an *asleep* man

In (11a) it is evident the "intermediate step" which reductionalist partisans claim about the derivation of the prenominal position cannot be used as it creates a semantically unacceptable sentence. In (11b) the prenominal position is considered grammatically incorrect, in spite of the fact that the "intermediate step" is grammatically correct. Therefore, based on the examples (10), it can be inferred that one adjectival position cannot be derived from another. The approach used in this investigation is similar to that proposed by other researchers. Ferris (1993: 22) agrees with Bolinger's statement and holds that prenominal adjectives do not always designate a property of the entity to which they are attached (See the section 2.2 about premodifiers). Running the test "This N is A" may lead to an adjective meaning something which is either different from the original phrase or creates a fallacious result (Ferris 1993: 22). For instance, if the aforementioned test is implemented in the case of a phrase such as *the royal secretary*, the interpretation of the phrase would affect the original sense of the phrase (i.e. the secretary is royal) and create problems in understanding. *Royal* is considered a classifier and therefore, it cannot be used predicatively, as already introduced in section 2.1.

Bolinger was a pioneer who tried to correlate the syntactic position of the adjectives to the semantic effects of pre- and postposition. To begin with, Bolinger (1967) holds that the customary sense of prenominal adjectives is a typical characteristic of this position. For this reason, he coins the term "characterization" (1967: 7). According to "characterization", prenominal attributive adjectives, which are labelled "pre-adjuncts" by Bolinger, assign inherent and/or permanent characteristics to the nouns they modify. Adjectives and other elements which can function as modifiers share the same semantic characteristics in the prenominal position. Bolinger also examines the semantic interpretations of the past participles as modifiers. Following his analysis, he concludes that the attributive usage of modifiers "leaves a mark on something" (1967: 9) and describes an enduring "customary" characteristic (1967: 13). When modifiers are placed in postnominal position, on the other hand, are interpreted differently. According to Bolinger (1967: 13), they property they denote is "a quality that is too fleeting to characterize anything" (1967: 9). This attribute is something that he labels "non-customary". Ferris (1993: 46) points out that its validity is true within the time the phrase is uttered; postmodifiers include an "occasion" value.

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In the same article Bolinger illustrates that modifiers tend to modify different scopes of the noun. This is what is called "reference modification" and "referent modification" (1967: 14, 20). The main difference between them is which aspect of the noun is being modified (Bolinger 1967: 15). For instance, the phrase *John is a criminal lawyer* has a subject complement in the predicate position, the NP *criminal lawyer*. In the "referent modification" the reading of the sentence would be John is a criminal and a lawyer, whilst in "reference modification" the interpretation of the sentence would be that John practices criminal law. This shows that "reference modification" and "referent modification" focus on a different aspect of the modified noun.[9]

Larson (1998) proposes a further development of Bolinger's analysis. This time the analysis includes both semantic and temporal aspects as parameters in regards to the position of the adjective. According to Larson, adjective placement and interpretation can be divided into "stage-level" (s-level) predication and "individual-level" (i-level) predication (Larson 1998: 12), which correspond to Bolinger's customary and non-customary difference, respectively.[10] As seen in section 2.2 Larson's terminology is also related to Ferris's explanation (1993) about the interpretation of adjectives depending on the nouns they modify. Additionally, he argues that the understanding of the noun phrase is not a matter of linearity, but rather the placement of the modifier before or after the head. He provides the following example:

(12)   the *visible* stars *visible* include Capella.

In this sentence the noun phrase is being modified pre- and postnominally by the same deverbal adjective. Larson interprets this sentence as follows "the inheritably visible stars which happen to be visible at the moment include Capella" (1998: 12). In this case, the interpretative difference is regarded as a consequence of pre-/postnominal adjectival position for the hearer. In other words, Larson highlights the correlation between the temporariness and adjectival position. Furthermore, Larson & Marušič (2004: 275) add that that in the postnominal position the modifier can only be understood restrictively, whereas in the prenominal position the modifier can have both restrictive

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[9] Quirk et al. (1985: 435) draw a similar semantic distinction between "inherent" and "non-inherent" adjectives. The former adjectives characterize the reference of the noun, whereas the latter are associated with the role of the noun. The same semantic distinction is also reflected in Ferris's (1993) concepts of "ascriptive" and "associative" in respect "inherent" and "non- inherent" respectively, which were discussed earlier in Section 2.2.

[10] Closely related to the concept of temporariness are the notions "occasion" vs. "characterization value" introduced by Bolinger (1967).

and non-restrictive interpretation. This supports Bolinger's (1967) and Larson's (1998) argument on the different interpretations of the two positions. As shown, semantics and instantiation of the entity in terms of time are highly interrelated with noun phrase modification. However, these are not the only criteria on which the modifiers' positions depend.

Syntax and semantics influence the interpretation of the modified noun phrase in English. Pragmatics may also affect the participle placement regarding the understanding of the noun phrase. One pragmatic factor responsible for the postnominal position is suggested by Ferris; he proposes that this type of placement results from "emphasis" or "focus" (1993: 44). Although he does not justify his statement in full detail, he suggests that interlocutors prefer to use the less frequent adjective position, namely the one after the noun, with the aim of marking emphasis (ibid: 44). [11] Further focusing on the pragmatic functions of this construction, Ferris (1993: 45) explains that users choose to use a different word order in the NP to indicate "contrast" and "salience"; in "contrast" the NP under investigation is contrasted with another entity, as in *the stars visible include Capella*, whereas *the visible stars cannot be seen today due to clouds.* In the latter example, the entity *stars* loses its characteristic of being distinguished by the naked eye, because at the moment of uttering this phrase the weather is cloudy. By "salience" Ferris (1993: 45), refers to the prominent notion described in the particular situation as in *the examples given above clearly demonstrate how crucial the situation is.* Yet, "salience" of an adjective cannot be easily detected. "Salience" characterizes all adjectives when they are not placed in a sentence which denotes contrast; the adjectives remain, therefore, "salient" for this occasion (Ferris 1993: 45). It is a characteristic of the prenominal position, as it can only be evident when the same modifiers are found in two different positions. I may say that "contrast" makes the understanding of "salience" plausible. The main weakness in Ferris's explanation is the lack of concrete examples which can be listed as "salient". The term "salient" could be argued to be too vague to offer a convincing argument for the placement of an adjective in postnominal modification.

While various attempts have been made to approach the difficult issue of adjective position and interpretation, past participles as modifiers have never been given much attention as a separate group. Research on the subject of pre- vs. postnominal position of modifiers have been mostly

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[11] Emphasis of cause and effect as a pragmatic element which distinguishes the two positions could also explain the intonation variation, as suggested by Matthews (2014).

restricted to the analysis of the other deverbal adjectives, namely those ending in *-able/ -ible*. Ferris (1993) offers a detailed discussion of the postnominal position of modifiers and its effect on the interpretation of the noun phrase. In particular, he holds that postnominal position of the modifiers is associated with its head noun by assignment (Ferris 1993: 59). He exemplifies this schematically as in:

[**E ← P**]

The brackets surrounding the schema indicate that this phrase has a syntactically complex structure; as **E** identifies the entity which is modified (i.e. head noun) and **P** stands for the property notion (i.e. adjectives or past participles) assigned to the entity. This specific schema represents "the postnominal attributive position" (Ferris 1993: 36) as in *data examined, examples given* etc. NPs such as these are deemed grammatically acceptable, but cannot be treated as simple entity modification, rather as a "clause within some larger construction" (Ferris 1993: 61). This could be the case, because such constructions can be paraphrased as restrictive relative clauses, as in *the data which are examined and the examples which are given*. As a consequence of Ferris's explanation, it could be understood that in the case of past participles as modifiers can be a by-product of a reduced relative clause or causative clause.

The postnominal position of adjectives, and especially the position of past participles, is dealt with Sleeman ((2011); (2014)). In particular, she attempts to identify the mixed properties of these deverbal categories in wider scope, by looking at different classes of verbs that participles derive from. The three groups which she formed, were labelled in accordance with the nature of the action performed by the verbs which the participles stem from. Thus, participles as in *a learned scholar* are tagged as "statives", participles of the kind found as in *the unopened package* are labelled as "resultatives" (Sleeman 2014: 172), and those in examples like *the jewels stolen* are referred to as "eventives" (Sleeman 2014: 7). The "stative" participle can further be paraphrase as in *the student who has acquired knowledge*, the "resultative" one can be explained as *the package which remains closed* (i.e. it has not been opened yet) whereas the "eventive" one can be realized as in *the jewel which are stolen and the speaker refers to the event of the robbery*. Even in examples like the previous ones there are some arguments against their categorization. Mechanisms such as the modification of the noun phrase by an adverb of manner (i.e. very) or time (i.e. recently) sometimes facilitate the understanding of categories, such as resultative and eventive, however, this

distinction is not always easy to be made. Sleeman (2014) points out that the line among these categories is not easy to detect. To support her claim, she provides an example of a NPs with a prenominal participle *the closed door* which includes all three possible readings mentioned above; namely, "stative" as in *after the earthquake the door of the old building became permanently closed*, "resultative" as in *the door remained closed despite the strong wind* and "eventive" as in *the door was closed by the wind.* Such approaches, however, have failed to explain differences in interpretation of this construction; they did not clarify how the position of the modifier may affect the reading and instead, they form general categories. In addition, the aforementioned examples can have different interpretations depending on the context they are found. Sleeman offered these examples out of context which explains why different readings are possible.

Similar to Sleeman's interpretation of participles, Radden & Dirven (2007) offer a cognitive approach to the issue discussed. In particular, they draw attention to the mixed attributes characterizing the class of past participles as modifiers, by explicitly stating "participles occupy an intermediate position between verbs and adjectives" (Radden & Dirven 2007: 155). Focusing on the prenominal participle position, the authors stress that the English language does not allow further modification of the participle, as in **the by John closed door* (2007: 155), unlike other Germanic languages, such as German, which permits such constructions, as in *die von Johann geschlossene Tür*. In their view past participles are atemporal; they refer to situations which are "finished or complete" and describe the result of an event (2007: 155). Radden & Dirven's (2007) characterization seems to correspond to merely one of Sleeman's participle classifications, namely the resultative state. Radden & Dirven also add new perspectives to the interpretation of the past participles. They concern the semantic impact the position of the past participle has on interpreting the noun phrase. Speakers tend to use the appropriate construction, namely prenominal or postnominal, in order to create the suitable effect. More specifically, they assert that past participles as modifiers outline the outcome of an event,[12] and have different characteristics depending on where they are positioned. For instance:

    (13)   a. a *written* poem   b. a poem *written*

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[12] A parallelism can be made between the "occasion value" (c.f. Bolinger (1967) and Ferris (1993)) and the "resultant state".

In (13a) a written poem refers to a poem which is written and can presumably be found in printed formats such as a poetry collection or a magazine; the action denoted by such construction highlights the "stable" type of poem (2007: 156) (See also Downing (2006)). In (13b) a poem written, on the other hand, hints that the event, namely the writing of the poem, is a temporary event causing the result, which is evident from the postnominal position (ibid: 156). According to the aforementioned explanation, the NP can be interpreted as *only one poem written was presented in the conference, the rest were just recordings*. Radden & Dirven's argumentation for the past participle position and its semantic influence on NP understanding may be deemed convincing; however, their analysis cannot be applied to all modified NPs. Some participles cannot be used as premodifiers, for instance a sentence such as *the amount of money spent is nowhere equal to our company's budget* is grammatically correct, whereas the equivalent sentence with prenominal modification *the amount of spent money is nowhere equal to our budget* is considered ill-formed. Regarding the last example, partisans of the cognitive approach may argue that this sentence is incorrect because the intended interpretation (i.e. *spent money*) denotes a stable result, which is not available. Therefore, I may claim that Radden & Dirven's approach on the semantic interpretation of the two positions can only be possible in contexts where the intended interpretation has a stable result; this is evident only in the prenominal position. That is why the second sentence is ungrammatical, because such an interpretation is not available.

To sum up this section, theories about the interpretation of the prenominal and postnominal position of modifiers were presented. It is understood that generative and cognitive scholars agree that the two positions influence the noun phrase understanding. In the sections to follow, studies on the postnominal position along with other elements concerning the noun phrase modification will presented.

4. Corpus-based studies focusing on postnominal adjectives

In the recent years corpus-based studies have been conducted and have exclusively focused on modifiers in the postnominal position. The most recent ones are conducted by Šaldová (2005), whom makes use of the British National Corpus (BNC) as the main source of her examples, and by Blöhdorn (2009), whom makes use of the Brown and the Frown Corpus. Both researchers focus on the behavior of adjectives during modification. The results of the first study show that post-head modifiers have an anaphoric function within the clause. In particular, the author asserts that the anaphoric reference is reflected on the preference of the suitable determiner before the head, in this case the definite article. In addition, in order to function as anaphoric devices, the modifiers need to fulfil the act of presupposition. This explains why the postnominal position is often used without complementation (i.e. ellipsis) and the impossibility of separating the head from the postnominal modifier by a comma.[13] As far as Blöhdorn's (2009) project is concerned, he investigates the syntax and semantics of different postmodifying structures within the corpora. More specifically, he implements different approaches (e.g. restrictiveness, presupposition, transformational approaches etc.) related to postpositive adjectives which derived from the published literature, with the aim of classifying adjectives in accordance with their syntactic and semantic behavior. Following the analysis of the data, the author coins the "Attributive Postmodification Filter" (ARF) according to which he can identify the characteristics of all potential adjectives which can be placed after the noun. According to this filter, the postmodifying position is grammatical when an adjective named α modifies a referent in the following constructions (ibid: 158, 162):

- α modifies a pronoun[14]: someone *faithful*
- complemented by a prepositional phrase: a tank *full* of water
- coordinated adjectives: all students *good* and *bad*
- compound modifiers: a tube of metal three feet *long*
- institutionalized expressions: attorney *general*
- adjectives start with *a-*: the child *asleep*
- additional focus semantic value: the body *beautiful*

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[13]As Ghesquiere (2009) already pointed out that the head modified by a postnominal adjective are treated as a "functional unit".

[14] Blöhdorn (2009: 158) labels this type of pronouns as "IPR-D" for the purpose of his research.

As can been seen from the brief discussion on noun phrase modification, the current published literature does not exhaustively explain the circumstances which allow or prohibit the prenominal or postnominal position of the past participles; neither have authors shared a prevailing consensus on the postnominal modification and the characteristics joint among the deverbal adjectives. Particularly, the verbs which the past participles stem from may, also, influence the syntactic behavior of the derived adjective, due to the fact that past participles derive from verbs. As such, it was deemed necessary to discuss some aspects of verbs which I think are related to the past participles' behavior.

5. Verbs in English

In this section of the project verbs as a word class in English will be discussed. Due to the fact that this study is about past participles as modifiers in the NP, it is necessary to address some aspects of the verbs, such as the past participles derived from them. In particular, this section will include a brief discussion of the following attributes: the characteristics of transitive and intransitive verbs, the different categories of intransitive verbs, the concept of telicity, anaphora and focus. It is assumed that these characteristics may influence the modifier placement along with the understanding of the NP. During the analysis of verbs, there will not be any reference to copular verbs because they are considered irrelevant to the project. This section is structured in such a way as to provide an overall overview of the syntactic functions as well as of the semantic roles of these elements which are considered relevant to the project.

Grammarians agree that there are three main syntactic constituents of a clause, namely the subject, the verb and the object. The subject is an obligatory element of a sentence, depending on the verb, it may acquire either the semantic role of the agent, the recipient or the experiencer of the action. There are certain sentences which can be considered exceptions to this rule including the imperative, where the subject is omitted but it can be situationally or contextually understood. The presence of object, on the other hand, is permitted or "licensed" (Huddleston and Pullum 2002: 53) by some verbs but not by some others. Based on this characteristic, in terms of syntax grammarians classify the verbs into intransitive, transitive and copular (e.g. Quirk et al. (1985); Downing (2006); Huddleston and Pullum (2012)) whereas others (Biber et al. 1999: 141) use the terms one-place verb, namely verbs only occurring along with the subject, two-place verbs, namely

verbs in combination with one subject and one constituent, and three-place verbs in which the verb is surrounded by a subject and two other elements. The latter classification is used in semantics to indicate how many arguments a verb has. Following the former and more traditional categorization, the three primary verb groups are divided into further subclasses. These subgroups include:

- Monotransitive verbs:

(14)   This film bored me$_{Od}$.

