

**RELATIONAL ADJECTIVES
AT THE SYNTAX/MORPHOLOGY INTERFACE
IN ROMANIAN AND SPANISH**

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Vorgelegt von

Mihaela Adriana Marchis

Hauptberichter: Prof. Dr. Artemis Alexiadou
Mitberichter: Prof. Dr. Susann Fischer

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Institut für Linguistik: Anglistik, Universität Stuttgart

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Abstract

This thesis, as indicated by its title, investigates the morpho-syntactic and syntactic properties of Relational adjectives at the Syntax/Morphology interface. More concretely, I provide an analysis of a special case of morpho-syntactic derivation which represents a puzzle for Distributed Morphology i.e., the case of Relational adjectives which have the semantic interpretation of nouns while exhibiting the formal properties of adjectives. Hence, I syntactically explore Relational adjectives from a micro-dimension as underlying nouns to a macro-dimension as compounding.

From a more theoretical perspective, this thesis is meant to provide additional support to the Distributed Morphology approach according to which certain morphemes such as Agreement (AGR) nodes or Case features are added after syntax as they are demanded by language-specific requirements and are never essential to semantic interpretation. A specific case of syntax/ morphology mismatch is the status of Relational adjectives as nouns in the syntax and adjectives in the morphological structure (PF). In the spirit of Embick & Noyer (2005), I argue that the Case features of Thematic adjectives are relevant only at PF, conditioning the choice of Vocabulary Items expressing Case. More explicitly, the deficient Case features of Thematic adjectives are valued only at PF, conditioning the choice of introducing the Agreement node (AGR) where the noun turns into an adjective through suffixation or introducing the Case feature Genitive which is spell-out as *de* preposition in Romance languages.

The overarching goal of this thesis is to show that derivation and compounding represent cases of morphology-as-syntax. In the light of this hypothesis, I regard Relational adjectives in Romance as crosslinguistically corresponding to two types of Compounding, i.e., Thematic adjectives to subordinate compounds while Classificatory adjectives to attributive ones.

All in all, in spite of the fact that Relational adjectives, as cases of transpositions, represent a puzzle for DM due to their syntax/morphology mismatches, this thesis will show that the dual character of Relational adjectives as nouns and adjectives at the same time can be syntactically accounted for within the framework of Distributed Morphology.

Zusammenfassung

Die Dissertation untersucht die Eigenschaften von Relationalen Adjektiven an der Schnittstelle von Morphologie und Syntax. Ich biete eine Analyse für einen speziellen Fall der Derivation an, die bis zu dem Zeitpunkt ein Rätsel für die *Distributed Morphology* darstellt. Dieser spezielle Fall bezieht sich auf die Transposition der Relationalen Adjektive, die die Semantik von Nomen aufweisen, während sie gleichzeitig formale Eigenschaften von Adjektiven tragen (cf., Bally 1965). Der theoretische Beitrag liegt in der Unterstützung der Auffassung, dass die Derivation und die Komposition als Fälle von Morphologie-als-Syntax analysiert werden sollen. In dieser Arbeit wird von einer Mikroperspektive über die Relationalen Adjektive als Nomen ausgegangen, dann aber eine neue Makroperspektive der Relationalen Adjektive als Komposita vorgeschlagen.

Im Einklang mit der englischen und romanischen Tradition, wie Postal (1969), Levi (1978), Bosque & Picallo (1996) und Alexiadou & Stavrou (zu erscheinen) unterstütze ich, zuerst, die generelle Behauptung, dass die Relationalen Adjektive grundlegende Nomen sind, obwohl sie morphosyntaktisch kein homogenes Verhalten aufweisen. Entsprechend bringe ich in Anlehnung an Bosque & Picallo (1996) weitere Argumente zugunsten einer dichotomischen Klassifizierung von Relationalen Adjektiven vor, die die Thematischen Adjektive, die Argumente von deverbalen Nomen sind, von den Klassifikatorischen Adjektiven, die nur als restriktive Modifikatoren betrachtet werden, trennt

Ein wichtiges Ziel dieser Dissertation ist es, zu zeigen, welche Nomen sich hinter den Relationalen Adjektiven verbergen. Konkret wird die These aufgestellt, dass Thematische und Klassifikatorische Adjektive zweier Typen von *Bare Nouns* entsprechen. Die Thematischen Adjektive entsprechen *bare nouns* Argumenten, DPs, während Klassifikatorische Adjektive, restriktiven *bare nouns* Modifikatoren, NPs entsprechen.

Im weiteren wird die gespaltene Klassifizierung von Relationalen Adjektiven auch von einem syntaktischen Standpunkt motiviert. In dem zweiten Teil der Dissertation wird behauptet und argumentiert, dass aufgrund ihrer syntaktischen Unterschiede, Th- und Kl-Adjektive für zwei verschiedene syntaktische Analysen zugänglich sind. Als erstes werden die Thematischen Adjektive behandelt. Auf der Basis von einem umfangreichen Vergleich zwischen Th- Adjektiven und Genitiven im Rumänischen und Spanischen, wird festgestellt, dass Th- Adjektive *de* Genitiv-Argumenten entsprechen (Marchis 2009 und eingereicht).

Nichtsdestoweniger muss man eine Erklärung für das idiosynkratische Verhalten von Th-Adjektiven zu den *Complex Event Nominals* finden: Im Gegensatz zu den *de* Genitiven in den romanischen Sprachen können die Th- Adjektive nicht mit den *Complex Event Nominals* vorkommen. Aus diesem Grund liegt es nahe, einen Exkurs zu den Nominalisierungen im Rumänischen und zur Realisierung von Genitiv Argumenten im Rumänischen und Spanischen einzuschieben.

Anhand einer neueren Perspektive zur Nominalisierung und der Rollen der Argumente in der Nominalphrase (Cornilescu 2001, de Hoop 1993, Borer 1994), ziehe ich endgültige Schlüsse über den syntaktischen Status der Th- Adjektive: Die Th- Adjektive werden den *de* Genitiven im Spanischen und Rumänischen gleichgestellt, weil sie beide als Argumente intern den Kasus überprüfen. Anschließend wird die Hypothese auch um die Ethnischen Adjektive erweitert, eine Subklasse von Th- Adjektiven, die Eigenschaften über die geographische, politische, rassische oder religiöse Identität teilen (cf. Alexiadou & Stavrou zu erscheinen). In Anlehnung an Alexiadou & Stavrou (zu erscheinen) verwende ich verschiedene Tests, um zu zeigen, dass die Ethnischen Adjektive zu Genitiv Agens in komplementärer Distribution stehen. Gemäß der vorgeschlagenen Analyse kann man zwei wichtige Eigenschaften von Th-Adjektiven erklären, nämlich die mangelnden anaphorischen Eigenschaften sowie ihre Ungrammatikalität mit den *Complex Event Nominals*.

Die mangelnden anaphorischen Eigenschaften lassen sich dadurch erklären, dass die Th-Adjektive in der nP in situ verbleiben und den Genitiv durch Long Distance Agree überprüfen. Das heißt, dass sie nicht in einer k- Kommando Relation mit der Subjekt Kopie in den subjunktiven Nebensätzen stehen. Aus diesem Grund ist die Kontrolle verboten.

Die Verbindung von den Th- Adjektiven mit den Komplex Event Nomina ist ungrammatisch weil ihr Kasus intern geprüft wird. Laut Cornilescu (2001) werden Kasus und Aspekt gleichzeitig in einer Phrase außerhalb der Nominal Phrase geprüft, Spec, Gen/AspP. Da die Th- Adjektive nur intern den Kasus überprüfen, können sie nicht gleichzeitig den [+ telic] Aspekt der *Complex Event Nominals* prüfen. Deswegen können sie nur mit den *Simple Event Nominals*, die keinen Aspekt aufweisen, vorkommen. Dort können die Th- Adjektive in situ den Genitiv Kasus prüfen und stehen in Long Distance Agree mit der AgreeP.

Des Weiteren wird eine sprachübergreifende Variation zwischen den Ethnischen Adjektiven im Rumänischen und Spanischen, auf der einen Seite, und den Ethnischen Adjektiven im Griechischen, auf der anderen Seite, dargestellt.

Der zweite Teil dieser Dissertation behandelt die zweite Subklasse von Relationalen Adjektiven, nämlich die Klassifikatorischen Adjektive. Im Gegensatz zu den Th- Adjektiven, die immer Argumente von deverbalen Nomen sind, gehören die Klassifikatorischen Adjektiven zu den restriktiven Modifikatoren. Das ist dadurch begründet, dass sie mit *cel* im Rumänischen auftreten können. Laut Marchis & Alexiadou (2009), führt *cel* einen restriktiven Relativsatz mit einer spezifizierenden Funktion ein. Die Klassifikatorischen Adjektive können daher entweder ein Nomen klassifizieren oder ein Verb als Adverb bestimmen. Die zwei Umgebungen in denen Klassifikatorische Adjektive vorkommen, werden anhand verschiedener syntaktischer Analysen dargestellt

Der letzte Teil dieser Doktorarbeit schlägt eine neue Perspektive über die morphosyntaktische Analyse von Relationalen Adjektiven vor. Anhand von Bissetto & Scalises (2005) Klassifizierung von Komposita schlage ich vor, dass Relationale Adjektive sprachübergreifend zwei Typen von Komposita entsprechen, d.h., die Thematischen Adjektive entsprechen den untergeordneten Komposita während die Klassifikatorischen Adjektive, zu den attributiven Komposita gehören. Konkret bespreche ich die Variation zwischen dem Englischen, Rumänischen & Spanischen bezüglich der endozentrischen untergeordneten Komposita und zeige, dass die verschiedenen Strategien, die diese Sprachen für endozentrische untergeordnete Komposita verwenden, immer im Bezug auf den Kasus angewendet werden. Ausführlicher gesagt kann der Kasus des Komplements durch Inkorporation im Englischen, *de* Insertion in den romanischen Sprachen oder durch Thematische Adjektive in den romanischen Sprachen und im Englischen realisiert werden. Im Wesentlichen bringt dieser Ansatz zusätzliche Beweise für die in dieser Dissertation vorgeschlagene Hypothese, demzufolge die Thematischen Adjektive den *de* Genitiv-Argumenten in den romanischen Sprachen entsprechen. Anders gesagt ist die syntaktische Eigenschaft des Kasus für das idiosynkratische Verhalten der Thematischen Adjektive verantwortlich, d.h., ihre mangelnden anaphorischen Eigenschaften, die Ungrammatikalität bezüglich der *Complex Event Nominals* und, nicht zuletzt, die fehlende Inkorporation mit den endozentrischen untergeordneten Komposita in den romanischen Sprachen.

Im Unterschied zu den untergeordneten Komposita drücken die attributiven Komposita eine modifizierende Beziehung aus. Sie können ebenfalls sowohl endozentrisch also auch exozentrisch sein. Ich behaupte, dass die Kl- Adjektive und die *de* Phrasen, die die Gattungsnamen modifizieren, als Fälle von attributiven Komposita angesehen werden sollen, wie zum Beispiel *root compounds* im Englischen. Außerdem wird eine Parallele zwischen den

KI- Adjektiven, die ein Verb modifizieren und den modifizierenden synthetischen Komposita im Englischen gezogen, wie zum Beispiel *quick-falling*.

Trotzdem gibt es viele Eigenschaften von Relationalen Adjektiven, die von den Eigenschaften der Komposita abweichen. Aus diesem Grund finde ich es notwendig, dass ich die Frage anspreche, wie berechtigt es ist, dass man die Relationalen Adjektiven als Komposita betrachtet. Ich bringe eine umfangreiche Reihe von Argumenten, die dafür sprechen, dass die Relationalen Adjektive und *de* Phrasen in den romanischen Sprachen den inkorporierten Komposita entsprechen.

Im Ganzen löst diese Doktorarbeit das Rätsel von Transpositionen und zeigt, dass der duale Charakter Relationaler Adjektive (gleichzeitig) als Nomen und Adjektiv im theoretischen Rahmen der Schnittstelle von Morphologie und Syntax behandelt werden kann.

1. Introduction

This thesis, as indicated by its title, investigates the morpho-syntactic and syntactic properties of Relational adjectives at the Syntax/Morphology interface. More concretely, I provide an analysis of a special case of morpho-syntactic derivation which represents a puzzle for Distributed Morphology i.e., the case of words which have the semantic interpretation of a certain category while exhibiting the formal properties of another one. These structures are regarded as transpositions by Kurylowicz (1936). According to Bally (1965) Relational adjectives are instances of transpositions as they have the morphological shape of an adjective but behave in many respects like nouns.

The theoretical importance of this work is that it provides support for the idea that derivation and compounding represent cases of morphology-as-syntax. Explicitly, it shows that the dual character of Relational adjectives as nouns and adjectives can be syntactically accounted for within the framework of Distributed Morphology.

In both Romance and English literature Relational adjectives have received special attention from the very beginning, due to their apparently idiosyncratic behaviour. In spite of their ambiguous behaviour as nouns and adjectives, different linguists such as Postal (1969), Levi (1978), Bartning (1980), Bosque & Picallo (1996), Fábregas (2007) and Alexiadou & Stavrou (to appear) among others, all shared the opinion according to which, from a semantic and syntactic point of view, Relational adjectives are nouns. This thesis empirically supports the claim that Relational adjectives (apart from adverbial Relational adjectives) are underlying nouns but it brings evidence that they do not have a homogenous syntactic behaviour. Building on Bosque & Picallo (1996), I divide Relational adjectives in two major subclasses: Th(ematic) vs. Cl(assificatory) adjectives and show that this distinction is visible at the semantic interpretation and the word order of Relational adjectives: Thematic adjectives saturate the role of theme for the deverbal noun whereas Classificatory adjectives do not absorb a theta role, they only introduce a domain in relation to which the object is classified (Bosque & Picallo 1996: 369):

- | | | | | |
|-----|----|-----------------------------------|----|----------------------------------|
| (1) | a. | <i>producción automovilística</i> | b. | <i>excursión automovilística</i> |
| | | Th(ematic) Adj. | | C(lassificatory) Adj. |
| | | car production | | car tour |

Note that the adjective *automovilística* can appear as either a Th(ematic) adjective or a C(lassificatory) adjective. The Thematic status of the adjectives in (1a) is triggered by the deverbal nature of the noun. *Producción* is a deverbal transitive NP which lexically licenses a theta role, the theme as the argument of *producción*. The same adjective *automovilística* in (1b) appears this time as a Classificatory-adjective because *excursión* is not a deverbal noun, so it cannot license theta roles.

From a morpho-syntactic viewpoint, the aim of this thesis is twofold: First, in line with Postal (1969), Levi (1978), Fábregas (2007) and Alexiadou & Stavrou (to appear), I present several tests which speak in favour of the denominal nature of Relational adjectives. But Alexiadou & Stavrou (to appear) show that their deficient anaphoric binding properties may represent a counterargument for their denominal nature. Moreover, as seen in (1) they do not represent a syntactically homogenous behaviour i.e., Th-adjectives can be arguments of the noun while Cl-adjectives are predicatives.

Thus, the second goal is to account for this dual behaviour of Relational adjectives, showing that they correspond to two types of bare nouns in Romanian and Spanish, namely to argument bare nouns which are DPs and non-argument bare nouns which act as restrictive modifiers and are NumPs (cf. Dobrovie & Bleam & Espinal 2005, Giurgea 2005). However, both types of bare nouns do not differ from a semantic perspective as they all have a non-specific and non-identificational interpretation. Analogically, all Relational adjectives trigger the same semantic interpretation like bare nouns, i.e., they cannot occur with individual level predicates which can trigger a kind-reading.

From a syntactic viewpoint, I show that a split syntactic analysis of Relational adjectives is highly justified. Th- and Cl-adjectives show a large diversity of differences which are amenable to different syntactic analyses. To begin with, Th-adjectives are arguments of the deverbal nominals, can occur neither in the predicative position and nor with *cel* in nominal ellipses in Romanian and are illicit with complex event nominals. In contrast, Cl-adjectives behave like predicative adjectives, can occur with *cel* and are licit with complex event nominals. In the light of these differences I put forth two hypotheses regarding their syntactic status. First, I claim that those Relational adjectives which show grammatical relations with their head noun correspond to Genitives in Romance. Second, I show that only those Relational adjectives that are non-argumental can occur with *cel* in Romanian. However, the proposed assumptions are not free of complications.

A central part of the thesis, hence, explores the pros and cons of the first hypothesis according to which Th-adjectives correspond to Genitives in Romanian and Spanish. To begin with, there are several properties of Th-adjectives which set them apart from Genitives and must be accounted for: First, unlike Th-adjectives, inflectional Genitives and prepositional Genitives can occur in complex event nominals. Second, unlike Genitives, two Th-adjectives can apparently occur together. (cf. Cornilescu 1995, Cornilescu & Nicolae 2009). Last but not least, unlike Genitives, Th-adjectives cannot control purpose clauses.

One of the major goals of this work is to syntactically illustrate the similarities and differences between Genitives and Th-adjectives in Romance. On the basis of their similarities, I show that Th-adjectives can be analysed on a par with prepositional Genitive arguments by the virtue of the fact that both are arguments of the deverbal noun, have the same unbounded interpretation (mass/plural reading) and the same distribution. Nevertheless, unlike prepositional Genitives, Th-adjectives cannot occur with complex event nominals in Romance. Before setting forth on the exploration of the syntactic status of Th-adjectives, I provide an excursus regarding the distinction between complex event nominals and simple event nominals and types of nominalizations in Romanian and Spanish. Cornilescu's (2001) approach of nominals in Romanian casts more light on the syntactic differences between Genitives and Th-adjectives and provides an answer to the ungrammaticality of Th-adjectives with complex event nominals. Crucially, according to Cornilescu (2001) the + telic aspect of complex event nominals is checked at the same time as Case, in the Genitive CaseP. In other words, the Genitive object of a complex event nominal has to move up to the Case locus in order to check both the Case and the Aspect of the deverbal noun head. Thus, in order to account for the ungrammaticality of Th-adjectives with complex event nominals, I argue that they have a Case-deficient feature. As Th-adjectives are Case-deficient, they are –Referential and cannot serve as event identifier in Spec,Gen/AspP. Therefore, in line with Marchis (2009a, b) and Alexiadou & Stavrou (to appear), I propose that object Th-adjectives are projected as sisters of verbs, and contain a Case-deficient DP which is in Long distance Agree with AgrP (Chomsky 2001). This is why they can occur only with deverbal nouns that lack + Telic aspect and, hence, do not project GenP. Their Genitive case can be checked nP internally through Long Distance Agree with AgrP.

Regarding agent Th-adjective constructions, several tests show that the agent role of the deverbal noun is in complementary distribution with agent Genitives. Nevertheless, in spite of the fact that they absorb the agent role of the deverbal noun, unlike Genitives, they are illicit with complex event nominals. This is due to their Case deficiency. In line with

Alexiadou & Stavrou (to appear), I argue that Ethnic adjectives are dual between adjunct arguments and possessors and are introduced by a semiprojection nP. Crucially, this projection is similar to the applicative phrase in Double Object Constructions with indirect objects in Romance since both involve the same relation of possession. Hence, the analysis I propose for EAs is in line with Alexiadou & Stavrou (to appear) and Marchis (2009a,b), i.e., Ethnic adjectives are merged in the spec nP where they receive the agent role and can check their deficient Case through Long Distance Agree with AgrP. Importantly, this explains the lack of control properties of Ethnic adjectives: Since they remain in locus and check the Genitive case through Long Distance Agree, they are not in a c-command position with the subject copy in the infinitive/ subjunctive purpose clauses and the control is hence illicit.

Another part of my work is dedicated to the second subclass of Relational adjectives, CI-adjectives and draws a parallel between Th-adjectives, on the one hand and predicative adjectives and CI-adjectives, on the other hand. Several tests show that CI-adjectives contrast to their Thematic counterparts not only with respect to their semantics but also to their syntactic analysis. Explicitly, I show that unlike Th-adjectives, CI-adjectives are not arguments of the noun but rather they relate the noun to a domain according to which the NP is classified. Hence, they are restrictive modifiers of the noun. This is highlighted on the basis of several tests, i.e., they do not correspond to Genitives, are predicative, can occur with *cel* and correspond to *de* modifier phrases in Romance.

In the light of all this I propose that a restrictive relative clause stands for the Classificatory adjective that is the right sister of nominal head (NP) with which it forms a complex lexical unit. This is proven by the fact that CI-adjective can occur with *cel* in Romanian, which is argued to introduce a reduced relative clause with a specifying function, rendered in English via the use of e.g. the adverb *namely* (cf. Cornilescu 2005, Marchis & Alexiadou 2009). Hence, the second hypothesis is demonstrated.

A different analysis is given to the structures with e-nominals (complex event nominals) modified by a CI-adjective. On the basis of the interpretation of CI-adjectives with deverbal nouns, I argue that they modify the event underlying the deverbal nominalization. Therefore, they involve an adverbial layer before turning in adjectives. Essentially, the two layers within the structure of CI-adjectives with e-nominal capture both their dimensions: as adjectives agreeing with the nominal and as adverbs modifying the event underlying the deverbal noun.

The last part of my work aims at providing a novel perspective on the morpho-syntactic status of Relational adjectives in Romance. The central idea of this part is that, on the basis of Bisetto & Scalise's (2005) classification of compounds, Relational adjectives in Romance correspond crosslinguistically to two types of Compounding, i.e., Thematic adjectives to subordinate compounds while Classificatory adjectives to attributive ones. Moreover, it provides additional support for the syntactic analysis for Relational adjectives proposed in previous chapters.

Regarding first subordinate compounding across languages, I show that languages employ different mechanisms to build compounds that express a complement relation. More specifically, I discuss the variation between English and Romanian & Spanish in endocentric subordinate compounds, showing that the different strategies employed by languages in this type of compounding are only Case-related, i.e., the Case of the complement can be checked by incorporation in English, *de*-insertion in Romance or Thematic adjectives in Romance and English. Importantly, this approach of subordinate compounding brings more evidence in favour of the hypothesis according to which Thematic adjectives correspond to *de* Genitive phrases in Romance.

Unlike subordinate compounding, attributive compounds express a modification relation, building either endocentric or exocentric compounds. I argue that both CI-adjectives and *de* modifier phrases modifying common nouns are instances of attributive compounds on a par with primary or root compounds in English but with different morpho-syntactic analyses.

For the second context of CI-adjectives with complex event nominals, I argue that they act as modifiers of the underlying event in the e-nominal. I draw a parallel between CI-adjectives and modificational synthetic compounds in English of the type *quick-falling*.

By the virtue of the fact that Relational adjectives have a large number of syntactic properties that set them apart from standard compounds, it is justified to discuss how legitimate it is to consider Relational adjectives in Romance as instances of compounding on a par with incorporation in English. I bring positive evidence for such an approach and, thereby, more support for the hypotheses put forth, according to which Relational adjectives correspond to *de* phrases in Romance, which can be either modifiers or arguments.

The structure of this thesis is as follows: Chapter 2 presents the framework of Distributed Morphology and also its mechanism to deal with the phenomenon of transpositions. In chapter 3 adjectives are semantically classified in two main groups:

Qualifying and Relational and the differences between prototypical adjectives and Relational adjectives are summarized. In addition, on the basis of Radatz (2001), I provide a brief overview on the interpretive effects of Relational adjectives.

Chapter 4 discusses the split classification of Relational adjectives in Thematic and Classificatory adjectives and the major approaches of Relational adjectives in English and Romance literature, such as Postal (1969), Levi (1978), Bartning (1980), Bosque & Picallo (1996), Fábregas (2007) and Alexiadou & Stavrou (to appear).

A morpho-syntactic analysis of Relational adjectives is provided in chapter 5 where I bring evidence for the denominal nature of Relational adjectives (cf. Fábregas 2007 and Alexiadou & Stavrou to appear). However, due to the different syntactic behaviour of Th- and Cl-adjectives, I argue that they are amenable to different morpho-syntactic structures, i.e., Th-adjectives correspond to bare nouns arguments which are DPs in Romance while Cl-adjectives correspond to bare nouns which act as restrictive modifiers.

In chapter 6 I present the distinction between Th-adjectives and Cl-adjectives also from a syntactic point of view, providing a novel analysis of Relational adjectives. More explicitly, unlike Cl-adjectives, Th-adjectives are argued to be DPs corresponding to Genitive DPs while Cl-adjectives, NumbPs realized as restrictive modifiers.

Chapter 7 is dedicated to the syntax of Th-adjectives. By the virtue of the fact that Th-adjectives and *de* prepositional Genitive in Romanian and Spanish show syntactic and semantic similarities, I argue that they should be analyzed on a par. More exactly, I put forth the hypothesis that Th-adjectives correspond to prepositional Genitive in Romance.

The other subclass of Relational adjectives, Cl-adjectives is discussed in chapter 8 where a distinct analysis is provided – they are analyzed as either nominal restrictive modifiers or verbal modifiers.

Chapter 9 provides a parallel account within the framework of Distributed Morphology for Romance Relational adjectives and different types of compounding. Building on the novel classification of compounds proposed by Bisetto & Scalise (2005), I argue that Relational adjectives correspond to two different types of endocentric compounds – subordinate compounds in case of Th-adjectives and *de* prepositional Genitives and modificational compounds in case of Cl-adjectives and *de* modifier phrases.

The last chapter summarizes the results of the proposed approach of Relational adjectives in Romanian and Spanish and offers new insights for further research.

2. The Distributed Morphology Framework

2.1. Introduction

As a point of departure for the new approach of Relational adjectives, I find it necessary to discuss the importance of a theory based on the syntax/morphology interface in contrast to a one which regards “words” as totally belonging to the Lexicon.

In the current linguistic investigation field there are two lines of research which make different stipulations with respect to the status of “words”. The Lexicalist Hypothesis and some other versions of it claim that “words” have a different status in contrasts to phrases. That is: the derivation of words occurs in a different module of the grammar, namely in the Lexicon while the derivation of syntactic objects such as phrases and sentences occur in the syntax. Hence, the hallmark of the Lexicalist approaches is that there is a clearly cut distinction between syntax and morphology and their interface is opaque. Explicitly, they argue that there is no reason to assume that the building of words is systematically parallel to the composition of phrases and sentences.

A second line of investigation proposes that the rules for composing words are the same rules that compose syntactic objects, and consequently they are totally syntactic. Such a stipulation provides a novel perspective over “words”: no distinction is made between words and phrases as both are treated as the output of the same generative system – the syntax (cf. Halle & Marantz 1993, Harley & Noyer 1999, Embick & Noyer 2005 among others). Crucially, this theory regards “words” at the Syntax/Morphology interface and aims at providing answers to some crucial issues regarding the architecture of “words”. First, a theory of the syntax/morphology interface has to respond how “words” and their internal structure are related to the architecture created by the syntax. Second, it has to show how the rules for deriving words and complex words relate to the principles governing the composition of larger syntactic objects. Last but not least, this approach should be able to reveal the manner in which phonological forms relate to the primitives (morphemes) and to the complex objects constructed from the primitives (see Embick & Noyer 2005). Needless to say, this theory pledges for a transparent interface between syntax and morphology as it stipulates that the same generative system is responsible for deriving all syntactic objects.

Halle & Marantz (1993) are the first to propose an alternative approach to morphology, called Distributed Morphology which is meant to show that morphology is not concentrated in a single component of the grammar, but rather is distributed among several

different components. So far, in the traditional literature only stems of the lexical categories such as N, V, A are considered morpheme “pieces” or lexemes while affixes are regarded as the by-product of morpho-phonological rules called word formation rules. Such a traditional affixless approach was proposed by Anderson (1992), Aronoff (1992) and Beard (1991).

Departing from the traditional theory, Lieber (1992) refines the notion of affixes and proposes that like lexical stems, affixes are “morpheme” pieces whose lexical entries relate phonological form with meaning and function. Thus, according to Lieber’s lexical theory, the combining of lexical items creates the word that operates in the syntax.

The alternative theory proposed by Halle & Marantz (1993) represents the third morphological approach, Distributed Morphology which combines the affixless theory with the lexicalist one. Thus, on the one hand, like Anderson (1992), Aronoff (1992) and Beard (1991), Distributed Morphology considers the separation of the terminal elements involved in the syntax from the phonological realization of these elements. On the other hand in line with the lexicalist approach, DM considers the phonological realization of the terminal elements in the syntax to be governed by Vocabulary entries.

In their study, Halle & Marantz (1993) highlight the shortcomings of the precedent approaches. To begin with, according to them, the affixless approach proposed by Anderson (1992) contradicts the current practices in generative syntax where inflections are standardly treated as heads of functional categories and therefore, are terminal nodes. Therefore, the parallelism between the layering of syntax and the layering of phonology is regarded by such an approach as a mere accident of the organization of the word formation rules. The only case that might speak in favour of an affixless theory is the suppletion phenomenon. However, this phenomenon is only marginal not only in English but also crosslinguistically.

Unlike Anderson’s approach, Lieber’s lexicalist approach considers that affixes are morphemes just like lexical items having both phonological and morpho-syntactic features. Essentially, in this approach lexical items combine to create words manipulated by the syntax. However, DM departs from the lexical theory in that it assumes that the assignment of phonological features to morpho-syntactic features takes place after the syntax and does not create or determine the terminal elements manipulated by syntax (Halle & Marantz 1993).