- Ditransitive verbs:

(15)   I bought my brother$_{Oi}$ a present$_{Od}$.

- Complex-transitive verbs:

(16)   I consider his advice$_{Od}$ very helpful$_{ObjComp}$.

(17)   He placed the shopping bags$_{Od}$ on the counter$_{OAdv}$. (Quirk et al. 1985: 721)

In cases such as (15), in which there are two objects, Downing (2006: 50) adds that the indirect object has the ability of being paraphrased by a prepositional phrase or being substituted by a personal pronoun (i.e. pronominalization) as in:

(18)   I bought a present to *my brother*. (Paraphrase)
(19)   I bought *him* a present. (Pronominalization)

One thing that needs to be stressed regarding (19) is that in order for a pronominalization to be understood by the interlocutor, the substituted referent needs to be familiar to the speaker or to be inferred from the context; otherwise, the utterance will lead to communication failure. The particular phenomenon will be presented in Section 7 in more detail, as is related to the matter of reference.

The structures related to verb syntax are not always distinct. In regards to speech it has been observed that the speaker will omit objects. The distinction is often challenging as is pointed out by some grammarians (e.g. Quirk et al. (1985); Biber et al. (1999); Huddleston and Pullum (2002)). This happens because the syntactic behaviors of one verb category (e.g. intransitive) may overlap with another (e.g. transitive). There is also a possibility where other syntactic phenomena (e.g. ellipsis) may take place. For the purpose of this project it was deemed essential to discuss some of

these cases as they may have an impact on the deverbal adjectives and on their analysis. First of all, Quirk et al. (1985: 723) demonstrates four cases in which the object is omitted. The first two include the object recovery/understood by the preceding linguistic context (i.e. ellipsis of the direct object) or by the situation denoted by the context (See section 7.3). The latter is often preferred with the use of imperative when instructions or guidelines need to be followed. Other cases where the object is often omitted are with reflexive verbs (Quirk et al. 1985: 723; Biber et al. 1999: 148) and reciprocal verbs (Biber et al. 1999: 148). The omission of objects in these types of verbs is preferable because the semantic difference is not substantial. Speakers utter the object of these verbs due to emphasis. Emphasis is often prosodically marked with fall-rise tone. Huddleston and Pullum (2002: 300) provide a detailed analysis of the omission of the object by citing that in some intransitive constructions the expression of object is a matter of entailment as in examples:

(20)   a. Mary studies.   b. Mary studies physics.

In (20a) the utterance entails that there is something that Mary studies, it could perhaps be a foreign language or something at University, whereas in (20b) the entailment ceases to exist with the expressed object. Such types of verbs in which the recovery of the unexpressed object is possible have been schematically presented as "$S_{intrans} = S_{trans}$" (2002: 300). That is to say that the only stable constituent in the clause is the subject. The example (20) illustrates the difference between transitive and two-place verbs. In this case, even when used intransitively (20a), these verbs would still be two-place (20b), since they entail a second argument.

The semantic overlapping between transitive and intransitive verbs is also evident in sentences where the subject of the intransitive verb resembles the object of the transitive. For instance:

(21)   a. Residents grow vegetables$_{Od}$ organically in their gardens.
         b. Some vegetables$_{Subj}$ grow in winter, others in summer.

Examples as in (21) are characterized "$S_{intrans} = O_{trans}$" by Huddleston and Pullum (2002: 306). This type of verbs is also called "unaccusative" and/ or "unergative" (Biber et al. 1999: 147). To put it in a simpler way, in unaccusative verbs the subject of the verb is also the theme in terms of semantics, whereas in unergative verbs the subject is also the agent of the intransitive verb.

These two subcategories are a key element to the past participle derivation. As seen in the previous section, some grammarians claim that past participles as modifiers derive from the reductions of

passive voice constructions in a relative clause. However, this transformation does not apply to intransitive verbs, due to the nature of the verb, because some of them cannot assign case (i.e. the inaccusative verbs). In English some verbs behave both transitively and intransitively as in (21). This may affect how past participles function as modifiers. For this reason, it is considered necessary to present the concepts of unaccusative and unergative verbs. In the following section the main ideas of the two categories will be addressed. The theories, which will be presented, will deal with the syntactic and semantic characteristics of intransitive verbs.

5.1. Unaccusative and unergative verbs

As discussed in the previous section verbs in English are labelled as transitive and intransitive. Some linguists analyze further the latter category by dividing the intransitive verbs into unaccusative and unergative ones. The concept of unaccusativity was first introduced by Perlmutter (1978) and further elaborated by others. His main ideas will be summarized in the section to follow.

Perlmutter (1978: 157) discusses the idea of unaccusative verbs, by referring to them as the "impersonal passives of intransitive clauses". In brief, the idea of the syntactic functions of intransitive verbs with the help of "Unaccusative Hypothesis" (UH) is being explained. The idea was initially proposed in Relational Grammar (RelGr) and helped to formulate his arguments with the use of schemata. The relational networks created suggested that unaccusative verbs are analyzed as having an initial "2-arc" but no initial "1-arc" (1978: 160). Presence of 2-arc and lack of 1-arc indicate the presence of a direct object and the absence of a subject, respectively. The concept of unaccusativity can be seen in the following example (Perlmutter 1978:160):

(22)   Gorillas *exist*.

The verb exist is considered unaccusative, because its grammatical subject (i.e. gorillas) is understood as the object of the verb in terms of the relational grammar. The interpretation of the sentence is achieved with the help of the relational networks. Unergative verbs, on the other hand, have an initial 1-arc (i.e. subject) but no 2-arc (i.e. object), as in (Perlmutter 1978:161):

(23)   Gorillas *play* at night.

In (23) the verb *play* can be characterized as unergative, because in the relational network the subject cannot be characterized as the object of verb, as occurs in (22). For this reason, in languages other than English, such as in German, speakers place a personal pronoun in order to syntactically show the object.

Perlmutter provides an informative background on how the two intransitive groups are structured differently in terms of syntax. This could be considered convincing if merely syntax is taken into consideration. His work has become a guiding tool for other theories which are indicative of the syntactic differences among unaccusative and unergative verbs (e.g. Burzio 1986).

Burzio, in particular, adapted the concept of Unaccusative Hypothesis into Government-Binding theory (GB). Perlmutter's "unaccusative" verbs were now called "ergative". The author compares the verbs in passive voice with the unaccusative ones similar to previous theories (Perlmutter 1978). Burzio (1986: 88) concludes that "ergative verbs [fail] to either assign a θ-role to a subject position or to appear with a *by-phrase*". This statement also entails that unaccusative verbs cannot assign Case. In other words, unaccusative objects are not able to take any surface objects (Levin and Rappaport Hovav 1995: 40). Due to this constrain, Burzio points out (1986: 191) that verbs with this syntactic restriction "will be barred from undergoing past participle affixation".[15] The suggested theory can be illustrated as in:

$$[_s [_{NP} e][_{VP} V NP]] \quad \text{(Van Valin 1990: 221)}$$

(24)   * [A student [sc[e] applied to the program] arrived yesterday.

In (24) the sentence is considered ungrammatical as no θ-role is assigned to the subject position and there is no NP object-no argument in the sc which can function as an element in a reduced relative clause. The [e] suggests an empty position (Burzio 1986: 6), similar to "no initial 1-arc" suggested by Perlmutter (1978) above. Burzio also tried to focus on the syntactic behavior of the unaccusative and unergative verbs, similar to Perlmutter's.

The two theories presented above are the basis for the explanation of the two intransitive categories and has been used as a reference in future studies (Levin and Rappaport Hovav 1995). However,

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[15]The aforementioned statement has been proven by the original language data, derived from corpora. (See chapter (9))

the previous studies fail to provide an explanation about the behavior of unaccusative and unergative verbs in terms of semantics. Simpson (1983) was the first who made an attempt to incorporate semantic explanation in the original syntactic approach.

The author borrows the verb classification introduced by Dowty (1979). According to this classification, verbs can be divided into "states, achievements, accomplishments, activities" (Van Valin 1990: 222).[16] In accordance to the analysis an "intransitive change of a state verb with a resultative attribute does not have transitive counterpart" (Simpson 1983: 144) as in:

(25)   a. He grew *old*.
        *b. I grew the tree *old*.

The verb *to grow* does not allow a resultative attribute (i.e. predication) in its transitive form. [17] In the case of unergartive verbs Simpson points out they also do not allow any predication as in:

(26)   * I spoke/ worked/ laughed <u>tired</u>.

However, he notes that in these types of verbs the predication of the resultant state of the subject is possible by inserting "a fake reflexive" (ibid: 145) as in:

(27)   a. I laughed myself *sick*.
        b. I danced myself *tired*.

The presence of an underlying or surface object differentiates between unaccusative and unergative verbs. In the resultative sentence the controller is the object while in transitive sentences there is a surface object. In addition, in passive voice sentences and in unaccusative sentences the object is underlying whereas in unergative cases the object is a fake reflexive (ibid: 146).

Simpson's contribution towards the dichotomy between unaccusative and unergative verbs has been done with the help of syntax and semantics. Focusing on the predication of the subject he suggested a diagnostic tool to understand the differences of these two categories. The correlation between passive voice and unaccusative verbs has been accepted by the majority of linguists (Levin and Rappaport Hovav (1989); (1995); Van Vallin (1990)). An interesting observation

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[16] These categories are also known as Aktionsarts (See chapter (6))

[17] It needs to be stated here that Simpson only refers to unaccusative verbs. He does not mention that explicitly, but towards the end of his study he uses the terms introduced by Perlmutter (1978) and compares how distinctly these categories behave.

suggested by Levin and Rappaport Hovav (1995: 11) was that "objects of transitive verbs and the subjects of unaccusative verbs share a single semantic property" which is the argument being the macrorole undergoers. According to this claim, the common semantic ground which underlies in the two constructions is being pinpointed.

Simpson was not the only one who investigated the semantic and syntactic aspects of unergative and unaccusative verbs, Chierchia (2004: 20) proposed that unaccusatives are "generally reflexivizations of causativeness".[18] More specifically, he questions the idea of unaccusatives and its relation to/ derivation from passivization. Additionally, he proposed the reflexive aspect of these verbs. Reflexivization is defined as "[the event which] identifies subject and object and externalizes the remaining argument" (Chierchia 2004: 14). In the example *Mary killed herself* the sentence contains the reflexive pronoun *herself*, which denotes that the agent of killing and the theme are the same, namely *Mary*. In the same sense in the example the boat sunk, the boat is treated as the theme and the cause of sinking. Chierchia (2004: 14) claims that the inanimacy of the boat prohibits the active reflexivization. The author suggests (ibid: 17) that the "subject of unacussatives should be associated with the entailments that characterize themes as well as entailments that characterize causes" (i.e. the boat sank itself). In other words, unaccusatives are treated as "reflexivizations of causative transitive forms" (ibid: 17). Unaccusatives denote a reflexive causative relation referring to a certain state. However, there are cases in which the causative relation is not stative, but telic (ibid: 19). For example, the verb *run* is most of the times atelic, as in:

(28)   Tom ran in the Marathon.

However, it can be telic with the use of an adverbial which demonstrates time and consequently, entails the completion of the activity, as in:

(29)   Tom ran 5 km in two hours.

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[18] Chierchia thoroughly discusses the issue of intransitive verbs in other papers as well (c.f. Chierchia (1985); (1989)). This one is one his latest in which he presents an overview of the main characteristics of his previous works.

Examples as in (28) denote that the activity has been completed. Telicity is marked with the use of different auxiliary verbs in languages other than English, such as German. Unaccusatives and telicity are strongly related. This correlation will be discussed in the chapter to follow.

The idea of reflexivization is very similar to what Burzio (1986) had originally suggested. However, causative relations cannot be accepted as a characteristic of unaccusative verbs. In the phrase *the vegetables grow* the theme is the same as the subject ~~agent~~, namely *the vegetables*. In this sentence, this is not an example of a causative relation rather a resultative state as previously presented by Simpson (1983).

Van Valin (1990) in his work *Semantic parameters of split intransitivity* criticizes the purely syntactic approach of Perlmutter (1978) and Burzio (1986) and opts for a better explanation with the help of semantics. In addition, criticism is made against the theories about intransitively verbs solely based on the rules of syntax, while the author discusses the issue of intransitivity from the perspective of semantics. In particular, the verb classification proposed by Dowty (1979)[19] is taken into consideration. Apart from the actions denoted by the verb, of equal importance are the thematic relations for the positions of the arguments. A second classification of the verbs is proposed based on semantic and syntactic criteria. Specifically, two "macroroles" namely "ACTOR" and "UNDERGOER" are introduced (1990: 226) for the arguments which occur with the aforementioned verbs. In transitive sentences both arguments are present, whereas in intransitive ones, one argument is available which corresponds to one of the intransitive verbs (ibid: 226). They have been labelled as macroroles because each argument incorporates various thematic relations based on the verb they occur with. More specifically, Van Vallin (1990: 226) holds that "the prototypical actor is an agent and the prototypical undergoer a patient, but effectors experiencers with verbs of cognition and perception can also be actor […]". Thus, verbs may denote different semantic relations and this is evident by the label of their arguments. Following the analysis of intransitive and transitive constructions in Italian, Georgian and Acehnese the author concludes that accomplishments and achievements are resultative phrases and therefore, they need to "be predicated of an object" (1990: 255). In the case of the unaccusative verbs the reflexive pronouns are used, as in:

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[19] Similar to Simpson (1983)

(30)   He talked himself hoarse (Van Vallin 1990: 254)

In (30) the object is overt because in the resultative clause it is the undergoer. It is the reflexive pronoun himself that makes the resultative interpretation possible, as seen in:

(31)   [**talk'** (x)] CAUSE [BECOME **hoarse** (x)] (Van Vallin 1990: 255)

Van Valin (1990: 255) also points out that unlike accomplishments and achievements, activity verbs, which are inherently atelic, cannot denote a resultative state or have an experiencer/undergoer argument. Thus, they do not take resultative phrases. This can be seen in:

(32)   He talked hoarse for five minutes (adapted from Van Vallin 1990: 255)

The prepositional phrase *for five minutes* denotes the duration of the state being hoarse not the actual duration of talking, as in *he talked for five minutes*. This happens, because the verb falls into the category of atelic activity verbs which do not code a result state. The author suggests that intransitive phenomena can be better explained in semantic terms within the Role of Reference Grammar than syntactic approaches.

Van Valin's semantic explanation can be considered very resourceful regarding intransitive phenomena. However, his theory solely introduces an approach to unaccusativity without using the subcategories of intransitive verbs. The arguments introduced are interesting especially the semantic correlation the author made between unaccusative verbs and passive voice. Most of his argumentation falls within the scope of Simpson (1983) and Chierchia (2004). Argumentation as such highlights the semantic aspect of the two intransitive categories and their interpretations.

All in all, it can be concluded that unaccusative and unergative verbs do differ. In English their differences are not easily detected due to lack of morphological and syntactic features. The main difference could be that in unaccusatives there is an implied agent and can schematically be illustrated as "$S_{intrans} = O_{trans}$"; this schema may derive from causative or resultative constructions. Unergatives, on the other hand, are often encountered with "fake reflexives" and do not entail any of the aforementioned relations. In the section to follow the aspect of telicity will be discussed as it is strongly associated with unaccusative verbs as well as the resultative aspect of verbs as a criterion which may influence the position of the modifier past participle will be addressed.

6. Telicity

As discussed in the previous section verbs can be divided into transitive and intransitive. The latter category can be subdivided into unaccusative and unergative verbs. The main difference among them is the resultative aspect which is denoted by some unaccusative verbs. In this section I am going to discuss this aspect as it is a common feature in both transitive and unaccusative intransitive verbs and consequently, in the past participles which derive from them.

The resultative state is strongly linked with the entity of telicity. Telicity stems from the ancient Greek word "telos" (= τέλος) which means "end", "result" and "goal". Telicity characterizes the actions denoted by verbs and correlates with the aspect they denote. Aristotle was the first to distinguish between some verbs which have an "end", or "result" and those that do not. Zeno Vendler (1957) was the one who made the verb classification as it is known today, namely *states, activities, accomplishments and achievements.* As seen in Section 3 Aktionsarts was taken into consideration by Sleeman as a means of classification of the past participles as modifiers. For this reason, a brief discussion about the four categories will be presented. As representatives of *states* can be considered verbs such as *know*, *believe*, *desire* etc. (i.e. psychological verbs). Dowty (1979: 54) points out that these verbs cannot occur in progressive tenses as they denote a state. One example could be:

(33)   *Mary is knowing the answer.

States can be distinguished from activities, because the latter can occur in progressive tenses (Dowty 1979: 54). Verbs of activity are characterized the following: *run*, *walk*, *learn, drive* etc. Consider the following examples:

(34)   a. Mary is learning how to drive.

          b. John is driving in the opposite direction.

In both examples (34) the present continuous indicates that the activity is taking place at the time the speaker utters the phrase. Additionally, Dowty (1979: 54) notices that these verbs can be used with the present simple when there is a "frequentative or habitual meaning" such as:

(35)   a. John drives his car to work.

          b. Mary runs 5km in two hours.

The habitual inference is not available when a state verb is used in present simple. Dowty (1979: 54) points out this semantic distinction between the two categories, as in:

(36)   a. Mary *knows* the answer.

        b. John *believes* in second chances.

The second sets of verbs are called "accomplishments" and "achievements". Verbs which belong in the first category denote that the action requires time in order to be completed (Dowty 1986: 42), whereas "achievements" are "punctual" in some sense (Dowty 1986: 42). Consider the following examples:

(37)   a. They were building a house for two years.

        b. John was dying when the nurse arrived.

In (37a) the verb is a member of the accomplishments and in (37b) it is considered an achievement. The semantic difference is very hard to distinguish; Dowty (1986: 43) notes that achievements are typically of shorter duration than the achievements, because there is no entailment of sub-events. "Dying" is considered the ending point-the finish line. In this sense achievements are considered punctual because there is no interruption or overlapping of the activity (Dowty 1986: 43). As it turns out the aspect of the verbs influences whether a verb is classified as telic or atelic as well. Vendler (1957) offers a table where aktionsarts and their functions are summarized:

Table 1. Vendler's (1957) verb classes (Van Valin & LaPolla 1997: 93)

Aktionsart Function	State	Activity	Accomplishment	Achievement
Static	+	-	-	-
Telic	-	-	+	+
Punctual	-	-	-	+

According to the table above, accomplishments and achievements are the only verb categories which have a telic function, which is expressed with an object. The other two functions are not considered relevant to the project and will not be addressed. Verbs of the different verb categories also have two additional features, namely *tense* and *aspect*, which vary depending on the verb

class. Verb tense will not be addressed in this project, whereas verb aspect seems relevant to the concept of telicity. In particular verb aspect indicates semantic difference, as it distinguishes "such things as whether the beginning, middle or end of an event is being referred to, whether the event is a single one or a repeated one, and whether the event is completed or possible left incomplete" (Dowty 1979: 52).[20] The situations denoted by the verbs are often characterized as "durative" and "non- durative" (Verkuyl 1972: 8).[21] In addition, when these situations suggest actional distinctions, they can be categorized as "telic" versus "atelic" and "directed" versus "self-contained" (Bache 1997: 53).

Bache (1997) has investigated such form-meaning relationships. The author (1997: 164, 238) argues that a telic verb describes a situation which has some duration and includes a terminal point (i.e. a "telos"). This can be seen in the following example:

(38)   Sophia *built* a house.

The situation in the abovementioned example is considered complete. The nature of the verb suggests a perfective and telic action. The ending point of the action suggested by the verb is evident from the word *house*. Additionally, Bache (1997: 237) also points out that durative situations can further be divided into telic and atelic. Based on this last comment, the original definition of telic and atelic situations is reestablished. A telic situation, in particular, is a durative situation which leads up to and includes a terminal point; beyond this terminal point the situation cannot progress unless reformulated (ibid: 239). This definition is the one which is most accepted by scholars and can be found in English grammars.

To sum up, I may conclude that telicity is associated with the existence of an ending point. Telic verbs can also be part of durative and non-durative situations. In addition, the achievement of a goal denotes a perfective situation. In this sense, telicity often expresses a result of a situation. Thus, a resultative state is often associated with the concept of telic verbs.

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[20] The latter criterion is associated with the concept of telicity.
[21] Bache (1997: 237) among other linguists labels the "non-durative" situation as "punctual".

7. Reference

In this part of the literature review the focus will be on reference. In particular, I am going to talk about anaphoric and cataphoric reference. Reference as part of the pragmatics is important in understanding noun phrases. Because I am discussing past participle modification in the noun phrase, the presentation of anaphoric and cataphoric reference are deemed necessary. The position of the modifier may depend on discourse-pragmatic aspects of the noun phrase in question.

Quirk et al. (1985: 267) defines anaphoric reference as being possible when "the uniqueness of reference of some phrase […] is implied by the information given earlier in the discourse". In this sense, it can be understood that anaphora is contextually given. In addition, the authors distinguish two kinds of anaphoric reference, namely the "direct anaphoric reference" and the "indirect anaphoric reference". The former denotes that the noun phrase occurred in the text will be used again, as in:

(39)   Maria ate an apple and *a sandwich*. *The sandwich* contained tuna and tomato.

The underlined phrases in (39) have the same reference; this phenomenon is called "coreference" (1985: 267). Furthermore, Quirk et al. (1985: 267) highlights the role of definite and indefinite articles; they function complementarily. In the first sentence, the underlined word is marked with the indefinite article. Once the referent is introduced to the hearer, this acknowledgement can be seen with the use of the definite article.

As far as the indirect anaphoric reference is concerned, Quirk et al. (1985: 268) describe it as the reference which is evident because it is assumed to be part of the hearer's knowledge, without being explicitly stated. For example:

(40)   Maria bought a new *computer*, but when she opened the package the *keyboard* was broken.

As seen above (40) the hearer understands the referent *keyboard*, because the word *computer* has already been introduced (i.e. anaphora) and the interlocutor knows that computers have keyboards as part of their hardware (i.e. general knowledge and in this case example of meronymy and cataphora).

Quirk et al. (1985) provide an interesting overview about the phenomenon of anaphora. However, there are other issues with this type of reference that need to be addressed. Huddleston and Pullum (2002) offer a functional approach to anaphoric reference, as we are going to see in what follows.

Huddleston and Pullum (2002) introduce different terminology for the anaphoric reference, namely they (ibid: 1454) call this phenomenon as "anaphora" and its constituents "anaphor" and "antecedent". The terms describe the same concepts as Quirk et al. where "anaphor" and "antecedent" could correspond to *the sandwich* and *a sandwich* in (39), respectively. In addition, Huddleston and Pullum do not make use of the distinction between "anaphora" and "cataphora", rather they treat the later as a subdivision of "anaphora". In particular, the authors point out (2002: 1455) two cases of anaphora, namely the "retrospective" and the "anticipatory" anaphora. In the retrospective one the antecedent precedes the anaphor , as in:

(41)   When *Michael* left the house, *he* realized that *he* forgot his keys.

As far as cataphoric reference is concerned, Huddleston and Pullum (2002: 1455) note that in this type of reference the anaphor "looks forward into what follows" (i.e. the antecedent). A reformulation of the sentence (41) could be:

(42)   When *he* left the house, *Michael* realized that he forgot the keys.

In this example the anaphor *he* precedes the antecedent, *Michael*. Huddleston and Pullum (ibid: 1456) also add that there are two types of anticipatory anaphora depending on the function of the antecedent, namely "integrated" versus "non- integrated antecedent". To support this claim, the authors (ibid: 1456): offer the following examples:

(43)   a. None of those who actually saw *it* said that *the film* should be banned. (integrated)
         b. *It's* official: *Bill Gates is now the richest man in the world.* (non-integrated)

As seen in the sentence (43a) the antecedent *the film* is integrated in a sentence. In other words, this noun phrase has a syntactic function; it is the subject of the sentence *the film should be banned.* In the second example (43b) the antecedent is not integrated. It is not a constituent of larger construction, but it provides additional information to the pronoun *it*.

Huddleston and Pullum (2002) offer some useful information about the anticipatory anaphora (i.e. cataphoric reference) and its constituents. The subdivision of cataphoric reference enables us to understand how larger clauses function as complements of pronouns apart from *it-cleft* sentences.

Quirk et al. (1985) make some additional remarks in relation to cataphoric reference and the use of the definite article. In particular, the definite article is attached to "what follows the head noun, rather than what precedes it" (ibid: 268). The authors provide the following examples:

    (44)   *The President of Mexico* is to visit China.

    (45)   The girls *sitting over there* are my cousins.

In the aforementioned examples the definite article instantiates the noun phrase and makes the referent unique. In these examples the article specifies which politician of Mexico is going to visit China (44), and who is sitting over there (45). The definite article is used to indicate that the speaker assumes that the addressee can identify the referent(s) in question. For both examples the post-head information helps to achieve this. In particular, in (44) the prepositional phrase helps to specify which president mentioned and since Mexico has only one president, the definite article can be used. However, Quirk et al. (1985: 268) highlight that there are very limited cases in which definite article is found in constructions as in (44) and (45) where the modification of the noun phrase (e.g. prepositional phrase) restricts the reference of the noun and therefore, its referent needs to be explicitly defined.

To sum up, reference is important for the interpretation of the noun phrase. Anaphora and cataphora enable the hearer to identify the referent. As already seen these two elements are also linked with the use of the definite article. In anaphoric reference *the* is attached to the entity which has already been introduced in a previous part of the context, and is uniquely identifiable for the addressee, whereas in the cataphoric reference the definite article behaves differently. Reference has a significant role in discourse and has to be considered during the analysis of noun phrases.

7.1.<u>Pragmatic relations</u>

Pragmatics is the area of linguistics where the context or setting contribute to the meaning an utterance bears. The general domain of investigation into the relationship between grammar and discourse is often characterized as "discourse pragmatics" (Lambrecht 1994: 2). In the field of pragmatics, the concept of information structure is important and needs to be addressed. According to Lambrecht (1994: 5, 6) information structure is a component of a sentence grammar; it is evident in "aspects of prosody, in special grammatical markers, in the form of syntactic (in particular nominal), in the position and ordering of such constituents in the sentence, in the form of complex grammatical constructions and in certain choices between related lexical items". In other words, information structure can be detected in the syntactic structures, where meaning relationships are underlying. In the study of information structure there are two pragmatic functions, namely "topic" and "focus", which are considered fundamental and relevant to the noun phrase modification as well. In the sections to follow the two pragmatic functions will be presented.

7.2.<u>Topic</u>

There are various interpretations on what a topic is. Prague School research has adopted the idea that topic (or theme) is the "element which comes first in a sentence" (quoted Lambrecht 1994). In this sense the element that initiates the utterance is marked as topic. However, the aforementioned definition faced some criticisms because elements in the initial position can be either topic or focus. Lambert (1994: 118) employs the definition of topic which coincides with the definition of "subject" in traditional grammar. In respect to that, topic of a sentence is the entity which the proposition denoted by the sentence is about.[22]

In some languages such as English topic as an element remains morphologically unmarked in the sentence, whereas in others (e.g. Korean) interlocutors frequently tend to mark the entity with affixes which show the "aboutness" of the proposition. In any case Lambrecht (1994: 127) underlines that the element (i.e. referent) is understood as the topic of a proposition if "IN A

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[22] Proposition in the field of pragmatics is defined as "that part of the meaning of a clause or sentence that is constant, despite changes in such things as the voice or illocutionary force of the clause. A proposition may be related to other units of its kind through interpropositional relations, such as temporal relations and logical relations". (Glossary of linguistic terms: https://glossary.sil.org/term/proposition)

GIVEN DISCOURSE the proposition is construed as being ABOUT this referent". This could be elaborated on as the proposition provides additional information to the referent which is relevant to and increases the addressee's knowledge to this referent (Lambrecht 1994: 131). Topic is also associated with pragmatic presupposition; it is associated with what the referent denotes, and in many cases it is related to the context. Lambrecht (1994: 150) argues that propositions such as "X is under discussion" or "X is to be predicated of …" contain X as a topic. Therefore, it can be understood why in some propositions the definite article is chosen in the noun phrases. As a final remark about this concept is that the generalization of topic-first principle which occur in languages such as in Korean, is not applicable in English. As noted by Lambrecht (1994: 200) expressions which denote topic can also appear in an argument position after the verb; this sentence is not syntactically marked, the information structure of such sentences is only marked prosodically. However, Lambrecht's approach on topic faces some problems concerning the relation between subject of the sentence and topic. Therefore, another approach on topic is deemed suitable for this project. In this project the "discourse topic or D-topics" is more helpful. Keizer (2007: 194) sums the ideas of Brown & Yule (1983), Grice (1975), Dik (1997) and Chafe (2001) and concludes that the discourse topic includes what the discourse participants talk about and what is their opinions on the topic discussed. The discourse topic should not be treated as/expressed by a NP (as it happens with sentence topic and grammar topic) but it should be understood as a proposition which is related to relevance of the utterances made by interlocutors. This type of topic is more relevant to the thesis, as the noun phrase examined may alter (or not) their original form in order to contribute to the discourse topic.

7.3. Focus-Given/new information

In this part of the literature review some aspects of the pragmatics in the noun phrase will be addressed. In particular, I will touch upon the issue of information structure regarding the terms of topicality/focality and giveness/newness. These elements influence the understanding of the noun phrase and are considered as potential candidates for the choice and the word-order of some constituents of the noun phrase.

Focus is generally treated as the complement of topic or the element which adds new knowledge/ information to the topic discussed in a sentence. Lambrecht (1994: 206) disagrees with the

proposed definitions of focus, because all sentences convey new information and that presupposes that all sentences must have the concept of focus. While the statement is true, not all sentences have a topic. For instance, there are cases where topic has been earlier introduced in the discourse and there is no need to restate it in the sentence. However, focus is evident in every sentence whether or not there is topic. In this sense, focus cannot be seen as a complement to the topic, but must be regarded as an autonomous notion. Additionally, Lambrecht (1994: 206) highlights that the new information which can be inferred from focus is not added to the topic, rather it is "superimposed on" the pragmatic presupposition. Pragmatic presupposition is identified as the information which can be recoverable from the preceding discourse (Halliday 1967: 204f). Lambrecht concludes that since focus information is unpredictable or pragmatically non-recoverable, when used in discourse it turns an utterance into an assertion.

Having briefly mentioned what focus is about, I also need to define which domains are used in order to indicate focus. Lambrecht (1994: 215) explicitly mentions that focus involves only phrasal categories such as verb or adjectival phrases, noun phrases, prepositional phrases, adverbial phrases and sentences. He excludes lexical categories, because focus is related to the relations between entities and states in a given discourse situation. It is not associated with the relations between words and meanings. Since the author is dealing with the relationship between entities and states in discourse, he (1994: 223) identifies three focus-structure relationships based on scope, namely "predicate-focus structure", "argument-focus structure" and "sentence-focus structure". Concerning the project, I am mostly interested in the second type of focus. Lambrecht (1994: 231) claims that in English focus is prosodically marked and in some cases the predicate-focus structure and the argument-focus structure are semantically the same but pragmatically may differ.

"Pragmatic presupposion" and "pragmatic assertion" may correspond to "old" and "new" information, respectively as Keizer (2007: 193) points out. In particular, Keizer draws similarities between Lambrecht's (1994) and Prince's (1981) approaches to information provided by an utterance. According to her, the old information is "contained in, or evoked by, as a sentence as the *pragmatic presupposion",* whereas new information "is expressed by or conveyed by the sentence as *pragmatic assertion"* (Keizer 2007: 193, quoting Lambrecht 1994: 52). Every speaker first introduces an entity into the discourse; this entity can be new or unfamiliar to the hearer (Prince 1981: 234).