This leads to two fundamental differences between DM and Lieber’s approach: First, in DM terminal nodes are combined by synthetic operations prior to Vocabulary Insertion – so the structure of words is determined by the syntax and not by the subcategorization frames carried by each affix as in Lieber’s approach. Second, in DM the morpho-syntactic features involved in the operation of syntax is not supplied by Vocabulary entries as Vocabulary entries may be

underspecified. In other words, Lieber’s theory assumes that the Vocabulary entries of affixes carry enough features to generate the proper feature structures. In contrast, Halle & Marantz (1993) and their followers support the idea that the principles that govern the building of words are the same as those that govern the composition of syntactic objects.

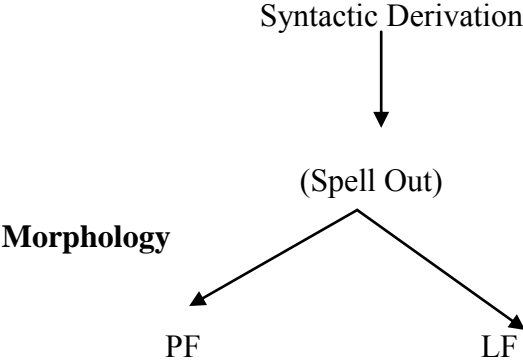
Such an approach that assumes that there is a single generative system responsible for both word structure and phrase structure is the framework of Distributed Morphology. Its assumptions are clear: the only way of combination in the grammar is syntactic and, hence, morphological structure is syntactic structure. By the virtue of this novel perspective over “words”, Distributed Morphology provides a non-Lexicalist perspective on morphology.

This thesis work is intended to show that the composition of Relational adjectives represents a clear case of morphology-as-syntax and brings positive evidence for such an approach. For the purposes of the analysis I propose for Relational adjectives, I outline here the basic principles of the framework of Distributed Morphology.

2.2. The grammar architecture in Distributed Morphology

Unlike the traditional approaches of morphology, Distributed Morphology adopts the basic organization of a “principle-and-parameters” grammar where the Morphological Structure is the interface between syntax and phonology. The architecture of the model of grammar adapted in Distributed Morphology is illustrated below.

(1) The Grammar



Within such an architecture, the syntax consists of a set of rules that generate syntactic structures which are subject then to further operations in the derivation of the PF and LF

interface levels. The stronghold of Distributed Morphology is that every word is formed by syntactic operations such as Merge and Move. Hence, the morphological structure at PF is simply the syntactic structure. However, there are cases where additional PF processes modify syntactic structure. These are the language-specific PF requirements, which may force to introduce features and terminal nodes into the syntactic structure.

The term Distributed Morphology is explained by the fact that this approach assumes that the aspects of word formation arise from syntactic operations such as head movement which belong to the syntax while the other aspects of word formation which may be language specific happened in the PF branch. Thus, the formation work of words is distributed between syntax and PF. Nevertheless, PF processes are not assumed to constitute a separate generative system for deriving words as they only minimally affect the structures generated by the syntax (for further discussion on the minimal requirements of PF consult Embick & Noyer 2005).

2.2.1. *Primitives of Syntax*

Within the Distributed Morphology tradition, *morphemes* are units that are subject to the syntactic operations Move and Merge. They are the terminal nodes of the tree diagrams used to illustrate syntactic constituent structure. Thus, each morpheme is a bundle of features which can be phonological and grammatical or syntactico-semantic. The basic inventory of syntactic terminals is divided into two categories, i.e., abstract morphemes and the Roots. The former are composed only of non-phonetic features while the latter are sequences of complexes of phonological features. According to Embick & Noyer (2005), Roots do not contain or possess grammatical or syntactico-semantic features.

The crucial distinction between abstract morphemes and Roots is that the features that make up abstract morphemes are regarded as universal while Roots are considered as language-specific combinations of sound and meaning (cf. to Embick & Noyer 2005). This distinction is related to that between functional categories and lexical categories.

According to Marantz (1995), Roots never appear alone, they must be always categorized by virtue of being in a local relationship with one of the category-defining functional heads, such as *a*, *v* or *n*. This constraint is stipulated in the categorization assumption:

- (2) ***Categorization assumption***: Roots cannot appear without being categorized; Roots are categorized by combining with category-defining functional heads.

Roots do not possess any grammatical features, so the lexical decomposition of the Roots is impossible. Hence, it is the functional structure in which Roots appear that is decomposed, not the Root themselves. In contrast, abstract morphemes represent the functional categories which must be supplied with a set of phonological features by the end of the computation. This implies that functional heads do not have phonetic content in the syntactic derivation and one of the functions of morphology is to supply phonological features to abstract morphemes. Roots, on the other hand, have available all their features throughout the derivation.

What distinguishes Distributed Morphology from the Lexicalist approaches is that the lists of morphemes presented in the former is fundamentally different from the lists of lexical items that build the Lexicon in the latter approaches.

2.2.2. Vocabulary Insertion

Vocabulary Insertion is called the mechanism used for supplying phonological features to the abstract morphemes. Thus, the Vocabulary is the list of the phonological exponents of the different abstract morphemes of the language, paired with conditions on insertion, i.e., a Vocabulary item refers, then, to such pairing of a phonological exponent with information about the grammatical context.

But what happens when more than one Vocabulary item meets the conditions for insertion at a particular node?

Halle (1997) shows that the Subset Principle controls the application of Vocabulary Items and can resolve most cases of competition:

- (3) **Subset Principle**: The phonological exponent of a Vocabulary Item is inserted into a position if the item matches all or a subset of the features specified in that position. This implies that insertion does not take place if the Vocabulary Item contains features not present in the morpheme. Where several Vocabulary Items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal node must be chosen. (Halle 1997).

To summarize, on the basis of the assumptions of Distributed Morphology, all derivations are performed in the grammar whereby three distinct lists are accessed (Harley & Noyer (1999), Embick & Noyer (2005)):

- i. **The Syntactic Terminals:** Roots and Abstract Morphemes
- ii. **the Vocabulary:** Vocabulary Items that provide phonological content to abstract morphemes.
- iii. **the Encyclopaedia:** the list of semantic information that must be listed as a property of a Root.

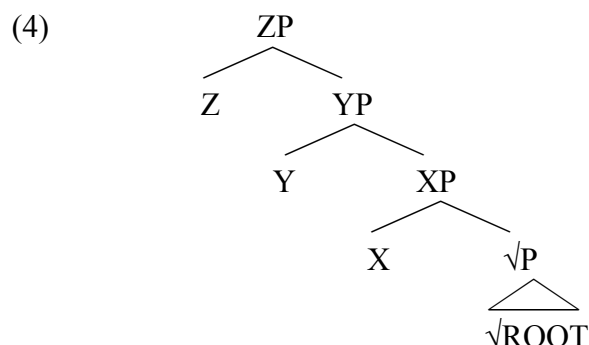
Crucially, these lists are accessed at distinct stages of the derivation: Items are drawn from the list of Syntactic Terminals in the syntactic derivation. The Vocabulary is consulted at PF, and contains the rules that supply the phonological exponents to abstract morphemes. The third list, Encyclopaedia refers to the inventory for the meanings of Roots or of larger objects. This component is consulted at the output of PF/LF.

In line with Harley & Noyer (2000), terminal nodes come in two varieties: f-morphemes and l-morphemes which correspond to the distinction between feature bundles or abstract morphemes and Roots. If we previously assumed that the abstract morphemes or f-morphemes are universal while Roots are considered as language-specific combinations of sound and meaning, Roots must be then related to Encyclopaedia, which is in charge of relating Vocabulary Item to meanings. As above mentioned, the Encyclopaedia is the list of idioms in a language. In the DM tradition, the term *idiom* is used to refer to any expression whose meaning is not wholly predictable from its morpho-syntactic structural description (Marantz 1995, 1997). Hence, l-morphemes are always idioms while f-morphemes are not. Consequently, the term of “lexical item” lost its significance in DM as nothing can be said to be “lexical” or “lexicalized”. In DM such an expression is an idiom and requires an encyclopaedic entry. Nevertheless, morphemes smaller than wordsize may have particular interpretations but also complex words may be equally idiomatized (cf. Harley & Noyer 2000).

2.3. A Transparent Interface between Syntax and Morphology

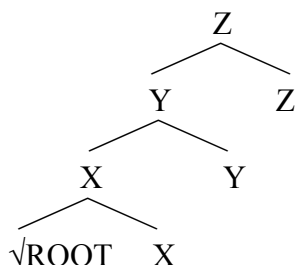
The essence of the Distributed Morphology approach is that morphology is totally syntactic and, hence, there is not such syntax/morphology interface as words and phrases are created by the same generative system, they are derived by the rules of syntax.

The major syntactic process of creating complex heads is head movement:



Importantly, each of X, Y or Z could be linearized as a prefix or a suffix, producing Z-Y-X-√ROOT or Z-√ROOT Y-X etc. Thus, a complex head has the following structure created through syntactic head movement:

(5) Complex Head



According to Embick & Noyer (2005), the internal structure of the word corresponds to the syntactic structure. So the linearization of the heads is constrained by the hierarchical structure, explicitly by the Mirror Principle (cf. Backer 1985, 1988) according to which the order of the affixes mirrors the syntactic hierarchy of projections. Moreover, this principle has the merit of showing how syntactic structure and morphological structure relate to one another.

Moreover, Marantz (1997, 2001) assumes that words can be built in one of the two ways: either in the domain of a root, by attaching a morpheme to the root before attaching the functional head that determines the syntactic category of the word or outside the domain of the functional head that determines syntactic category:



Nevertheless, there are cases when the order of morphological elements is not equivalent to the syntactic order. In order to account for the syntax/morphology mismatches, Embick & Noyer (2005) propose that the set of PF operations is responsible for these deviations from the default case. Thus, one of the tasks of the morphological theory is to identify PF operations and the conditions under which these processes apply. However, Embick & Noyer (2005) stress that the operations that apply at PF are minimal readjustments that are motivated by language-specific requirements.

2.3.1. Ornamental Morphology: Insertion of Nodes/Features

Embick & Noyer (2005) assume that all morphemes and interpretable features that are present at PF are not necessarily present in the syntactic derivation. That is certain morphemes that are demanded by language-specific well-formedness requirements are added only at PF. Crucially, these morphemes are never essential to semantic interpretation. Therefore, they are considered to be only ornamental as they introduce syntactic-semantically unmotivated structure and features.

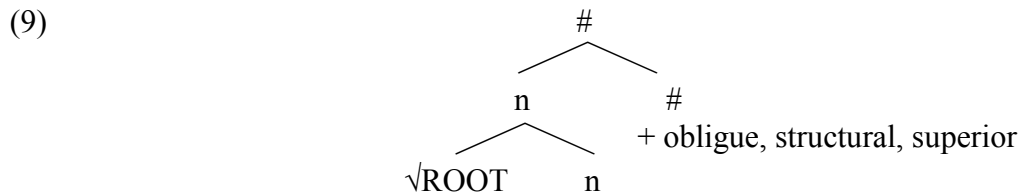
A common example of this type of morpheme is Agreement (AGR) nodes where morphemes are added after syntax. The addition of nodes may introduce a kind of syntax/morphology mismatch as there are more positions in the morphological structure (PF) than in the syntactic one. Another kind of mismatch involves the introduction of features at PF. According to Embick & Noyer (2005), the primary mechanism to introduce features at PF is Vocabulary Insertion where the phonological features of Vocabulary Items are added to abstract morphemes. Apart from this, there are other cases in which PF rules add non-phonological features which have an impact on Vocabulary Insertion. An instance of this is morphological case features.

A crucial assumption made in Embick & Noyer (2005) is that Case features are absent in syntax and are inserted at PF, conditioning the choice of Vocabulary Items expressing Case. In spite of the fact that Case features might refer to properties of syntactic structures, they are not syntactic features. Hence; they are added to nodes at PF under specific

conditions. Let us illustrate an example: Nouns can appear within DPs to which (to D heads) Case features can be added at PF (cf. Marantz 1992 and McFadden 2004):

(8) $D \rightarrow D$ (case features)

Embick & Noyer (2005) propose that Case features can be added directly under the # node:



All in all, there are cases in which both morphemes and features that are not present in the syntax are inserted by rules of PF. These ornamentations of the syntactic structure introduce redundancy into the PF expression but cannot eliminate or alter which is crucial for semantic interpretation (cf. Embick & Noyer (2005))

In order to technically deal with the information added at PF, Embick (1998) and Embick & Noyer (2005) refer to this material as *dissociated*. This term is intended to show that such material is an indirect reflection of certain syntactic morphemes, features or configurations but not the actual spell-out of these. There are *dissociated features* referring to features added under specified conditions at PF and *dissociated nodes* referring to nodes added to a structure under specified conditions at PF.

Essentially, nodes that are featureless get their features to agreement or concord processes. A clear distinction must be made between *copying features and introducing features* at PF. Explicitly, within Embick & Noyer's (2005) approach, a feature that is present on a node X in the narrow syntax is copied onto another node Y at PF while a feature that is not present in narrow syntax is added at PF. For instance, the introduction of Case features, constitutes a case of feature introduction since these features are irrelevant to semantic interpretation. That means that only features that are not interpretable can be introduced at PF (cf. Embick 1997, 2000).

In order to account for the mapping between morphology and syntax, certain additional operations need to occur prior to spell-out. Impoverishment (see Bonet (1991) eliminates features from morphemes prior to Vocabulary Insertion and creates certain types of systematic syncretism. Apart from that, fission is one operation that permits the insertion of more than one Vocabulary Item at a single syntactic terminal.

To conclude, the approach proposed by Distributed Morphology, in detail discussed in Halle & Marantz (1993), Harley & Noyer (2000) and Embick & Noyer (2005) among many others, is based on the assumption that there is a single generative component – the syntax – which is responsible for the constructions of syntactic objects.

This thesis is meant to provide additional support for the idea that certain morphemes such Agreement (AGR) nodes or Case features are added after syntax as they are demanded by language-specific requirements and are never essential to semantic interpretation. A specific case of syntax/ morphology mismatch is the status of Relational adjectives as nouns in the syntax and adjectives in the morphological structure (PF). In the spirit of Embick & Noyer (2005), I argue that the Case features of Thematic adjectives are relevant only at PF, conditioning the choice of Vocabulary Items expressing Case. More explicitly, the deficient Case features of Thematic adjectives are valued only at PF, conditioning the choice of introducing the Agreement node (AGR) where the noun turns into an adjective through suffixation or introducing the Case feature Genitive which is spell-out as *de* preposition in Romance languages. But does the mechanism of Vocabulary Insertion know how to make the right choice between the two Vocabulary Items, i.e., adjectival suffix and the spell-out of *de*?

In line with Halle (1997) I assume that the Subset Principle in (3) resolves this case of competition. By the virtue of the fact that the phonological exponent of a Vocabulary Item is inserted into a position if the item matches all or a subset of the features specified in that position, the adjectival suffix cannot be inserted in a position where a full specification for structural Case is required. As chapter 7 and 9 will show, fully specified Case is needed only to satisfy the aspectual properties of complex event nominals. In these cases, the *de* Case preposition is spell-out. This proposal has the merit of explaining the puzzling empirical facts in Romance literature which show that Thematic adjectives are illicit with complex event nominals. As predicted by Embick & Noyer's (2005) approach, no semantic difference is perceived between Thematic adjectives and *de* Genitives in Romance. This supports once again the idea that the introduction of Case features in case of *de* Genitives or the introduction of Agreement features for Thematic adjectives are irrelevant to semantic interpretation.

Another theoretical goal of this thesis is to show that derivation and compounding represent cases of morphology-as-syntax. On the basis of the novel classification of compounds proposed in Bisetto & Scalise (2005), I provide support to their approach according to which compounds universally involve a grammatical relation between the two constituents. In the light of this hypothesis, I regard Relational adjectives in Romance as

crosslinguistically corresponding to two types of Compounding, i.e., Thematic adjectives to subordinate compounds while Classificatory adjectives to attributive ones.

All in all, in spite of the fact that Relational adjectives, as cases of transpositions, represent a central puzzle for DM due to their syntax/morphology mismatches, this thesis will show that the dual character of Relational adjectives as nouns and adjectives at the same time can be syntactically accounted for within the Framework of Distributed Morphology.

3. Qualifying vs. Relational Adjectives

3.1. *The classification of adjectives as prototypical vs. marginal*

As a point of departure, I start with the traditional distinction between prototypical adjectives/core adjectives and marginal adjectives. A more detailed classification of adjectives is able to cast light on the semantic and morpho-syntactic differences between the two classes. For the purpose of this study, however, I regard only the subclass of Relational adjectives as part of the larger group of marginal adjectives.

Radatz (2001) describes prototypical adjectives as morphologically simple lexemes, which means that they do not come into being by means of derivation from substantives or other word classes. Another property of core adjectives is that they are semantically mono-dimensional and, therefore, they can appear both in the prenominal and the postnominal position:

- (1) a. *una (bonita) mariposa bonita/que es bonita* Spanish
b. *un (frumos) fluture frumos/ care este frumos* Romanian
a beautiful butterfly/ which is beautiful

In contrast, marginal adjectives cannot occur in the prenominal position. More than that, it seems that they have a strict word order with respect to the noun head:

- (2) *una comedia musical americana* Spanish
o comedie muzicală americană Romanian
an American musical comedy

Note that the string of postnominal adjectives in the Romance languages constitutes a mirror image of their counterparts in English. Moreover, the adjacency of Relational adjectives with respect to N is the same irrespectively of whether the adjectival string appears at the right of N, as in Romance languages, or at its left, as in English.

- (3) a. **una comedia divertida musical americana*
b. **o comedie distractivă muzicală americană*
a comedy amusing musical American

Moreover, within the class of marginal adjectives, Relational adjectives do not show a homogenous behaviour with respect to their acceptability in the predicative position:

- (4) a. *Această analiză este sintactică.*
Este análisis es sintáctico.
 This analysis is syntactic.
- b. **Consumul este alcoolic.*
**El consumo es alcohólico.*
 The consumption is alcoholic.

Another property of Qualifying adjectives is that they are semantically mono-dimensional and, therefore, they can be graded.

- (5) a. *un vaso grande/ muy grande/ grandísimo* *Spanish*
- b. *un pahar mare/ foarte mare/ extrem de mare* *Romanian*
 a big glass/ a very big glass/ an extremely big glass

In contrast, this is illicit with Relational adjectives:

- (6) a. *el coche presidencial/ *muy presidencial / *presidencialísimo*
- b. *o mașină presidențială/ *foarte presidențială / *extrem de presidențială*
 a presidential car/ *a very presidential car/ *an extremely presidential car

Thus, another feature that distinguishes prototypical adjectives from Relational adjectives is that they can be graded.

In addition, some Relational adjectives not only fail to appear in comparative and superlative forms but also do not preserve the property of adjectives to agree with nouns in gender. This phenomenon can be observed only in Spanish since there are some Spanish Relational adjectives which do not agree in gender with the noun; for instance if we take the Relational adjective *presidencial*, it can be noticed that it preserves the same suffix even if it occurs with a feminine noun: *un coche (masculine) presidencial* and *una actitud (feminine) presidencial* which means “a presidential attitude”.

Due to these consistent differences between Qualifying and Relational adjectives, I argue that they differ from a syntactic, semantic and a morphological perspective.

This is illustrated on the basis of a brief overview on the general properties of Relational adjective according to three major criteria, i.e., the morphological, semantic and syntactic characterization.

a. Morphological characterization:

The morphological characterization demonstrates that Relational adjectives do not belong to the core domain of the adjective class because they come into being through the process of trans-categorization from other parts of speech, normally from nouns.

Relational adjectives usually derive from noun roots to which derivational suffixes are added. The most common suffixes to build Relational adjectives in Spanish are *-al*, *-ar*, *-ario*, *-ico*. For instance the Relational adjective *manual*, which modifies the noun *trabajo* in Spanish, *munca* in Romanian and “work” in English, is built from the noun root *manu* which derives from the Spanish noun *mano* and in Romanian from the noun *mâna*, meaning *hand*, and the derivational suffix *-al*.

b. Semantic characterization:

The main property of Relational adjectives is that in the “transcategorizational process” they undergo, they preserve the entire semantics/meaning of the nouns from which they derive (Radatz 2001: 96). This means that Relational adjectives show the same semantic characteristics like the nouns and their role is to bind two nouns to one to another. For instance, in *trabajo manual* in Spanish or *lucru manual* in Romanian which means *manual work*, the noun *trabajo* and the noun *lucru* are bound to another noun, namely *hand*.

The entire nominal phrase is interpreted as “a work made with the help of hands”. Moreover, Relational adjectives can be paraphrased with a prepositional phrase:

(7)	<i>una reforma constitucional</i>	<i>Spanish</i>
	<i>o reformă constituțională</i>	<i>Romanian</i>
	a Constitutional reform	

In all these examples the paraphrase of the noun phrase would be “a reform made with respect to Constitution”. Taking this into account, one can easily deduce that the Relational adjective does not function as an adjective in the phrase but either as a nominal argument or modifier.

Therefore, Relational adjectives are quite far away from the adjectival prototype – they do not present any properties but rather they classify the noun or they create the relation of the noun to another noun. For instance, in the expression *una reforma constitucional*, the Relational adjective does represent a property of the noun *reforma* but rather it describes a certain class of reforms. Bartning (1980) does not consider Relational adjectives as having adjectival character as, therefore, he calls them “pseudoadjectifs denominaux”. According to Radatz (2001) this formulation of Relational adjectives is rather radical as they also possess a number of properties atypical for nouns such as their synthetic combination with a referential noun. In Romance where nominal compounds are hardly built, nouns have the possibility to combine with prepositions such as *de* or *a* and, additionally, in order to avoid the monotony of the over-usage of prepositional phrases, Relational adjectives are preferred (cf. Radatz 2001).

To support this, according to Radatz (2001) Relational adjectives in Romance almost always correspond to nominal compounds in German:

- (8) a. *vaca lechera* - *Milchkuh*
 milk cow
 b. *vestimenta real* - *Königskleidung*
 royal garment

Hence, the morphological bi-composition of Relational adjectives is reflected in the semantic structure. Radatz (2001) explains that the nominal base holds the referential content of the expression while the Relational adjective maintains the entire semantics of the initial nouns from which the adjective was derived.

c. Syntactic characterization:

Relational adjectives are always postnominal but they can turn into Qualifying adjectives if they move in the prenominal position.

- (9) a. *una lesión muscular* *Spanish*
 b. *o leziune musculară* *Romanian*
 muscular lesion

- (10) a. *un atleta musculoso / un musculoso atleta* Spanish
 b. *un atlet musculos / un musculos atlet* Romanian
 a muscular athlete

In (10) the adjective *muscular* respectively *musculara* has a relational status because *muscular musculara* can be paraphrased with a prepositional phrase such as *una lesion de musculos* in Spanish or in Romanian *o leziune a mușchilor* meaning “a lesion of muscles”. Another evidence for their relational status is their postnominal position in Spanish and Romanian as they cannot appear in the prenominal position.

In contrast to the above mentioned adjectives in (9), the adjectives in (10) describe a quality and have the descriptive function of defining the athlete. They are semantically simple and do not derive from other parts of speech. Hence, they are considered by Radatz (2001) to be prototypical adjectives belonging to the core class of adjectives.

Due to the substantival character of Relational adjectives, Radatz classifies them as marginal adjectives or “denominal pseudo-adjectives” (cf. Barning (1986) and Radatz (2001)).

Furthermore, unlike Qualifying adjectives, Relational adjectives cannot be asked using interrogative pronouns such as “how” as it would give birth to a semantic anomaly:

- (11) a. ?? *Comment etait l'intervention?* French
 How was the intervention?
 b. ??? *Chirurgicale* French
 Cirurgical?

The explanation for this is linked to the fact that Relational adjectives which do not present a property but rather class affiliation. Hence, they respond to interrogative pronouns such “what kind of”:

- (12) a. *Quelle classe d'intervention etait-ce?*
 What type of intervention was ?
 b. *C'etait une intervention chirurgicale*
 It was a cirurgical intervention

In fact “relational” or “qualifying” do not necessarily represent properties which are inherent to an adjective but they rather represent basically two different ways in which an adjective can modify its referent noun. In general, it is the case that Relational adjectives allow a qualifying interpretation but a Qualifying adjective can never acquire a relational interpretation. Theoretically, a Relational adjective can be transcategorized into a Qualifying adjective by simply turning it into a prenominal adjective. If this process of transcategorization happens with high frequency then the prenominal reading will be the unmarked for this adjective.

In this respect, Schweickard (1992) talks about the grad of lexicalisation for adjectives, which can go so far that the conscious that the word was derived from a proper name disappeared. Examples for these lexicalisations are adjectives such as *diabolic* or *sadistic*. The reverse process also exists, namely the process of delexicalisation, for instances *simpatico*, *maternal* or *popular*.

In the next section, basing on the abstract semantic classification of adjectival modification proposed by Radatz (2001), I discuss in more detail the semantics of Relational adjectives versus Qualifying adjectives.

3.2. Three abstract types of adjectival modification: absolute, relation and synthetic

Apart from the usual classification of adjectives, Radatz (2001) presents a more abstract account of adjectives, trying to offer a more unified view over the semantics of adjectives. According to his view, the adjective and the noun form a unified concept, and therefore, the relative position of the adjective with respect to the noun may trigger different interpretive effects. Radatz has good reasons to regard the semantics of the combination noun – adjective as a key factor in the phenomenon of the relative position of adjectives. More explicitly, an adjectival positioning (N A or A N) is invalid due to the fact that the combination of adjective and noun does not lead to a contextually meaningful concept (Radatz (2001): 65).

Moreover, the concept created by the combination of adjective and noun should be integrated in a context and a simple classification of adjectives is not able to perform this task. For this reason, Radatz pays attention to the semantics which goes beyond the semantics of isolated adjective. He bases his theory on the principle of compositionality of lexical unities. In contrast to nouns and verbs, adjectives have different ways to form semantic concepts with the noun they modify. The most basic type of modification is the absolute combination

between an adjective and a noun like in the example *a red car*. Absolute modification analyses the NP modified by the adjective as an intersection between the intension of the noun and the adjective. In other words, the adjective and the noun merge into a new complex concept, more than just a simple addition of semantic features. The most important characteristic of adjectives is that in contrast to nouns, which can refer alone to denotations, they always have to establish a relation to a nominal concept and for this reason, in a specific context, they can be closer or farther from their prototype which is defined in dictionary (Radatz 2001: 68). However, an important question remains for us to be answered: how is created the overall meaning of the NP out of the isolated meaning of its components?

The traditional response to this question would be that the adjective has the function to select out of the list of all possible referents those subsets of referents which correspond to the semantic features of the adjectives. According to this definition, there would be only one type of modification and only two factors for us to take into account, namely the intension of the noun and of the adjective.

Let us take into account the following example:

(13) a small elephant

With this example Radatz (2001) demonstrates that there are also two further factors which are relevant for the semantics of the combination of noun and adjective, namely, on the one hand, the contextual and encyclopaedic knowledge and, on the other hand, the conceptual nature of the combination between N and A. For instance, the above example illustrates that the interpretation of the mass adjectives like “small” depends on extra-linguistic knowledge, such as the usual size of an elephant. In other words, the adjective “small” from this set phrase can be interpreted only by taking into account the definition of the elephant.

The other factor which plays an important role for the semantics of the combination between adjective and noun is presented by Zeno Vendler in his famous typological study about English adjectives. The main issue of his study is to respond to the question: In how many ways can the adjectives be combined with the nouns they modify? The main difference is made between *absolute vs synthetic* modification. In the case of the absolute modification, the property represented by the adjective is a simple predicate, which does not depend on the intension of the noun it modifies. Unlike the absolute modification, the synthetic modification implies that the property which the adjective carries is closely connected to the meaning of the modified noun.

The essential issue for this study is that most adjectives have more than one reading and, therefore, we do not have to do with an inherent property of an isolated noun but rather with a specific reading which depends on the type of combination with a noun (Radatz (2001): 71).

3.2.1. *Absolute vs. Synthetic modification*

Quine (1960) presents the semantic derivation of the absolute reading and assumes that nominal phrases modified by an absolute adjective form “composite terms” whose predication is true only if the predication of its components is true (Quine (1960):103). For instance, if *X is a blue butterfly* is true, then *X is a butterfly* and *X is blue* must be true at the same time. In this case the adjective *blue* receives an absolute interpretation. In order to highlight more the absolute modification, let us consider the following example:

(14) chemical cleaning

In the above example, the prototypical meaning of the adjective *chemical* is lost due to the fact the predication of the construction does not allow the same derivation as in the case of *blue butterfly*. *Chemical cleaning* is true if *X is a cleaning* but not if *X is chemical*. This implies that the prototypical meaning of the adjective *chemical* is lost in the expression *chemical cleaning*.

Moreover, another parameter relevant for the synthetic modification is the nature of the noun. Radatz (2001) claims that the synthetic modification is associated with the verb class. Therefore, agents such as “dancer” or “cook”, which derive from verbs, receive automatically a synthetic interpretation when they are modified by adjectives such as “good”. For instance, “a good dancer” is not a dancer and a good person but rather a person who dances well. Analogically, I argue that those Relational adjectives that modify the event underlying the deverbal nominal show a synthetic modification:

- (15) a. *demonstrarea matematică a teoremei de către Ion.* Romanian
 b. *la demonstraci3n matemática del teorema por parte de Juan.* Spanish
 the mathematical demonstration of the theorem by Juan

In the example above, the Relational adjective modifies the event of demonstrating the theorem as the noun is a complex event nominal. This is highlighted also by the fact that in Romanian, the Relational adjective has the same form like the adverb modifying a verb:

- (16) a. *Ion a demonstrat matematic teorema.*
 John demonstrated mathematically the theorem.

Another difference that can be noticed in the absolute modification is that the prototypical property of the absolute adjective is available for all the hyperonyms of the noun, for instance *a blue butterfly* is a blue fly, and a blue animate subject, while *a chemical cleaning* is neither a chemical task, nor a chemical subject. According to Radatz (2001) this represents the most reliable test for the difference between *absolute vs. synthetic* modification. The distinction between these two types of modification is reflected in the different semantics of Relational adjectives versus Qualifying ones.

3.2.2. *Relational modification*

Apart from the absolute and the synthetic modification, there is another type of modification, which is also characterizing and occurs with Relational adjectives. Radatz (2001) considers this type of modification a special case of synthetic reading due to the fact that both types of modification depend on encyclopaedic and contextual information. However, they resemble also the absolute adjective as they do not change their semantic information in any context. The most important feature of relational modification is that it involves only Relational adjectives not prototypical adjectives like in the case of synthetic modification.

- (17) a. *una reforma constitucional* - *una reforma de la constitución*
 b. *o reformă constituțională* - *o reformă a constituției*
 a Constitutional reform - a reform of constitution

Relational adjectives can be paraphrased as prepositional phrases and receive a synthetic interpretation due to the fact that their semantics is not established by the intersection between the set of nouns and the set of denominal adjectives. The interpretative

effects of Relational adjectives in Romance is properly illustrated by German, a language in which the entire construction appears as a compound.

- | | | | | |
|------|----|-----------------------------------|---------------------|----------------|
| (18) | a. | <i>Verfassungsreform</i> | <i>Milchkuh</i> | <i>German</i> |
| | b. | <i>una reforma constitucional</i> | <i>vaca lechera</i> | <i>Spanish</i> |
| | | a Constitutional reform | milk cow | |

According to Quine (1960) the noun modified by an absolute adjective builds composite terms, whose predication is true only if the predication of their components is true. This means that the predication X is a white Mercedes is true if X is a Mercedes and if X is white. As previously shown, this is not the case for expressions such chemical cleaning as *a chemical cleaning* is true if X is a cleaning but not X is chemical. The specific meaning of the adjective chemical from the expression *a chemical cleaning* is lost when this adjective is separated from the noun while the meaning of white remains the same.

Hence, one could say that the relational modification represents only a special case of synthetic modification. Nevertheless, by the virtue of the fact that Relational adjectives do not show a homogenous behaviour, this is only partially true. First, Relational adjectives always represent cases of transcategorisation of elements from other words, in most cases from nouns. This explains also their name as “relational” since relational adjectives do not express properties but rather they relate the noun to another nominal concept. Nevertheless, some Relational adjectives (Classificatory adjectives within Bosque & Picallo’s terminology) are closer to adjectives than others:

- | | | |
|------|----|----------------|
| (19) | a. | Italian bag |
| | b. | Italian attack |

Notice that in (19a) the Relational adjective “Italian” classifies the noun with respect to its origin, it represents more or less a property of the bag like in the case of Qualifying adjectives. In contrast, the same Relational adjective in (19b) is not understood as classifying the attack but rather it stands for the agent of the event of attacking. The distinction between the two readings of the Relational adjective is related to the nature of the noun, i.e., deverbal noun vs. common noun.

On the basis of the classification between *synthetic vs. relational* modification, I argue that those Relational adjectives that occur with deverbal nouns take part in a synthetic

modification of the type *a good dancer* where *good* does not refer to the character of the dancer but rather to the fact that that dancer dances well. This is the case of Relational adjectives as in *interpretarea matematică a teoremei* “the mathematical interpretation of the theorem”. Hence, the adjective *matematică* does not refer to the result noun “interpretation” but rather to the act of interpreting the theorem.

Nevertheless, there are also other Relational adjectives which do not enter in any kind of modification with the deverbal noun but rather they behave either as the agent or the object of the verb from which the noun is derived:

- (20) a. *producția petrolieră* b. *atacul american*
 producción petrolera *el ataque americano*
 oil production the American attack

Importantly, in line with Bosque & Picallo (1996), Alexiadou & Stavrou (to appear), Marchis (2009) and many others, these types of Relational adjectives do not modify the noun. This is highlighted by the fact that they are illicit in the predicative position:

- (21) a. **Producția este petrolieră* b. **Atacul este american*
 **La producción es petrolera* **El ataque es americano*
 The production is oil. The attack is American

Crucially, these kinds of Relational adjectives that seem to be the arguments of the deverbal noun should not be confused with event modifiers like in (16), repeated below:

- (22) a. *demonstrarea matematică a teoremei de către Ion.*
 b. *la demostración matemática del teorema por parte de Juan.*
 the mathematical demonstration of the theorem by Juan

The major test to distinguish between argumental Relational adjectives and event modifier Relational adjectives is that only the latter can occur with complex event nominals in Romance of the type presented in (23):

- (23) a. **producția petrolieră de către Venezuela*
b. **producción petrolera por parte de Venezuela*
oil production by Venezuela.

In the light of all these tests, one can realize that Relational adjectives do not build a homogeneous class. So far we detected a three way distinction: argumental Relational adjectives which cannot occur with complex event nominals but behave like the agent or the object of deverbal nouns, event modifier Relational adjectives which can occur with complex event nominals and modify the event underlying the complex event nominals and nominal modifier ones which modify only common nouns. Crucially, on the basis of Radatz's (2001) three way semantic distinction of adjectival modification, I argue that unlike event modifier and nominal modifier Relational adjectives, those Relational adjectives which behave like arguments of the deverbal noun as in (20) do not enter in a modification relation to the head noun. In contrast, event modifier Relational adjectives participate in a synthetic modification with the deverbal head by the virtue of the fact that this type of modification involves event modification as in *good dancer* while nominal modifier Relational adjectives are in a relational modification relation to common nouns as they relate the noun to another nominal concept.

In the following chapters I show that the different semantic effects observed above in the behaviour of Relational adjectives are syntactically motivated. Crucially, grammarians from different schools have considered Relational adjectives to be a heterogeneous class where one and the same adjective comes in different disguises: as event modifier similar to adverbs, as arguments of the deverbal nouns or as nominal modifiers on a par with predicative adjectives. Hence, the next chapter is dedicated to the classification of Relational adjectives in the literature from different schools and from widely different points of view.

4. An Overview on the Classification of Relational Adjectives

In the literature Relational adjectives have received special attention from the very beginning due to their apparently idiosyncratic behaviour. In spite of their ambiguous behavior as nouns and adjectives, different linguists such as Postal (1969), Levi (1978), Bartning (1980), Bosque & Picallo (1996) and Fábregas (2007) all shared the opinion according to which, from a semantic and syntactic point of view, Relational adjectives are nouns.

For instance, Postal (1969)'s hypothesis for Relation adjectives (pseudo-adjectives in his terminology) is that they must be transformationally derived from underlying nominals. He used several tests in order to demonstrate the denominal nature of Relational adjectives: Coordinate Structure and Command Constraints, Equi-NP Deletion, Super-Equi- NP Deletion, Reflexivization, Symmetrical Pronoun Elision and anaphoric transformations.

In the spirit of Postal (1969), Levi (1978) was in favour of a transformational analysis of Relational adjectives (nonpredicating adjectives in her terminology), showing that they express the same properties like nouns: nondegreeness, conjunction of like constituents, countability, semantic classes, case relations, and nominalization. Like Postal and Levi (1978), Bartning (1980) regards the class of pseudo-adjectives as a distinctive subset of adjectives, sharing properties more with nouns than with adjectives. However, he departs from his predecessors who propose a transformational analysis for these adjectives. The merit of his approach is that he presents two novel criteria which are essential for the syntax of pseudo-adjectives in French, i.e., the interdependence of the grammatical relations between the pseudo-adjective and the noun and the predicativity of the adjective. Analogically, Bosque & Picallo (1996) show that a two-way distinction of Relational adjectives is visible also in Spanish, i.e., argument-like Relational adjectives and predicative Relational adjectives. In the light of this distinction, Bosque (1993), Bosque & Picallo (1996) proposed a split classification of Relational adjectives, i.e., Th-adjectives are regarded as arguments of the verbal noun vs. Classificatory adjectives as restrictive modifiers. Regarding the latter, in the same spirit, Fábregas (2007) argues that those Relational adjectives that do not occupy theta-roles correspond to PPs.

A further development in the study of Relational adjectives is provided by Alexiadou & Stavrou (to appear) who discuss the ambiguous nature of a subset of Relational adjectives, namely Ethnic adjectives which exhibit a hybrid nature, sharing properties of both nouns and adjectives. Essentially, Ethnic adjectives correspond to Th-adjectives that encode a thematic role assigned to them by the noun they modify. By contrast, the homophonous counterpart of

Ethnic adjectives, (Classificatory adjectives according to Bosque & Picallo's classification) are predicative adjectives, - hence they are analyzed as "deep" adjectives

All in all, the purpose of this section is to present how Relational adjectives are regarded in the literature, starting from a semantic perspective to a more syntactic one and to put forth arguments in favour of a split classification of Relational adjectives.

4.1. Postal (1969)

Paul M. Postal is one of the few linguists who dedicated himself to analysing Relational adjectives as a distinctive set. He focuses exclusively on the set of "Proper Pseudo-Adjectives" - that is those "pseudo-adjectives" which must be derived from proper nouns, as *American refusal* or *Persian application*. It looks like that Postal uses the term "pseudo-adjective" to denote Levi's term of "nominal nonpredicating adjectives" or Bosque& Picallo's term of Relational adjectives.

Postal's hypothesis for the pseudo-adjectives is that they must be transformationally derived from underlying nominals. The main arguments to support his claim are anaphoric relations and constraints on NPs. He puts forward the following arguments: Coordinate Structure and Command Constraints, Equi-NP Deletion, Super-Equi- NP Deletion, Reflexivization, Symmetrical Pronoun Elision and anaphoric transformations.

According to Postal, a theory which speaks against the nominal source of pseudo-adjectives would have to state these 13 principles twice – once for all nominal phrases and for pseudo-adjectives and no doubt this theory would be completely uneconomical.

Apart from these, Postal receives support in his thesis by the fact the NPs and their corresponding pseudo-adjectives occur in complementary distribution. He claims:

If pseudo-adjectives do not have a nominal derivation, a special statement of syntactic restrictions will be required to handle facts like those:

- (1)
 - a. the invasion of France by America
 - b. France's invasion of America
 - c. the French invasion of America

- d. *the French invasion of America by Portugal
- e. *France's French invasion of America

That is the PPA French in such cases in complementary distribution with the genitive NP/by phrase NP, that is, with the agent NP. Under the proposal of nominal derivation, this is an automatic consequence (Postal (1969): 220)

Postal claims that the same principle of complementary distribution obliges us to offer different Case relations. Moreover, our capacity of understanding the data depends on the generalizations expressed in terms of semantic Case relations.

Levi (1978) extends Postal's data on Ethnic pseudo-adjectives to Relational adjectives derived from common nouns and reveals that they show the same complementary distribution with the Genitive NP:

- (2) a. Agentive: a judicial attack on bureaucrats/ *by bureaucrats/*by judges
- b. Objective: literary criticism by professors/ *of music/ * of literature
- c. Locative: an aerial attack on the missile sites/*under the ground
- d. Instrumental: aural comprehension of Swahili/* using the eyes
- e. Possessive: presidential power over appropriations/ * of senators

(Levi 1978: 36)

Note that for each complex nominal there are two starred phrases: the first is ruled out as repeating the Case expressed by the prenominal adjective, while the second is ruled out as repeating the ancestor of that adjective as well as the Case that it expresses. On the other hand, the fully acceptable phrase *a judicial attack on bureaucrats* is neither redundant nor contradictory with respect to the Case relations expressed by the prenominal and postnominal modifiers. According to Postal, the Coordinate Structure Constraint can explain the ungrammaticality of the following sentences:

- (3) a. the attack on Spain by Persia and France
- b. *France's attack on Spain by Persia
- c. *the French attack on Spain by Persia

As mentioned before the example (3c) would be ruled out on the basis of Case conflict, since an agentive reading of French would conflict with the agentive reading of “by Persia”. The question that Levi raises is why a conjoined agentive reading is also ruled out. According to Levi, in a denominal theory, (3a) would be the underlying structure for either (3b) and (3c). However, the Coordinate Structure Constraint blocks the movement of a single conjunct out of a coordinate structure and, hence, it blocks the movement of the underlying noun *French* out of a coordinate structure. This implies that a theory that did not derive these adjectives from nominal ancestors would have to extend the Coordinate Structure Constraint in order to account for such data.

4.2. *Levi (1978)*

Within a theory of generative semantics, Levi’s (1978) study aims at providing a syntactic and semantic analysis of complex nominals (CN) and incorporates the productive aspects of complex nominals formation into a grammar of English. She uses this term to encompass the three partially overlapping sets of endocentric expressions, i. e., nominal compounds, nominalizations and noun phrases with nonpredicating adjectives (Relational adjectives):

(4)

- | | | | | | |
|----|--------------------|----|----------------------|----|-------------------|
| a. | apple cake | b. | American attack | c. | musical clock |
| | deficiency disease | | presidential refusal | | musical comedy |
| | autumn rains | | musical criticism | | musical criticism |

Comparing these expressions, we realize that what they have in common is a head noun preceded by a modifying element which in some cases is a noun, in others an adjective. Levi’s aim in this study is to explain the many other features that these expression have in common. So far, the first class of complex compounds has received a great deal of attention in the literature as this phenomenon can be observed also in Turkish, Hebrew, Chinese, Sanskrit and German. The second group, called “nominalizations” have also been frequently analyzed as these nominalizations played an important role in the theoretical controversy between the schools of “lexicalism” and “generative semantics”.

The less explored subset of complex nominals is the one illustrated in (4 b & c). Levi (1974) names this group as nonpredicate NPs but in the literature they received various names “pseudoadjectives”, “attributive-only adjectives”, “denominal adjectives”, “transposed

adjectives”, and “denominal nonpredicate adjectives”. According to Levi (1978), these adjectives merit special attention and, actually, they represented the foundation for Levi’s study of complex nominals.

Levi’s syntactic analysis shows that CNs are dominated by a node label of N on the surface, while their more remote source structures are dominated by an NP node. Their daughter nodes consist of a head NP and an S node, in either relative clause or NP complement construction. One of her major claims is that all CNs are derived by just two syntactic processes: predicate deletion and predicate nominalization. The former process involves a set of Recoverably Deletable Predicates which represent the semantic relations underlying CNs. Levi’s predicates are in number of nine and are considered to be universal: CAUSE, HAVE, MAKE, USE, BE, IN, FOR, FROM and ABOUT.

In contrast to complex nominals derived by predicate deletion, complex nominals have their head noun as a nominalised verb and their prenominal modifier is derived from either the underlying subject or the underlying direct object of this verb.

However, the formation of CNs through predicate deletion and nominalization is not free of multiple ambiguity. According to Levi, “this ambiguity is reduced to manageable proportions in actual discourse by semantic, lexical, and pragmatic clues.” (Levi (1978): 6). It is important to mention that the scope of her study includes only endocentric complex nouns, i.e., those CNs whose referents constitute a subset of the set of objects denoted by the head noun. It excludes metaphorical names *foxglove* (for a flower), synecdochical expressions which use a part to represent the whole *eagle-eyes* and coordinate structures where neither noun can be taken as the head *speaker-listener*.

But one of the greatest merits of Levi’s work is that it puts forth convincing arguments in favour of the nominal nature of nonpredicating adjectives and their similarity to nominal compounds. As follows, I present a summary of her arguments.

Levi (1978) claims that the similarity between nonpredicating adjectives and nominal compounds suggests that these adjectives are derived from underlying nouns. Her aim is to present a theory of nominal origins which can explain the otherwise anomalous syntactic and semantic behaviour of this subset of adjectives. Levi’s approach shows that the data on nonpredicating adjectives are only superficially distinct from the data on both compounds and

nominalizations and, therefore, she believes that an analysis of these nonpredicate adjectives is possible only as part of a comprehensive analysis of all subsets of complex nominals.

First, the most striking feature of these adjectives is that they cannot be used in the predicate position. Note the difference between the behaviour of predicate adjectives and those nonpredicate:

- | | | | | |
|-----|----|------------------------|----|---------------------------------|
| (5) | a. | a beautiful princess | b. | a princess who is beautiful |
| | | a clever engineer | | an engineer who is clever |
| (6) | a. | a rural policeman | b. | *a policeman who is rural |
| | | An electrical engineer | | * an engineer who is electrical |

Bolinger (1967) was the first to realize that the above presented distinction between (5) and (6) constitutes counterevidence to the well-known assumption according to which all prenominal adjectives in English are derived from the predicate position in relative clauses. Levi (1978) supports Bolinger's observation and, in addition, she shows that forms like those in (5b) either are semantically ill-formed or have a well-formed reading which is nonsynonymous with the counterpart in (6a).

Second, it can be easily noticed that the meaning of the nonpredicate adjectives changes depending on the head noun they modify. For instance, from the expression *musical clock* one understands "a clock that produces music", however, *musical criticism* can hardly be paraphrased as "criticism that produces music". In conclusion, it is important to observe that in (4) none of the nonpredicate adjectives uses *musical* in the sense of the normal predicative adjective with the meaning "like music or melodious". For these reasons, Levi raises the questions whether the predicate adjective *musical* is homophonous with the nonpredicate adjective with the same form and whether there are any limits to the apparent polysemy of nonpredicating adjectives.

Finally, these adjectives regularly appear in positions where one might expect nouns. In other words, they form complex nominals that are parallel in semantics and syntax to the noun-noun collocations that have been identified so far as compounds. Below I illustrate some examples which reveal the parallelism between nonpredicating adjectives + nouns and nominal compounds:

- | | | | | |
|-----|----|---|----|---|
| (7) | a. | corporate lawyer
electrical shock
parental prerogatives | b. | tax lawyer
future shock
student prerogatives |
| (8) | a. | linguistic difficulties
dramatic criticism
Atomic bomb | b. | language difficulties
drama criticism
atom bomb |

To sum up, Levi's (1978) pioneering study is dedicated to the semantic and syntactic properties of "complex nominals" in English under which term three partially overlapping sets of expressions are encompassed, i.e., nominals compounds, nominalizations and noun phrases with "nonpredicating" adjectives. One of the major merits of Levi's work is that it highlights the similarity between nonpredicating adjectives and nominal compounds suggesting, in line with Bolinger (1967), that these adjectives are derived from underlying nouns. To support her assumption, she puts forth convincing arguments: nondegreeness, conjunction of like constituents, countability, semantic classes, case relations, and nominalization.

Moreover, she realizes that the interpretation of the nonpredicating adjective depends on the interpretation of the head noun:

- | | | |
|-----|-------------------|----------------------------|
| (9) | musical clock | = "clock that makes music" |
| | musical comedy | = "comedy that has music" |
| | musical criticism | = "criticism of music" |

In the light of this observation, she claims that complex nominals are derived by two syntactic processes: the deletion or the nominalization of the predicate in the underlying S. Essentially, in the former case, the noun is not a deverbal noun and, has no theta-roles to assign while in the second case, the nonpredicating adjectives represent the arguments of the nominalised head. Essentially, this leads to the conclusion that the same nonpredicating adjective or noun can enter in both derivations. Therefore, I argue that Levi's approach is able to capture the ambiguous behaviour of complex nominals, as arguments with nominalised heads and as modifiers with deletable predicates.

Last but not least, the similarity between nonpredicating adjectives and nominal compounds that Levi shows for endocentric constructions is motivated by Romance languages

which lack endocentric compounds derived by incorporation (cf. Harley (2008) for English, Marchis (2009) for Romance). This hypothesis is thoroughly discussed in chapter 9:

- | | | | | |
|------|----|-----------------------------|----|--|
| (10) | a. | <i>*petrol producție</i> | b. | <i>producție de petrol/ petrolieră</i> |
| | | <i>*petróleo producción</i> | | <i>producción de petróleo/ petrolera</i> |
| | | oil production | | production of oil/ oil.adj. |

Note that Romanian and Spanish do not have nominal compounds for endocentric compounds, they rather use Relational adjectives and *de* phrases.

4.3. *Bartning (1980)*

Bartning's (1980) study on French pseudo-adjectives represents a major contribution to the syntax and semantics of Romance Relational adjectives. In line with Postal and Levi (1978), Bartning regards the class of pseudo-adjectives as a distinctive subset of adjectives, sharing properties more with nouns than with adjectives. However, he departs from his predecessors who propose a transformational analysis for these adjectives. The merit of his approach is that he presents two novel criteria which are essential for the syntax of pseudo-adjectives, i.e., the interdependence between the grammatical relations between the pseudo-adjective and the noun and the predicative nature of the former. Essentially, unlike Levi (1980), Bartning observes that there are some pseudo-adjectives that can occur in the predicative position while the others cannot:

- | | | | |
|------|----|---|---------------|
| (11) | a. | <i>L'organisation en question est régional.</i> | <i>French</i> |
| | | The organization in question is regional | |
| | b. | <i>L'analyse qu'il fait est stylistique.</i> | |
| | | The analysis made is stylistic. | |
| (12) | a. | <i>*L'élection est présidentielle.</i> | |
| | | The election is presidential. | |
| | b. | <i>*La construction est immobilière.</i> | |
| | | The construction is estate. | |

In the light of this observation, Bartning puts forth two hypotheses:

- (A) *Plus la relation grammaticale est facile à reconnaître, moins la prédictivité est possible.*
- (B) *Si le PA fait partie d'un syntagme nominal dont le nom tête est une nominalisation verbale du type A (+action), le PA n'accepte pas la position prédictive. Si, au contraire, la nominalisation est du type B (-action), le PA accepte la position prédictive.*

According to Bartning's first hypothesis, pseudo-adjectives are classified according to their grammatical relations to the noun head, i.e., when the noun is a verbal nominalization, the pseudo-adjective can be object, subject, locative PP etc. while when the noun is not deverbal, there are no grammatical relations between the noun and the pseudo-adjective:

- (13) a. *élection présidentielle* *French*
presidential election
- b. *construction immobilière*
estate construction
- c. *décision gouvernementale*
governmental decision
- d. *revendications féminines*
female revendications
- (14) a. *ville universitaire*
university town
- b. *société industrielle*
industrial society

Importantly, Bartning observes in his first hypothesis that there is a relation between the grammatical relations between the pseudo-adjective and the head noun and the incapacity of the pseudo-adjective to be predicative. This is highlighted by the contrast between (13) and (14). Explicitly, Bartning argues in his second hypothesis that if the pseudo-adjective is part of a nominal phrase where the noun is a nominalization of a (+action) type, then the adjective cannot occur in the predicative position.

- (19) *cette industrie est laitier, et non pas pétrolière.*
This industry is dairy, and not oil.

The explanation that Bartning (1980) gives for such cases is that the contrastive context seems to diminish the grammatical relations between the head noun and the pseudo-adjective. However, the contrastive context is obligatory for the grammaticality of pseudo-adjective arguments in the predicative position.

The last issue Bartning regards is whether pseudo-adjectives can be analyzed transformationally in line with Postal (1969) and Levi (1978) or rather standardly in line with Chomsky (1972) and Ronat (1974).

To begin with, Postal's main concern is to demonstrate that the pseudo-adjectives impose the same condition on coreference like the nouns from which they are derived:

- (20) a. American's attack
b. The American attack

Essentially, both the pseudo-adjective and the Genitive noun can be the antecedent of PRO:

- (21) a. American's attempt PRO to attack Cuba at night.
b. The American attempt PRO to attack Cuba at night.

The fundamental distinction between Postal's hypothesis and Chomsky's hypothesis concerns the autonomy of the lexical item. According to the theory of generative semantics, the profound structure is the semantic interpretation of the phrase while in the standard lexical hypothesis, the lexical item has autonomy and is defined by its semantic and syntactic features within the lexicon.

In spite of the fact that Postal's approach can explain the parallelism between (21a) & (21b), Bartning (1980) shows that Postal's hypothesis cannot account for the lack of possessive pronominalisation of some pseudo-adjectives and their idiosyncratic readings in French:

- (22) a. *La voiture du ministre; était stationnée devant la porte. On a tout de suit reconnu sa; voiture.*

The car of the minister was parked in front of the door. Everybody recognized his car.

- b. **La voiture ministérielle était stationnée devant la porte. On a tout de suite reconnu sa; voiture.*

The ministerial car was parked in front of the door. Everybody recognized his car.

Moreover, Chomsky (1972) notices that the synonymy between the pseudo-adjectives and their corresponding nouns cause problems to the interpretation of the following examples:

- (23) a. the Markovian solution of that problem
b. Markov's solution of that problem

According to Chomsky (1972), there is an interpretative distinction between (23a) and (23b), i.e., a solution according to the method of Markov in (54a) vs. a solution given by Markov in (23b).

Nevertheless, building on Dubois & Dubois-Charlier (1970), Bartning (1980) shows that there are cases when there is a one-to-one relation between *de* phrases in French and the pseudo-adjectives derived from nouns with adjectival suffixes:

- (24) a. *l'industrie de France* → *l'industrie française* *French*
The industry of France → the French industry
b. *le voyage du président* → *le voyage présidentiel*
the trip of the president → the presidential trip

Essentially, the generalization that Bartning (1980) makes is that only non-idiosyncratic pseudo-adjectives can be replaced by a nominal complement of the type *de-Det. – N.*

In the light of these observations, he puts forth his third hypothesis:

C. *Plus la relation grammaticale du syntagme N-PA est perceptible, plus celui-ci est susceptible d'admettre la reconstitution par N-de-Dét-N.*

In the light of this hypothesis, pseudo-adjectives are classified in two subclasses: argumental which corresponds to the nominal complement of the type *de-Det-N* and are not

predicative and the non-argument ones which are idiosyncratic and are ungrammatical with *de* phrases. Thus, Bartning's theory makes a compromise between the two theories showing that only argumental pseudo-adjectives can be transformationally derived in the spirit of Postal (1969).

4.4. *Bosque & Picallo (1996)*

Like Levi (1978) and Bartning (1980), Ignacio Bosque & Carmen Picallo (1996) recognize as well the denominal character and the argument-like relation of Relational adjectives to the noun but they provide a more syntactic inquiry on the idiosyncratic phenomenon of Spanish Relational adjectives. Essentially, unlike their predecessors, they explore the heterogeneous nature of Relational adjectives and provide a novel classification of Spanish Relational adjectives, i.e., Thematic vs. Classificatory R-adjectives.

The Thematic Adjectives saturate the role of theme for the deverbal noun whereas the Classificatory adjectives don't absorb a theta role, they only introduce a domain in relation to which the object is classified (Bosque & Picallo 1996: 369):

- | | | | | |
|------|----|--|----|---|
| (25) | a. | <i>producción automovilística</i>
Th(ematic) Adj.
car production | b. | <i>excursión automovilística</i>
C(lassificatory) Adj.
car tour |
|------|----|--|----|---|

Note that the adjective *automovilística* can appear as either Th(ematic) adjective or C(lassificatory) adjective. The Thematic status of the adjectives in (25a) is triggered by the deverbal nature of the noun. *Producción* is a deverbal transitive NP which lexically licenses a theta role, the THEME as the argument of the *producción*. The same adjective *automovilística* in (25b) appears this time as a Classificatory-adjective because *excursión* is not a deverbal noun so it cannot license theta roles.

In addition, Bosque & Picallo (1996) bring forth empirical evidence for the distinction between the two subclasses of Relational adjectives, i.e., Th- and Cl-adjectives behave differently with respect to possessive pronominalization of Genitive arguments:

- | | | |
|------|----|--|
| (26) | a. | <i>la organización papal de la Curia.</i>
<i>organizarea papală a Curiei.</i>
The Pope's organization of the Curia |
|------|----|--|

- b. *la producción manual de camisas.*
producerea manuală de cămăși.
 the manual production of shirts.

In (26a) the Th-adjective *papal* has the Agent role while the Genitive DP ‘de la Curia’ has the role of the Theme. In (26b), the Cl-adjective *manual* modifies the Noun and the Genitive DP *de camisas* has the Theme role. Below one can observe that possessive pronominalization of the Theme is ungrammatical with the Th-adjective in (27a) and grammatical with the Cl-adjective in (27b):

- (27) a. **su₁ organización papal t₁*
 its organization popist
 its organization by the Pope
- b. *su₁ producción manual t₁*
 its production manual
 its manual production (Bosque & Picallo 1996)

The ungrammaticality in (27a) may be linked to the restriction imposed by Spanish of only one Genitive per DP, if we take into account Bartning’s hypothesis for French according to which Th-adjectives correspond to *de Det N*. However, this hypothesis will be thoroughly discussed in the next sections:

- (28) **la producción de camisas de Alemania*
**producerea cămășilor a Germaniei*
 ‘The production of shirts of Germany’

a. Thematic Adjectives

According to Bosque & Picallo (1996), Th-adjectives absorb the thematic role that the verb related to the nominal head would assign to its complement. Therefore, Th-adjectives are incompatible with DP arguments with the same thematic role. The same restrictions can be observed also in Romanian:

- (29) a. *producción petrolera* b. **producción petrolera de sondas*
 oil production oil production of drills

In (29) the adjective *petrolera* absorbs the thematic role that the verb related to the nominal head, *producir*, would assign to its complement. Bosque & Picallo (1996) assume that thematic licensing is satisfied by Th-adjectives in the same way that it is satisfied by the Genitive DPs like in (29b). Therefore, I would explain the ungrammaticality of (29b) through the fact that the deverbal noun *producción* cannot assign two slots for the same thematic role.

a'. Ethnic or referential Th-adjectives

In the literature of Relational adjectives, there is a group of Th-adjectives which are considered to behave differently with respect to their function as arguments of the noun. They usually derive from common nouns that denote humans or geographical proper nouns. Bosque & Picallo (1996) regard them as denominal adjectives as denoting a group of human beings.