The taxonomy of given-new information is relevant to our project because speakers sometimes provide new information to their addressee or refer back to what they have already discussed with the use of the noun phrases (see chapter 7). Such constructions are marked syntactically with the appropriate article or sometimes with the change of the word order. The latter case can be applied to modification with past participles, by placing the modifier before or after the head. Therefore, the principles introduced by Prince (1981) will be presented. The two types of discourse entities are divided into NEW, which the hearer has to create a new entity into his/her model, and UNUSED, which are taken for granted; meaning that the hearer is familiar with the discourse entity (Prince 1981: 235). What interests us are the entities which are already introduced in the discourse. These are called "EVOKED" entities and are characterized by being evoked earlier by the hearer (ibid: 236). The EVOKED entities can be further divided into TEXTUALLY and SITUATIONALLY EVOKED; the former refers to what is known as anaphora, whereas the latter is related to the discourse entities and "salient features of the extratextual context (viz. the setting where the proposition is uttered), which includes the text itself" (ibid: 236). For example:

(46)   a. Pardon, would *you* have a change of a quarter?

        b. *A guy that I work with* says *he* knows your sister.

In (46a) *you* is labelled as a "situationally evoked" entity due to the fact that the situation (i.e. extratextual context) led the speaker to use the personal pronoun without mentioning it earlier in the context. In (46b), on the other hand, *he* is referring back to the discourse entity which has been already textually evoked. A final category of discourse entity is the "INFERRABLES". Prince (1981: 236) defines the inferrables as the entities which the speaker assumes the hearer can infer, via logical or plausible reasoning, from discourse already mentioned (i.e. EVOKED) or from other inferrables. One example could be:

(47)   I got on *a bus* today and *the driver* was drunk!

In the example above, the hearer understands the discourse entity of *the driver* because the speaker had already mentioned the entity *a bus*, which is considered an inferrable. The new discourse entity can also be assumed from the general knowledge about busses that is *every bus has a driver.* Finally, Prince (1981: 236) adds a subcategory in the class of inferrables; these are called CONTAINING INFERRABLES. The class includes the entities which can be inferred "by a set-

member inference". In other words, the entity introduced is contained within the NP and most of the time this entity is situationally evoked. Prince (1981: 233) offers the following example:

(48)   Hey, *one of these eggs* is broken!

The hearer understands the discourse entity because the extratextual features facilitate this process. Furthermore, the binominal phrase denotes that the entity which has been influence is contained in the NP itself. The instances of CONTAINING INFERRABLES are usually SITUATIONALLY EVOKED. This can be understood from the fact that CONTAINING INFERRABLES are part of the so-called "shared knowledge" which every hearer intuitively has. In that sense, in (48) the hearer already has created an image in his/her mind where egg is broken.

All in all, it can be concluded that focus along with givenness/newness is evident in noun phrase structure. It can be observed in the structure of the noun phrase; in particular, the use of the appropriate article along with the position of the constituents (i.e. modifier) may influence the understanding of the noun phrase and have semantic effect to the hearer. In this case speakers may place the past participle before or after the head in order to illustrate these semantic differences as well as use a different article to introduce a given or new information to their addressee.

Perhaps add a sentence that this concludes the literature review and that you are now moving on to the empirical part of the study.

8.   Methodology-Research questions

This chapter presents the methodological conventions adapted for the present project. In this section the empirical part which includes the data collection and its analysis will be presented. In addition, an attempt will be made to answer the research questions of this thesis concerning the reason why some past participles can occur in both position during modification, whereas others not, as well as to classify the past participles based on their common characteristics during the noun phrase modification. The analysis can be designed as primarily qualitative as it relies on the classification of each of the verbs which the past participles derive from, based on whether they can occur either in the prenominal or postnominal position in the noun phrase, or both. There will not be any attempt of calculating the frequency of the diverse positions of the past participles, since

the main focus is the common characteristics found in the verbs at question and not the possible quantitative side. In the paragraphs to follow the process of data collection and analysis will be conferred in a great detail.

The starting point for the research was Bolinger's (1967) remark towards the two modifying positions and the semantic influence they have towards interpreting the noun phrase. From a semantic point of view the prenominal position denotes a permanent, enduring and customary characteristic, whereas the postnominal one indicates a temporal and non-customary attribute. The semantic effects of the positions are applicable to all adjectives including the deverbal ones as well as the past participles. In terms of syntax, the consensus suggests that past participles in these positions stem from relative clause reduction (RCC); an argument which can supported by the preposition phrase (PP), mostly a *by-phrase*, which follows the postmodifier as in:

(49)   a. The results *presented by the researcher* caused a great deal of controversy in the
                audience.   ↓

         b. The results *that were presented by the researcher* caused a great deal of controversy
                in the audience.

Examples such as those in (49) show the reason why the past participle follows the noun. The syntactic restriction which occurs when a prepositional phrase follows the past participle and the fact that English does not allow prenominal modification by means of postmodified past participles shows that the postnominal position seems to be the only available place for the modifier. Nevertheless, such constructions are not always accompanied by a PP in order to presuppose their position. An attempt will be made to identify and describe the factors which influence the position of the modifier in tha case of unmodified past participles. These could be related to the field of syntax, semantics and discourse-pragmatics.

In this section of the research process the data collection and classification will be outlined. In order to investigate how users of the language employ these constructions, namely the prenominal and postnominal position of the past participles as modifiers, it was deemed necessary to observe authentic language data. Therefore, this study is corpus-based, the data resource which is selected for the purposes of this paper is COCA (Corpus of Contemporary American English) (Davies: 2008-). COCA was deemed suitable for this type of research, as it incorporates written language

data, such as fiction (FIC), magazine (MAG), news (NEWS) and academic documents (ACAD) along with spoken data (SPOK). In the view of this, traces of the past participle's behavior within the discourse can presumably be more accessible because the aforementioned syntactically complex phenomena appeared with high frequency in written language, namely in the academic field, and less frequently in spoken discourse. It will be also possible to compare and contrast the two formats. The verbs, and consequently their past participles, which were chosen for investigation, derived from the domains of Biber et al.'s Grammar of spoken and written English (1999: 361- 364). Their grammar was deemed a useful and reliable source of extracting the data because the authors also provided real life examples and not fabricated ones. The semantic domains of the verbs in question are the following:

- Activity verbs
- Communication verbs
- Mental verbs
- Verbs of facilitation or causation
- Verbs of simple occurrence
- Verbs of existence or relationship
- Aspectual verbs

From the aforementioned categories seventy-four verbs were collected (see Appendix A) and used for examination along with some additional ones, which were selected because of their idiosyncratic function (viz. intransitive function), and because they were mentioned in the literature. As a final step of this project, a new classification based on the position and syntactic/semantic behavior of the past participles will be proposed.

In order to retrieve the constructions under analysis, different research strategies were taken into consideration. During the search process, three factors were considered, namely the type of the determiner preceding the modified noun phrase (i.e. definite/ indefinite article and possessive pronoun), the position of the modifier (i.e. prenominal or postnominal) as well as the constituent immediately following the noun phrase (i.e. preposition, verb or other). Based on the aforementioned criteria some structures are not captured by the searches, for example different determiners such as the demonstrative pronouns *this, these* etc., or noun phrases with other modifiers (e.g. numbers) will not be shown. Therefore, not every instance related to declarative

sentences will be tested. Having illustrated this limitation, the original four main queries in COCA are constructed as it follows:

(a) article + past participle of the verb + noun (_at* verb/-ed/-en _nn*)

(b) possessive pronoun + past participle of the verb + noun (_app* verb/-ed/-en _nn*)

(c) article + noun + past participle of the verb (_at* _nn* verb/-ed/-en)

(d) possessive pronoun + noun + past participle of the verb (_app* _nn* verb/-ed/-en)

In the first query the requested number of hits was 100. After receiving the sample, no randomization took place as every instance of the construction under analysis should be carefully examined in order to fulfill the criteria which was examined. In constructions as in (a) (b) the results were easier to be extracted and the analysis was not problematic because the modifier was within the noun phrase, whilst cases such as (c) (d) were more problematic due to various reasons. To begin with, from the morphological point of view the majority of the verbs tend to share the same form for past tense and past participle forms; thus, when searching for past participles in the postnominal position, they coincide with the verb in past simple in which the noun phrase is the subject of the verb in past form, such as:

(50)   a. *Seven of the studies examined* gender differences in perceptions, whereas four of the studies examined nationality differences in perceptions. (COCA 1996: ACAD)

b. *Seventeen of the studies examined* in this paper used the MDQ for diagnostic purposes. (COCA 1992: ACAD)

In (50a) the *-ed* form (i.e. examined) functions as the verb of the clause where the preceding noun phrase is its subject, whilst in (50b) the *examined* serves as modifier in postnominal position. As such, it was difficult to acquire the appropriate context in which a past participle functioned as a postmodifier. As a result, the most frequent hits offered in the corpus tended to be verbs followed by gerunds and infinitives. In the case of prenominal positions there were also times where COCA showed different results, especially when the past participle was followed by a tag. In particular, most of the times the premodifier did not have to be followed by a tag, because it was preceded by an article and followed by a noun. However, when the tag of adjective, namely _j*, was immediately placed after the modifier new examples sometimes came up, even though the aforementioned tag is not appropriate for the past participles. This problem often appears with automatically tagged corpora like COCA, because they are programmed to recognize every

constituent which is between an article and a noun and does not have the -*ly* suffix as an adjective. In addition, due to the fact that COCA is designed to provide the most frequent usages of such constructions, it was expected to receive limited instances of postnominal constructions or even none in some verbs. In order to compensate for this, a new series of queries was implemented. This time, two additional elements were inserted in the original searches (c) and (d); thus, the new queries were formed as it follows:

(e) article + noun + past participle of the verb + verb (_at* _nn* verb/-ed/-en _v*)

(f) article + noun + past participle of the verb + preposition (_at* _nn* verb/-ed/-en _i*)

(g) possessive pronoun + noun + past participle of the verb + verb (_app* _nn* verb/-ed/-en _v*)

(h) possessive pronoun + noun + past participle of the verb + preposition (_app* _nn* verb/-ed/-en _i*)

Verbs and prepositions were deemed the additional constituents to facilitate the research process and simultaneously restrict the results by focusing on the modified noun phrase with the deverbal adjective in postnominal position. In the first set of queries (e) (f) the chances of the past participles behaving as a verb in past tense is very limited, unless the modified noun phrase is part of an embedded clause in indirect speech; an issue which can be detected through analyzing its construction within its context. Furthermore, in the second set of searches (g) (h) the following PP will limit the irrelevant examples by providing an additional element which restricts the modified noun phrase, as proposed by the literature (e.g. Radden & Dirven (2007)). The setting parameters were the same as in the previous searches. One hundred of the most frequent hits was requested in COCA and their results were set for examination. The aim was to obtain enough lexical input in order to be able to form an idea on how past participles behave as modifiers as well as to observe some of their similarities which will pave the way for their categorization.

During the research it was also deemed necessary to designate the transitivity of the verbs under examination in order to predict whether their originated past participle can function as a modifier in a noun phrase. Due to the research needs, it was suggested to make use of an online dictionary. For this purpose, Merriam-Webster Open Dictionary was considered suitable for this occasion for various reasons. To begin with, this electronic source is based upon the American variety of English, which coincides with COCA. Thus, it is anticipated that American constructions,

idiosyncrasies as well as fixed phrases will be available to the readership. In addition, due to the fact that it is an electronic tool, it has its database updated with the latest lexical entries in discourse. Last but not least, the most important contribution to this study is the order frequency of the transitive or transitive use of the verbs. That is to say, when a verb happens to be both transitive and intransitive, the dictionary shows which function is used more frequently, by placing it in the beginning of the explanation of the verb. This tool proved very helpful with the data analysis and the classification process.

The extraction and the classification of the final dataset were conducted in two stages. Before presenting the results of each query some comments were made for each enquiry regarding the constituents which helped shape the search. In particular, the notes were based on the ability of the participles to appear in either of the two positions or in both, the preference of the determiner (i.e. definite or indefinite), the frequency of their appearance according to the language format (i.e. written and spoken data), the occurrence of fixed phrases as well as the interpretation of the prepositional phrase following the noun phrase under analysis. With the view to this, a condensed overview was constructed based on the preferences of the past participles in relation to their positions as modifiers.

The second stage involved the taxonomy of the selected participles. The new categories were coined based on the semantic and syntactic characteristics of the derived verbs. As expected the two main categories which were created are labelled as "transitive" and "intransitive verbs"; thus, the selected verbs will be assigned to either one of the two groups or both. The purpose of this grouping is to observe whether the verb under analysis has either both transitive and intransitive functions or one of them. In addition, the classification enables us to understand that there are verbs which are polysemous and this attribute may influence the position of their derived past participle before or after the noun. Furthermore, this form of taxonomy sheds light on verbs which solely have one function in terms of transitivity and can be treated as representatives of transitive or intransitive verbs, respectively. For example, the verb *to go* is a verb of motion, it has one sense, namely moving towards a specific direction, and based on the corpora research its past participle only follows the noun as in:

(51)   *The people gone* are the middle ones, the centrists in both parties […] (COCA 2010: NEWS)

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Therefore, this verb could be seen as a decent yardstick for how intransitive verbs may behave. As far as the readings of the verbs are concerned, it is assumed that if a verb is polysemous, it would be more versatile and, consequently, its participle could possibly appear in both positions while modifying a noun. One example could be the verb *to run*. The most frequent use, according to the dictionary, is the intransitive in which *run* behaves as a verb of motion and denotes "to go faster than a walk" (Merriam-Webster Dictionary). However, in the past participle construction its transitive characteristic is preferred which involves a semantic change; *run* acquires the meaning of "operating" (Merriam-Webster Dictionary). Verbs which are only transitive tend to have their past participles in both positions during modification; as they can be placed prenominally and postnominally, according to:

(52)   These results showed few differences between gender and *the run test* based on age. (COCA 2012: ACAD)

(53)   […] Wally should be grateful to be part of *a company run by somebody like Tommy* […] (COCA 2003: FIC)

As Levin and Rappaport Hovav (1995: 29) pointed out, examples as in (52) and (53) involve "several lexical semantic representations [which] are based on different lexical semantic templates but share the same constant". That is to say, *run* expresses its arguments in a specific manner when it is a verb of motion and in another way when it is a verb of action. Additionally, the example (53) illustrates one more time that the prepositional phrase following the past participle forces the modifier to follow the noun. After assigning the verbs and its categorization, their new classification took place.

Following the classification in the three major groups (i.e. transitive, intransitive or both), the second classification took place. The newly formed groups are labelled as follows:

1. Participles which do not occur in the postnominal position.
2. Participles which allow only postnominal position.
3. Participles which involve lexical change in prenominal position.
4. Fixed phrases.
5. Syntactic-pragmatic criteria (i.e. anaphora, definiteness, restrictiveness, focus).

In the section to follow I am going to present some representative examples of each subgroup. For each of the examples I will provide an interpretation based on the literature discussed along with my own linguistic instincts. The overall categorization of the verbs into the new categories can be found in Appendix B.

A final remark concerning the final dataset from corpus needs to be made. Despite the restrictions during the research process COCA still offers inappropriate examples in the results, such as:

(54)　I heard an explosion, and I saw flames coming from *the left wing*, and I thought, [sic] This isn't good. (COCA 2009: NEWS)

(55)　He was leaning against the bar, wearing a white silk shirt embroidered with roses, his striped Western-cut britches hitched way up on his hips, his gold curls hanging from under *a felt hat* that was as white as Christmas snow. (COCA 2013: FIC)

Such examples are considered irrelevant to the topic of research and will not be taken into consideration during the analysis. Examples like (54) and (55) indicate another problematic area of the automatically tagged corpora during the research process.

9.　Classification of verbs

In this chapter about it will be shown how the selected verbs, and consequently their past participles, function as modifiers in the form of past participles, based on the results derived from the corpus. Since verbs can modify noun in the form of past participles, it is also worth investigating the modification of the noun with present participles and their comparison between the two types of modification. However, this will not be addressed in the present study because the aim of this study is solely the past participles as modifiers. In the sections to follow, first there will be an analysis of the functions of the verbs which are either transitive or intransitive. This will give an idea of how the transitivity may influence the position of the derived past participle. In the second half of this chapter there will be a discussion about the verbs which can be both transitive and intransitive. In this section the focus will be on the subgroups and the verbs-participles are assigned to. Finally, an overview of the important characteristics/finding of each category will be presented in the part of conclusion.