- (30) *alianza báltica*
 Baltic alliance

In the following examples Bosque and Picallo (1996) aim at demonstrating that these referential Th-adjectives absorb also the theta role of the underlying N head.

b. Classificatory Adjectives

In contrast to Th-adjectives, the most distinctive feature of Cl-adjectives is that they don't saturate theta roles lexically licensed by the head noun. In line with Levi (1978), Bosque & Picallo (1996) show that they incorporate different semantic functions to the N head.

Bosque & Picallo advanced their proposal to consider Cl-adjectives as semantic adjuncts that function as restrictive modifiers. Thus, Cl-adjectives serve to relate the noun to a domain according to which the NP is classified:

- (31) *análisis sintáctico/ estilístico / periódico*
 ‘syntactic/ stylistic/ peridiocal analysis’

Regarding the adjectives in (31), they can intuitively be described as elements that add a restriction on the lexical head.

Nevertheless, the most viable argument which demonstrates that unlike Th-adjectives, Cl-adjectives do not saturate theta-roles is their co-occurrence with eventive nominals:

- (32) *el análisis periódico de las publicaciones por parte del departamento.*
 the periodical analysis of the publications by the department.

- (33) **la producción petrolera por parte de China*
 oil production by China

The ungrammaticality of (33) is explained in Bosque & Picallo (1996) by the fact that an internal argument of an event nominal cannot surface as a Th-adjective as they are in Specifier position and this complex event nominals ask for an argument in the complement position. As Cl-adjectives do not saturate theta-roles, they are grammatical with complex event nominals like in (32).

In addition, Bosque & Picallo (1996) shows that the adjacency of Cl-adjectives and Th-adjectives with respect to the noun is fixed:

- (34) a. *unos residuos atómicos soviéticos*
 C-adj. Th-adj. (POSSESSOR)
 some Soviet atomic residues
- b. *una serie de casamientos monogamas reales*
 C-adj. Th-adj. (AGENT)
 a series of royal monogamic_weddings

In the above examples one can notice that the string of Relational adjectives follows a rigid pattern, always having the Cl-adjectives closer to the noun head.

Bosque & Picallo (1996) generalize the fixed pattern observed in the adjacency of Relational adjective in the following scheme for Spanish and English:

- (35) NOUN C-adjective Th-adjective (Spanish, Romanian)
 Th-adjective C-adjective Noun (English)

The scheme makes clear that the string of postnominal adjectives in Romance languages constitutes a mirror image of their counterparts in English. However, the relative adjacency that Cl- and Th-adjectives must have with respect to the noun is the same in Spanish as in English. It can universally be assumed that Cl-adjectives are always closer to the noun head no matter if they appear prenominally or postnominally.

All in all, Bosque & Picallo (1996) provide an intrinsic syntactic approach of Relational adjectives which casts more light on their heterogeneous nature. It shows that Th-adjectives correspond to the arguments of the deverbal noun while Cl-adjectives to restrictive modifiers. With respect to each other, Cl- and Th-adjectives are subject to a strict pattern in which the Cl-adjective is adjacent to the noun head.

4.5. *Fábregas (2007)*

In his study Fábregas (2007) provides a configurational morphological analysis of Relational adjectives, which are considered to be nouns that contain in their internal syntactic structure a semantically defective matrix of features which is spelled out as an adjectival affix. Regarding the semantics of these adjectives, Fábregas adopts Levi's (1978) argument that a Relational adjective is semantically equivalent to a noun modifying another. Moreover, he puts forth several tests which speak in favour of a nominal nature of Relational adjectives in Spanish. These tests are discussed in the next chapter which regards the morpho-syntactic analysis of Relational adjectives.

In line with Bosque & Picallo's (1996) classification of Relational adjectives, Fábregas (2007) shows that those Relational adjectives which cannot be predicative are arguments of the deverbal noun, corresponding to Bosque & Picallo's Th-adjectives while those which are predicative are Classificatory Adjectives:

- (36) a. *La comedia es musical.* b. **La producción es pesquera /china.*
The comedy is musical The production is fishing/ Chinese.

The distinction between Th-adjectives and Cl-adjectives proposed by Bosque & Picallo's (1996) receives more support in Fábregas' study. His observation that Th- and Cl-adjectives can be paraphrased with different prepositions casts more light on the distinction between the two subclasses of Relational adjectives:

- (37) a. *análisis microscópico* ≈ *análisis mediante microscopio*
analysis microscopic ≈ analysis done using a microscope
- b. *tren pendular* ≈ *tren con péndulo*
train pendular ≈ train with a pendulum
- (38) a. *la producción pesquera* ≈ *la producción de pesca*
the production fish.adj ≈ the production of fish
- b. *la importación sedera* ≈ *la importación de seda*
the import silk.adj. ≈ the import of silk

Comparing the paraphrases of the adjectives in (37) and (38), it is noticeable that there is a difference between the two types of prepositions that correspond to Cl- and Th-Adjectives in Spanish. The observation that Fábregas makes is that the adjectives in (37) correspond to Classificatory adjectives and, therefore, they must be paraphrased with lexical prepositions with strong semantics while the Thematic adjectives in (38) are paraphrased only with the preposition *de* which has a very weak meaning to the extent that it is used to denote the patient and the agent (Fábregas 2007:142). This preposition in Spanish corresponds, for instance, to the Romanian Genitive case which paraphrases Thematic Relational adjectives. This argument makes legitimate the question whether Thematic adjectives are closer to the nouns than Relational adjectives as they express Genitive case.

Essentially, Fábregas' observation for Spanish is in line with Bartning's hypothesis of French Relational adjectives according to which there is a relation between their predicativity, their argument structure and the possibility of being paraphrased with *de Det N* phrases.

- (39) a. *análisis microscópico* ≈ *análisis mediante microscopio*
analysis microscopic ≈ analysis done using a microscope
- b. *análisis microscópico* ≈ **análisis del microscopio*
microscopic analysis ≈ * the analysis of the microscope
- c. *Este análisis es microscópico.*
This analysis is microscopical.
- (40) a. *la producción pesquera* ≈ *la producción de pesca*
the production fish.adj ≈ the production of fish

- b. **Esta producción es pesquera.*

This production is fishing.

Fábregas' main concern represents Classificatory adjectives (Classificative adjectives according to his terminology) and he makes several interesting observations about their semantic and syntactic status. First, in the spirit of Levi (1978) who claims that Relational or nonpredicating adjectives have in their underlying structure deletable predicates such as CAUSE, HAVE, MAKE, USE, BE, IN, FOR, FROM, and ABOUT, Fábregas claims that Cl- adjectives in Spanish are equivalent to noun phrases introduced by prepositions. Relational adjectives are selected by P without phonological materialization.

- (41) *análisis microscópico* ≈ *análisis mediante microscopio*
 analysis microscopic ≈ analysis done using a microscope

The preposition has a meaning of instrument, which determines that the adjective *microscopic* represents the instrument used to perform the analysis. Prepositions are considered to be a relational head (Hale & Keyser 1993) that selects the two entities that stand in a specific relationship. Importantly, different prepositions give rise to different meanings in such a way that a Cl- adjectives will enter into different semantic relationships (see Bosque & Picallo 1996).

Moreover, Bosque and Picallo (1996), Fábregas (2007) and many other linguists observe that Classificatory adjectives combine with other Relational adjectives in subordinate structures: that is the second Classificatory relational adjectives specify the meaning of the first one. This is not the case of predicative adjectives:

- (42) a. *una mesa redonda y grande.*
 a table round big
 # a table characterised by a big roundness
- b. *coma alcohólico metílico*
 coma alcoholic methylated
 ‘methylated alcohol coma’

Note that the Relational adjectives in (42b) act as PPs modifying Np. A PP can modify an nP which is the complement of another PP.

In the light of Fábregas' (2007) approach, Relational adjectives do not have a homogenous semantic and syntactic behaviour, in spite of the fact that they both represent cases of **transpositions**, i.e., morphological structures which have a semantic head which is at odds with its formal head; words that have the semantic interpretation of a certain category which exhibiting the formal properties of another. Thus, according to Bosque & Picallo (1996) and Fábregas (2007), those Relational adjectives which cannot be predicative are arguments of the noun head and correspond to *de* Genitive phrases while the other subclass which can be predicative and are paraphrased with lexical prepositions with strong semantics are prepositional phrases, acting as restrictive modifiers.

4.6. *Alexiadou & Stavrou (to appear)*

In line with Postal (1969), Alexiadou & Stavrou (to appear) discusses the complex behaviour of a subgroup of Relational adjectives, namely Ethnic adjectives. Such adjectives are argued to refer to a group of entities that share features regarding geographical, race, religion or political identity.

Their approach represents a major contribution for understanding the ambiguous nature of Thematic Relational adjectives as Ethnic adjectives exhibit a hybrid nature, sharing properties of both nouns and adjectives (cf. Alexiadou & Stavrou (to appear)). Essentially, Ethnic adjectives correspond to Th-adjectives that encode a thematic role assigned to them by the noun they modify. By contrast, the homophonous counterpart of Ethnic adjectives, (Classificatory adjectives according to Bosque & Picallo's classification) are predicative adjectives, - hence they are analyzed as "deep" adjectives:

- (43) a. *to egleziko to palto tu* *Greek*
 The English the overcoat his
 'his English overcoat'
- b. *i amerikaniki anamiksi* *Greek*
 'the American intervention'

In the example above, the adjective in (43a) is a predicative Classificatory adjective as it modifies a common noun while the same adjective in (43b) is a Thematic adjective which saturates the role of Agent for the deverbal noun. Thus, Alexiadou & Stavrou (to appear)

claim that adjectives which modify event nouns are Ethnic adjectives corresponding to Thematic adjectives whereas the adjective modifying common nouns have only descriptive character, being called homophonous descriptive adjectives.

In order to highlight this assumption, they present several tests which cast more light on the basic differences between Ethnic adjectives (EAs) and their homophonous counterparts (CI-adjectives).

To begin with, in line with diverse scholars (Bartning (1980) for French, Levi (1978) for English, Bosque & Picallo (1996) and Fábregas (2007) for Spanish), Alexiadou & Stavrou (to appear) show that also in Greek predicativity is the first tool to differentiate between Th- and CI-adjectives. Note that Ethnic adjectives cannot be predicative while CI-adjectives can:

- (44) a. **I epemvasi stin Kipro itan amerikaniki.*
The intervention in Cyprus was American
b. *To palto tu ine egleziko/ kenurjo.*
The overcoat-his is English/new

Moreover, EAs cannot be co-ordinated with non-Ethnic adjectives. This is not the case of CI-adjectives:

- (45) a. **i amersi, grigori, pithani ke amerikani anamiksi*
The immediate quick, possible, and American intervention
b. *?to oreo, zesto, malino ke egleziko palto tu*
The nice warm woolen and English overcoat his

Associated with their predicativity/ intersectiveness, Ethnic adjectives do not appear in determiner spreading constructions (DS) in Greek while their CI-adjectives counterparts pattern with predicative adjectives. Hence, they are grammatical in DS.

- (46) a. *?i amerikani i epemvasi*
The American the intervention
b. *to palto tu to egleziko/ kenurjo*
the overcoat-his the English new

Moreover, in the spirit of Postal (1969), Alexiadou & Stavrou (to appear) show that the EA has the interpretation of an agent in Greek:

- (47) a. *i turkiki isvoli stin Kipro*
The Turkish invasion in Cyprus
- b. *i isvoli ton Turkon stin Kipro*
the invasion the Turks-gen of Cyprus
- c. *I eliniki apantisi stis proklisis*
the Greek reply to the provocation
- (48) a. *I apantisi ton elinon stis proklisis*
the reply the Greeks-GEN to the provocation
- b. *I apantisi stis proklisis apo tus Elines*
the reply to the provocation by the Greeks
- c. **I eliniki apantisi stis proklisis ton Elinon, apo tus Elines*
the Greek reply to the provocation the Greeks-GEN, by the Greeks

Importantly, the agentive interpretation of Ethnic adjectives in (48) is highlighted by comparing them to their nominal counterparts in (49). Alexiadou & Stavrou's observation is that EAs occur in the same environments like Genitives. This is explicitly shown by the complementarity of the EA with both a Genitive DP and a by-phrase in (49c).

Related to the complementarity between EAs and Genitives in Greek, Alexiadou & Stavrou make an interesting observation, i.e., Ethnic adjectives cannot co-occur with a postnominal Genitive that stands for an internal complement of a noun:

- (49) **I eliniki kataktisi tis Persias*
The Greek occupation of Persian.

Essentially, this idiosyncrasy of Greek EAs is associated with the fact that in Greek, as a rule, two argument Genitives are not licit:

- (50) **i katastrofi tis polis ton exthron*
The destruction the city-gen the enemies-gen

Undoubtly, this represents further support for the nominal nature of Ethnic adjectives and that they represent a distinct class from Classificatory adjectives.

To sum up, Alexiadou & Stavrou (to appear) represents a further important step towards a complex analysis of Relational adjectives that makes justice to their heterogeneous nature. That is: the dual behaviour of Ethnic adjectives crosslinguistically justifies the split analysis of Relational adjectives that is proposed in literature for English by Postal (1969), Levi (1970) c.a and for Romance by Bartning (1980), Bosque & Picallo (1996), Fábregas (2007) c.a.

4.7. *A split classification of Relational adjectives*

As we can see in this section Relational adjectives received special attention both in English and Romance literature due to their apparently idiosyncratic behaviour. From a theoretical point of view, Relational adjectives have either been regarded within the framework of generative semantics such as Postal (1969) and Levi (1980) or within the standard lexical hypothesis in line with Chomsky (1972) and Ronat (1974) or within the non-Lexicalist approach of the Distributed Morphology (Fábregas (2007), Alexiadou & Stavrou (to appear), Marchis (2009)). Postal's main claim for the pseudo-adjectives is that they must be transformationally derived from underlying nominals. The main arguments to support his claim are anaphoric relations and constraints on NPs.

(51) The Greek attempt to eliminate drugs was a failure.

For instance in (51) the noun underlying the EA can provide reference for an anaphoric or deictic expression. This is so also in the case of Romance languages:

- (52) a. *Incerarea grecească de-a elimina drogurile a fost un eşec.* Romanian
b. *El intento griego de eliminar las drogas fue un fracaso.* Spanish
c. The Greek attempt to eliminate drugs was a failure.

Moreover, he provides further evidence by the fact that the NPs and their corresponding pseudo-adjectives occur in complementary distribution:

- (53) a. the invasion of France by America
 b. France's invasion of America
 c. the French invasion of America
 d. *the French invasion of America by Portugal
 e. *France's French invasion of America

Essentially, Dubois & Dubois- Charlier (1970) and Bartning (1980) for French show that there are cases when there is a one-to-one relation between *de* phrases in French and the pseudo-adjectives derived from nouns with adjectival suffixes:

- (54) a. *l'industrie de France* → *l'industrie française* *French*
 The industry of France → the French industry
 b. *le voyage du président* → *le voyage présidentiel*
 the trip of the president → the presidential trip

For Spanish, Bosque & Picallo (1996), Fábregas (2007) claim that Thematic adjectives are paraphrased with the preposition *de* which has a very weak meaning to the extent that it is used to denote the patient and the agent (Fábregas 2007:142):

- (55) a. *La producción pesquera* ≈ *La producción de pesca.*
 The fishing production ≈ The production of fish
 b. *La importación sedera* ≈ *La importación de seda*
 The French silk import ≈ The import of silk

In Marchis (2009) I show the similarity between Thematic adjectives and Genitives in Romanian and Spanish in the following examples:

- (56) **Theme**
 a. *alegerea prezidențială* ≈ *alegerea președintelui*
elección presidencial ≈ *la elección del presidente*
 presidential election ≈ the election of the president
Agent
 b. *decizie guvernamentală* ≈ *decizia guvernului*
la decisión gubernamental ≈ *la decisión del gobierno*

governmental decision ≈ the decision of the government

Possessor

- c. *revendicările sindicale* ≈ *revendicările sindicatelor*
 las reivindicaciones sindicales ≈ *reivindicaciones de los sindicatos*
 the union demands ≈ the demands of union

Non-grammatical relations

- d. *analiză microscopică* ≈ **analiza microscopului*
 análisis microscópico ≈ **análisis del microscopio*
 microscopic analysis ≈ * the analysis of the microscope

In the above examples note that only those Relational adjectives which are arguments of the deverbal nouns correspond to Genitive phrases.

In the same spirit, Levi (1978) claims that the similarity between nonpredicating adjectives and nominal compounds suggests that these adjectives are derived from underlying nouns:

- (57) a. corporate lawyer b. tax lawyer
 electrical shock future shock
 parental prerogatives student prerogatives

- (58) a. linguistic difficulties b. language difficulties
 dramatic criticism drama criticism
 Atomic bomb atom bomb

In this study I show that also in Romanian and Spanish Relational adjectives represent cases of compounding:

- (59) a. *consumul de alcool/ alcoolic*
 el consumo de alcohol/ alcohólico
 consumption DE alcohol/ alcohol.TH-adj.

According to Marchis (submitted), the examples above represent cases of endocentric subordinate compounds like *truck driver* in English. Essentially, in Marchis (submitted) and in this study, I argue that the different strategies employed by languages to realize endocentric

subordinate compounding are Case related, i.e., Case can be checked by incorporation, *de*-insertion or Th-adjectives. However, this hypothesis will be developed in detail in the chapter 9.

In the light of all these observations, apparently it can be claimed that all Relational adjectives can be transformationally analysed as underlying nouns. However, Bartning (1980) shows that Postal's hypothesis cannot account for the lack of possessive pronominalisation of some pseudo-adjectives and their idiosyncratic readings in French:

- (60) a. *La voiture du ministre_i; était stationnée devant la porte. On a tout de suit reconnu sa_i voiture.*
 The car of the minister was parked in front of the door. Everybody recognized his car.
- b. **La voiture ministérielle était stationnée devant la porte. On a tout de suit reconnu sa_i voiture.*
 The ministerial car was parked in front of the door. Everybody recognized his car.

Note that this is also the case for Romanian and Spanish:

- (61) a. *Mașina președintelui_i; a fost staționată în fața porții. Toata lumea i_i-a recunoscut mașina sa_i.*
 a'. *El coche del presidente_i; estaba estacionado frente de la puerta. Todo el mundo reconoció su coche.*
 The car of the minister was parked in front of the door. Everybody recognized his car.
- b. **Mașina prezidențială_i; a fost staționată în fața porții. Toata lumea i_i -a recunoscut mașina sa_i.*
 b'. **El coche presidencial_i; estaba estacionado frente de la puerta. Todo el mundo reconoció su coche.*
 The presidential car was parked in front of the door. Everybody recognized his car.

In the same spirit, Alexiadou & Stavrou show that Ethnic adjectives in Greek have several characteristics which set them apart from nominals.

To begin with, unlike Genitives, Ethnic Adjectives (EAs) act as an anaphoric island, not being able to bind an anaphor:

- (62) **i germaniki katastrofi tu eafu tus/ ton eafon tus*
 The German destruction the self (gen.sing/pl)- their.CL

Furthermore, EAs cannot provide an antecedent for personal pronouns, i.e., pro or clitic:

- (63) **i eliniki; adinamia na min paradexomaste; ta lathi mas;*
 The Greek weakness SUBJ not admit-1pl the faults our-1cl.GEN

Neither can they control a relative pronoun:

- (64) **Oli katadikasan tin Amerikaniki epithesi sti Servia, i opii fisika*
 all condemned the American attack to Serbia, who, of course, have
exun parelthon se tetjes energies.
 have a long history in such acts

However, there are many cases in other languages where the noun underlying the EA can provide reference for an anaphoric or deictic expression. This is the case of English and Romance languages:

- (65) a. *Incarcarea grecească de-a elimina drogurile a fost un eşec.* *Romanian*
 b. *El intento griego de eliminar las drogas fue un fracaso.* *Spanish*
 c. The Greek attempt to eliminate drugs was a failure.

In order to account of the lack of Relational adjectives to crosslinguistically show the basic binding properties of argument DPs, Alexiadou & Stavrou's (to appear) regard them as deficient referring elements that are, however, available for certain rules of thematic interpretation.

Thus, chronologically speaking, Bartning (1980) was one of the first scholars to realize that not all Relational adjectives can be replaced by a nominal complement of the type *de-Det. – N* in Romance.

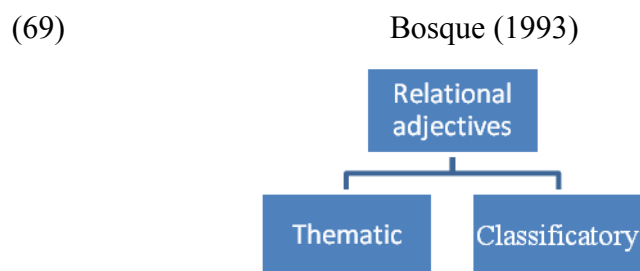
Essentially, the generalization that Bartning (1980) makes is that only non-idiosyncratic pseudo-adjectives can be replaced by a nominal complement of the type *de*-Det. – N. The merit of his approach is that it presents two novel criteria which are essential for the syntax of pseudo-adjectives, i.e., the interdependence between the grammatical relations between the pseudo-adjective and the noun and the predicative status of the former. Essentially, unlike Levi (1980), Bartning observes that there are some pseudo-adjectives that can occur in the predicative position while the others cannot:

- (66) a. *L'organisation en question est régional.* *French*
 The organization in question is regional
 b. *L'analyse qu'il fait est stylistique.*
 The analysis made is stylistic.
- (67) a. **L'élection est présidentielle.*
 The election is presidential.
 b. **La construction est immobilière.*
 The construction is estate.

Analogically, Bosque & Picallo (1996) show that the two-way distinction of Relational adjectives is visible also in Spanish, i.e., argument-like Relational adjectives and predicative Relational adjectives:

- (68) a. **La estructura es urbana.* b. *La competencia es internacional*
 The structuring is urban The contest is international.

In the light of this distinction, Bosque (1993), Bosque & Picallo (1996) propose the following classification of Relational adjectives.



The merit of such a novel classification is that it is able to capture the heterogeneous nature of Relational adjectives and their strict word order in Romance. As shown in (34) repeated below, Bosque & Picallo (1996) reveal that the adjacency of Cl-adjectives and Th-adjectives with respect to the noun is fixed:

- (70) a. *unos residuos atómicos soviéticos*
 C-adj. Th-adj. (POSSESSOR)
 some Soviet atomic residues
- b. *una serie de casamientos monogamas reales*
 C-adj. Th-adj. (AGENT)
 a series of royal monogamic_weddings

In the above examples one can notice that the string of Relational adjectives follows a rigid pattern, always having Cl-adjectives closer to the noun head. The strict adjacency can only be explained by a two-way classification of Relational adjectives.

Furthermore, Bosque & Picallo's (1996) approach receives further support from Fábregas (2007) and Alexiadou & Stavrou (to appear).

First, the distinction between Th-adjectives and Cl-adjectives proposed by Bosque & Picallo (1996) is highlighted by Fábregas' observation that Th- and Cl-adjectives can be paraphrased with different prepositions (see (37) & (38) repeated below):

- (71) a. *análisis microscópico* ≈ *análisis mediante microscopio*
 analysis microscopic ≈ analysis done using a microscope
- b. *tren pendular* ≈ *tren con péndulo*
 train pendular ≈ train with a pendulum
- (72) a. *la producción pesquera* ≈ *la producción de pesca*
 the production fish.adj ≈ the production of fish
- b. *la importación sedera* ≈ *la importación de seda*
 the import silk.adj. ≈ the import of silk

The observation that Fábregas makes is that the adjectives in (71) correspond to Classificatory adjectives and, therefore, they must be paraphrased with lexical prepositions with strong semantics while the Thematic adjectives in (72) are paraphrased only with the preposition *de* which has a very weak meaning to the extent that it is used to denote the

patient and the agent (Fábregas 2007:142). This preposition in Spanish corresponds, for instance, to the Romanian Genitive case which paraphrases thematic relational adjectives.

Analogically, in Marchis (2009) and in this study, I show that in Romanian Th-adjectives correspond to the Genitive case in Romanian. This hypothesis will be explored in detail in the next chapters.

In this study, I pursue Bosque & Picallo's split classification of Relational adjectives due to its crosslinguistically empirical validity. One of the aims of this study is to show that in Romanian and Spanish, Relational adjectives have a heterogeneous nature and cannot be regarded from a unilateral point of view, i.e., either transformationally or lexically.

To begin with, in line with Bartning (1980), Bosque & Picallo (1996), I argue for Romanian and Spanish that Th-adjectives are arguments of the deverbal nominal, either the object or the subject:

(73) **Object**

- | | | | |
|----|--------------------------------------|---|------------------------------|
| a. | <i>alegere (*este) prezidențială</i> | → | <i>X alege președintele.</i> |
| | <i>elección (*es) presidencial</i> | → | <i>X elige el presidente</i> |
| | presidential election | → | X elects the president |

Subject

- | | | | |
|----|---------------------------------------|---|---------------------------|
| b. | <i>decizie (*este) guvernamentală</i> | | <i>guvernul decide</i> |
| | <i>decisión (*es) gubernamental</i> | | <i>el gobierno decide</i> |
| | decision (*is) governmental | → | the government decides |

Essentially, the word order of Th-adjectives obeys the thematic hierarchy, having the internal argument closer to the head than the external argument:

- (74) a. *producția automobilistică germană.*
 production car German
 German car production
- b. **producția germană automobilistică.*
 production German car.

A further test from Romanian may cast light on the properties and the origin of Classificatory adjectives, namely *cel* in case of nominal ellipses. With adjectives *cel* can occur in two main contexts: in case of a lexically expressed N with postnominal predicative adjectives and in case of nominal ellipsis only with predicative adjectives. So in both contexts *cel* can occur only with predicative adjectives which have a contrastive or a partitive meaning.

In the light of this argument, we can expect that Classificatory adjectives should also be able to occur with *cel* as they are also argued to be restrictive modifiers (Bosque & Picallo 1996) and can be paraphrased as prepositional phrases:

- (78) a. *analiza morfologică si cea sintactică.*
 The analysis morphological and CEL syntactic
 The morphological analysis and the syntactic one
- b. **producția petrolieră si cea cerealieră.*
 production oil and CEL cereal
 the oil production and the cereal one
- c. *decizia guvernamentală si *cea prezidențială.*
 decision-the governmental si CEL presidential
 the governmental decision and the presidential one

Importantly, in (78a) Classificatory adjectives which behave like modifiers appear in nominal ellipses with *cel* while Thematic adjectives (thema or agent) are ungrammatical in contexts of nominal ellipses.

All in all, in the light of this empirical data, I argue that Bosque & Picallo's split classification of Relational adjectives is justified as it is able to capture the idiosyncrasies of Relational adjectives and their ambiguous nature. Hence, this classification is pursued in this study.

5. The morpho-syntactic analysis of Relational adjectives

In this chapter I discuss the denominal nature of Relational adjectives. As shown in the previous chapter, there are two sub-classes of Relational adjectives, namely Thematic and Classificatory ones (Bosque & Picallo 1996), illustrated in (1):

- (1) a. *producción petrolera* b. *análisis sintáctico*
oil production syntactic analysis

Following Postal (1969), Levi (1978), Bosque & Picallo (1996), Fábregas (2007) and Alexiadou & Stavrou (to appear) I claim that both Thematic and Classificatory adjectives are denominal but they correspond to different classes of nouns, i.e., argumental bare nouns DPs vs. non-argumental bare nouns NumPs or NPs. Thus, the aim of this paper is two-fold.

First, in the light of the several tests proposed by Levi (1978), Fábregas (2007) and Alexiadou & Stavrou (to appear), I argue that all Relational adjectives are denominal.

Second, I distinguish between Th- vs. Cl-adjectives, arguing that in Romance, the former correspond to argument bare nouns, i.e., DPs, while the latter to bare nouns, i.e. NPs. The analysis follows syntactic approaches to word formation such as Distributed Morphology (cf. Halle & Marantz (1993)).

This chapter is structured as follows: In section (5.1) and (5.2) several tests proposed by diverse scholars are presented in order to illustrate the pros and cons for the denominal nature of all Relational adjectives. The second part of this chapter is dedicated to different types of nominals in Romance and is meant to show that in Romanian and Spanish, bare nouns differ syntactically regarding their argument structure but semantically they trigger a non-specific interpretation. In the light of the split typology of bare nouns, in section (5.3) & (5.4), I trace the nature of nouns which build Relational adjectives in Romance and see in which amount their origin influences the syntactic analysis of Relational adjectives. More exactly, in section (5.5) I provide convincing arguments for the fact that Thematic adjectives correspond to argument bare nouns which are DPs in Romanian and Spanish (cf. Dobrovie & Blean & Espinal (2005), Giurgea (2008)). A syntactic analysis is provided for Thematic adjectives within the Distributed Morphology framework. Unlike Thematic adjectives,

Classificatory adjectives in section (5.6) are regarded as non-argumental bare nouns and are analyzed accordingly, i.e., as either NumPs or NPs.