9.1.<u>Intransitive verbs</u>

In Biber et al.'s (1999) grammar, there are not many verbs which can be solely characterized as "intransitive". Even fewer are the sentences in which participles as modifiers are participated and can be detected in COCA. As purely intransitive verbs have been characterized as the following: *to go, to happen, to occur, to appear* (derived from the grammar) and *to die, to fall.*

Verbs such as *to happen, to occur* and *to appear* are labelled as verbs of existence and appearance by Levin & Rappaport Hovav (1995). The last two verbs are categorized as "bona fide" unaccusatives. This term is applied to authentic, real unaccusative verbs which, similar to unergative verbs in general, lack causative uses. The fact that these verbs do not express causative relationships may be the reason why their past participles cannot be used postnominally. More specifically, COCA provides only the following example:

(56)   a. *The incident happened* blocked all southbound lanes for nearly two hours and causing an 8-mile backup that stretched to Beaver Ruin Road in Gwinnett County. (COCA 2014: NEWS)[23]

As seen in the example (56a) *happened* occurred postnominally. The verb by nature does not denote a causative state, but rather an event of single occurrence. The postnominal position here denotes a perfective situation with *the incident* to be both "the subject" in regards to syntax, and "the undergoer" in regards to semantics of the action denoted by the participle. In addition, comment on the article which used in the NP can be made. In this example, it is questionable whether or not the definite article has influenced the position of the modifier, since COCA does not offer any grammatically acceptable example of prenominal position in order to comment on the semantic and syntactic differences.[24]

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[23] Having one example of postnominal position does not allow us to draw reliable conclusions about how verbs of this category behave. I provided this example as an indication that this construction may possibly exist. In this case the writer may consider it wrong after a second proofreading, since the sentence has also an ill-formed construction. As pointed out by the supervisor of this study, there is a problem with the constituent following the conjunction, namely "causing". Due to "and", "causing" should be reformed into "caused" to correspond with "blocked.

[24] COCA offered one example in which "happened" precedes the noun, as in:

    i. We stopped to look in a junk shop window taped with ads from *a happened parade*. (COCA 2011 FIC).

In this sentence I question the existence of such construction for various reasons. First of all, a parade is an event which occurred only once and thus suggested a perfective event. Therefore, such an event should be expressed with

Interestingly enough COCA does not offer examples of modification by means of the past participles of the other two verbs (i.e. *occur* and *appear*). One reason could be that in American English the past participles of such verbs are not used. Therefore, a further research in other corpora (e.g. NOW Corpus) that offer different varieties of English is suggested. Another explanation could be that these verbs do not occur in passive voice. Thus, if I make an attempt to analyze (56a) into a restrictive relative clause I will receive the following:

(56)   b. The incident *that had happened blocked* all southbound lanes for nearly two hours and causing an 8-mile backup that stretched to Beaver Ruin Road in Gwinnett County.

The passivization is inherent in the verb *to happen* and, therefore, such construction is unavailable. Verbs like *happen* are labelled as unaccusative and/or unergative depending on the construction they participate. In this example (56b) the verb is labelled as unergative. A final feature of these candidates is that when they are often followed by a prepositional phrase, which denote either manner or place in order to provide further information to the hearer.

The second verb which was chosen as a representative for the group of intransitive verbs is *to go*. This verb has been characterized by scholars as telic, due to the fact that it inherently denotes a directed motion. Both prenominal and postnominal constructions can be found in COCA. Some examples with *gone* as prenominal modifier are:

(57)   Annette wears my mom's bracelets, which my sister still has and wears like on a daily basis. So - but any remnant of *your gone parent* you crave or you want. (COCA 2016: SPOK)

(58)   He would finger the tiny brown Luminol bottle in his suitcoat pocket while he contemplated the night's coming insomnia, contemplated too how nothing -- his writing, *his gone marriage*, his hairline -- would ever be the same. (COCA 1996: FIC)

As seen in the aforementioned examples *go-gone* ceases to be a verb of motion. In these examples where *gone* is placed before the noun, the past participle undergoes a semantic change. It does not denote an action, rather means something different. The Concise Oxford Dictionary (1982: 427)

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use of a relative clause as in: *from an event which had happened.* In addition, this construction contradicts Bolinger's (1967) statement towards an inherent, permanent characteristic which the prenominal position suggests. The construction at hand does not denote something similar. Overall, this noun phrase remains syntactically questionable.

defines *gone* in its verbal sense as *lost, hopeless* and *dead.*[25] This definition can be seen in the examples (57) and (58). In (57) the noun phrase *your gone parent* suggests a parent who is dead. This interpretation can also be deduced by the context, namely by the phrase *any remnant.* Similarly, the noun phrase *his gone marriage* may either infer to a dissolved marriage or to a hopeless marriage. This interpretation is highly context-dependent.

Gone as a postpositive has a different interpretation. In this construction *gone* retains its original sense, namely the activity of going- leaving. Example of this construction can be seen in:

(59)   On the Republican side, too, opposition to tax hikes is likely to be intensified by the Tea Party. "*The people gone* are the middle ones, the centrists in both parties, " says political scientist Larry Sabato of the University of Virginia. (COCA 2010: NEWS)

In (59) *gone* denotes "leave"; the voters who are not satisfied with the political parties and decide to leave the party. Thus, it can inferred that *gone* does not experience a semantic change when occurred in postnominal position.

The intransitive verb *to fall* behaves in similar way as the other verbs of this category. In the prenominal position, the past participle *fallen* can be found in many fixed expressions in which *fallen* changes its original sense, as in:

(60)   Since Dracula is *a fallen angel*, he can see his reflection and go out in the daylight, and he can't be killed with a wooden stake. (COCA 2016: MAG)
(61)   Marcus swung his foot in the darkness until he found *the fallen man's* sword. (COCA 2012: FIC)

In (60) a *fallen angel* is an angel who has fallen from grace and was cast out of heaven. This phrase is often used to describe Lucifer. In (61) a *fallen man* describes someone who lost his life during the battle. It is a poetic way to refer to people who are dead. Therefore, it is frequently encountered in fiction. In addition, a participle such as *fallen* can be found in prenominal modification without changing its original sense. This is because verbs like this one specify an inherent direction of motion without necessarily entailing the reaching/ fulfillment of a particular endpoint. Therefore,

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[25] In this sense the noun *goner* derived from it. The Concise Oxford Dictionary (1982: 427) claims that *goner* is a slang word who refers to "person or thing that is doomed, ended, irrevocably lost etc."

such verbs are not necessarily telic (Levin & Rappaport Hovav 1995: 147-148). The attainment of the endpoint is often shown with the use of an adverbial or a prepositional phrase suggesting a place. Examples of prenominal modification are:

(62)   I sat on *a fallen tree* and rested. I looked at the mountain and I looked at the canyon, and I waited for something to come to me, some sort of idea or thought that would give me an answer. (COCA 2013: FIC)

(63)   *The fallen leaves* of the mother oaks lay in strata upon the forest floor, crumbling beneath her swift feet and revealing her position as she ran toward salvation. (COCA 2016: FIC)

In (62) it can be understood that the tree has presumably fallen on the ground without being explicitly stated by the writer. The endpoint is perceived from the context with the use of *sat* and *rested.* In other words, it is co-textually evoked. These two verbs help us envision a static image which can also be inferred from the prenominal position of the past participle. In (63) the endpoint is explicitly mentioned, namely *in strata upon the forest floor*; *fallen* is treated as telic. The prenominal position as seen also in (63) denotes a permanent characteristic of *leaves* which suggests that the leaves are lively anymore. In noun phrases like (62) and (63) the main point is that *fallen* is treated as a telic verb and that the endpoint of the event has been/ was reached

Fallen as a postnominal modifier, on the other hand, does not frequently occur in COCA. In fact, the corpus offers one example of this construction, as in:

(64)   In a bitter, drawn out battle with heavy losses on both sides, bin Tashufin's army crushed Alfonso's overconfident forces. Alfonso, himself wounded, narrowly escaped with 500 of his knights. The next morning, the heads of *the Christian [sic] fallen* were lopped off, loaded onto carts, and taken to cities throughout al-Andalus to prove the Almoravid victory. (COCA 2011: MAG)

As seen in (64) *fallen* follows the noun. In addition, this example is the only one from the set which were examined where the noun phrase is the subject of the verb phrase and its postnominal modification is not a result of a preposition phrase which follows. Furthermore, in (64) *fallen* has the meaning of *dead/killed* and the process of descending. Two interesting remarks need to made concerning the structure of this noun phrase; the first one concerns the definite article *the* and the

second concerns the interpretation of the postnominal position. To begin with, *the* is used as a marker of definiteness. Definiteness denotes that the referent can be identified in the given context. In this case this can be inferred from the word *battle* which the writer referred to earlier in the text. In all battles there are winners and losers, so in this case the writer is talking about the latter which happens to be the Christians; a party which the reader already knows. Therefore, the entity can be easily understood and semantically related to the concept of *battle*; that is why, the writer uses the definite article. The modified noun phrase is treated as an "inferrable" which is textually activated with the use of the word *battle*. The context enables us to understand that only the dead bodies of Christians were treated in such a manner. As far as the understanding of the postnominal position is concerned, it can be argued that the postpositive is used restrictively (Larson & Marušič 2004: 275). More specifically the noun phrase could be interpreted as *the heads that were Christians (viz. that belonged to Christians) were fallen (viz. were killed)*. This noun phrase is structured in such way because it is a matter of focus (Ferris 1993). Unfortunately, there are not other examples with *fallen* as a postpositive to support and further elaborate on this statement.

Last but not least, it has been investigated how the past participle of the verb *to die* behaves as a modifier. It took me by surprise the fact that no results are listed in COCA. I suspect that this event occurs because the verb *to die* has an adjective counterpart which suggests the resultative state originally denoted by the verb. *Dead* as an adjective means someone or something "that has ceased to live" (e.g. the dead person) (The Concise Oxford Dictionary 1982: 243). The adjective functions as a classifier since it does not allow any degree of comparison or intension (e.g. *the more dead person, *the very dead person) and tends to be placed closest to the referent as in: *Down through the dark stand of oak, following the deer trail, over the wet compacted dead leaves, the old men went* (COCA 1995: FIC). It could be also assumed that the use of *died* as a premodifier is associated with different varieties of English[26] as well as with poetic speech.[27] Finally, *died* in the postnominal position is not associated with modification, it maintains the function of an intransitive verb following by a prepositional phrase of manner or place.

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[26] Searching for *died* in the prenominal position in the NOW corpus (Davies Mark (2013)), it turns out that this construction is frequently used in Indian and Nigerian varieties of English.

[27] Now corpus offers an article where *died* is used prenominally and the construction which participates has a poetic interpretation. Consider the following:
   i. "Katelynn has died eyes, and a died soul, heart and brain". (NOW 2013)

All in all, it can be concluded that verbs which are exclusively intransitive have the tendency to be placed postnominally. However, this is not a very robust result due to lack of sufficient examples. This infrequent phenomenon may occur because the nature of the verbs cannot be expressed with a modified noun phrase as some of the verbs do not occur in passive voice; as a consequence, the concept of relative clause reduction cannot be applied. Furthermore, the attributes that the modifiers add to the noun and can be characterized as permanent or temporal, are frequently expressed by the use of the verb in different tenses instead of the past participles. It could be also noted that the past participles of this category are rarely used in their original sense and often undergo lexical change. Therefore, it could be claimed that intransitivity and polysemy are factors which determine the modifier position in the noun phrase.

9.2.Transitive Verbs

In this section I am going to present and discuss the behavior of the past participles of transitive verbs. Biber et al. (1999) provide four verbs which are considered "transitives only". These include: *to suggest*, *to cause*, *to enable* and *to involve.* It has been discovered that the past participles of three of these verbs can appear in prenominal and postnominal position. *To enable* is the only transitive verb whose past participle cannot occur postnominally; further details about why *enabled* appeared only in prenominal position will be given during the analysis.

To begin with, I immediately notice that in constructions where *suggested* is a prenominal modifier, both articles are used. This indicates that the modified noun phrase is introduced into discourse when preceded by the indefinite article, whereas the definite article presupposes a discourse entity familiar to the speaker. One example where *suggested* is found in the prenominal position and is introduced by the indefinite article could be:

(65)   I have compiled a list of appropriate tude books organized by instrument and make recommendations for students based on their experience levels. This is just *a suggested list* based on input from local private instructors and other music teachers. (COCA 2009: ACAD)

In the above-mentioned example the noun is preceded by the indefinite article. Thus, it suggests that the discourse entity is not familiar to the hearer despite being earlier inferred co-textually from

the word *list*. The indefinite article could suggest that the prenominal modifier modifies the noun non-restrictively. In this sense the modified noun phrase could be interpreted as:

(65)   a'. This is just a *list, which is suggested,* based on input from local private instructors and other music teachers.

The modifier attaches an intrinsic and permanent characteristic to the noun (viz. *list*). This attribute can be true for every noun of the same kind (viz. *every list*) because the indefinite article does not indicate any specific *list*, as the definite article does.

Suggested as a postmodifier, on the other hand, is only preceded by the definite article, which suggests that the referent is familiar to the addressee and can be found in or inferred from the context. In the following examples the semantic difference of the two positions is examined:

(67)   a. The course leaders explained the new strategy for the week and described some situations where the strategy could be used. Finally, the parents discussed how they could use the strategy in various situations and how they would use it within their own family as their homework for the following week (see COPE, 2008). The lessons were structured discussions, seeking to encourage parents to use *the suggested strategies* in their own families. (COCA 2014: ACAD)

b. Conclusion. Serving the young gifted child begins with the recognition of their abilities and a sensitivity to their needs. While there are many different curriculum strategies, attention to the child's physical world is a primary concern. All of *the strategies suggested* are guided by characteristics of giftedness and developmentally appropriate practice. (COCA 2007: ACAD)

In (66a) the writer refers to some strategies that parents will learn during the lessons. The topic of the sentence/ paragraph is about the *strategies*; these strategies have been specified as *suggested* because it is their characteristic and therefore it is non-restrictive. In fact, *suggested* adds an enduring attribute to the modified noun and thus, it should be placed in the prenominal position. In (66b), on the other hand, the participle is placed postnominally. This can be explained by a number of reasons. To begin with, the noun phrase is found in the part of conclusion. It is also known that in conclusion writers write the final remarks or try to shape an impression on the readership and/ or persuade their readers to adopt their point of view. In order to draw the attention

of their readership, writers choose the appropriate sentence structure to create this effect. In this case this has been achieved by placing the entity denoting focus on the right side of the noun; the change in the word order is also part of focus. In addition, it could be argued that the postnominal position has a contrastive function and is used restrictively. In particular, the preceding sentence includes a contrastive clause introduced by *while* and separated with a comma from the main clause. The utterance expressed in the main clause is further explained in the sentence where the postnominal modifier appears. Therefore, it could be inferred that the entities of the noun phrases, namely *the different curriculum strategies* and *all of the strategies suggested*, are contrasted. Contrastiveness is evident in the position of the modifiers. In this example, the modifiers in the noun phrases are the contrastive focus expressions. Additionally, it could be noted that contrastive focus and restrictiveness complement each other. More specifically, the writer may firstly want to contrast between the two different strategies (viz. *the curriculum strategies* vs. *the strategies suggested in this program*), at the same time s/he manages to draw readership's attention by placing the modifier on the right side of the noun. Consequently, modifiers in the postnominal position appear to have only restrictive interpretation (Larson & Marušič 2004) and be understood differently in comparison to prenominal ones (65a). Finally, the examples similar to (65b) have shown that there is a strong relation between postnominal position and the use of definite article which may suggest that there could be a correlation between restrictiveness and definiteness. That is to say that the subset which has be restricted from one bigger set through the restrictive modifier is already known and represented in the mind of the hearer. This realization could be more valid with the results of a qualitative study concerning the two constituents.