5.1. *The denominal nature of Relational adjectives*

5.1.1. *Levi (1978)*

From the very beginning in the literature Relational adjectives were given a special status among adjectives. One of the first scholars to observe the denominal character of Relational adjectives is Levi (1978). She argues that Relational adjectives (or nonpredicating adjectives according to her terminology) derive all their semantic content – rather than just part as in the case of denominal adjectives – from nouns.

In order to support this hypothesis of nominal origins, she provides six arguments: nondegreeness, conjunction of like constituents, countability, semantic classes, case relations, and nominalization.

In the paragraphs to follow, each of these six properties of nouns will be mentioned:

- (2) 1. Nouns may not be immediately preceded by *very*, *quiet*, or other degree verbs
2. Nouns conjoin only with other nouns.
3. Nouns may appear after quantifiers, that may be counted.
4. Nouns may be categorized by semantic features such (+/-definite), (+/-concrete), (+/-animate), (+/-human), and (+/-common)
5. Nouns are analysed as entering into case relations such as agentive, objective, locative, dative/possessive, and instrumental
6. Nouns are not subject to the process of nominalization which normally turns predicating elements (verbs and adjectives) into derived lexical nouns

Essentially, Levi shows that Relational adjectives show all these noun properties.

I. Nondegreeness

As well-known, nouns cannot be preceded by degree adverbials. Importantly, the same observation is made by Levi (1978) regarding the behaviour of Relational adjectives. She also

claims that a theory that derives Relational adjectives from underlying nouns can explain also some of the related semantic facts presented by Bartning (1980) in her analysis of Relational adjectives in French. She proposes the three-way distinction among **i. binary oppositions**, which admit no degrees between the two opposites such as “dead” vs. “alive”, **ii. multiple oppositions**, which generally also lack gradience but which also comprise more than two alternatives such as colour terms, **iii. polar oppositions**, in which two poles define an entire continuum such as poor or rich.

Bartning (1976: 79) observes that in contrast to predicative adjectives, which belong more to the first and third categories, the vast majority of Relational adjectives represent the second category. The generalization made by Bartning is that while a small number of Relational adjectives show binary oppositions, there are no instances where these adjectives show polar opposition. The explanation for this relies that on the fact Relational adjectives are not used to denote intensifiable qualities, that is, those qualities which correspond to the different stages along a continuum. Instead, according to Levi (1978), they assign membership to discrete subsets of a superset, where the number of subsets may be just two as in the case of binary opposition or some finite number greater than two as is the case for multiple oppositions such as *chemical/ sanitary/ linguistic/ structural* (Levi 1978: 31). In this way the complementary distribution of function between predicative and Relational adjectives may be explained: - the former are used to assign places along a continuum and the latter to assign membership in subsets of the larger category denoted by the head noun.

II. Conjunction of Like Constituents

Levi (1978) uses this argument as a test for a more remote syntactic constituency, arguing that conjunction is permitted between superficially distinct constituents only if they derive from the same constituent type at a more remote stage of the derivation. Bearing this in mind, in the case of Relational adjectives, one would expect that these adjectives can be coordinated with semantically appropriate nouns and other nominal adjectives and cannot be coordinated with true adjectives that do not share their nominal origins. The data provided by Levi (1978) provide positive evidence for this argument.

(3) **Relational adjectives coordinated with Ns**

- a. a corporate and divorce lawyer
- b. solar and gas heating

c. domestic and farm animals

(4) **Relational adjectives coordinated only with Relational adjectives**

- a. a civil and mechanical/ *rude engineer
- b. anthropological and ethnographic/*respected journals
- c. literary and musical/ * bitter criticism

III. Countability

The third argument on which Levi based her theory is that nouns are the only constituents that can be counted. Therefore, her theory predicts that at least some Relational adjectives should be countable, like the nouns they are derived from and unlike true adjectives. Evidence for the countability of Relational adjectives comes from bound morphemes of quantifying prefixes such as *mono-*, *bi-*, *multi-* or *poly*.

(5)

Prefix + noun	Prefix + nonpred adj	Prefix + pred adj
monoplane	monochromatic	*monohigh
biped	binational	*bired
triangle	triconsonantal	*quadralow
multicylinder	multiracial	*multidense

As Levi predicted, Relational adjectives can have numerical prefixes just like nouns and unlike true adjectives.

IV. Semantic classes

The next argument proposed by Levi predicts that Relational adjectives should be divisible into the same semantic categories that are used to classify nominal constituents (Levi (1978): 25). Her argumentation is based on six important semantic divisions among nouns, which are expressed in features as (+/-definite), (+/-concrete), (+/-animate), (+/-human), and (+/-common).

- (6) + definite: American, Parisian, European
 - definite: national, urban, feline
- + concrete: aquatic, suburban, lunar
 - concrete: dramatic, constitutional, linguistic, musical
- + animate: senatorial, presidential, feline...
 - animate: rural, electric, linguistic
- + human: presidential, papal, athletic
 - human: European, feline, nocturnal
- + masculine: paternal, masculine, Shakespearean
 + feminine : maternal, feminine,
- +common : financial, urban, musical
 -common : Persian, Parisian, Shakespearean

As Levi points out for nouns, there are certain features of Relational adjectives which make others redundant. For instance, (+ human) implies (+animate) and (-common) implies (+definite). In these cases, it is important to note that the selectional restrictions expressed by these features for nouns are visible also for their corresponding Relational adjectives. Below I present the examples provided by Levi (1978:26):

- | | | | | |
|-----|----|--|----|---|
| (7) | a. | lies by presidents/ *by chemical digestion by cows/*Paris comments by editors/ * flowers | b. | presidential/*chemical lies bovine/ * Parisian digestion editorial/ * floral comments |
|-----|----|--|----|---|

V. Nominalization

Nominalization is the last argument presented by Levi in favour of the nominal source of Relational adjectives, arguing that if Relational adjectives are indeed derived from nouns, one would expect that these adjectives behave syntactically like nouns and therefore, they fail to undergo the process of nominalization. In supporting this prediction, Levi presents Bartning's

observation according to which nominalization applies only to those adjectives which may be in predicate position. This argument is demonstrated by the following homophonous adjectives:

- (8) a. *un garçon ponctuel* b. *une source lumineuse ponctuelle*
Ce garçon est ponctuel. **La source lumineuse est ponctuelle*
La ponctualité du garçon **La ponctualité de la source*

The same observation can be made also for English homophonous adjectives:

- (9) a. mechanical reaction b. mechanical engineer
Her reaction was mechanical. *The engineer was mechanical.
The mechanicalness of her reaction *The mechanicalness of the engineer.

Levi raises the question regarding the correlation between the possibility of nominalising an adjective and its predicate position. First, it is important to note that the nominalization process regularly functions by incorporating an abstract head noun with the predicate of an underlying sentence, and using this predicate element as the morphological stem.

This clearly leads to the rationale that there is no point in nominalising an element which is already nominal. As a consequence, although verbs and predicative adjectives are predicating adjectives and perfect candidates for this nominalization, nouns and nominal adjectives are unsuitable since their function is that of a logical argument rather than a predicate.

In light of these arguments, Levi (1978) argues that nonpredicating adjectives have a different status than their predicative counterparts. She claims that denominal adjectives can be dual between predicative and non-predicative, but only predicative adjectives can be nominalised as the non-predicative ones are nouns.

In light of these tests, Levi (1978) provides strong arguments for the nominal nature of Relational adjectives and raises a legitimate question regarding the parallelism between Relational adjectives and nominal compounds.

- (13) a. **los embajadores [alto y bajo]*
**ambasadorii [înalt y scund]*
 The ambassadors.pl tall.sg and short.sg
- b. *los embajadores [de Méjico y de Argentina].*
Ambasadorii Mexicului si Argentinei
 The ambassadors from Mexico and Argentina
- c. *Los embajadores mejicano y argentino.*
Ambasadorii mexican si argentinian.
 The ambassadors.pl Mexican.sg and Argentinian.sg

Fourth, Relational adjectives show bracketing paradoxes with prefixes and prenominal adjectives:

- | | | |
|------|--|-----------------|
| (14) | <i>pre-universit-ario, ante-diluvi-ano</i> | <i>Spanish</i> |
| | <i>Pre-universit-ar, anti-deluvion-al</i> | <i>Romanian</i> |
| | Pre-universit-ary, before-related to the flood | |

The Relational adjective *antediluviano* with the prefix *ante-* meaning “before the time of X” and the base *diluviano*, “related to heavy rain” does not receive the interpretation “by being previous to the property of being related to the flood” but rather it expresses the property of being related to the time previous to the flood. That implies that the prefix *ante-* only has scope over the base *diluvio* which means “heavy rain”. The same phenomenon happens with the Relational adjective with the prenominal adjective *bajomedieval* “something from the late Middle Age”, the adjective *bajo* seems to modify the base and not the entire Relational adjective.

Last but not least, Classificatory Relational adjectives act as subordinate adjectives:

- (15) a. *una mesa redonda y grande.*
o masă rotunda si mare
 A table round big
 # a table characterised by a big roundness
- b. *coma alcoholic metílico*
 coma alcoholic methylated
 methylated alcohol coma

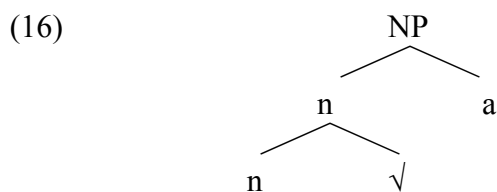
- c. *reguli sanitare veterinare*
 regulations health animal
 Animal health regulations

Observe that Classificatory adjectives combine with other Relational adjectives in subordinate structures: that is the second Classificatory adjective specifies the meaning of the first one. This is not the case with predicative adjectives.

In the light of these tests which reveal the nominal nature of Relational adjectives, Fábregas (2007) argues that a Relational adjective is semantically equivalent to a noun modifying another. However, this behaviour would not be expected from an adjective.

Thus, due to the peculiar semantic and syntactic characteristics of Relational adjectives, Fábregas claims that Relational adjectives represent instances of transposition. The term, first introduced in the literature by Marchand (1969), refers to a lexeme whose grammatical label has been changed without altering the rest of its properties. In other words, it refers to words which have the semantic interpretation of a certain category while exhibiting the formal properties of another one.

The behaviour of Relational adjectives is accounted for by Fábregas with a configurational analysis which preserves their form-meaning isomorphism. Explicitly, he provides a configurational morphological analysis of Relational adjectives, which are considered to be nouns that contain in their internal syntactic structure a semantically defective matrix of features spelled out as an adjectival affix.



In (16) the head little *a* is unable to project, while little *n* imposes the semantic and formal features in the structure. As a consequence the structure will behave like a noun, but will spell out like an adjective.

Crucially, in the case of the non-defective functional head, the suffix selects semantically the other constituent and the last suffix added to a word generally imposes its semantic denotation to that word. In the case of predicative adjectives, the semantics imposed by *a* is the feature of attribution (Spencer (1999) and Fábregas (2007)). Fábregas claims that

when this features is contained in a head, it is responsible for the denotation of an adjective as a word which denotes qualities of things (Fábregas 2007: 146).

As expected, Relational adjectives have indeed a head with characteristics similar to little *a*, but whose feature *Attr* is defective or does not exist. The immediate result of this is that this head will not project its label – and therefore it won't dominate the structure with which it merges.

Relational adjectives have this defective *Attr* feature and, therefore, they are not able to select the base of the word, are unable to select the semantic type of the projection with which it combines but they are not entirely semantically empty. In the spirit of McNally and Boleda (2004), Fábregas argues that the presence of this defective *a* into the internal structure of Relational adjectives explains why Relational adjectives exhibit agreement.

As follows I will present the steps proposed by Fábregas for the syntactic derivation of Relational adjectives: The morphological base of the Relational adjective is a little *n* projection – as inside most Relational adjectives there is a noun – and the semantic denotation of the Relational adjective is nominal.

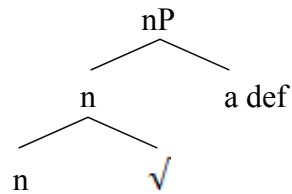
First, the first syntactic operation is of merge where the noun selects the root and determined the grammatical category – the label that dominates the construction is little *n* – which imposes its semantics:



Second, the next merge operation is of the *a* defective which lacks the feature attribution. Essentially, this lexical item cannot project its label. This head has interpretable features that force the word to agree with a full noun phrase. According to Chomsky, uninterpretable features do not have a meaning but trigger syntactic operations that are interpreted semantically in Logical Form.

The consequence is that according to McNally and Boleda (2004), the agreement between the defective *a* and the head noun is responsible for the meaning of relationship which is denoted by Relational adjectives:

(18)



However, in spite of the fact that Fábregas's theory can derive the semantic properties and the order of morphemes in the Relational adjectives, I show that it has several shortcomings:

To begin with, it assumes that both Thematic and Classificatory adjectives have the same configuration. As well-known, Th-adjectives are arguments of the deverbal noun and are argued to correspond to the Genitive case while Cl-adjectives are intersective and predicative. As we see in the next subsection, Alexiadou & Stavrou (to appear) argue that the distinction between Th-adjectives and Cl-adjectives can be accounted for if they interact with syntax at different points of the derivation, i.e., Th- adjectives are subdued to a syntactic derivation while Cl-adjectives are compatible with a morphological derivation. Moreover, unlike Cl-adjectives, Th-adjectives are arguments of the deverbal nouns, hence they must be embedded under DP in the light of the fact that only DPs can be arguments (Longobardi 1994).

Moreover, in spite of the fact there are strong arguments in favour of a denominal status of Relational adjectives, there is some counterevidence for the nominal character of Relational adjectives, namely their defective anaphoric properties. Fábregas' claim that the Relational adjective has a defective feature of Attr cannot account for the deficient anaphoric properties of Relational adjectives.

5.2. *Counterevidence for the denominal character of Relational adjectives*

5.2.1. *Alexiadou & Stavrou (to appear)*

As Postal (1969), Levi (1978), Bartning (1980) and Alexiadou & Stavrou (to appear) show, the hidden nominal behind the Relational adjective is not accessible to rules of outbound anaphora. The Relational adjective is an anaphoric island (cf. Postal 1969)

(19) *the American proposal to the UN reveals its/ her rigid position

Unlike Relational adjectives, Genitive nouns can bound an anaphora:

- (20) a. America's proposal to the UN reveals its/ her rigid position.
b. Albania's destruction of itself grieved the expatriot community.

Alexiadou & Stavrou (to appear) show that Ethnic adjectives in Greek, (a subset of Thematic adjectives) cannot bind an anaphor in (21), cannot provide an antecedent for personal pronouns in (22) and cannot control a relative pronoun in (23).

- (21) **i germaniki katastrofi tu eaftu tus/ ton eafton tus*
The German destruction the self (gen.sing/pl)- their.CL

- (22) **i eliniki adinamia na min paradexomaste; ta lathi mas;*
The Greek weakness SUBJ not admit-1pl the faults our-1cl.GEN

- (23) **Oli katadikasan tin Amerikaniki epithesi sti Servia, i opii fisika*
all condemned the American attack to Serbia, who, of course, have
exun parelthon se tetjes energies.
have a long history in such acts

Analogically, in Romanian and Spanish, Ethnic adjectives can bind neither an anaphor and provide an antecedent for personal pronouns nor can they control relative pronouns:

- (24) a. **distrugerea germană a ei/ a lor*
destruction.the german of her/ their
b. **la destrucción alemana de el/ ellos*
the destruction german of his/their

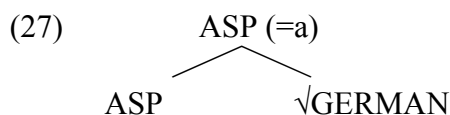
- (25) a. **slabiciunea greacă de a nu admite greșelile noastre.*
Weakness Greek SUBJ not admit faults.the our-1pl.
b. **la debilidad griega de no aceptar nuestros errores.*
The weakness Greek of not accepting our faults.

All in all, Alexiadou & Stavrou's (to appear) approach shows that despite the ability of EAs to act as nominals in sentences and are underlying nouns, they do not have the basic binding properties of argument DPs. Therefore, Alexiadou & Stavrou (to appear) regard them as deficient referring elements that are, however, available for certain rules of thematic interpretation. The idiosyncrasies of Ethnic adjectives in Greek are captured by the morpho-syntactic analysis provided by Alexiadou & Stavrou (to appear).

In the general spirit of Marantz (1997, 2001), they assume that words can be built in one of the two following ways: either in the domain of a root, by attaching a morpheme to the root before attaching the functional head that determines the syntactic category of the word or outside the domain of the functional head that determines syntactic category:



Building on Embick (2003) and Alexiadou & Anagnostopoulou (2008), Alexiadou & Stavrou (to appear) take (27) as the basic structure both for EAs and prototypical adjectives:



The distinction between prototypical adjectives and EAs is argued to be at the level of allomorphy, i.e., *-ik* in Greek is an ASP exponent that appears with particular lists of roots, while \emptyset appears with a different list of roots.

Thus, Alexiadou & Stavrou (to appear) take *-ik* as the overt exponent of the category *a*/ASP which creates an adjective out of a noun. Importantly, GERMAN is already a noun via zero affixation and, subsequently, this stem is turned into an adjective through suffixation with *-ik*.



As I will present in chapter 6 dedicated to the syntax of Relational adjectives, *-ik* is merged directly in spec AGR, heading an aP. From the spec nP the noun underlying the EA moves to the higher Specifier from where it adjoins, as a head, to *a* as a bound morpheme. Importantly, this movement is also akin to Case driven movement of arguments.

Unlike EAs, their homophonous counterparts (CI-adjectives) are argued to be derived prior to insertion in the syntactic structure. In other words, in spite of the fact that CI-adjectives are also nominal, they do not move to AGRP like nouns but directly as adjectives.

Thus, in the light of the fact that both Th-adjectives and CI-adjectives are nouns at their origin, one of the major goals of this study is to trace down the types of nominals behind Relational adjectives. This may cast more light on their semantics as deficient referring elements and on their syntactic properties as arguments and restrictive modifiers, respectively.

Thus, as follows I present first an excursus in the semantics and syntax of bare nouns in Romance.

5.3. *Bare Nouns in Romance*

As well-known, in Romanian and Spanish, bare plurals and bare mass nouns can appear in argument position. They can freely appear as complements of most verbs, as well as in post-verbal subject position. The following examples were provided by Dobrovie & Bleam & Espinal (2005)

- | | | | |
|------|----|--|-----------------|
| (29) | a. | <i>Juan vió películas.</i>
Juan saw movies. | <i>Spanish</i> |
| | b. | <i>Am desenat copaci.</i>
I have drawn trees. | <i>Romanian</i> |
| | c. | <i>Merodeaban leones en la selva.</i>
Prowled lions in the jungle | |
| | d. | <i>In grădină se plimbau lei</i>
In garden strolled lions. | |

However, this is not the case for all Romance languages. For instance, according to Zamparelli (2001), in Italian the definite article must accompany objects, post-verbal subjects, subjects of passive and preverbal subjects in order to acquire an existential (indefinite reading) while in Romanian and Spanish not:

- (30) a. *Ogni settimana, il mio sito web viene attaccato da *(gli) hacker.* Italian
 Every week my web site is attacked by the hackers.
- b. *In fiecare săptămână pagina mea web este atacată de viruși*(-i).* Romanian
 Every week my web site is attacked by hackers.
- c. *Todas las semanas mi pagina web es atacada por *(los) hackers.* Spanish
 Every week my web site is attacked by the hackers.
- (31) a. *In cantina ci sono i topi e sotto il lavello vivono gli scarafaggi.*
 In the basement there are the mice and under the sink live the cockroaches
- b. *In beci sunt soareci si sub chiuveta se gasesc molii(*-le).*
 In the basement there are mice and under the sink there are cockroaches.
- c. *En el sótano hay *(los) ratones y bajo la fregadera hay *(las) cucarachas.*
 In the basement there are mice and under the sink there are cockroaches.

These examples highlight the discrepancies among Romance languages with respect to the argument position of nouns. Explicitly, one can notice that the existential meaning of plural nouns is not the same in all Romance languages. That is: Italian requires in most cases the definite article for the existential interpretation while Romanian does not allow object definites with existential reading. However, in Spanish both the definite and bare forms are accepted with the remark that the definite article forces the meaning that for instances, all hackers attacked my web site.

However, note that bare nouns are used in Romanian and Spanish also in non-identificational and non-argumental constructions:

- (32) a. *Am citit cărți despre lei*(-i).*
 Have-1sg read books about lions.
 ‘I have read books about lions’
- b. *Leí libros sobre *(los) leones.*
 Read.1sg books about lions
 ‘I have read about lions.’

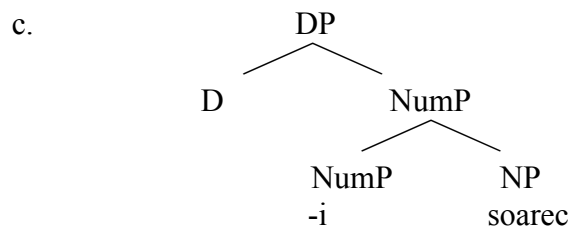
By the virtue of the fact that nominal projections can occupy argument positions only if they are DPs (Longobardi 1994) and that bare plurals can occur in the postverbal argument

position, I argue that in Romanian and Spanish bare nouns are DPs in argument position and are NumPs with non-argumental, non-identificational constructions like in (32b).

In the literature so far it was observed that bare plurals and mass nouns may lack a DP level when they are not arguments (Borer (2005), Dobrovie & Bleam & Espinal (2005), Giurgea (2008)). For instance, Dobrovie & Bleam & Espinal (2005) claim that in Romanian non-argumental bare plurals are NumP. In the same spirit, Giurgea (2008) argues that bare plurals are in predicate position – ambiguous between NP and DP; in argument position, they are DPs.

Thus, in line with Giurgea (2008) I claim that bare nouns may also have a D level, being actually ambiguous between DPs when they are arguments and NumP when not.

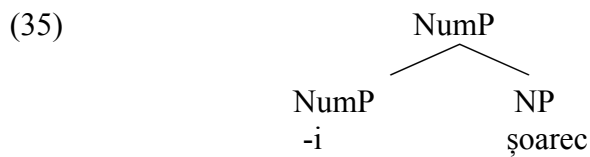
- (33) a. *Pisica a mâncat șoareci* – bare plural
 Cat-the eats mice.
 b. *El gato comió ratones* - bare plural
 The cat eats mice



I point out that the two layers – DP – NumP are necessary in the structure of argument bare plurals in Romanian as they have an indefinite interpretation: “The cat ate some mice”. However, the DP layer is not present in non-identificational constructions within the structure of bare nouns (see (32) repeated below):

- (34) a. *Am citit cărți despre lei*(-i).*
 Have-1sg read books about lions-the.
 ‘I have read books about lions’
 b. *Leí libros sobre (*los) leones.*
 Read.1sg books about the lions
 ‘I have read about lions.’

Hence, I claim that non-argumental bare nouns are only NumP in Romanian and Spanish:



Note that the same bare nouns can be both NumP and DP depending on the structural configuration – whether argumental or not.

However, some questions arise:

Why do Romanian and Spanish show the distinction between preverbal and postverbal arguments? Why is D in the postverbal position with bare noun arguments empty?

A first observation to be made is that plural definites can also occur in the postverbal object position either with a generic reading as in (36a) or with a specific reading (36b) but not with existential unspecific reading (36c):

- (36) a. *In Cretacicul târziu schimbările climatice și un asteroid căzut în Golful Mexic au ucis dinozauri*(-i).*
 In the Late Cretaceous climatic changes and an asteroid fell in the Gulf of Mexico killed dinosaurs-the.
- b. *Pisica a mâncat soarecii negri/ care erau negri/mari*
 Cat-the has eaten mice-the black/ which were black/big
- c. *Pisica a mâncat soareci(*-i).*
 Cat-the has eaten mice-the. (unspecific reading)

In the light of these examples, one can assume that unlike Italian, Romanian and Spanish use bare nouns, DPs with empty D in order to highlight the unspecific reading, i.e., (36a) triggers an all-reading or generic reading and (36b) refers to a specific subset of mice. In other words, the lack of the definite article reflects the lack of specificity of the nominal phrase. This also explains the fact that bare nouns cannot occur in the subject position as this position is always related to the topic or to specific referents.

After having a clear idea how bare and definite nominals are used in Romance languages, we should be able to detect the behaviour of nominals behind Relational adjectives.

5.4. *Relational adjectives as bare plurals in Romanian and Spanish*

As already illustrated in the first section, Relational adjectives have a nominal source. The aim of this section is, therefore, to trace the nature of nouns which build Relational adjectives in Romance and to see in which amount their origin influences the syntactic analysis of Relational adjectives. To capture such generalizations, let us regard the following Relational adjectives and their interpretations (presented in detail in chapter 4 and repeated here)

- | | | | | |
|------|----|---|----|---|
| (37) | a. | <i>alegeri prezidențiale</i>
presidential elections | b. | <i>construcții imobiliare</i>
estate constructions |
| | c. | <i>consumul petrolier</i>
oil consumption | d. | <i>producția agrară</i>
agrarian production |
| (38) | a. | <i>decizii guvernamentale</i>
decisions governmental | b. | <i>atacurile americane</i>
American attacks |
| (39) | a. | <i>reforma universitară</i>
academic reform | b. | <i>probleme financiare</i>
finance problems |
| | c. | <i>industria petrolieră</i>
oil industry | d. | <i>produse agrare</i>
agrarian products |
| | e. | <i>mașina prezidențială</i>
presidential car | f. | <i>anunțuri imobiliare</i>
estate announcements |

Recall that Relational adjectives do not represent a homogenous class despite their denominal nature. Hence, in the examples above I illustrate both Th-adjectives in (37 & 38) and Cl-adjectives in (39) in order to capture their behaviour with respect to a possible denominal source.

This leads us to several observations:

First, one can observe that one and the same Relational adjective can occur in two different environments, i.e., it can be either a Thematic or a Classificatory adjective. Thus, the adjective *petrolier* can be either a Thematic adjective in (37c) when it the argument of the deverbal noun “consumption” or is classificatory adjective in (39c) when it occurs with the common noun “industry”. The same observation holds also for Relational adjectives such as “agrarian” in (37d) vs. (39d) or “presidential” in (37a) vs. (39a).

Second, apparently Relational adjectives correspond to all kinds of nominals: count nouns such *preşedinte* in (38a) & (39e) or *guvern* in (38a), plurals such as *imobiliare* in (37b) & (39f) or *americani* (38b) but also mass nouns such as *petrolieră* in (37c) & (39c). Therefore, their heterogeneous nature can be a potential problem for a unified approach of the denominal nature of Relational adjectives. However, note that the only Relational adjectives that correspond to count nouns refer to a unique reference: the president or the government of a specific country. the only relational adjectives that correspond to singular count nouns refer to unique reference: the president or the government of a specific country and are limited in number. Crucially, according to Hawkins (1991) , unique nouns, like plural or mass nouns, make reference to all-entities/ mass within a set where the totality happens to be simply a single entity:

(40) *for the present queen of England there is a current set of officialises of England, and there is no entity outside of this set satisfying the description present queen of England*
(Hawkins 1991: 412)

Moreover, “uniqueness” can be extended also to plural nouns. For instance, the following example shows that the distinction between plural and mass nouns can be easily blurred:

(41) *The cake at the wedding was simply delicious.*

In line with Hawkins (1991), I argue that the *cake* refers to all cake at a particular wedding: there is a unique maximal amount of mass within a set to which mass nouns with the definite article refer.

In addition, according to Chierchia (1998), mass nouns are essentially just lexical plurals, so that the part/whole relation on the denotata of mass nouns coincides with the

subgroup relation on the denotata of plurals. In the light of this approach, the two distinct sources of Relational adjectives – plurals on a one hand and mass nouns on the other hand - come not as a surprise.

In the light of these observations, I put forward the hypothesis that Th-adjectives and Cl-adjectives correspond to the two subclasses of bare plurals and mass nouns: DPs with an empty D. Specifically, Th-adjectives are DPs while Cl-adjectives are nPs.

As follows, in order to offer support to this proposal, I first have to show that mass nouns semantically correspond to bare plurals and second, that Thematic adjectives share with plurals DPs the same unspecific semantics while Classificatory adjectives are NumPs like non-argumental bare plurals.

5.4.1. *The semantics of plurals*

Quine (1960) and Lasnik (1989) show that there are significant parallels between plural and mass expressions. Essentially, both exhibit *cumulative reference*, as they licence inferences such as in (40) (Quine 1960:91):

- (42) a. A is water and B is water; therefore A and B are together water
 b. A are apples and B are apples; therefore A and B together are apples

As expected, singular count nouns do not licence the same kind of inference, they exhibit, as (43) is invalid:

- (43) *A is an apple and B is an apple; therefore A and B together are an apple.