As far as the participle of the verb *to cause* is concerned, the use of the past participle as modifier in both positions is not frequent. This may be assumed to be due to the nature of the verb, which denotes a perfective event. Due to the fact that *to cause* denotes a telic and non-durative action it very rarely occurs prenominally. In particular, COCA only offers the following example:

(68)   This general attitude is confirmed by the development of Heereboord's discussion. Heereboord admits that the final cause produces its effect by operating as a good toward which *the caused thing* tends. Aristotle agreed on the fact that a true final cause exercises its causality as a good. (COCA 2016: ACAD)

In (67) it could be argued that the past participle functions as a classifier because it can be characterized as a functional unit. The text is about philosophy; thus, it could be inferred that the underlined noun phrase is treated as a term in this field of studies and is accepted objective in nature. No further explanation about the behavior of this participle can be given because there are not any other examples.

Few are also the sentences where *caused* is placed postnominally; in such constructions the semantic relations of the verb are maintained, as in:

(69)   a. As provided by statute and judicial application, a defendant may attempt to defeat liability, 92 to seek contribution for clean-up costs, 93 or to limit the extent of liability by proving *the harm caused* was divisible. (COCA 1995: ACAD)

In (68a) the past participle is placed postnominally; the construction denotes a telic and non-durative action. This can be exemplified by the fact that the modified phrase can be analyzed into a restrictive relative clause with suggesting non-durative aspect:

(69)   b. […] to limit the extent of liability by proving the harm *which has/had been caused* was visible.

The (68a) has the same interpretation as (68b), namely the harm has occurred only once; this is a non-customary characteristic and modifies the noun on the individual-level, whereas in (67) the modifier functions as a classifier indicating a type of a thing. As a final comment on the temporariness of this noun phrase, it can be stated that for any result to be visible the event suggested by the verb (or the modifier) must have been completed.

The last two transitive verbs from this category are *to involve* and *to enable*. Similar to the above-mentioned verbs, *to involve* occurs in prenominal and postnominal position. In the prenominal position two senses of the verb are evident; the original sense (i.e. to engage as a participant) and the other one which means "twisted" or "crooked". This can be seen in the following examples:

(70)   a. His job is to get *the involved parties* to agree on a fair price. (COCA 2005: ACAD) (original sense- to participate)

         b. A fracture may be transverse (the fracture occurs at right angles to the longitudinal axis of *the involved bone*) […] (COCA 2002: ACAD)

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As it is expected the latter sense is only found in fixed expressions and therefore, *involved* in this sense cannot appear postnominally. In addition, the modifier in noun phrases as in *the involved bone* adds an enduring characteristic to the noun; this can only be achieved when the participle is placed in the prenominal position. In the postnominal position, COCA offers examples with *involved* in its original sense. The reason why *involved* can occur postnominally is similar to cases such as *suggested* and *caused*. Finally, I have to point out that in the postnominal constructions the article used is the definite article. This supports the initial realization (65b) that the modified noun phrases in postnominal position are preceded by the definite article.

The past participle of the verb *to enable* behaves differently from other transitive-only verbs. More specifically, the participle is only available in the prenominal position with a different sense. In such construction, *enabled* means "activate" or "cause to operate" (Merriam-Webster Dictionary). Thus, examples of this construction are the following:

(71)   The assigned database-aided condition interface displayed an applicant's three financial ratios, location, and environmental predictability, and *an enabled database* DA feature showing 20 cases of randomly selected past applicants (Figure 2). (COCA 2003: ACAD)

There are no sentences where *enabled* is placed postnominally and is followed by a verb. This may be the case because the participle originally derives from a compound verb (i.e. en- + able), which suggests an action with no end point. *Enable* as a verb is most frequently followed by an direct object which indicates the beneficiary and then by a prepositional phrase. One example could be the following:

(72)   That would have *enabled her to retire* at 58 with at least 70 percent of her salary. (COCA 2011: NEWS)

In this structure the verb has the meaning of "to provide with means or opportunity *enabled* behaves as a verb by taking two arguments, namely *her* as the direct object and subject of embedded clause and *to retire* the prepositional phrase who functions as an embedded clause. Speakers do not use *enabled* as postmodifier because they may use synonyms to denote this semantic relations or other constructions (e.g. causative form) in order to modify the noun. Therefore, it could be inferred that the lack of postpositive counterpart suggests there will not be

solely a restrictive interpretation of the noun phrase, because during prenominal modification there is an ambiguity between restrictive and non-restrictive understanding. Furthermore, other pragmatic factors such as focus and contrast which could potentially influence the position of the modifier will not be relevant and speakers would have to resort to other constructions in order to achieve these pragmatic effects.

To sum up, transitive-only verbs frequently occur in both positions. In the prenominal position it is found out that past participles may maintain their original sense or experience lexical change. In the postnominal position, on the other hand, the semantic change does not take place. Furthermore, it can be concluded that in this category of verbs the position of the modifier is a matter of anaphoric reference and focus. Speakers employ these methods in order to create different pragmatic effects to the addressee. As an additional characteristic of the postnominal position has been observed to be the temporariness and the restrictive interpretation. In particular, in this position the modifiers add a non-customary, non-inherit property to they the entity modify and therefore, they are understood restrictively. The referent noun is already familiar to the addressee and thus, it is evident from the predominant use of the definite article in the postnominal constructions. As a conclusion, anaphoric reference and restrictiveness which are two characteristics of the postpositive position are related to the frequent use of the definite article as a marker of definiteness.

9.3.Verbs with transitive and intransitive function

In this section the verbs which can be both transitive and intransitive will be discussed. Having excluded the verbs that appear as only transitive and intransitive, there are sixty-four verbs which are left for examination (see Appendix A). Due to the fact that they can fulfill both functions, this characteristic may have an impact on the interpretation of the participles and consequently, on their position in the noun phrase as modifiers. In the subsections to follow the verbs will be classified based on their positions as modifiers in the noun phrase.

9.3.1.   Verbs whose participles cannot function as postpositives

In this part of the study verbs whose participles do not occur in the postnominal position will be addressed. Before the presentation of the results of this analysis, it has to be stated that in this category the participles which cannot be followed by a verb when they are modified noun phrases are presented.[28] Therefore, in this category there are constructions which include the participles: *allowed, become, begun, changed, decided, doubted, enjoyed, explained, feared, forced, hated, helped, increased, kept, let, looked, loved, read, remembered, said, seemed, shouted, started, stopped, stood, talked, wanted, worked.*

Based on the examples offered in COCA it has been found out that noun phrases which have these participles on their right side and are followed by a verb, become sentences which have the verb in the past tense. The majority of these past participles cannot be used as modifieres in the postnominal position because its form overlaps with the verb in the past simple. The verb is often followed by a gerund or bare infinitive. Thus, it could be stated that the postnominal modification is not possible in such contexts due to syntactic limitations. Consider the following examples:

(73)   a. *The money increased cycling* time in one participant, but did not affect the second participant. (COCA 2007: ACAD)

b. She cold-called banks, which wanted a stake in the company, until *a friend helped* arrange a loan at a French bank. (COCA 2006: MAG)

As seen in the above-mentioned examples, the constructions underlined are not modified. They are sentences which refer to an event that took place in the past. There are also cases in which some examples of postnominal modification have been found is when the noun phrases are followed by a prepositional phrase or an adverbial phrase as in:

(74)   a. As before, the *variance explained* in our models decreases linearly with higher age of the sample. (COCA 2014: ACAD)

b. Follow *the rules explained* here by Colette Kase […] (COCA 1998: MAG)

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[28] Note that the representative past participles presented here belong in this category based on the very limited sample that one corpus offered. Therefore, the results are very tentative, as some members of this category can occur in the postnominal position according to other language data sources, such as the internet:

    i.   To judge *by the words shouted*, the Childersins were fighting over the available horses. (internet)

    ii.   Only 20,000 of *the new one-family homes started* were originally intended for the rental market. (internet)

According to the previous examples, it could be understood that in COCA the selected sample of past participles occurs postnominally based on the specific queries which were used. However, due to the restricted amount of data and the specific research parameters constructions where the past participles appear postnominally and precede a verb cannot be excluded.

In this subclass it has been discovered that there are participles that cannot appear in both positions as modifiers due to the nature of the verb they derive from. For example:

(75)   At 6 o'clock Sunday morning, the phone *started ringing* with reservations and it didn't stop for three days. (COCA 2008: NEWS)

In (74) it is shown that *started* functions as a transitive verb. The following gerund (i.e. *ringing)* functions as verb complement, as it is considered necessary for the understanding of phrase. Verbs like these do not have participial counterparts because *started* can be also characterized as unergative intransitive verbs. Such verbs occur in sentences where the subject of the intransitive of the verb (i.e. the surface object) is an underlying subject. In addition, it is claimed that unergative verbs do not have "adjectival perfect participles" to form "adjectival passive participles" (Levin a & Rappaport Hovav 1995: 87, 88). All verbs behave in a similar way as verbs which initiate an activity (i.e. *to begin).*

To sum up, it could be argued that that there are participles which cannot be placed in the postnominal position. As seen from the language data this type of construction occurs often with unergative verbs because they tend to be followed by complements. In these cases the verb in past tense is the same with its past participle; in these circumstances the following constituent namely gerund, bare infinitive, predicate, prepositional phrase or adverbial phrase influences the function (or not) of the past participle as postmodifier. For this subclass, the results derived from the corpus analysis are very tentative, because due to the corpus size and the research settings no relevant examples could have been drawn. Thus, an additional larger corpus along and further research settings are suggested with aim of obtaining robust results for this mixed-type category.

9.3.2. Participles which occur only in the postnominal position

In Biber et al.'s (1999) grammar offers only two verbs which behave differently from other transitive and intransitive verbs. These are the verbs "to leave" and "to feel". The past participle of the first verb, namely *left*, is placed only postnominally based on the data derived from corpus. Here are some examples:

(76)   a. The *impression left* is that it was the kidnapping, not the repercussions when his views became known, that had shattered a successful man's life. (COCA 1998: NEWS)

         b. The most difficult negotiations still lie ahead, and *the time left* is perhaps only the remainder of this decade.

In the above-mentioned examples *left* follows the noun and functions as a modifier in the postnominal position. In examples like these, *left* shares the same characteristics with other postnominal participles. For example, the past participle can be developed into a restrictive relative clause and simultaneously adds a temporal characteristic to the modified noun. There are very few examples where *left* is used as a postmodifier. The reason why this could happen is because *left* belongs to the category of "*leave verbs*" because "the direct object of these verbs is understood to be the location that has been left" (Levin 1955: 264). More specifically, the verb *to leave* indicates that motion away from the location has taken place which is familiar to the addressee and is introduced with the definite article. The modifier is placed postnominally and is used restrictively because the verb, which the past participle derives from, suggests this specific location in the hearer's mind.

The second member of this subclass is the verb "to feel". Based on the research criteria, COCA did not offer any examples for the past participle of this verb. In order to illustrate that *felt* behaves in a similar way as *left*, different language databases were put in use, such as NOW corpus. The additional tool offers the following example:

(77) Acknowledging that the loss of a child through miscarriage can be quite traumatic, Dr. Vivian Panton says *the emotions felt* are dependent on certain factors. (NOW Corpus)

The aforementioned example comprised the realizations concerning the postnominal position and the semantic, syntactic and discourse-pragmatic factors which influence this position as pointed out in the previous sections. First, the modifier derives from a telic verb which takes a direct object. The restrictive relative clause which *felt* is the verb suggests the attainment of the endpoint. The restrictive use of the modifier indicates that the attribute attached to the property denoted by the noun is temporal; in other words, it is only valid for this specific occasion. Secondly, the employment of definite article is another common element of this position. In particular, the definite article is implemented because the modified noun phrase is co-textually evoked in the mind of the hearer as well as the restrictive use of the modifier illustrates that the subset which is created (viz. *the emotions that are felt during the miscarriage*) is based knowledge-based and is already represented in the mind of the hearer. Finally, in examples like (75) and (76) the pragmatic element of focus cannot be easily spotted, because there are not prenominal counterparts in order this distinction to be made. Identifying (discourse)-focus in this subclass could be achieved by investigating instances of spoken data and by paying attention to the prosodic markers.

To sum up, it can be concluded that in this subclass the representatives can only occur postnominally and used restrictively. This may happen due to the nature of the modifier which does not add a permanent characteristic to the noun. Additionally, in this category the attributes of the postnominal position are evident along with the elements characteristic of this category (i.e. definiteness, anaphora). A final remark for this category is that these past participles cannot be found in the prenominal position when they are immediately followed by a noun. The results may differ when other modifiers are also modifying the noun phrase. Thus, such results are considered tentative.

9.3.3. Participles which involve lexical change in prenominal position

In the data analysis it has been noticed that past participles in the prenominal position very often experience lexical change. The semantic shift is defined as "a change the meaning of a word taking place over time" (Aarts et al. 2014: 372). In my data prenominal participial modifiers change their

meanings when they modify specific referents. From my set of data these are the participles whose meaning changes: *explained, decided, felt, grown, kept, said.*

From these participles, some representative examples are going to be analyzed. Consider the following sentences:

(78)   a. You're *a grown man* by the time you get to the NBA. Only a grown man would march into his coach's office before a game against the San Antonio Spurs and ask to guard Kawhi Leonard, as Brogdon did earlier this season. (COCA 2017: MAG)

          b. Pam wasn't *a kept woman*. She earned her money and paid her own rent. (COCA 2006: FIC)

In (77a) it can be seen that *grown* is used metaphorically, in this sentence *grown* means mature. A person becomes more mature as s/he becomes older, in other words grows up. The result of this change leads to someone being called as a *grown man* or *a grown woman*, respectively. In this example it could be stated that *grown* may be considered an adjective, since many dictionaries have included this sense of *grown*. Concerning the second example (77b) another phrase in which the participle has a new sense is spotted. The construction at hand suggests a person who is financially supported by another person. This noun phrase has a negative connotation, as this phrase is used when a woman or a man is financially dependent upon their lovers who are often married individuals.

The aforementioned past participles tend to experience semantic shifts when placed postnominally. However, this does not happen when these modifiers are put in the postnominal position. Consider the following examples:

(79)   a. According to one explanation,"bostans are always established in places near the city because *the vegetables grown* are sold to the city; fertilizer, glass, crates, lamps (for heating) and other things needed for the bostans are procured from the city ". (COCA 2004: ACAD)

          b. *A promise kept* is the fulfillment of personal character as it stands in relation to others, and that fulfillment is achieved in the struggles that keeping a meaningful promise entails. (COCA 2006: ACAD)

As postmodifiers these participles are rarely or never used. In this category the majority of these verbs are also members of the class whose participles do not have postpositive counterparts. Thus, it makes us realize how idiosyncratic verbs and their participles as postmodifiers are. As far as (78a) is concerned, it could be stated that the postnominal position adds a temporal characteristic to the referent and is used restrictively, however, due to the fact that this verb is unaccusative it denotes a resultative action which has been completed. More specifically if I attempt to develop the modified noun phrase into a restrictive relative clause, I receive the following:

(78)   a'. […] because *the vegetables that have grown* are sold to the city […]

In the relative clause above, it has been noticed that the verb is in active voice and not in passive, as it was expected to be. This happens because the verb *to grow* is an unaccusative intransitive verb. This verb belongs to the categories of "verbs of change of state" (Levin 1955: 248) and "verbs of appearance" (Levin 1955: 258). Due to the fact that *grow* denotes these semantic relationships, its subject, in this case *the vegetables*, plays the part of the direct object that occurs in the transitive form. In (78a) the alternation of state is taking place; the change of state between an inanimate subject, namely *the vegetables* and its attribute, namely *grown* is also expressed in (78a') where there is a proper clause. The relationship between participial constructions from unaccusative verbs and those from passive constructions is still ambiguous within the linguistic community (Levin 1955: 87). In constructions like this one I may argue in favor of "separationalists" who claim that one construction (i.e. prenominal/ postnominal modifiers) cannot be derived from another one (i.e. relative clause reduction in passive form).

Regarding example (78b), it could be argued that *kept* maintains its original sense which means "to hold". In particular, this example stems from the fixed phrase, namely *to keep a promise*.[29] In terms of syntax, the noun phrase under analysis can be treated as an example of restrictive relative clause reduction with the verb in passive voice, such as:

(78)   b'. A promise *that is kept* is a fulfillment of personal character […]

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[29] U have to admit that in COCA there is an example of *kept* in the prenominal position with its original sense, but it is only one, as in:
    i.   And as *a kept promise* of sorts -- the book we read is an account of preparing to write this biography -- it is an ironic vindication, against the grain of modern biography, that a short description of somebody, done with sufficient skill, can be an account of their life. (COCA 2000: ACAD).
The majority of the data uses *kept* as presented in (75a). That makes us put *kept* in this category.

The postnominal position of the deverbal adjective shows that the attribute assigned to the referent is temporal. As the postnominal phrase suggests a non-customary characteristic of the head, it needs to be further analyzed. This is evident from the fact that the modified noun phrase is the subject of the copular verb which presupposes a subject complement. The subject complement completes the subject of the linking verb by ascribing a property to it. The new information, which is given with the help of the principle of end-focus and is added to the topic of the sentence (i.e. promise) with the postnominal past participle, is elaborated further with the use of subject complement.

To conclude, it could be stated that some past participles change their meaning when they are placed prenominally. The change in meaning is only evident in the prenominal position. In addition, it has been noticed that verbs and their participles of this category tend not to show postnominal counterparts as well. To support this claim, it can be said that it is the nature of the verb (i.e. transitive or intransitive) and its arguments which allow or not allow the past participle to appear in the postnominal position.

9.3.4. Fixed expressions

This category includes the past participles which construct fixed phrases. During the analysis of the two positions in the noun phrase it has been discovered that many prenominal modifiers create fixed phrases with the nouns they modify. The set phrases occur predominately in the prenominal position and is an interesting fact to investigate. From the data set examined the past participles which can be found in set expressions are: *called, calculated, changed, decided, developed, discovered, forced, given, run, studied, wanted, worked.*

(80)   a. YES, IT CAN BE HARD TO BE THE batter's mother, especially when there are two outs and the bases are loaded and you have to watch him go down *on a called strike*. (COCA 2017: FIC)

        b. He's *a changed man*, he's a family man, "the attorney said," and it would just be great if we could get relief from the governor. (COCA 2015: NEWS)

        c. But in *the developed world*, these kinds of infections aren't as common as they used to be. (COCA 2014: MAG)

d. In *the run game*, he's always been a big hitter, but his pass coverage is starting to improve. (COCA 2008: NEWS)

e. There's a very good chance that I'll be considered *a wanted man* in Nicaragua and potentially in the Central American region, and that's not justice. (COCA 2008: SPOK)

f. According to Gerjets, Scheiter, and Catrambone (2004), studying *the worked examples* that focus on steps, problem-type schemas, structural task features, and category-specific solution procedures might be cognitively demanding because it requires learners to simultaneously hold active a substantial amount of information in working memory. (COCA 2009: ACAD)

Before I proceed with the analysis of the aforementioned examples, a general point needs to be made; the majority of the fixed phrases are more frequently used in genres where different styles of language are used (viz. colloquial or academic). This suggests that it could be possible to find these word sets in academic writing. As seen from the above-mentioned examples, the only noun phrases which occurred in an academic writing is (79c) and (79f), however, a quantitative analysis is recommended for solid results. It was found out that this phrase is treated as a term in the field of psychology. In this sense *worked* suggests a customary attribute to the modified noun, namely *examples*. It is what Bolinger calls "characterization"; the premodifier leaves a mark on the noun which helps us identify the referent from other similar entities. In this example these qualities are further analyzed in the restricted relative clause which immediately follows the noun phrase. In addition, it could be claimed that *worked* in this fixed phrase is a Classifier. *Worked* with the modified noun function as one semantic unit which is understood together as a concept in the field of psychology. Similarly, the noun phrase *a called strike* (79a) has been institutionalized in the sports domain. As additional remarks to this phrase, I may argue that the premodifier is an example of reference modification; it modifies the head by assigning a certain type of designation. In other words, it could be understood that *strike* is an entity of a particular type (i.e. called). The noun phrase has been conventionalized and acquired a specific meaning in baseball (i.e. jargon).[30]

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[30] A called strike: a pitched baseball not struck at by the batter that passes through the strike zone (Merriam-Webster Dictionary)

In the same fashion, the rest of the presented examples behave. In particular, in (79b) it couls be noticed that the prenominal participle adds a permanent characteristic to the head *man*; this attribute comes as a result of experience within time. The participle suggests a permanent characteristic which derives from this change. It is worth mentioning that the verb which the past participle derives from (i.e. to change) is a member of unaccusative intransitive verbs and denotes a resultative state. This subtype of intransitive verbs allows their participles to be placed in the prenominal position in comparison to unergatives which cannot be placed after the noun. As far as (79c) and (79e) are concerned, I may say that these deverbal adjectives fall into the category of the ascriptive adjectives[31] because they designate what kind of *world* and *man* the phrases are referring to. They denote an inherit attribute. In (79c) the noun phrase is placed in front of the sentence in order to show focus (i.e. predication focus-structure) and add new information which are not familiar to the addressee, whereas in (79e) there is no change in the word order but the focus structure is the same. Last but not least, the noun phrase in (79d) is also considered a fixed phrase. In general, it has been observed that when *run* is placed before the noun, it creates compound words. However, this does not mean that *run* is always a past participle when occurred prenominally. This is evident from other data derived from the corpus, such as *run time, run pattern* etc.

To sum up, it has been shown that in the prenominal position the past participles tend to form more fixed phrases. As seen above some of them form phrases which have become terms in different domains, whilst others have been institutionalized in order to describe the referent in a specific manner in everyday speech. It could be also pointed out that these phrases cannot occur postnominally and maintain their conventionalized meaning which they have acquired in the prenominal position. Finally, the meaning of such fixed phrases is entrenched in the human mind and speakers treat such phrases as a single semantic unit.

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[31] Similar to Classifiers.

10. Semantic-pragmatic factors

Having presented the factors which allow or prohibit a past participle to be placed in one position or the other, in this section the past participles which can be both premodifiers and postmodifiers is discussed. In particular, there are some factors which could influence the appearance of a modifier in one of the two positions. From the past participles examined, these are the participles which can be found in both positions and are followed by a verb: *announced, asked, believed, bought, carried, considered, discovered, discussed, examined, given, included, known, learned, moved, opened, permitted, preferred, required, solved, spoken, stated, suspected, taken, told, understood, written.*

As seen from the list above, the modifiers which can be placed in both positions and also be the subject of a verb phrase are very limited. In fact, only twenty-six out of the seventy-four past participles examined are members of this category. This evidence suggests how infrequent the appearance of past participles as modifiers in both positions is. While analyzing the data, I found out that there are other factors which may influence their position. These aspects are mostly related in the field of semantics and pragmatics. Consider the following examples:

(81)   a. A regular computer can determine the factors of *a given number* by trying one possible factor to see if it works, then another, then another, then another: brute-force calculation. (COCA 2002: FIC)

   b. Estimate of the Plantation, both of Men, houses and lands of 1685 in the Springfield Collectors Office gives the names and lands of even more heads of households, i.e. of 163. The list is neither exclusively a list of the churchmembers [sic] nor of the commoners, proprietors or of those eligible to vote in either the town or the province. Both its purpose and *the number given* allow us to assume that the list covers, if not every, then almost every male head of household. (COCA 1995: ACAD)

In the examples above it can be seen that there are the same noun phrases, yet in different contexts and accompanied by different articles. Before the analysis starts, at this point I would like to mention that in the prenominal position the most frequently used article is the indefinite, whereas in the postnominal position the noun phrases are preceded by the definite article. In addition, I would like to report that *given* as a premodifier mainly modifies nouns from the semantic field of

time; the three most frequent noun phrases in COCA are: *a given year, a given time, a given day.* Considering the example in (80a), modified noun phrase can be rephrased as "a certain number"; it could be understood that from the knowledge regarding technology and that computers function with a certain amount of input. *A given number* is treated as a single semantic unit which can be taken for granted by the interlocutor. In examples like (80a), the prenominal position can be interpreted both restrictively and non-restrictively; this is a unique characteristic of this position. *Given* as a postmodifier, on the other hand, occurs with nouns which function as objects when *give* is a verb, such as *the reason given, the impression given, the examples given* etc. In (80b) the event which is described is different. The modified noun phrase is introduced with the definite article which suggests that the referent is known to the addressee. Indeed, the modified noun phrase has an anaphoric function. The information is given earlier in the context, namely the number 163. Thus, I may say that in this sentence there is an integrated antecedent with direct anaphoric reference. In addition, it can be noted that the text preceding the noun phrase activates the understanding of the phrase by providing relevant information about it. To be more specific, it is what Prince (1981) has called "TEXTUALLY INFERRABLES". Another element which presupposes the existence of anaphora is the possessive pronoun (i.e. *its*) which defines the noun *purpose*; the former noun along with the noun phrase under examination are linked with the coordinating conjunction "and" which joins nouns, phrases etc. of equal grammatical rank. Therefore, I may say that the anaphoric reference is syntactically and semantically evident in the present example. As seen already in the group of "transitive-only" verbs the postnominal modifier is used restrictively and is related to definiteness. This statement is also proven in (80b) as the first modified noun phrase is introduced with the possessive pronoun, as in *its purpose given*, and the second one has the definite article in the beginning, such as *the number given.*

As far as anaphoric reference is concerned, it was deemed necessary to investigate how prenominal and postnominal medication can be interpreted when they are preceded by the same article. In other words, I will touch upon the semantic differences of the two positions in terms of definiteness and reference. Consider the following set:

(82)   a. Foorman et al. determined that alphabetic instruction with phonological awareness training was more effective on first grade growth of reading and spelling measures than phonological training alone. In phonics instruction, the stimulus is *the written*

word rather than the oral word. Students typically learn to decode words using letter to sound correspondence as well as sounds taught for letter combinations, patterns, or with rules. (COCA 2015: ACAD)

b. Leonard sits, reading through nutritional manuals. We see that he is writing things down on a piece of paper. *The words written* are: Sugar, corn syrup, salt, gum. (COCA 2005: FIC)

In the above-mentioned examples it can be noticed that *written* precedes (81a) and follows (81b) the modified noun. In (81a) the underlined noun phrase serves as subject complement due to the copular verb *be*. In this example the noun phrase specifies what element functions as *stimulus* during phonological training. At the beginning of the sentence, the author draws the readers' attention by placing the prepositional phrase, which makes the readership understand the field of studies, at the front of the sentence. In other words, the writer makes use of the predicate-focus structure through fronting the prepositional phrase. This is also evident from the comma following this phrase which suggests a pause in the speaker's utterance and a separation of the two constituents. In addition, the definite article in the modified noun phrase is implemented because it is also used in the subject of the verb phrase which has previously been identified in the prepositional phrase. In this sense the hearer is already familiar with the concepts surrounding phonics instruction, which can be seen as evidence of situationally evoked inferrable. Furthermore, the modified noun phrase can function as one semantic unit in the speaker's mind without needing further explanation. Thus, the writer does not specify it any further. The phrase could be also reformulated as in *the stimulus is each written word.* In this way, it can be understood that every word that appears in written format is stimulus for the learner. This interpretation highlights the non-restrictive use of the modifier, while the restrictive use could be interpreted as "the words that are written function as stimulus". Finally, in such examples (81a) the past participle with the noun construct a semantic unit which is contrasted with another one (i.e. oral word). Examples like this one support the claim that modifiers in the prenominal position tend to be treated as one semantic unit along with the noun. In (81b), on the other hand, the noun phrase at hand is the subject of the copular verb. This structure entails the existence of a predicate which will enable the hearer to understand the referent. Additionally, I could understand the sense of occasional value that the modifier assigns because in the preceding context there is a durative action denoted by the present simple continuous. The completion of this action is denoted by the modified noun phrase in the

next sentence. Thus, I may say that the modified noun phrase suggests the "product" of this telic and perfective event. The action inferred by the noun phrase is "valid" only for this specific situation and is used restrictively; this becomes clear again when we mention the prepositional phrase (i.e. a piece of paper), such as *the words written on the piece of paper*. The writer wants to capture the specific property instantiated by the noun at the time of expressing this utterance and that is why s/he chooses to place the past participle after the noun. As a final remark, it can be pointed out that the modified referent has anaphoric function. More specifically, the noun phrase (i.e. *the words*) is the anaphor for the already introduced antecedent word, namely *things*.[32] Due to the fact that the referent is known to the speaker, it can be explained why the lexeme, *words,* is preceded by the definite article.

In order to have a solid understanding towards prenominal and postnominal position in relation to definiteness and reference, it was deemed necessary to examine another example of such constructions.

(83)   a. A consultation is a two-way process. Rightly, much emphasis is placed on' active listening' - encouraging your patient to proffer *the required information* - as this is an area traditionally neglected in medical (and possibly even nursing) practice. (COCA 2011: ACAD)

b. Plan B is a massive mobilization to deflate the global economic bubble before it reaches the bursting point. Keeping the bubble from bursting will require an unprecedented degree of international cooperation to stabilize population, climate, water tables, and soils -- and at wartime speed. Indeed, in both scale and urgency *the effort required* is comparable to the U.S. mobilization during World War II. (COCA 2003: ACAD)

In (82a) it can noted that the modifier, namely *required* precedes the noun and is used both restrictively and non-restrictively. The noun phrase is treated as one semantic unit which is part of the activity/concept of *active listening*. In other words, the notion of "active listening" is further explained by describing the type of the activity denoted by *to proffer the required information*. The definite article is presumably attached to the noun phrase because *the required information* is

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[32] Thing(s) is considered a lexeme with "little semantic content" (Aijmer 1984: 122-123) similar to "stuff". It does not correspond to a specific referent and therefore, it needs further explanation.

either a specific information known to the specialists of this field, or it has been already mentioned earlier in the context but the corpus does not provide it In any case it suggests that the entity is familiar to the readership. As far as (82b) is concerned, the structure of the noun phrase is different, because the past participle follows the noun. In the structure of the sentence, it can be noted that the writer implements some techniques in order to draw the attention of the readership. In particular, s/he uses the word "indeed" and the prepositional phrase "in both scale and urgency" with aim of making the utterance into an assertion. The emphatic word (i.e. indeed) and the predicate-focus structure through fronting have achieved to create this strong declaration. The postnominal position shows that this kind of effort is only needed for this specific framework where it assigns a temporal, non-customary characteristic to the modified noun and is used restrictively; the noun phrase above could be interpreted as in: *the effort that is required for the massive mobilization is comparable to the U.S. mobilization during World War II.* In addition, it could be said that in this example there is an instance of situationally inferable anaphoric reference, because the utterance *an unprecedented degree of international cooperation* can be considered the antecedent to which *the effort required* functions as an anaphor. I may also infer that the two phrases are semantically linked from the lexeme *require* which functions as a verb in the utterance of the antecedent and as a modifier in the form of deverbal adjective in the second phrase. In this case the anaphoric reference is textually evoked through the use of the same verb.

In the preceding part an attempt was made in order to illustrate how definiteness and other factors influence the understanding of the two constructions. In this part I will compare prenominal and postnominal modifiers when determined by the indefinite article. Consider the following examples:

(84)   a. Professor Des Crawley, at a recent workshop in Australia, clearly explained the differences between the two forms: A document: a literal record or a factual image. (Open) A picture: a fictional or conceptual image, or photographic art. (Creative) That is, *a taken photograph* as opposed to a created photograph. (COCA 2009: ACAD)

    b. The lonely execution, the hidden burial, the months it took to find them, are more painful, she meant, than to die in the presence of your own people. To her, *a life*

taken has more meaning if witnessed by others who survive to tell what happened. (COCA 1999: NEWS)

As can be seen in (83a) the underlined noun phrase is determined by the indefinite article. It is evident the need to place the indefinite article because the writer introduces a new discourse entity. This entity is not familiar to the reader and therefore, it has to be introduced with the indefinite article. In addition, within the context the writer does not mention any type of specific photograph rather than s/he uses the noun phrase in its general sense (i.e. non-restrictive). This allow us to reinterpret the underlined phrase as:

(83)   a.' That is, *every* taken photograph as opposed to every created photograph.