Moreover, in Romanian and Spanish mass and plural nouns may appear with no overt determiner, while a determiner is normally required for singular count nouns:

- | | | | | | | |
|------|----|-----------------|----|-------------------|----|--------------------|
| (44) | a. | <i>Văd aur.</i> | b. | <i>Văd pisici</i> | c. | <i>*Văd pisică</i> |
| | | <i>Veo oro.</i> | | <i>Veo gatos</i> | | <i>*Veo gato.</i> |
| | | I see gold | | I see cats | | I see cat |

From a semantic point of view, bare mass and plural nouns phrases also resemble in interpretation, depending on the predicate with which they also combine. Carlson (1977) and Lasnik (1989) show that if the predicate is *stage-level*, the noun phrase is understood as existentially quantified:

- (45) a. Water leaked into the floor.
 b. Raccoons were stealing my corn

In (45) the nouns are interpreted existentially, equivalent to: Some water leaked into the floor and some raccons were stealing my corn, respectively. On the other hand, if the predicate is individual-stage, the sentence is understood as drawing a generalization about the objects of the kind picked out by the mass or plural noun, as in (46):

- (46) a. Water is wet.
 b. Raccoons are sneaky.

Importantly, if the predicate is kind-level, the mass or plural noun is understood as referring to a “kind” of object, and the predicate is applied to this kind collectively, as a whole:

- (47) a. Water is common.
 b. Raccoons are extinct.

In the light of this approach, the two distinct sources of Relational adjectives – plurals on a one hand and mass nouns on the other hand - come not as a surprise. However, if Relational adjectives indeed originate in plurals and mass expressions, then they have to coincide in the semantics. As follows, I show that Th-adjectives have the same unspecific semantics like bare nouns in argument positions (DPs with an empty D) while Cl-adjectives are NumPs just like other bare nouns that are non-identificational and non-argumental.

5.5. *Thematic Relational adjectives – as plural/mass nouns expressions*

In this section, I show that Thematic adjectives semantically correspond to mass and plural expressions.

To begin with, like mass and plural expressions, Relational adjectives exhibit cumulative reference.

- (48) *reforma universitară*
 reforma universitaria
 academic reform (= The reform of the universities)

Note that the Relational adjective *universitară* “regarding the universities or academic” corresponds to plural expression *universități or universidades* “universities”. This licenses the inference that:

- (49) If A is something that refers to universities and B is something that refers to universities then A and B both refer to universities.

In other words, if the reform A is academic and reform B is academic, then both reforms A and B are academic.

The same cumulative reference is licensed by the Relational adjective *petrolier*:

- (50) a. *consumul petrolier*
 el consumo petrolero
 consumption oil-TH-adj

- (51) If A consumes oil and B consumes oil, then both A and B consume oil, not a specific kind of oil.

Thus, one can assume that Thematic adjectives correspond to argumental plural nouns. However, as in the excursus above one can see, there are two classes of bare plurals in Romance: DPs with an empty D which are arguments and NumPs in non-argumental positions. The distinction between the two classes of bare nouns presented in (33&34) is that

the first are arguments while the latter function as restrictive modifiers. What they, however, have in common is their unspecific meaning:

Thus, by the virtue of the fact that nominal projections can occupy argument positions only if they are DPs (Longobardi 1994) and that bare plurals can occur in the postverbal argument position, in the previous section I showed that in Romanian and Spanish bare nouns are DPs in argument position and are NumPs with non-argumental, non-identificational constructions like in (34). Moreover, I showed that there is a semantic distinction between the presence and the absence of the definite article in D. The empty D signals the lack of identificational reference as only unspecific arguments occur bare in post-verbal positions (see (36a) vs. (36c)).

Analogically, Thematic adjectives are argued to be arguments of the deverbal head (Levi (1978) Bartning (1980), Bosque & Picallo (1996), Alexiadou & Stavrou (to appear))

- (52) a. *producción automovilística*
 Th(ematic) Adj.
 car production

Therefore, there are strong reasons to believe that Thematic adjectives syntactically correspond to bare noun arguments which are DPs.

If it is so that Thematic adjectives correspond to argumental bare nouns with an empty D, then they should show the same non-specific, non-identificational reading. Essentially, I show that Thematic adjectives occur only with stage-level predicates which impose a non-specific reading:

- (53) a. *Construcțiile imobiliare în satul X au fost amânate.*
 Las construcciones inmobiliarias en el pueblo X se demoraron.
 The estate constructions in the X village were postponed.
- b. **Disparația piscicolă a crescut în anul 2009.*
 **La desaparición ballenara aumentó en el año 2009.*
 The fish/whale disappearance increased in 2009.

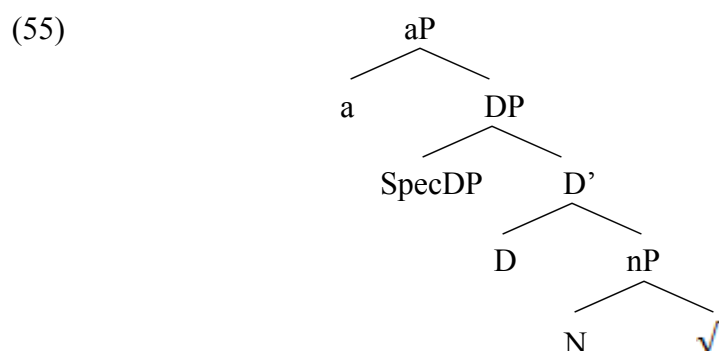
Note that in (53a) the Th-adjective does not and cannot refer to specific estates in the X village but rather to some estates which were meant to be built. Moreover, Thematic adjectives occur only with deverbal nouns derived from stage-level predicates such as

“construct”, “consum”, “produce” or “elect” and they are illicit with individual-level predicates such “disappear” or “die” in (53b) which imply a generic or all reading. Importantly, individual-level predicates trigger a kind reading in Romance which is marked by the presence of the definite article:

- (54) *In Cretacicul tarziu schimbarile climatice si un asteoroid cazut in Golful Mexic au ucis dinozaurii.*
 In the Late Cretaceous climatic changes and an asteroid fell in the Golf of Mexico
 killed dinosaurs-the.

In the examples above the definite noun “the dinosaurs” refers to the entire specie of dinosaurs which disappeared and this kind reading is triggered by the definite article and the individual-level predicate “kill”.

All in all, I argue that there are three types of plural nominals in Romanian and Spanish, i.e., bare nominals which are NumPs are used in non-argumental position, bare nominals which are DPs with an empty D used for plural arguments with non-specific interpretation and definites which are used for specific and generic readings. On the basis of this classification, Thematic adjectives correspond to bare nouns which are DPs with an empty D due to several reasons: first, Thematic adjectives are arguments of the deverbal nouns (cf. Postal (1969), Levi (1978), Bartning (1980), Bosque & Picallo (1996), Fábregas (2007) and Alexiadou & Stavrou (to appear)); second, unlike definites, they occur only with nouns derived from stage-level predicates and cannot have a kind reading; third, they show a non-specific interpretation. Thus, I propose the following structure for Thematic adjectives:



On the basis of Borer (2005), I argue that relational adjectives are underlying underspecified nouns with a default mass/plural interpretation. The structure of their DP is minimal in the sense that it is similar to that of mass nouns. i.e. it simply contains a D head

and the root (see Borer (2005); cf. Marchis (2009)). This is presumably the reason why such nouns are interpreted as having a mass/plural (: group) denotation.

In the general spirit of Marantz (1997, 2001) and Alexiadou & Stavrou (to appear), I argue that the noun underlying the Thematic adjective moves (from nP) to AgrP; there it adjoins, as a head, to a/ASP. We assumed that all adjectives contain this a/ASP head. The movement of the noun in Spec, nP can be seen as parallel to the movement of clitics which move as heads and as maximal projections at the same time (Chomsky 1995; Cardinaletti 1998). It is also akin to Case driven movement of arguments (cf. Alexiadou & Stavrou (to appear)). Assuming that a DP unvalued for Case is ill-formed at morphological structure, in chapter 7 I propose two ways of solving the Case feature mismatch of Thematic adjectives.

To sum up, the structure in (55) has the merit of equally capturing both the nominal nature of the Thematic adjectives as it contains a nP, their argument structure as DPs but also their partial lack of binding properties as they are DPs with a deficient structure shown by Alexiadou & Stavrou (to appear).

As follows, I show that the split distinction of bare nouns in Romance is reflected also in the classification of Relational adjectives as Thematic vs. Classificatory adjectives as the latter correspond to bare nouns as NumPs and, are not formed in the syntax but are morphologically derived.

5.6. *Classificatory adjectives – as nPs*

In spite of the fact that all Relational adjectives are underlying nouns, unlike Th-adjectives, Classificatory adjectives are not arguments of the noun but rather they behave like restrictive modifiers (cf. Bosque & Picallo (1996)). In this section I first put forth several arguments in favour of the predicative nature of Cl-adjectives and I second show that Classificatory adjectives correspond to non-argumental bare nouns in Romance, which are nPs.

To begin with, the first similarity between Cl-adjectives and bare nouns is that they both can occur in the predicative position:

- (56) a. *Leii sunt animale(*-le) nobile.* *Romanian*
Lions-the are animals-the noble.

Niculescu (2009) claims that in (60a) the bare noun is a real bare noun, with no functional projection, and with the meaning of property of an object and in (60b), the noun phrase projects a NumP; the noun “noblemen” has the meaning of plurality. Importantly, Cl-adjectives can be substituted with *de* + bare nouns:

- | | | | | |
|------|----|---------------------------------|---|---------------------------|
| (61) | a. | <i>dragoste de mamă</i> | ~ | <i>dragoste maternală</i> |
| | | <i>amor de madre</i> | ~ | <i>amor maternal</i> |
| | | love of mother | ~ | maternal love |
| | b. | <i>veșminte de rege/regi</i> | ~ | <i>veșminte regale</i> |
| | | <i>vestimenta de reye/reyes</i> | ~ | <i>vestimenta real</i> |
| | | garments of king/kings | ~ | royal vestiments |
| | c. | <i>lucru de mână</i> | ~ | <i>lucru manual</i> |
| | | <i>trabajo de mano</i> | ~ | <i>trabajo manual</i> |
| | | hand work | ~ | manual work |

Last but not least, Niculescu (2009) shows that there are two Romanian *de* phrases, suggesting that one is a genitive DP while an nP as a restrictive modifier.

- | | | | | |
|------|----|--------------------------------|----|--------------------------------|
| (62) | a. | <i>producția de petrol</i> | b. | <i>veșminte de rege/regi</i> |
| | | <i>producción de petróleo.</i> | | <i>vestimenta de rey/reyes</i> |
| | | production of oil | | garment of king/kings |

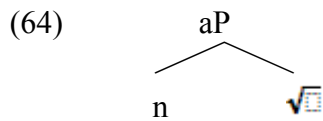
(62 a & b) correspond to the distinction between Th-adjectives and Cl-adjectives in (63 a & b):

- | | | | | |
|------|----|-----------------------------|----|-----------------------------|
| (63) | a. | <i>producția petrolieră</i> | b. | <i>vestimentație regală</i> |
| | | <i>producción petrolera</i> | | <i>vestimenta real</i> |
| | | production oil-TH-adj | | garment royal |

All in all, the split classification of Relational adjectives seems to reflect the syntactic dual behaviour of bare nouns in Romanian and Spanish, as DPs when they are post-verbal arguments and nPs when they are non-argumental. Semantically speaking, however, both have a non-specific reading.

In the light of these distinctions, I propose the following structures for Cl-adjectives:

a. Cl-adjectives as nPs



Thus, as one can observe in (64), Cl-adjectives are simple nPs underspecified for mass-count or singular-plural distinction. Like Th-adjectives, Cl-adjectives have less structure than their corresponding *de* phrases: they do not realize NumbP

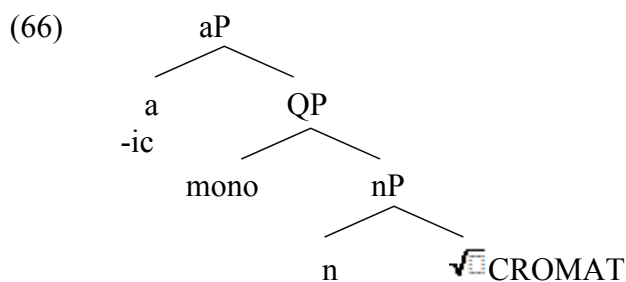
Nevertheless, Levi (1978) for English and Fábregas (2007) for Spanish show that Cl-adjectives show number/countability properties just like nouns.

(65)

<i>a.</i>	<i>mono-cromático</i>	<i>b.</i>	<i>poli-silábico</i>	<i>Spanish</i>
	<i>mono-cromatic</i>		<i>poli-silabic</i>	<i>Romanian</i>
	<i>mono-chromatic</i>		<i>poly-syllabic</i>	

Crucially, pseudo-prefixes such as *mono* or *bi* do not show division or countability but rather quantification much in the sense of mass nouns: *little* or *much*.

Therefore, I argue that like in the case of other relational adjectives, the NumbP in relationales adjectives such as presented in (65) is not realized but rather the Quantity Phrase (as proposed in Borer (2005) for *little* or *much*):



5.7. *Conclusions*

In this section I discussed the morpho-syntactic structure of Relational adjectives within the Distributed Morphology Framework (Halle & Marantz (1993)).

In line with Levi (1978) and Fábregas (2007), I present several tests which speak in favour of the denominal nature of Relational adjectives. But Alexiadou & Stavrou (to appear) show that their deficient anaphoric binding properties may represent a counterargument for their denominal nature. Semantically speaking, however, they show non-degreeness, countability and belong to semantic classes like nouns. From a syntactic point of view, they do not present a homogeneous behaviour i.e., Th-adjectives can be arguments of the noun while Cl-adjectives are predicatives.

This dual behaviour of Relational adjectives corresponds to the two types of bare nouns in Romanian and Spanish, argument bare nouns which are DPs and non-argument bare nouns which act as restrictive modifiers and are NumPs (cf. Dobrovie & Bleam & Espinal (2005) Giurgea (2008)). However, both types of bare nouns do not differ from a semantic perspective as they all have a non-specific and non-identificational interpretation. Essentially, all Relational adjectives trigger the same semantic interpretation like bare nouns, i.e., they cannot occur with individual level predicates that trigger a kind-reading. The distinction between bare arguments and definites is the specific or kind reading which is available with the latter and absent with the former.

Nevertheless if all Relational adjectives have the same unspecific interpretation like bare nouns, I show that they differ syntactically.

First, by the virtue of the fact Thematic adjectives are arguments of the nouns and show a non-specific interpretation like bare noun arguments, I argue that they have a DP layer in their underlying structure before turning into adjectives (Dobrovie & Bleam & Espinal (2005), Giurgea (2008)). The structure of the DP in the structure of Thematic adjectives is minimal in the sense that it is similar to that of mass nouns, i.e. it simply contains a D head and the root (see Borer (2005); cf. Marchis (2009)). This is presumably the reason why such nouns are interpreted as having non-specific plural (: group) denotation. Essentially, the Thematic adjectives are DPs with a deficient structure.

Thus, the structure I propose for Thematic adjectives has the merit of equally capturing both the nominal nature of Thematic adjectives as it contains a nP, their argument structure as DPs but also their partial lack of binding properties as they are DPs with a deficient structure.

Second, unlike Thematic adjectives, Classificatory adjectives are not arguments of the noun but rather they behave like restrictive modifiers (cf. Bosque & Picallo (1996). Essentially, I show that CI-adjectives behave like non-argumental bare nouns. To begin with, both CI-adjectives and bare nouns can be predicative. Second, Dobrovie & Blean & Espinal (2005) show that bare nouns in Romanian and Spanish allow only a classifying predication and correspond to the interpretation of bare nouns in the predicative position when they are preceded by an indefinite article. Interestingly, the same type of predication was observed for CI-adjectives by Bartning (1980). Third, in Marchis (2009a,b) I argue that CI-adjectives correspond to *de* + bare nouns. According to her, there are two Romanian *de* phrases: the one is a genitive DP while the other is realized as an nP with the function of a restrictive modifier. In the next chapter I will show that the former *de* phrase syntactically corresponds to Thematic adjectives while the latter to Classificatory adjectives. Nevertheless, unlike *de* bare nouns, both Thematic and Classificatory adjectives are underspecified for mass-count distinction and, hence, do not realize NumP, having a minimal deficient nP.

All in all, the aim of this paper was two-fold. On a one hand, I show that Relational adjectives are all nominal in spite of their deficient referring nature. On the other hand, Relational adjectives are not syntactically homogenous, i.e., Thematic adjectives are arguments and, consequently argument bare nouns DPs while Classificatory adjectives are restrictive modifiers, and correspond to non-argumental bare nouns nPs.

6. The syntactic analysis of Relational adjectives

6.1. Introduction

This chapter provides a general overview on the syntactic properties of Relational adjectives in Romanian and Spanish. It aims at providing background information for the chapter 7 and 8 where Thematic and Classificatory adjectives are syntactically analysed as different syntactic classes.

As a point of departure for the analysis, I present the functional structure of Romance DP which includes a determination area, an area of morpho-syntactic features projections, and an agreement area. This introductory part is intended to facilitate more insights into the behaviour of Relational adjectives in Romance and to point out the motivations behind the proposed analyses for Th- and Cl- adjectives.

In the following sections, significant syntactic approaches of Relational adjectives are discussed, such as the analyses proposed in Bosque & Picallo (1996) and Fábregas (2007) for Spanish and in Alexiadou & Stavrou (to appear) for Greek Ethnic adjectives. I present the pros and the cons for the different accounts in the Romance literature.

On the basis of empirical data from Romanian and Spanish, I show that a split syntactic analysis of Relational adjectives is highly motivated. Th- and Cl-adjectives show a large diversity of differences which are amenable to different syntactic analyses. To begin with, Th-adjectives are arguments of deverbal nominals, can occur neither in the predicative position and nor with *cel* in nominal ellipses in Romanian and are illicit with complex event nominals. In contrast, Cl-adjectives behave like predicative adjectives, can occur with *cel* and are licit with complex event nominals. In the light of these differences, I put forth two hypotheses regarding their syntactic status. First, I claim that those Relational adjectives which show grammatical relations with their head noun, correspond to Genitives in Romance. Second, I show that only those Relational adjectives that are non-argumental can occur with *cel* in Romanian.

However, the proposed assumptions are not free of complications. In the last part of this chapter, I present several counterarguments for the two hypotheses, which are to be thoroughly discussed in the following chapters.

All in all, this chapter is intended to prepare the ground for discussion regarding the analyses proposed for Th- and Cl-adjectives in chapter 7 and chapter 8, respectively.

6.2. *The functional structure of the Romance DP*

According to the work on Romance (e.g. Cinque 1993, Picallo 1990, Valois 1991, Giusti 1993, Cornilescu 1995), the functional structure of the Romance DP includes the following domains: a determination area, an area of morpho-syntactic features projections, and an agreement area:

- (1) [determination area Q [morpho-syntactic features area ... [agreement area [NP N]]]

A general property of Romance is that lexical categories regularly raise to affixal heads by rule like V-movement, N-movement, which obey the Head Movement Constraint.

The determination area includes a Determiner Projection, which is the complement of a higher Quantifier Projection. Q may contain definite quantifiers, as well as indefinite ones or cardinals. The second head, D may be viewed as a Case position where the Case feature of the noun phrase is assigned (Giusti 1992). Importantly, an element which is generated in D/Case, such as Case affix or a determiner, is a natural candidate for realizing the abstract Case feature. The definite article is viewed as a Case element. In Romanian, the definite article is enclitic, has the status of an affix which appears in the enclitic position. Its enclitic position is the result of the Noun Movement, obeying the Head Movement Constraint (cf. Dobrovie- Sorin 1987).

The area of morpho-syntactic features includes the Number Projection (cf Valois 1991), a Gender Projection (cf Picallo 1991), and possibly a Nominalizer Projection (Valois 1991, Picallo 1991). Cornilescu (1992) shows that at least one functional projection below D, say NumP, is needed in Romanian

The Agreement Area is an interesting property of Romance DP. It represents an area of phrases that must follow the head noun but overtly depends on it. Since these elements must follow the head, they are base generated in the lower part of the DP, below demonstratives and cardinals, which remain pronominal. In the unmarked word order, however, these phrases precede subcategorized complements of the head noun.

For instance in Romanian, locative and temporal PPs regularly precede Possessor Gens:

- (2) a. *casele de pe deal ale stăpânului.* *Romanian*
houses-the of on the hill of.GEN the master
'the master's houses on the hill'

- b. **casele stăpânului de pe deal.*
houses-the master-GEN of on the hill

According to Cornilescu (1995), the Case assigner of Gen in Romanian is also a functional head which agrees in gender, number and case with the noun that theta-marks the Genitive. She claims that that Genitive is assigned in the Specifier of the functional projection in the DP, as AgrP referred to as AgrGenP.

As follows, for the purpose of this work, I present different syntactic proposals for the structure of Relational adjectives, starting with the one proposed by Bosque & Picallo (1996).

6.3. *Bosque & Picallo (1996)*

Bosque & Picallo's (1996) approach discusses the semantic and syntactic properties of Spanish indefinite determiner phrases that contain postnominal Relational adjectives. As shown in chapter 4 of this study, Bosque & Picallo (1996) divide Relational adjectives in two major subclasses: Th(ematic) vs. Cl(assificatory) adjectives and show that this distinction is visible in the semantic interpretation and the word order of Relational adjectives:

Thematic Adjectives saturate the role of theme for the deverbal noun whereas Classificatory adjectives don't absorb a theta role, they only introduce a domain in relation to which the object is classified (Bosque&Picallo 1996: 369):

- | | | | | |
|-----|----|-----------------------------------|----|----------------------------------|
| (3) | a. | <i>producción automovilística</i> | b. | <i>excursión automovilística</i> |
| | | Th(ematic) Adj. | | C(lassificatory) Adj. |
| | | car production | | car tour |

Note that the adjective *automovilística* can appear as either Th(ematic) adjective or C(lassificatory) adjective. The Thematic status of the adjectives in (3a) is triggered by the deverbal nature of the noun. *Producción* is a deverbal transitive NP which lexically licenses a theta role, the THEME as the argument of *producción*. The same adjective *automovilística* in (3b) appears this time as a Classificatory-adjective because *excursión* is not a deverbal noun so it cannot license theta roles.

Moreover, the fact that the same Relational adjective can be ambiguous between a Thematic and a Classificatory interpretation can be observed in the following example proposed by Bosque & Picallo (1996):

- (4) *política americana*
American politics

Essentially, in (4) the Relational adjective can have either a Th-interpretation which triggers the possessive/ agentive reading, i.e., “politics by America” or the Cl-interpretation with the reading “politics related to America” where the Cl-adjective only introduces a domain which classifies the noun.

The semantic distinction between the two subclasses of Relational adjectives is reflected in the word order of Th- and Cl-adjectives when they co-occur:

- (5) a. *reformas agrarias gubernamentales* Spanish
reformele agrare guvernamentale Romanian
reforms agrarian governmental
agrarian reforms by the government
- b. **reformas gubernamentales agrarias* Spanish
reformele guvernamentale agrare Romanian
reforms governmental agrarian
governemental agrarian reforms

Note that a strict word order must be kept in the adjectival string as a Cl-adjective is strictly adjacent to the N head and is followed by a Th-adjective.

Bosque & Picallo (1996) generalize the fixed pattern observed in the adjacency of Relational adjective in the following scheme for Spanish and English:

- (6) **NOUN C-adjective Th-adjective** (Spanish, Romanian)
Th-adjective C-adjective Noun (English)

The scheme makes clear that the string of postnominal adjectives in Romance languages constitutes a mirror image of their counterparts in English. However, the relative adjacency that Cl- and Th-adjectives must have with respect to the noun is the same in Spanish as in English. It can universally be assumed that Cl-adjectives are always closer to the noun head no matter if they appear prenominal or postnominal.

Thus, Bosque & Picallo’s syntactic approach of Relational adjectives maps the different types of Relational adjectives in DP structure, intending to capture all their semantic and syntactic properties.

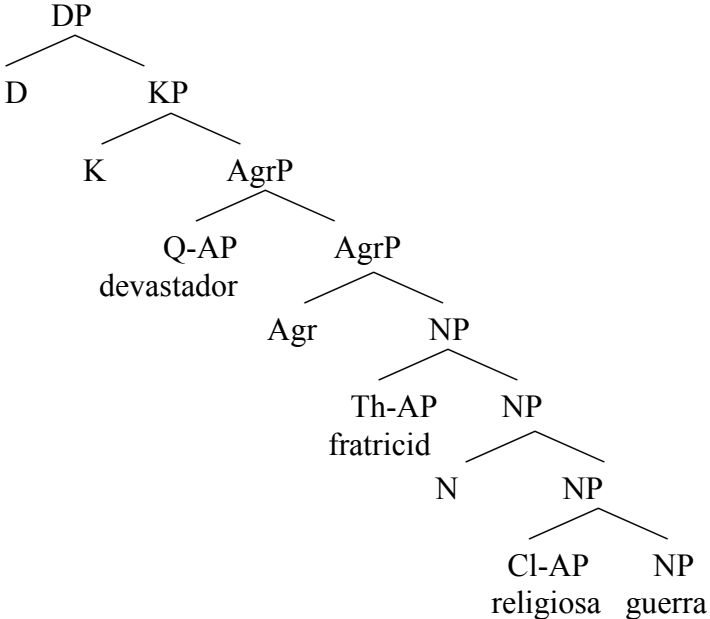
To begin with, I provide, first, the configuration of indefinite DPs proposed by Bosque & Picallo (1996). Essentially, indefinite DPs contain an NP category and several functional projections dominating it: DP as the highest functional projection which shows overt gender and number, and has covert Case, KP as a complement of the DP headed by abstract Case features (Giusti 1992), AgrP, immediately dominating the NP and the head containing abstract gender and number features. The structure is present below:

(7) **[DP D [KP Case [AgrP [Gender&Number] [NP Noun]]]]**

Bosque & Picallo’s approach shows how Thematic, Classificatory and Qualifying adjectives map into the basic configuration presented in (8) and the syntactic operations they undergo.

Observe the syntactic representation in (8) where the basic configuration of indefinite DPs contains a head modified by a Cl-adjective, a Th-adjective and a Q-adjective:

- (8) *Un devastador fratricid religios guerra*
 A devastating fratricidal religious war



Note that in line with Kayne (1994), their analysis regards all Relational adjectives both Th- and Cl-adjectives and Qualifying adjectives (cf. Cinque 1994) as mapped into

Specifier positions. NP is the category that hosts all Relational adjectives and, therefore, it can have as many layers as Th- and Cl-adjectives. The lower NP is the lexical projection to which the Cl-adjective is adjoined, occupying its Spec position. The higher empty shell NP harbors the Th-adjective. The existence of two NP shells is assumed in Kayne's (1994) system where only one adjunct/ specifier per category is allowed. Thus, in line with Cinque (1994) the Qualifying adjective is in the Spec position of the AgrP immediately dominating NP. Importantly, this configuration provides the exact opposite word order for the noun and the adjectives in Spanish. Therefore, Bosque & Picallo (1996) argue that a number of combined raising operations that are driven by feature-checking requirements are responsible for the postnominal order of adjectives in Spanish.

First, Gender and Number are morphologically strong in Spanish nominals, hence their overt checking takes place prior to phonological spell out. Second, Case can be overtly checked only by the noun as Th-, Cl- and Q-adjectives are weakly attracted to Case. Therefore, their checking of Case takes place covertly at LF. Thus, the distinction between overt Case checking and covert Case checking is considered by Bosque & Picallo (1996) to account for the postnominal position of the adjectives in Spanish indefinites.

The result of the series of overt movement operations applied to the N head, the Cl- and Th-adjectives is that they raise past the Q-adjective, providing the correct word order in (9):

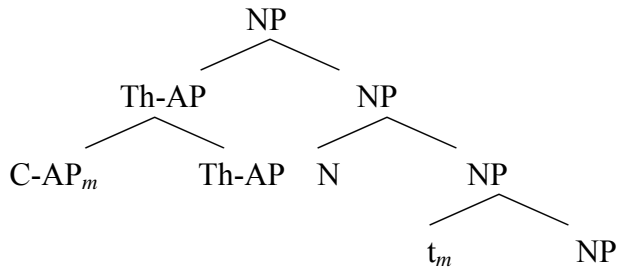
(9) *una guerra religiosa fratricida devastadora*
 'a devastating fratricidal religious war'

(10) [D [N [[Cl-Adj]_i Th-Adj]_j [Q-Adj [t_j...t_i...t_n]]]]

However, these movement operations are not free of constraints on locality. As known, AgrP has a checking head able to attract adjectives to its Spec position. But Th-adjectives and Cl-adjectives cannot independently move to Spec, AgrP as the Cl-adjective would always be too far from Spec AgrP due to the intervening Th- and Q-adjectives in the upper Spec positions (Bosque & Picallo 1996: 173).

In order not to violate minimality conditions, Th-adjectives and C-adjectives form a cluster and move to AgrP for the purpose of gender and number checking:

(11)

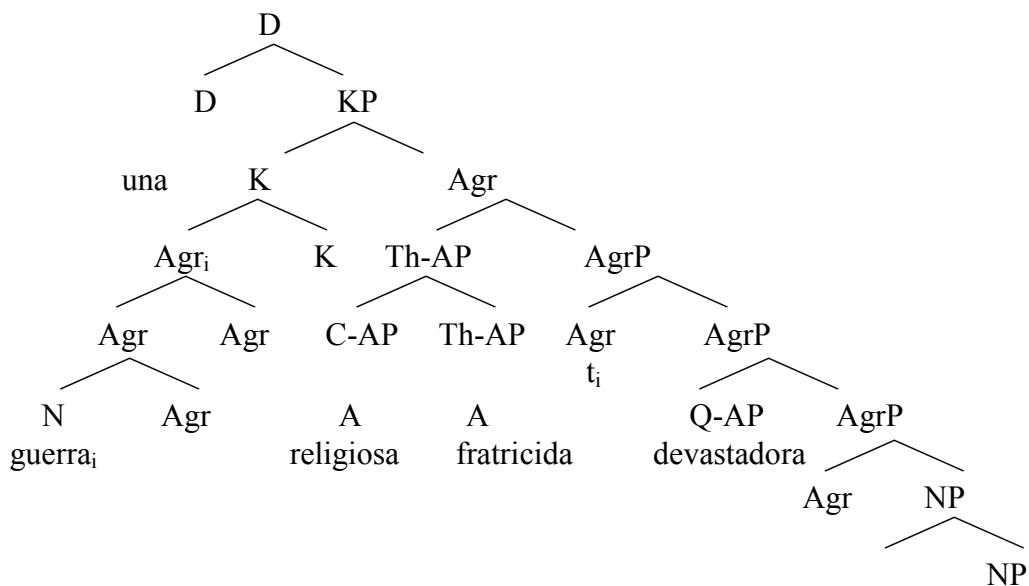


In Bosque and Picallo’s analysis, the CI-adjective adjoins to the Th-AP, being able to c-command its trace. Essentially, in line with Kayne’s (1994) system, it is neither dominated by Th-AP nor by the higher NP node, given that the Th-AP and the NP are segments and specifiers are just adjoined phrases. Thus, the complex [CI- AP, Th-AP] formed via the adjunction of the CI-adjective to the Th-adjective can move to Spec, AgrP, moving beyond the Q-adjective harboured in the specifier position of the intervening AgrP.

The grammatical word order of Relational and Qualifying adjectives with respect to the noun shows that the N head must raise to a position past adjectives. Bosque & Picallo (1996) propose that N raising is triggered by overt Case-checking requirements on the noun. In line Giusti (1992), the Case feature is hosted in the head of KP (Case phrase) that is located in the complement position of D. Hence, in Bosque & Picallo’s approach the noun checks the Case in Spanish by raising the complex Agr which contains the lexical N head, to the K position past all adjectives in (12)

(12) *una guerra religiosa fratricida devastadora*

a war religious fratricid devastating



All in all, Bosque & Picallo (1996) propose that Th-adjective and Cl-adjective form clusters adjoining to one another prior to raising for gender and number checking. The newly formed complex cluster raises over the Q-adjective and results in the grammatical word order. The postnominal position of both Relational and Qualifying adjectives with respect to the noun is the consequence of the distinction between the overt Case checking of the noun and the covert Case checking of adjectives. Hence, in line with Giusti (1992), Bosque & Picallo (1996) claim that the head noun in Spanish has strong Case features which allows the noun to raise past the Cl-, Th- and Q-adjectives to the K head.

As follows I discuss the shortcomings of such an analysis.

6.3.1. *The shortcomings of Bosque & Picallo's (1996) analysis*

As we could see above, Bosque & Picallo (1996) proposed an analysis of Relational adjectives which splits them into two subclasses, Thematic vs. Classificatory adjectives. In the chapter 4 I showed that this division is crosslinguistically justified both from a semantic and a syntactic point of view, since it effects both the interpretation and the word order.

However, I claim that the syntactic analysis proposed for Thematic and Classificatory adjectives as maximal projections mapped into specifier positions of the DP has several shortcomings. On a one hand, Bosque & Picallo's (1996) approach cannot do justice to the behaviour of adjectives in general in Romance as it is based on N-movement theory. On the other hand, what is crucial for this study is that their syntactic analysis does not capture significant facts in the syntactic behaviour of Relational adjectives.

First, Bosque & Picallo (1996) assume the N-movement of the noun in order to account for the word order of postnominal adjectives. The relative order of postnominal Romance adjectives with respect to the N is the mirror image of the English order. However, this configuration cannot be derived via N-movement, as assumed in Bosque & Picallo (1996) (cf. Lamarche (1991), Alexiadou (2001) and Giurgea (2005) among others)

Lamarche (1991) shows that an N-movement theory should assume two abstract representations for deriving the relative ordering of adjectives in Romance and Germanic languages:

- | | | |
|------|--|--------------------|
| (13) | Adj.₂ – Adj.₁ – N | Germanic languages |
| | N_i – Adj.₂ – Adj.₁ – e_i | Romance languages |

Hence, Alexiadou (2001) and Lamarche (1991) conclude that the N-movement theory cannot account for the following order in Romanian and Spanish:

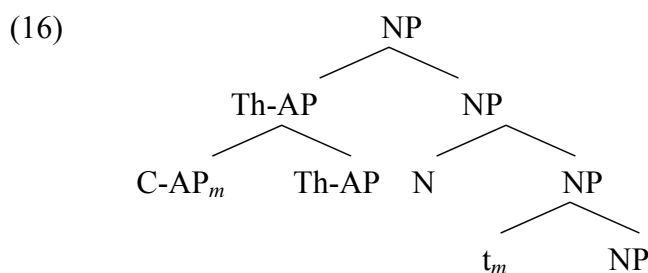
- (14) un coche **blanco oxidado** vs. **a rusty white** car

Analogically, Ticio's data on Spanish speak also against an N-movement theory. Note that postnominal adjectives in Spanish do not appear preceding the complement of the N (cf. Ticio (2003)).

- (15) a. *Los productores de petróleo independientes*
 The producers of oil independent
 b. **Los productores independientes de petróleo*
 The producers independent of oil

Lamarche (1991) and Ticio (2003) claim that N-movement analysis cannot explain why the adjective cannot appear between the N and its complement.

Second, crucially this approach does not make the distinction between the two types of Thematic adjectives: the theme vs. the agent as both are base-generated in the Spec NP. The distinction between the different thematic roles of Thematic adjectives is not reflected in the structure (16) provided by Bosque & Picallo (1996) (the structure in (11) is repeated below):



Third, Relational adjectives do not represent a homogeneous class. Th- and Cl-adjectives behave differently with respect to possessive pronominalization of Genitive arguments (see chapter 4). If Bosque & Picallo (1996) argue that both Th-adjectives and Cl-adjectives are specifiers of an NP layered projection, then they should both allow or disallow possessive pronominalization.

Last but not least, it cannot explain the different distribution of Th-adjectives vs. Cl-adjectives, i.e., the predicative nature of Cl-adjectives vs. the non-predicative nature of Th-adjectives. Unlike Th-adjectives, Cl-adjectives can occur in the predicative position (cf. Cornilescu (2009), McNally & Boleda (2004))

- (17) a. **Restructurarea este urbană.* b. *Concursul este internațional.*
 **La estructura es urbana.* *La competencia es internacional*
 The structuring is urban The contest is international.

More support for the predicativity of Classificatory adjectives is provided by Romanian. Importantly, in Romanian Cl-adjectives can occur with *cel* while Th-adjectives are ungrammatical with it:

- (18) a. **Producția petrolieră și cea cerealică*
 production oil.TH-adj and CEL cereal.TH-adj
 the oil production and that of cereals
 b. *analiza sintactică și cea morfologică*
 analysis syntactic and CEL morphological

Note that the *cel* pattern in Romanian is generally argued to introduce a predicative clause (see Cornilescu (2005) and Marchis & Alexiadou (2009)).

I argue that Bosque & Piccolo's (1996) syntactic analysis of Relational adjectives cannot account for the predicativity of Cl-adjectives.

As follows, I present Fábregas' (2007) approach which deals in particular with the predicative status of Cl-adjectives and regards them as a distinctive class of Relational adjectives.

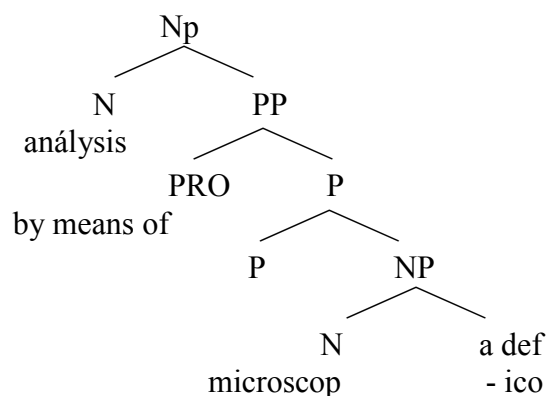
- (23) a. *La producción pesquera / de pesca*
 The production fish-TH-adj. /DE fishing
- b. *La importación sedera/ de seda*
 The import silk-TH-adj. / DE silk

Comparing the paraphrases of the adjectives in (22) and (23), it is noticeable that there is a difference between the two types of prepositions that correspond to Cl- and Th- adjectives in Spanish. The observation that Fábregas makes is that the adjectives in (22) correspond to Cl- adjectives and, therefore, they must be paraphrased with lexical prepositions with strong semantics while Thematic adjectives in (23) are paraphrased only with the preposition *de* which has a very weak meaning to the extent that it is used to denote the patient and the agent (Fábregas 2007:142).

Thus, in the spirit of Levi (1978) who claims that Relational (nonpredicating adjectives in her terminology) have in their underlying structure deletable predicates such as CAUSE, HAVE, MAKE, USE, BE, IN, FOR, FROM, and ABOUT, Fábregas claims that Classificatory adjectives in Spanish are equivalent to noun phrases introduced by prepositions.

Hence, he proposes that Cl-adjectives are selected by P without phonological materialization.

- (24) *análisis microscópico* – analysis by means of a microscope



Crucially, the preposition has the meaning of a instrument, which determines that the adjective *microscópico* represents the instrument used to perform the analysis. Prepositions are considered to be a relational head (Hale & Keyser 1993) that selects the two entities that stand in a specific relationship.

Importantly, different prepositions give rise to different meanings in such a way that Classificatory adjectives enter into different semantic relationships (see Bosque & Picallo 1996):

(25)

- locative path: acrobacias *aéreas* - air acrobacies
- locative source: calor *solar* – solar heat
- locative (goal): viaje *estelar* – star trip
- locative (place): poblado *lacustre* – lake town
- cause: discriminación *racial* – racial discrimination
- benefactive: literatura *infantil* - children’s literature
- instrumental: curación *manual* - manual cure
- source: residuos *industriales* – industrial residues
- purpose: material *quirúrgico* – surgical material

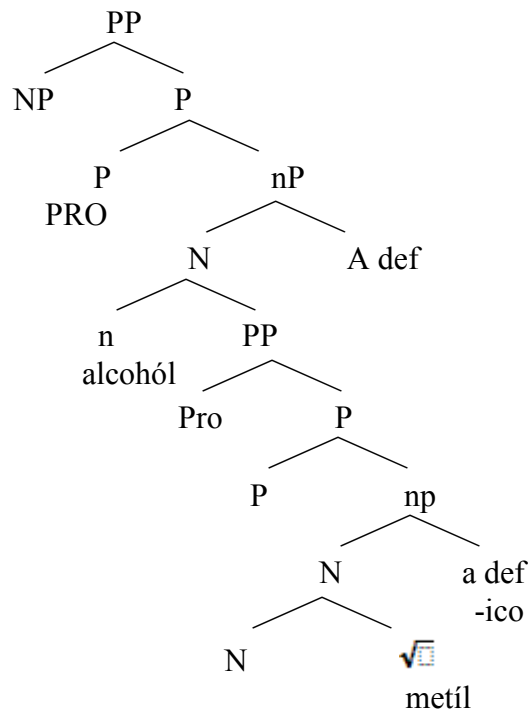
Apart from their rich semantics, CI-adjectives show another specific property, namely they combine with other Relational adjectives in subordinate structures. That is the second CI-adjective specifies the meaning of the first one. This is not the case of predicative adjectives:

- (26) a. *una mesa redonda y grande.*
 A table round big
 # a table characterised by a big roundness
- b. *coma alcohólico metílico*
 coma alcoholic methylated
 ‘methylated alcohol coma’

Essentially, this property of CI-adjectives is captured in the syntactic analysis proposed by Fábregas.

Note that the Relational adjectives in (26b) act as PPs modifying NP. A PP can modify an nP which is the complement of another PP.

- (27) *coma alcohólico metílico*
 coma alcoholic methylated
 ‘methylated alcohol coma’



Note that the distance between the two Relational adjectives is empirically explainable as it is possible to separate the two Relational adjectives from the head noun or the second Relational adjective from the first one:

- (28) *una coma fue metílico y el otro etílico*
 one coma was methylated and the other was ethylic.

To sum up, Fábregas's approach mainly concerns with the status of Classificatory adjectives and has the merit of showing that this subclass of Relational adjectives have a different syntactic and semantic behaviour. Unlike Thematic adjectives, in the spirit of Levi (1978), Fábregas argues that Cl-adjectives are PPs. In favour of his analysis of Classificatory adjectives some of the properties of Cl-adjectives are relevant, i.e., bracketing paradoxes and the subordinate modification.

However, the shortcoming of Fábregas's theory is that like Levi (1978) he assumes that Classificatory adjectives correspond to a large number of prepositions in Spanish.

- (29) *análisis microscópico / análisis mediante microscopio*
 analysis microscopic / analysis done using a microscope

Unlike Cl-adjectives, Thematic adjectives are argued to be paraphrased with the preposition *de* which has a very weak meaning to the extent that it is used to denote the patient and the agent (Fábregas 2007:142).

Nevertheless, note that not only Th-adjectives but also Cl-adjectives mainly correspond to *de* phrases:

Thematic adjectives

- (30) a. *La producción pesquera / de pesca*
The production fish.TH-adj. /DE fishing
- b. *La importación sedera/ de seda*
The import silk.TH-ADJ. / DE silk

Classificatory adjectives

- (31) a. *calor solar/ calor del sol*
Solar head/ heat of the sun
- b. *discriminación racial/ discriminación de razas*
racial discrimination/ discrimanacion of races
- c. *curación manual / curación de mano*
manual cure / cure by hands

Note that the diverse interpretation of Cl-adjectives can be captured by the preposition *de* in Spanish. Therefore, it seems that not only Th-adjectives but also Cl-adjectives correspond to *de* phrases in Romance. This empirical fact cannot be explained by Fabregas' analysis of Relational adjectives.

6.5. Alexiadou & Stavrou (to appear)

As illustrated in chapter 4, Alexiadou & Stavrou (to appear) discuss the complex behaviour of a subgroup of Relational adjectives, namely Ethnic adjectives. Such adjectives are argued to refer to groups of entities that share features regarding geographical, race, religion or political identity.

Their approach represents a major contribution for understanding the ambiguous nature of Thematic Relational adjectives as Ethnic adjectives exhibit a hybrid nature, sharing

properties of both nouns and adjectives (cf. Alexiadou & Stavrou (to appear)). Accordingly, Ethnic adjectives correspond to Th-adjectives that encode a thematic role assigned to them by the noun they modify. By contrast, the homophonous counterpart of Ethnic adjectives, (Classificatory adjectives according to Bosque & Picallo’s classification) are predicative adjectives, - hence they are analyzed as “deep” adjectives:

- (32) a. *to egleziko to palto tu* (Greek)
 The English the overcoat his
 His English overcoat
- b. *i amerikaniki anamiksi* (Greek)
 the American intervention

In the example above, the adjective in (32a) is a predicative Classificatory adjective as it modifies a common noun while the same adjective in (32b) is a Thematic adjective which saturates the role of Agent of the deverbal noun. Thus, Alexiadou & Stavrou (to appear) claim that adjectives which modify event nouns are Ethnic adjectives corresponding to Thematic adjectives whereas the adjective modifying common nouns have only descriptive character, being called homophonous descriptive adjectives.

As Alexiadou & Stavrou (to appear) mention, a major aspect that influences the syntax of Ethnic adjectives (EA) is the noun that is modified by an EA. Explicitly, they argue that the referring ability of EAs is connected to the fact that they modify deverbal nouns. Importantly, according to Alexiadou & Stavrou (2009) the noun that is modified by an EA is a R(eferential) noun and not an argument structure nominal (ASN) under Grimshaw’s (1990) classification. In spite of the fact that both classes are deverbal, they are ambiguous between an ASN and an R(ererential)-interpretation:

- (33) a. the decoration of the Christmas tree took a long time (ASN-reading)
 b. the decoration was expensive (R-reading)

Crucially, the distinction between ASN and R-nouns is that the latter are not theta-assigners, lack obligatory arguments and do not license argument structure. Unlike R-nouns, ASNs are theta-assigners and have arguments.

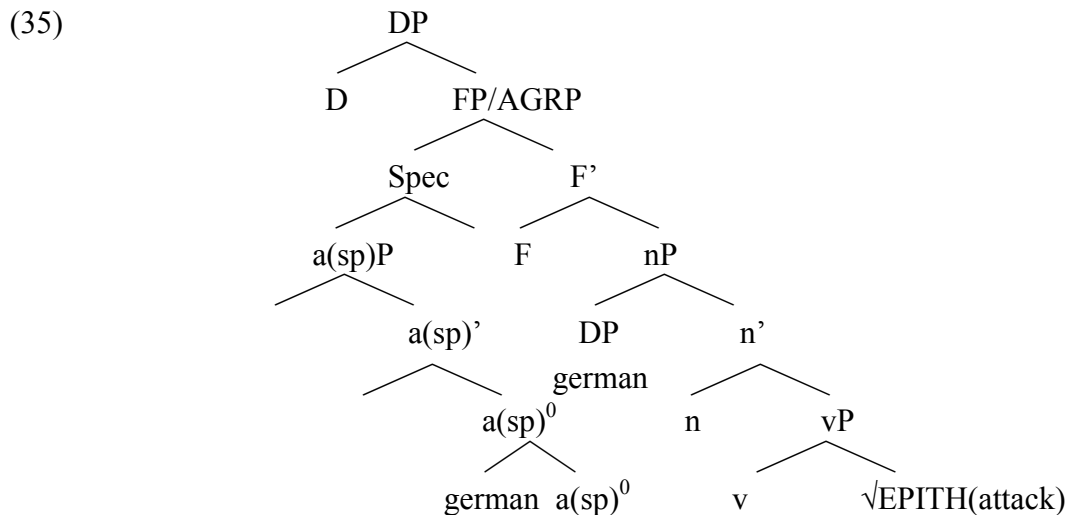
In line with (Grimshaw (1990), Picallo (1991), Bosque & Picallo (1996) and Alexiadou & Stavrou (1998, to appear), EAs appear only with nominals that are of the R-type. The distinction between ASN and R-nouns will be discussed in detail later in this chapter.

In spite of the fact that EA occur with nominals of no argument structure supporting type, they are argued to encode an agent theta role. As Postal (1969) shows they are in complementary distribution with both a *by* – phrase and a genitive encoding the external role:

- (34) a. the application for membership by the Persians
 b. the Persians’s application for membership
 c. the Persian application for membership
 d. *the Persian application for membership by Iran
 e. *Persia’s Persian application for membership

(Postal 1969)

In the light of the Greek empirical data, Alexiadou & Stavrou (to appear) propose a syntactic structure for EAs in Greek where the deverbal nouns modified by an EA is not of the argument supporting type and therefore, this adjectives are ambiguous between an argument and an adjunct reading:



Notice that like Marchis (2009), Alexiadou & Stavrou (to appear) argue also in favour of a DP analysis of the EA in the light of the fact that only DPs can be arguments (Longobardi 1984). For the morpho-syntactic analysis of Greek EAs see the chapter 4 section (4.6).

In the above structure, the EA is emerged in the spec nP which is considered by Alexiadou & Stavrou (to appear) to be similar to the light *v*/ Voice which introduces the external argument in the verbal domain. Crucially, in this position the EA receives the agent

theta role since according to Kratzer (1994) and Chomsky (1995) the agents, both in the nominal and in the verbal structure, are not directly theta-marked. Hence, they must be introduced by an extra head.

From the spec nP the noun underlying the EA moves to the higher specifier from where it adjoins, as a head, to *a* as a bound morpheme. In line with Kayne (1984), Bosque & Piccallo (1996), Marchis (2009), Alexiadou & Stavrou (to appear) claim that the movement of the noun from Spec, nP to *a* can be seen parallel to the movement of clitics which move as heads and as maximal projections at the same time (Chomsky 1995, Cardinaletti 1998). Importantly, this movement is also akin to the Case driven movement of arguments. This possibility is extensively explored in the next chapter.

Essentially, the syntactic analysis which considers the EA to correspond to the Genitive case provides an explanation of why only one EA or only one Genitive can occur in the Greek DP.

However, this is not crosslinguistically valid. Notice that unlike Greek, Romanian and Spanish allow the co-occurrence of two Th-adjectives despite the fact that neither of these languages allows two Genitives per DP.

- (36) a. *producția petrolieră americană*
producción petrolera americana
 production oil.TH-ADJ american.TH-ADJ
- b. **producția petrolului Americii*
 **producción de petróleo de América*
 production oil.GEN American.GEN

Thus, the syntactic approach proposed in this study aims at capturing the idiosyncrasies of Thematic adjectives in Romance.

Regarding the homophonous counterpart of Ethnic adjectives, (Classificatory adjectives according to Bosque & Piccallo's classification), in the spirit of McNally & Boleda (2004), Alexiadou & Stavrou (to appear) show that Relational adjectives of the classifying subtype are intersective and predicative:

- (37) a. *I tsanta tis ine orea/ italiki* *Greek*
 The bag.cl.poss.3sg is nice/ Italian

‘Her bag is nice/ Italian’

b. *Afta ta ine elinika/ ala diekdikunte ke apo alus*

These the islands are Greek but are claimed and by others

‘These are Greek islands but claimed by others too.’

In the light of the distinction between Ethnic adjectives (Th-adjectives) and their homophonous counterparts (Cl-adjectives), Alexiadou & Stavrou (to appear) argue that the formation of the latter takes place prior to insertion in the syntactic structure. In other words, EAs and their homophonous counterparts interact with syntax at different points in the derivation, i.e., Ethnic adjectives are subordinated to a syntactic derivation while their homophonous counterparts are compatible with a morphological derivation.

As follows, I provide a syntactic analysis for Relational adjectives in Romanian and Spanish which is intended to capture the idiosyncratic behaviour of Thematic adjectives and Classificatory adjectives in Romance.

6.6. *A novel perspective on Relational adjectives*

On the basis of previously mentioned syntactic approaches of Relational adjectives, I show in this study that from a syntactic point of view, Relational adjectives do not represent a homogeneous class. In spite of the fact that both Th-adjectives and Cl-adjectives are denominal as the different tests provided by Levi (1978), Fábregas (2007) and Alexiadou & Stavrou (to appear) show, they have a different syntactic behaviour.

To begin with, Relational adjectives that occupy thematic roles (Th-adjectives) do not appear in the predicative position while Cl-adjectives do:

- (38) a. **La producción es automovilística /china.* Spanish
**Producția este automobilistică/ chinezească* Romanian
The production is fishing/ Chinese.
- b. *Ceaiul este englezesc.*
El te es ingles
The tea is English

Second, Th-adjectives are argued to be either the complement or the agent of the verb (Levi (1978), Bartning (1980), Bosque & Picallo (1996))

Unlike Th-adjectives, Bosque & Picallo (1996) argue that Cl-adjectives are semantic adjuncts that function as restrictive modifiers. Thus, Cl-adjectives serve to relate the noun to a domain according to which the NP is classified:

- (39) *análisis sintáctico/ estilístico / periódico*
 syntactic/ stylistic/ peridiocal analysis

Importantly, in Romanian the status of Cl-adjectives as restrictive modifiers is highlighted in the nominal ellipsis context with *cel*:

- (40) a. *analiza morfologică si cea sintactică*
 The analisis morphological and CEL syntactic
 ‘The morphological analysis and the syntactic one’
 b. * *producția petrolieră si cea cerealieră.*
 production oil.TH-adj and CEL cereal
 ‘the oil production and the cereal one’
 c. *decizia guvernamentală si *cea prezidențială*
 decision-the governmental si CEL presidential
 ‘the governmental decision and the presidential one’

In (40) observe that Classificatory adjectives which behave like modifiers appear with *cel* in nominal ellipses whereas Thematic adjectives (thema or agent) are ungrammatical in the contexts of nominal ellipses. Crucially, *cel* clauses are considered to be appositive specification relative clauses (cf. Marchis & Alexiadou (2009)).

Third, in support of the above-mentioned observation, Fábregas (2007) and Marchis (2009) show that Cl-adjectives correspond to the prepositional *de* phrases in Spanish and Romanian, respectively while Th-adjectives correspond to genitive DPs (cf. Marchis (2009)):

In (39) CI-adjectives can be substituted with *de* + bare nouns as Cornilescu & Nicolae (2009), Niculescu (2009) showed that *de* can also introduce a bare noun as a modifier. Hence, CI-adjectives are nPs:

- (41) *amor de madre* ~ *amor maternal* *Romanian*
 dragoste de mamă ~ *dragoste maternă* *Spanish*
 love DE mother ~ maternal love

As shown in chapter 4 and 5, unlike CI-adjectives, Th-adjectives correspond to the genitive DPs (Marchis 2009): This similarity can also be observed in following paraphrases: Furthermore, Bosque & Picallo’s (1996) observation that Th- and CI-adjectives behave differently with respect to possessive pronominalization of Genitive arguments represents strong evidence for the proposal that Th-adjectives correspond to GenDPs also in Spanish.

Last but not least, the distinction between Th-adjectives and CI-adjectives is manifested also in their co-occurrence with complex event nominals. Unlike Th-adjectives, CI-adjectives are licit with e-nominals:

- (42) *el análisis periódico de las publicaciones por parte del departamento.*
 the periodical analysis of the publications by the department.
 (43) **la producción petrolera por parte de China*
 production oil.TH-adj by China

All in all, in light of these visible differences between Th-adjectives and CI-adjectives, I argue that Th-adjectives are DPs by the virtue of the fact that only DPs can be arguments (Longobardi 1994) while CI-adjectives are predicative intersective adjectives that function as restricted modifiers. I highlight the differences between Th-adjectives and CI-adjectives in the following hypotheses:

Hypothesis 1:

- (44) *The more perceivable the grammatical relations between the Relational adjective and the head noun are, the more possible is the reconstruction of Relational adjectives as Genitives in Romanian and Spanish.*

Hypothesis 2

(45) *If there is no grammatical relation between the Relational adjective and the noun head, the Relational adjective can occur with cel in Romanian and functions as a restrictive modifier*

However, these hypotheses are not free of problems as the following section shows.

Problems for Hypothesis 1

In the previous section several tests were presented, showing that the behaviour of Th-adjectives corresponds to those of Genitives in Romance. However, in spite of the fact that Th-adjectives and Genitives satisfy the same thematic roles as shown above, there are several properties of Th-adjectives which set them apart from Genitives and must be accounted for:

First, Inflectional Genitives and prepositional Genitives can occur in complex event nominals while Th-adjectives cannot.

(46) *citirea de romane/ romanelor de catre studenti.*
reading DE novels/ novels.Gen by students.

(47) a. **la pesca ballenera por parte de los japoneses*
The fishing whale.TH-adj by the Japanese
b. **producerea automobilistică de către japonezi.*
the production automobilistic by the Japanese

Second, another related problem is that Romanian has the restriction of one Genitive per DP. But, unlike Genitives, two Th-adjectives can apparently occur together. (cf. Cornilescu 1995, Cornilescu & Nicolae (2009)):

(48) **portretul lui Aristotel al lui Rembrandt.*
the portray of Aristotel of Rembrandt.
'Aristotel's portray by Rembrandt.'

- (49) *producția cerealieră germană.*
 production cereal German
 ‘German cereal production’

Third, unlike Genitives, Th-adjectives cannot control purpose clauses.

- (50) a. *Invazia americanilor pentru a apăra drepturile irachienilor.*
 Invasion.the Americans.GEN to defend the rights of Iraqis.
 b. **Invazia americană pentru a apăra drepturile irachienilor.*
 The invasion American.TH-adj to defend the rights of Iraqis.

Moreover, as Alexiadou & Stavrou (to appear) show for Greek, Ethnic adjectives cannot bind an anaphor and provide an antecedent for personal pronouns. This is also the case for Romanian and Spanish:

- (51) a. **distrugerea germană a ei/ a lor*
 destruction.the German of her/ their
 b. **la destrucción alemana de el/ ellos*
 the destruction German of his/their
- (52) a. **slabiciunea greacă de-a admite greșelile noastre.* Romanian
 Weakness Greek SUBJ not admit faults.the our-1pl.
 b. **la debilidad griega de no aceptar nuestros errores.* Spanish
 The weakness Greek of not accepting our faults.

Thus, it seems that Th-adjectives show important syntactic differences from Genitives DPs in Romanian and Spanish. Therefore, a detailed comparison is needed in order to trace out their differences.

Problems for Hypothesis 2

Recall that Cl-adjectives are predicative, do not satisfy thematic roles and can occur with *cel* in Romanian. However, Classificatory adjectives occur with *cel* but in only one contexts, i.e., in nominal ellipses.

Crucially, in Romanian *cel* can occur with adjectives in two main contexts: in case of a lexically expressed N with postnominal predicative adjectives and in case of nominal ellipsis only with predicative adjectives. So in both contexts *cel* can occur only with predicative adjectives which have a contrastive or a partitive meaning.