For the (83a) it could be also claimed that *taken* assigns a permanent characteristic to the modified noun. This characteristic helps the readers distinguish this type of photograph from another one. The distinction also happened to be evident from the context; *a taken photograph* versus *a created photograph*. Both modifiers add permanent and customary characteristic to their nouns; thus, the contrast between two intrinsic characteristics is possible. Modifiers in such position can be interpreted both restrictively and non-restrictively, however, in this example the indefinite article creates ambiguity. For this occasion, Larson & Marušič (2004: 276) conclude that examples similar to (83a') have only restrictive meaning. Finally, it could be noted that the modified noun phrase is part of the terminology used in the field of photography which could also support the restrictive interpretation of the noun phrase. Similar to (79f), the noun phrase is a concept shared among photographers and this is why the modifier is in the prenominal position. In the (83b) a postmodified noun phrase with the indefinite article as a determiner is presented. While searching for examples with this format, I realized that this construction is not very frequent. Very few are the noun phrases where there is the indefinite article before the noun phrase. In the example (83b), the writer describes the event of dying. In spite of the fact that the event which is mentioned in the noun phrase is situationally evoked by word such as *execution* and *die*, because the speaker assumes that the hearer may infer it, the writer does not use the definite article as the determiner of the noun phrase. Furthermore, it can be assumed that the author does not specify which *taken life* is referring to because s/he does not use the definite article. It could be also added that the author describes an event which is true to every life which has been taken which raises questions concerning the restrictive use of the modifier along with the predominant employment of definite

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markers.[33] The postnominal position of the past participle shows that the event is telic with a resultative state, because I may analyze the noun phrase in a telic restrictive relative clause, such as:

(83) b.' To her, *a life that has been taken* has more meaning if witnessed by others who survive to tell what happened.

According to this, it can be argued that the noun phrase is about a dead person, which infers to a permanent state. In this example it could be claimed that the indefinite article the noun phrase shows the event of having someone's life taken by another person, because the process of being killed is explained later in the context. It would be easier to make the semantic distinction if COCA had offered us an example with the prenominal construction.[34] This example shows that the person is dead due to execution and not to suicide; the interpretation is different due to the position of the modifier and the context which is offered. Finally, it could be stated that this example contradicts with the claims towards the permanent or temporal attributes which each modifier assigns to the noun, depending on its position.

All in all, it can be concluded that anaphoric reference is a characteristic which is evident when postnominal modification is implemented. This pragmatic characteristic is also apparent from the use of the definite article in the beginning of this constructions. Besides anaphoric reference, focus also affects the position of the postnominal modifier, because language users employ it when they want to draw the attention of their audience. In past participles which can be both prenominal and postnominal modifiers anaphoric reference, focus, telicity and restrictiveness could influence the use of one or the other position. To be more specific, the postnominal position suggests a restrictive

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[33] A mixed study (i.e. qualitative and quantitative) is recommended in order to identify the context and the frequency of this phenomenon, where a postnominally modified noun phrase is introduced by an indefinite article and how this noun phrase can be interpreted.

[34] Searching the prenominal modification of this noun phrase in another corpus, it turns out that the prenominal counterpart is used:

   i. The video was shortly removed from YouTube after being published however, it was still viewed by over one million fans (many of them young teenagers), who saw the horrific footage of *a taken life* by the base of Mt Fiji. (NOW 2018)

The reporter is reporting about an event where the person killed himself/herself; the prenominal position also adds a permanent characteristic to the noun. The interesting fact here is that the prenominal position is referring to the event of suicide, whereas in (83b) the event is about the execution of a person. This example may be an evidence towards supporting the semantic distinction of the two positions of the modifiers.

interpretation of the modifier and a possible correlation between anaphoric reference in semantic terms and focus in terms of pragmatics.

11. Research problems and limitations

In this section the main methodological limitations of this project will be acknowledged.

First of all, the sample collected for this study cannot be considered as representative for all the past participles of English. The number is relatively small; therefore, the results are characterized as tentative. In addition, the choice of another and presumably larger corpus will be needed in order to be used as a second source of linguistic input, where more solid results will be drawn. A larger sample of past participles along with the use of a second corpus could facilitate more understanding of the behavior of the past participles as modifiers and offer more context where other factors may influence the position of the modifier. Thus, the phenomenon would be better explained as well as further aspects would be highlighted and pinpointed.

During the research process there were a few problems which arose while using the corpus. As already mentioned in Section 8, COCA does not have specific tag for the past participles when occurred in the postnominal position. As such, it was difficult to acquire the appropriate context in which a past participle functioned as a postmodifier. This occurred because the past participle often had the same form with the verb in the past simple tense. Another problem encountered during the bibliography research was the terminology; I have to state that it was challenging for me to detect the similar concepts among the theories, as in some of them the terms "adjective" and "modifier" were used interchangeably. Due to the fact that the past participles are a product of verbs, they were often characterized as "deverbal adjectives" similar to *audible* and *drinkable*. The aforementioned characterization is true but not for all the past participles. As deverbal adjectives can be characterized modifiers such *grown* and *developed* which have been institutionalized and can be treated as adjectives. Other deverbal lexical units, such as *said, calculated,* are simply past participles which have the same function as adjectives (viz. they modify the noun). This fine distinction had caused many understanding problems during the literature review. Furthermore, in relation to terminology during the analysis I had to choose which terminology I would use and be very careful every time I tried to find the correlation between terms that belonged to two different

theoretical approaches. Concerning the classification of the past participles I must admit that it was also challenging. More specifically, irrelevant examples offered in COCA had to be omitted. Moreover, the classification needed an extra attention as it was demanding to detect the common characteristics of the past participles. The classification was not complete until the very end of this project which suggests that any possible alternations and new groups can occur when new data are added to the sample. Finally, the corpus sometimes includes texts with grammatical mistakes or false translations which cannot be considered useful for the research. Therefore, in queries where the use of a grammatical element in relation with its context is set for investigation, the researcher has to be selective with the selection of source-texts.

To sum up, working with a corpus helped us investigate the phenomenon of past participles in the modification of the noun phrase by offering real data. The topic is still under research and more details may arise by increasing the data sample, employing a second corpus in the study and moving in different positions the modified noun phrase (e.g. at the end of the sentence). These remarks and limitations lead me to the following conclusion.

12. <u>Conclusion</u>

The starting point for this research was Bolinger's (1986) semantic distinction on the two positions which a modifier can be placed in the noun phrase in English, namely the prenominal and postnominal position. This research has ignited my interest in investigating how the past participles behave as modifiers and why some past participles appear in both positions during modification while others do not. It took me by surprise when I realized that this issue had not been addressed in the published literature and that the research on this field is limited. Based on current research, anaphora and focus have been pointed out as parameters which influence the position of the modifier inside or outside of the noun phrase (Ferris (1993); Šaldová (2005); Blöhdorn (2009)). Having closely investigated a sample of data, it was identified that there are additional syntactic, semantic and discourse-pragmatic parameters which have an impact on the position of the past participle.

As the described pragmatic factors were taken into consideration in the given project, a corpus-based research was conducted in order to detect why some past participles appear in both positions,

whereas others do not, and what representatives of each category have in common. The detection of these factors has lead us to form new categories where modifiers with the same attributes are placed. During the analysis and the classification of the results I included the past participles which were immediately followed by a verb, because it had been discovered that when an adverb or a prepositional phrase follows the modified noun phrase then, the past participle is placed on the right side of the noun (viz. postnominally). Taking into account the aforementioned results of the individual analyses, several conclusions can be drawn. First of all, the results show that the types of verbs, namely transitive, intransitive or both, has an effect on the position of the modifier. To be more specific, this characteristic of verbs allows or prohibits the past participle to occur in one position or the other. Past participles whose verbs are only transitive can appear in both positions during modification. In such cases, data shows that pragmatics influence the noun phrase modification. More specifically, anaphora and focus determine the position of the past participles. In addition, anaphoric reference is prominent in modifiers which occur in the postnominal position. This is evident from the fact that the modified noun phrases are introduced by the definite article which presupposes that the examined noun phrases refer back to discourse entities or concepts which are either contextually given or can be situationally activated in the mind of the reader. Anaphora and markers of definiteness often coincide with the restrictive use of the modifier; a tendency which can be better shown in a quantitative study. As far as the element of focus is concerned, it can be concluded that speakers could possibly place the modifier outside of the noun phrase in order to achieve it. In such cases focus is implemented so as to draw the audience's attention. In these examples, it is suggested a further research between "focus" and "contrast" in order to analyze which pragmatic phenomenon could also influence the structure of the noun phrase. Additionally, a further research is proposed with the use of only spoken data. During the research it would be easier to detect the prosodic markers and to see in practice whether or not the focus is prosodically marked during the speech. In the examined cases there would be a tendency of using a "fall-rise" tone while uttering a modified noun phrase with a postnominal modifier.

Moving on to the past participles of intransitive verbs it has been noticed that they have the tendency to follow the noun during modification; in such constructions they maintain their original sense, whereas in others (viz. in the prenominal position) they experience lexical change. In particular, it has been observed that when modifiers of these types of verbs occurred prenominally they often acquire metaphoric meaning. Therefore, it could be claimed that modifiers of this kind

are placed mostly postnominally when they want to maintain the sense of the verb which they derive from. Furthermore, it could be argued that such verbs very rarely have their past participles used as modifiers of a noun phrase. This event happens because most of these verbs do not appear in passive voice constructions because they inherently denote such semantic relation. This restriction prevents past participles from functioning as modifiers. The nature of such verbs plays an important role as to whether their past participles will also function as modifiers. Thus, a further investigation regarding unergative and unaccusative verbs in relation to their past participles is suggested in order to discover new possible parameters, other than intransitivity and polysemy, which could influence the behavior of the past participles during modification.

During the data analysis, it has been discovered that there are verbs which can be both transitive and intransitive depending on the context they are found. In such cases a further classification enables us to understand why some past participles appear before and/or after the noun, while others do not. The analysis shows that there are verbs whose past participles cannot be placed in the postnominal position, because they tend to modify the noun restrictively and add a temporal characteristic to the modified noun. An additional mark could be considered that some of the past participles have the same form with the verb in past tense. In these cases it has been noticed that the verb in its past form is most preferably used in sentences and is usually followed by an argument which helps the understanding of the verb. The corpus does not provide, at least to my knowledge, sentences where there is a modification of the noun by the past participle. It has also been observed that some of these verbs are intransitive and specifically belong to the class of unergatives. This evidence enhances the aforementioned claim that the group of intransitive verbs and consequently, their past participles need to be researched in detail because there could be undiscovered parameters which could explain the behavior of the past participles of the respective group.

The results of the research have shown that syntax influences whether or not a past participle will be placed in a certain position. In addition to this, semantics have been proven to play a role in the modifier's position. To be more specific, the corpus offered one example where the past participle could only be placed after the noun and maintain its original sense. Postpositive is the only position available for the modifier because it can only be used restrictively. Furthermore, the influence of the semantics in the noun phrase modification by a past participle is evident from the cases of

semantic change and fixed phrases. In the first category it has been out that there are some past participles which change their original meaning when they are placed prenominally. However, they tend to maintain their original sense when they follow the modified noun which is something that triggered my interest. In this category there is evidence of some past participles becoming adjectives by losing its verbal characteristics. Similar to lexical change, fixed phrases also happen when the modifier is placed on the left side of the noun. In such cases the modifier and the subsequent noun create one semantic unit; it is one concept which the hearer understood as without further explanation. The results show that fixed expressions are frequently used as terms in science, sports etc. which could also lead future research towards coining a new term.

Syntactic and semantic parameters, as it has been seen, influence the position of the modifier during the modification. The analysis of the data reveals that there is a third factor which should be taken into consideration, namely the discourse-pragmatics. In this category it can be seen that reference and focus have strong impact on noun phrase medication. The data shows that when an entity can be inferred from the context or has been already introduced to the hearer the chances are that the modifier will be on the right side of the noun, thus, restrictively. In accordance to this, the noun phrase will be introduced by the definite article in order to show that the entity denoted by the noun phrase is familiar to the interlocutor. At this point, the findings of Šaldová (2005) and Blöhdorn (2009) about anaphora and its effect on the noun phrase modification can be confirmed. Most of the examples support this claim and show how consistent this phenomenon is. Therefore, it can be concluded that there is a possible correlation between definiteness and the postnominal position. This could be better proven by conducting a qualitative study. Moreover, the element of focus is evident in some examples as some speakers resort to postnominal modification in order to illustrate the focus of phrases they utter. Focus is a salient characteristic when written data is examined. A better way to detect it is in spoken language by pointing out the prosodic markers, as I have already mentioned. As it turns out postpositives could be understood as a matter of focus, as first indicated by Ferris (1993). As a final remark for this category, it has been realized that even though the representative verbs can be both transitive and intransitive, past participles tend to prefer the transitive function of the verb. To be more specific, if I make an attempt to develop the modified noun phrase into a sentence, I find out that the past participle becomes the verb of a relative clause in passive voice. This supports the idea of relative clause reduction introduced by

Chomsky (1957) and also supports that participles from transitive verbs are frequently placed in both positions.

In every category which has been analyzed there are also additional aspects which can be further researched in order to understand better the phenomenon. One aspect worth investigating is register. While examining the data, it has been found out that this type of modification can be considered as a characteristic of the written data, due to its complex structure. There are hardly ever instances where a noun phrase is modified by a past participle in spoken language; this suggests that a further research should be conducted in the genres of which this kind of modification is prominent. In addition, it has been noted that in different fields (scientific or not) speakers make use of terms which include past participles as modifiers exclusively in the prenominal position. Therefore, a separate investigation would be recommended concerning the field terminology in relation to past participles and their position as well as to the preference of past participles as modifiers in comparison to the construction of compound words for coining a new term.

At the very end of the project I would like to emphasize that the writing of this paper and the research I conducted have considerably increased my knowledge and understanding of the relatively neglected phenomenon of past participles as modifiers in the English noun phrase. Additionally, the process of acquiring the data and the research itself have motivated me to plan new projects where different aspects of the noun phrase modification by past participles will be highlighted. I feel that the investigation has significantly deepened my interest in noun phrase modification and in general, in syntax, which was first sparked in my high school classes on ancient Greek and later on, in university classes on syntax.

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Appendix A

to bring	to talk	to prefer	to involve
to buy	to tell	to suspect	to start
to give	to write	to want	to keep
to go	to calculate	to allow	to stop
to leave	to consider	to cause	to begin
to move	to discover	to enable	to die
to run	to decide	to help	to fall
to take	to examine	to require	
to open	to learn	to permit	
to work	to read	to let	
to carry	to solve	to become	
to ask	to believe	to change	
to announce	to doubt	to happen	
to call	to know	to develop	
to discuss	to remember	to grow	
to explain	to understand	to increase	
to say	to enjoy	to occur	
to shout	to fear	to seem	
to speak	to feel	to look	
to state	to hate	to stand	
to suggest	to like	to appear	
to study	to love	to include	

Appendix B

<u>Intransitive verbs:</u>

to go, to happen, to occur, to appear (derived from the grammar) and *to die, to fall*

<u>Transitive verbs:</u>

to suggest, *to cause*, *to enable* and *to involve.*

<u>Verbs whose past participles cannot function as postpositives:</u>

allowed, become, begun, changed, decided, doubted, enjoyed, explained, feared, forced, hated, helped, increased, kept, let, looked, loved, read, remembered, said, seemed, shouted, started, stopped, stood, talked, wanted, worked

<u>Participles which occur only in the postnominal position</u>

Left, felt

<u>Participles which involve lexical change in prenominal position</u>

explained, decided, felt, grown, kept, said

<u>Fixed expressions</u>

called, calculated, changed, decided, developed, discovered, forced, given, run, studied, wanted, worked

<u>Semantic-pragmatic factors</u>

announced, asked, believed, bought, carried, considered, discovered, discussed, examined, given, included, known, learned, moved, opened, permitted, preferred, required, solved, spoken, stated, suspected, taken, told, understood, written