- (53) a. *băiatul cel frumos*
 boy-the CEL beautiful
 boy, the beautiful one
- b. *cel frumos*
 CEL beautiful
 the beautiful one

According to Marchis & Alexiadou (2009), *cel* introduces a reduced relative clause which has a specifying function, rendered in English via the use of e.g. the adverb *namely*:

- (54) a. *băiatul cel frumos*
 [&:P [DP baiatul]_i &: [DP cel_i [CP [C'
 [IP Ø AP]]]]]_i
- b. *cel frumos*
 the beautiful one
 [&:P [DP ~~baiatul~~]_i &: [DP cel_i [CP [C' [IP Ø_i frumos]]]]]

As we saw, Classificatory adjectives can occur with *cel* only in the second context, i.e., in the case of nominal ellipses. However, under the hypothesis that Classificatory adjectives are predicative and intersective adjectives that function as restricted modifiers, their ungrammaticality with *cel* in the first context with a lexically expressed N is unexpected:

- (55) a. **analiza cea sintactică*
 analysis CEL syntactic
- b. *analiza morfologică si cea sintactică*
 The analisis morphological and CEL syntactic
 ‘The morphological analysis and the syntactic one’

The idiosyncratic behaviour of Thematic and Classificatory adjectives is thoroughly discussed in the following chapters where Thematic adjectives are compared to Genitive DPs in Romanian and Spanish and CI-adjectives to predicative adjectives.

6.7. Conclusions

In this chapter I discussed some syntactic properties of Relational adjectives which motivate the idea that Relational adjectives do not represent a homogenous class from a syntactic viewpoint. As a starting point I provided some general information for the functional structure of DPs in Romance which may count as background information for the syntactic approaches of Relational adjectives presented in the following chapter.

One of the significant approaches of Relational adjectives in the Romance literature is provided in Bosque & Picallo (1996). They divide Relational adjectives in two major subclasses: Th(ematic) vs. Cl(assificatory) adjectives and show that this distinction is visible in the semantic interpretation and the word order of Relational adjectives. Nevertheless, I show that the syntactic analysis proposed for Relational adjectives is not empirically and theoretically motivated. In the same spirit, Fábregas (2007) puts forth several tests in order to distinguish the syntactic differences between Th- and Cl- adjectives, focusing on the latter.

Alexiadou & Stavrou (to appear) discuss the complex behaviour of a subgroup of Relational adjectives, i.e., Ethnic adjectives. Their approach represents a major contribution for understanding the ambiguous nature of Thematic Relational adjectives as Ethnic adjectives exhibit a hybrid nature, sharing properties of both nouns and adjectives. Ethnic adjectives correspond to Th-adjectives that encode a thematic role assigned to them by the noun they modify. By contrast, the homophonous counterpart of Ethnic adjectives, (Classificatory adjectives according to Bosque & Picallo's classification) are predicative adjectives, - hence they are analyzed as "deep" adjectives.

On the basis of the previously mentioned approaches, I provide evidence for a split syntactic analysis of Relational adjectives. As widely accepted in the literature, Th- and Cl-adjectives show a large diversity of differences which are amenable to different syntactic analyses.

To begin with, Th-adjectives are arguments of the deverbal nominals, can occur neither in the predicative position and nor with *cel* in nominal ellipses in Romanian and are illicit with complex event nominals. In contrast, Cl-adjectives behave like predicative adjectives, can occur with *cel* and are licit with complex event nominals.

In the light of these differences I put forth two hypotheses regarding their syntactic status. First, I claim that those Relational adjectives which show grammatical relations with their head nouns correspond to Genitives in Romance. Second, I show that only those Relational adjectives that are non-argumental can occur with *cel* in Romanian.

Nevertheless, the proposed assumptions are not free of complications. In the last part of this chapter, I present several counterarguments for the two hypotheses, which are to be thoroughly discussed in the following chapters.

7. The syntax of Thematic adjectives

7.1. Introduction

This chapter discusses in detail the syntactic properties of Thematic adjectives, the subclass of Relational adjectives which are argued to correspond to Thematic arguments of the noun they modify. As presented in the previous chapter, Th-adjectives are argued to be either the complement or the agent of the verb (Levi 1978, Bartning 1980, Bosque & Picallo 1996):

In the literature it is standardly assumed that Th-adjectives differ from Cl-adjectives in their ability to absorb the Thematic role and to occur in the predicative position

- (1) a. *la producción (*es) petrolera* b. *la análisis (es) sintáctico*
the production is oil the analysis is syntactic

The adjective (1a) is Thematic as it absorbs the Thematic role of the deverbal noun and it is not predicative; *sintáctico* in (1b) it is Classificatory as it is not an argument and is licit in the predicative position.

Thus, Thematic adjectives differ from Classificatory adjectives in a systematic way. According to Bosque & Picallo (1996), Thematic adjectives **absorb the Thematic role** that the underlying verb in the structure of the noun *producción* would assign to its complement; therefore Th-adjectives are incompatible with DP arguments with the same Thematic role:

- (3) **producción petrolera de sondas* *Spanish*
 **producția petrolieră de sonde* *Romanian*
 oil production of drills

Moreover, for Spanish, Bosque & Picallo (1996) and Fábregas (2007) claim that Thematic adjectives are paraphrased with the preposition *de* Gen (Fábregas 2007:142):

Another similarity between Th-adjectives and argumental Genitives is that neither of them can occur across copula, while possessor or modifier Genitives can be predicative like non-argumental Relational adjectives:

Furthermore, Bosque & Picallo's (1996) observation that Th- and Cl-adjectives behave differently with respect to possessive pronominalization of Genitive arguments

represents strong evidence for the proposal that Th-adjectives correspond to GenDPs also in Spanish:

- | | | | |
|-----|----|--|-----------------------------------|
| (4) | a. | <i>La organización papal de la Curia.</i>
<i>organizarea papală a Curiei.</i>
The popist organization of the Curia | <i>Spanish</i>
<i>Romanian</i> |
| | b. | <i>la producción manual de camisas.</i>
<i>producerea manuală de cămăși.</i>
the manual production of shirts. | <i>Spanish</i>
<i>Romanian</i> |

In (4a) the Th-adjective *papal* has the Agent role while the Genitive DP ‘de la Curia’ has the role of the Theme. In (4b), the Cl-adjective ‘manual’ modifies the Noun and the Genitive DP *de camisas* has the Theme role.

Below it can be observed that the possessive pronominalization of the Theme is ungrammatical with the Th-adjective in (5a) and grammatical with the Cl-adjective in (5b):

- | | | | |
|-----|----|---|---------------------------|
| (5) | a. | * <i>su₁ organización papal t₁</i>
its organization popist
its organization by the Pope | |
| | b. | <i>su₁ producción manual t₁</i>
its production manual
its manual production | (Bosque & Picallo (1996)) |

Clearly, the ungrammaticality in (5a) is linked to the restriction imposed by Spanish of only one Genitive per DP, as the Th-adjective *papal* corresponds to GenDP, the Genitive pronominalization of the Theme is banned:

- | | | | |
|-----|---|---|-----------------------------------|
| (6) | * | <i>la producción de camisas de Alemania</i>
<i>producerea cămășilor a Germaniei</i>
The production of shirts of Germany | <i>Spanish</i>
<i>Romanian</i> |
|-----|---|---|-----------------------------------|

Analogically, Postal (1969) and Alexiadou & Stavrou (to appear) show the distributional and the interpretational parallelism between Ethnic adjectives and subjects, for English and

Greek, respectively i.e., Ethnic adjectives and Genitives have the same selection restrictions and both can control the empty subject of a complement clause:

(7) * *i eliniki apantisi stis proklisis ton Elinon, apo tus Elines* *Greek*
the Greek reply to the provocation the Greeks-gen, by the Greeks

(8) a. America's attempt to attack Cuba at night *English*
b. the American attempt to attack Cuba at night.

Hence I highlight the differences between Th-adjectives and Cl-adjectives in a provisory hypothesis 1:

Hypothesis 1:

(9) *The more perceivable the grammatical relations between the Relational adjective and the head noun are, the more possible is the reconstruction of Relational adjectives as Genitives in Romanian and Spanish.*

However, as shown in the previous section, there are several properties of Th-adjectives which set them apart from Genitives and must be accounted for:

First, unlike Th-adjectives, inflectional Genitives and prepositional Genitives can occur in complex event nominals. Second, unlike Genitives, two Th-adjectives can apparently occur together. (cf. Cornilescu 1995, Cornilescu & Nicolae (2009)). Last but not least, unlike Genitives, Th-adjectives cannot control purpose clauses.

Therefore, the aim of this section is to provide a hypothesis regarding the similarities and differences between Genitives and Thematic adjectives in Romance, which can account for their syntactic status as arguments. In order to do so, I organize this chapter as follows: In section 7.2 I provide an introductory section in which the assignment of Gen(itive) case in Romanian and its particularities, such as “the double Gen construction”, the inflectional determiner, the Genitive article *al* vs. the prepositional Genitive *de*, are discussed. Section 7.3 presents the similarities and the differences between Th-adjectives and Genitives, such as their argument status and distribution. Their comparison, however, leads to puzzling results, i.e., there are pros as well as cons for the hypothesis according to which Th-adjectives correspond to Genitives in Romance. Before reaching a theoretical conclusion, I put forth an

excursus in section 7.4. with respect to the type of nominals and nominalizations in Romance which may account for the distinction between Th-adjectives and Genitives, i.e., their different grammatical behaviour with complex event nominals. In the light of all the similarities and differences between Th-adjectives in Noun Object constructions and Genitives, the hypothesis 1 proposed in the introductory section is revisited and a novel syntactic analysis is proposed in section 7.5. The following section 7.6.3. extends the hypothesis proposed for Th-adjectives in Noun Object constructions also to the subclass of Ethnic adjectives, which correspond to the agent subject Genitives. In this section I provide a crosslinguistic variation between Greek and Romance Ethnic adjectives and bring positive evidence for the analysis proposed for Greek EAs in Alexiadou & Stavrou (to appear). Section 7.7 concludes this chapter with a summary of the entire chapter.

7.2. *The position of the Genitive assignment*

According to Cornilescu (1995), the Gen occurs inside DPs and PPs. In Romanian, the Gen inside DPs is a structural Case, as it fulfills a variety of theta-roles, in addition to its specific Possessor role:

- | | | | |
|------|----|---|--------------------------|
| (10) | a. | <i>trădarea cauzei</i>
'The betrayal of the cause' | (Theme) |
| | b. | <i>trădarea lui Iuda</i>
'Juda's betrayal' | (Agent) |
| | c. | <i>cartea lui Ion</i>
'John's book' | (alienable possession) |
| | d. | <i>surâsul Giocondei</i>
'Gioconda's smile' | (inalienable possession) |
- (Cornilescu 1995: 7)

The D-structure position of Gen when it is an argument is controversial; an internal object Gen DP will be base-generated under N', as a right hand sister to the head, subject GenDPs will be projected in SpecNP, so as to allow them to be theta-marked within a projection of the theta-marking head.

Moreover, Cornilescu (1995) brings evidence that the complement must move out of the NP in order to be assigned Gen case. This piece of evidence comes from the only kind of Romanian DPs where it is possible to have two lexical Gens, one of which must be pronominal. This kind of DPs must be headed by topicalized adjectives, which bear the enclitic definite article. At the same time, a pronominal Gen may appear adjacent to the topicalized adjective, in a position to the left of the noun:

- (13) a. *frumoasa soție a tânărului print.*
 beautiful-the wife AL young-GEN prince
- b. *frumoasa lui soție.*
 beautiful-the his.CL wife (Cornilescu 1995)

In (13) the Gen pronoun has obviously left its basic position and has moved to the left of the nominal. As long as there is only an expressed Gen, there are thematic restrictions on the post-adjectival Gen. Cornilescu (1995) shows that any Gen DP may reach this position:

- (14) a. *frumoasele palate ale orașului* (Possessor)
 beautiful-the palaces AL the city.Gen
- b. *acest oraș, cu frumoasele lui palate* (lui Possessor)
 this city, with beautiful-the its palaces
- (15) a. *nenumaratele traduceri ale acestui roman* (Theme)
 numberless-the translations AL this novel-Gen
- b. *acest roman, cu nenumaratele lui traduceri* (lui Theme)
 this novel, with numberless-the its translations
- (16) a. *celebrele traduceri ale acestui expert* (Agent)
 famous-the translations AL this expert
- b. *acest expert, si cunoscutele lui traduceri* (lui Agent)
 this expert, and known-the his translations. (Cornilescu 1995)

However, an observation should be made regarding the pronominal pronominal. Note that when two Gens are lexicalized, the higher pronominal position is accessible only to subject DPs (Agents, Possessors). Another particularity of this construction is that it obeys the

Thematic Hierarchy proposed by Giorgi and Longobardi (1991). That implies that the internal argument (the Theme) has to remain in a lower position.

- (17) a. *Dan Dutescu si cunoscuta lui (Agent) traduce a acestui roman.*
 Dan Dutescu and known- his translation AL this novel.GEN
- b. **acest roman and cunoscuta lui (Theme) traduce a lui D. D.*
 this novel and known-the its translation AL Dan Dutescu.GEN

The remark to be made is that the higher pronominal Gen can only be interpreted as an Agent while the lower nominal Gen is interpreted as a Theme. The explanation given by Cornilescu (1995) for the ungrammaticality of (20b) where the internal object is realized as the pronominal pronominal Gen, is that there are minimality reasons why in a structure where both the subject and the object move to case positions, the subject must end up in a position higher than the object, contained in the minimal domain of the head (see Chomsky 1994). But why does the pronominal agent/ possessor move higher? Cornilescu (1995) claims that the topicalized adjective is involved in assigning Case to the pronoun following it. That implies that the subject must have travelled to this position to get Case. That is the subject has left its basic Spec,NP position. Moreover, Cornilescu argues that there are reasons to believe that the object also leaves its basic position (see the control data in (12)). The case of the double Gen structure shows that the object cannot have moved to SpecNP, as this position is held by the DP subject, actually, by the subject trace.

Cornilescu (1995) concludes that the postnominal Gen is also assigned in a position outside the minimal NP, in the Spec,AgrGenP position. Movements of the arguments are made possible by N-movement to the higher functional projections.

Now let us consider two different types of Genitives in Romanian: the posthead Genitive and the pronominal use and illustrate the unitary syntactic analysis provided by Cornilescu (1995)

7.2.1. *The postnominal Genitive*

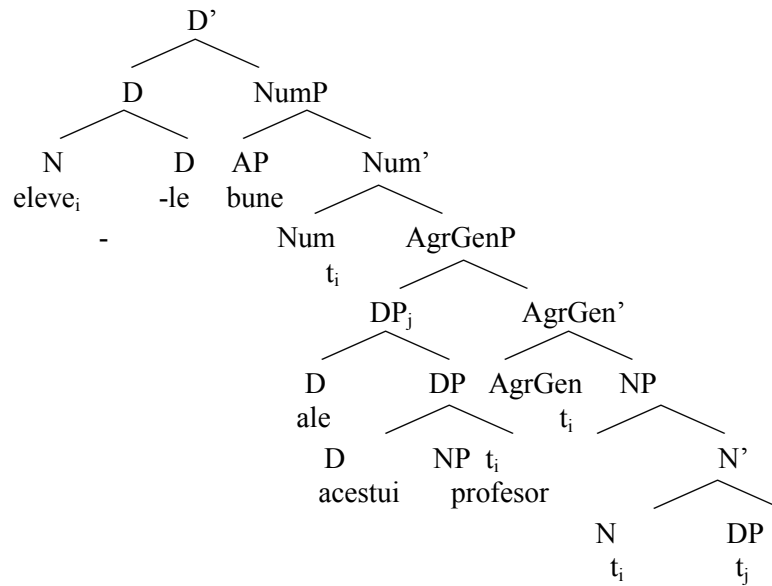
Below there are two nominal constructions which correspond to the postnominal Genitive in Romanian. (18 a&b) are inflectional Gen:

- (18) a. *elevule bune ale acestui profesor*
pupils.the good AL this.Gen teacher
the good pupils of this teacher
- b. *elevule acestui profesor*
pupils-the this.GEN teacher
the pupils of this teacher

Cornilescu (1995) argues that an explanation must be given for the manner in which *al* in (18a) receives its gender, number, and Case features, and the reason why *al* is absent in (18b).

Regarding (18a), the noun “pupil” is a relational noun, so GenP starts out in the complement position. As the noun moves to AgrGen, movement of the complement becomes possible. The Gen phrase may now reach the Spec,AgrGenP position, a position which is now in the minimal domain of the head (cf. Chomsky 1994). This is the configuration of structural Case assignment. Cornilescu claims, that this is the position where *al* is licensed, in the sense that its features are specified by Spec-Head agreement with the N in AgrGen. Since the matrix of the Genitive article has been fully specified by agreement, the Genitive article has content, and can be syntactically active. That implies that the functional determiner may now assign Case to its complement. Case is assigned under government, in fact, under strict c-command and adjacency, but Case assignment is mediated by a process of agreement which licenses the Case assigning Determiner *al*. Cornilescu (1995) shows that the Gen assigner is an agreeing element and suggests that Case is assigned in a Spec. The noun is argued to go up to D. Importantly, after Move has applied, *al* has to be lexicalized, since it is contentful, and since a strict locality condition requires a Gen phrase to always be adjacent to its assigner, and c-commanded by it.

- (19) *elevule bune ale acestui profesor*
pupils.the good AL this.GEN teacher
the good pupils of this teacher



Regarding the example in (18b), there is a correlation between the absence of the adjective and the absence of AL. The analysis Cornilescu (1995) provides is presented below, i.e., after N-to- D raising, the Gen phrase may also rise to the Spec immediately below the definite article.

In conclusion, the insertion of *al* in (19) is accounted for as a last resort operation and is the consequence of the movement of the N head to the higher functional projections and being too far from the complement, as the adjective “good” intervenes between the head and the complement. Thus, the Genitive case is assigned under strict c-command and adjacency regardless of the distance separating the Gen phrase from the head noun.

7.2.2. *The pronominal use of AL*

Romanian pronominal Genitives represent an interesting issue due to several reasons. First, it is worth noticing that pronominal Gens are obligatory in the double Gen construction available in Romanian, the structure with obligatorily topicalized adjectives, and the pronoun in post-adjectival position:

- (20) *celebra lui interpretare a rolului.*
 famous-the his interpretation AL of the part

Second, Romanian disposes of Gen clitics, unlike other Romance languages. These clitics alternate with full personal pronouns and possessive adjectives:

- (21) a. *venirea musafirului*
the coming guest.GEN
b. *venirea-i*
coming-the-his-CL
'his coming'

Cornilescu (1995) notices that both possessive adjectives and personal pronouns in Gen, when unaccompanied by *al*, partially share the distribution and properties of clitics, i.e., they function like weak pronouns (Cardinaletti 1993).

In the light of these observations, a threefold morpho-syntactic contrast emerges between strong pronouns (the phrasal forms with *al*), weak pronouns (bare pronouns without *al*), and clitics:

- (22) strong pronouns: *al meu* (mine), *al lui* (his)
weak pronouns: *meu* (my), *lui* (his)
clitics: *-mi* (my), *-i* (his)

Cornilescu (1995) suggests that bare pronouns tend to acquire clitic properties, i.e., to be viewed as X, rather than XP constituents..

Turning to the distribution of Gen clitics, they are always adjoined to the definite article. Since the definite article is enclitic on either nouns, or adjectives, clitics appear either in postnominal, or in postadjectival position. Bare pronouns share the distribution of clitics:

- (23) a. *țara-mi scumpă*
country-the-my.CL beloved
b. *scumpa-mi țară*
beloved-the-my.CL country
'my beloved country'
c. *țara mea scumpă*
country-the my beloved
d. *scumpa mea țara.*

beloved-the my country
'my beloved country'

Cornilescu (1995) provides an analysis intended to characterize the status of the pronouns as strong, weak, or clitic, as well as the manner in which the pronoun gets Case.

For the purpose of this paper, the postadjectival pronominal Genitive in (24) presents some special properties. First, as already known, DPs with postadjectival Gen pronouns are the only ones in Romanian that allow two Gen phrases, one nominal and the other one pronominal:

- (24) a. *celebra lui interpretare a rolului*
famous-the his.CL performance of that part
'his famous performace of that part'
- b. **interpretarea lui celebra a rolului*
performance- the-his.CL famous of the part

Cornilescu (1995) claims that these examples indicate that in these DPs there is a second case position, where case is assigned to the pronoun/clitic. An important property of the construction above is that it observes the thematic hierarchy established in Giorgi and Longobardi (1991), in the sense that the Agent must be structurally higher than the Theme. Second, the post-adjectival Gen position is available only for pronouns, not for nominal phrases:

- (25) a. **celebra lui Oliver interpretare a rolului*
Famous-the GEN Oliver performance AL of the part

Thus, Cornilescu (1995) showed that in postadjectival position, bare pronouns behave like weaks pronouns, sharing the properties of clitics. First, they can no longer be focused, behaving on par with the clitics. Focalized pronouns must appear in postnominal position:

- (26) a. **credinciosul lui, nu ei prieten*
'his faithful friend, not hers'
- b. **credinciosu-i, nu ei prieten*
faithful-his.CL, not her friend

- c. *credinciosul prieten al lui, nu al ei*
 faithful-the friend AL his, not AL her
 his faithful friend, not hers

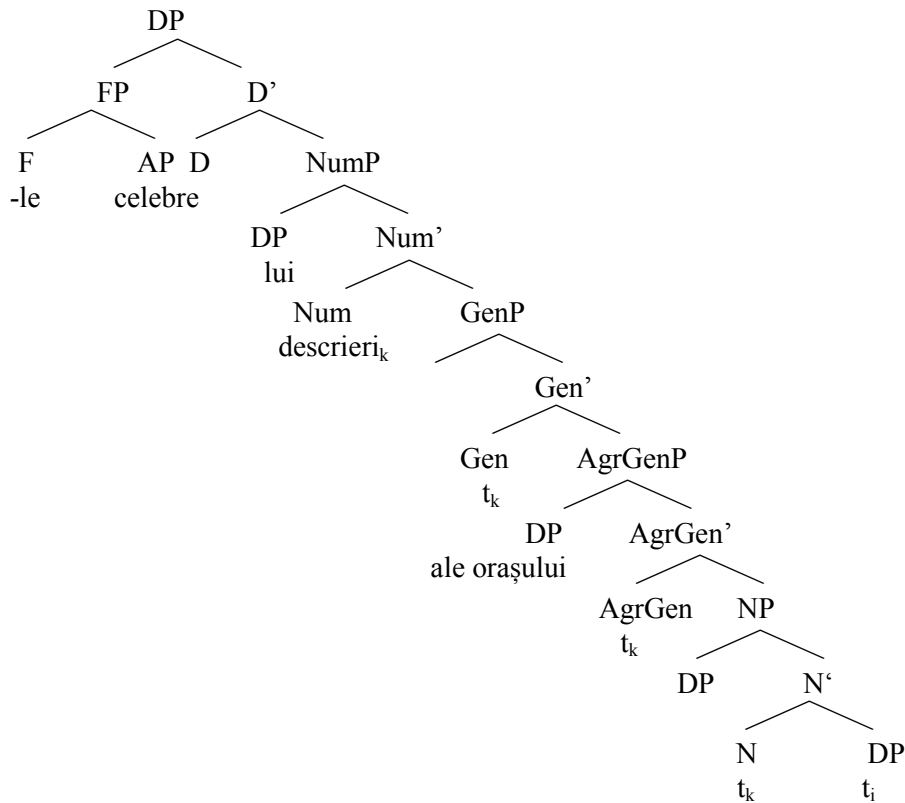
Moreover, coordination becomes impossible. Bare pronouns cannot be coordinated with one another, or with strong phrasal pronouns:

- (27) a. **elegantul lui si ei apartament*
 elegant-the his and her apartment
 b. *elegantul apartament al lui si al ei.*
 elegant-the apartment AL his and AL her

Cornilescu (1995) concludes that bare pronouns in the Gen behave either like weak forms or like strong forms. In the first case, bare pronouns have clitic-like properties. Essentially, the differential strong/weak behaviour of the bare pronouns correlates with the different position of Gen case assignment in the DP. Regarding the second position of the Gen pronoun, one of the most salient characteristics is that the pronoun is pronominal. In contrast, the SpecAgrGenP is postnominal. When the regular Gen is pronominal, *al* occurs as Case-assigner. However, the pronominal position of the Gen, in conjunction with the absence of *al*, suggests that the second Gen position is not licensed by the head noun. This is why two Gens become possible: one is regularly licensed by the noun, through the agreeing determiner *al*, while the second must have a different source. Cornilescu shows that the coordination and focalization tests show that the second Gen position is a higher, left position, which cannot be a position of focus.

In the light of these observations, Cornilescu (1995) claims that the assigner of Gen is the definite article, and that the position of assignment is SpecNumP. This position is c-commanded by the definite article, so it satisfies the locality constraints of Gen assignment in Romanian.

- (28) *celebrele lui descrieri ale oraşului.*
 famous-the his descriptions AL of the city
 ‘his famous descriptions of the city’



In the structure above, Case is indirectly assigned by the definite article surfacing in the AP. Through Spec-Head agreement, the main D position ends up having a fully specified matrix. Compare now the two examples, i.e., bare pronoun vs. clitic.

- (29) a. *celebrele lui descrieri ale oraşului*
 famous-the his.CL descriptions AL the town
- b. *celebrele-i descrieri ale oraşului*
 famous-the-his.CL descriptions AL the city.

Regarding the contrast between (29a) vs. (29b) Cornilescu (1995) argues that clitics must raise to Spec,Num, since they must finally be adjoined to the definite article. They will reach the second Gen assignment position in every case. Analogically, as bare pronouns lack *al*, they are likewise forced to move up to Spec,NumP, so as to get Case. After Case-assignment clitics raise and cliticize on the main D position.

In conclusion, Cornilescu (1995) shows that a nominal postadjectival Gen is assigned in the same position as a bare pronoun or a clitic. Therefore, the proposal is that the second Gen position in the Romanian DP tends to be reinterpreted as an X position, rather than an XP

position. If it is so, Gen case would then be assigned in the head Num position, rather than in the Spec NumP position.

7.2.3. *The prepositional Genitive in Romanian: de*

Cornilescu & Nicolae (2009) claim that Romanian has not only an inflectional Genitive, but also the prepositional Genitive, based on the same prepositional *de* as in all Romance. Like Fábregas (2007), Cornilescu (2009) argued that the *de* form is structural Case.

In the spirit of Grimshaw (1990), Alexiadou (2001) and Cornilescu & Nicolae (2009)), I claim that prepositional *de* Gen can fulfil the most characteristic function of the Genitive, i.e., to licence a syntactic argument of a DP.

The first piece of evidence put forward by Cornilescu & Nicolae (2009) is that both Inflectional, as well as Prepositional Gen are able to licence the e-reading of nominalizations. Note that in complex event nouns, the internal case-marked argument (Theme) alternatively can be realized as an inflectional or prepositional Genitive:

- (30) a. *Citirea obligatorie a romanului de către studenți.*
reading.the obligatory AL novel.the GEN by students
The obligatory reading of the novel by the students.
- b. *Citirea obligatorie de romane de către studenți.*
reading.the obligatory DE novels by students. (Cornilescu 2009)

However, in the absence of the internal argument, the Agent alone is ungrammatical:

- (31) **citirea obligatorie de către studenți.*
reading.the obligatory by students.

Moreover, in nominalizations of double object verbs, the internal Theme argument must be overtly present to license the Dative indirect object of the nominalizations. This can be realised again as an Inflectional or Prepositional Genitive:

- (32) a. *acordarea obligatorie a unei burse studentilor.*
 granting.the obligatory AL a. GEN grant students.DAT
 ‘The obligatory granting of one scholarship to the students’
- b. *acordarea de burse a studentilor.*
 the granting DE scholarships students.the DAT
- c. **acordarea studentilor*
 granting.the students.the DAT (Cornilescu 2009)

As a further argument, notice that in result or event nominalizations Prepositional *de* Gen behave like Genitives rather than *de* modifiers (Cornilescu & Nicolae (2009)). The distinction is made between *de* Gen arguments and *de* modifiers with the observation that unlike *de* modifiers, *de* Genitives cannot occur with another Genitive. Essentially, result or event nominalizations allow only one lexical Genitive phrase:

- (33) a. *citirea de romane de către studenți.*
 reading DE novels by students
- b. **citirea de romane a studenților.*
 reading DE novels of students.
- c. *interpretare de maestru*
 performance of master
- d. *interpretare de maestru a lui Ion*
 performance of master Ion’s

Note that in (33a) the *de* NP is a Genitive Theme and is licensed by Agent *de către*. Importantly, the Agent cannot be realised as an inflectional Genitive in (33b) as Romanian disposes of only one nominal Genitive. However, (33c&d) where the *de* NP is a modifier are valid with an inflectional Genitive.

The conclusion reached by Cornilescu & Nicolae (2009) is that the *de* form is a Gen at least in event nominalizations where it functions as a syntactic argument.

Now we have all the ingredients for providing a thorough comparison between Genitives and Th-Relational adjectives, i.e., Th-adjectives are compared to pronominal Genitives, clitics and nominal Genitives.

7.3. *Thematic Relational adjectives*

As illustrated in the introductory section of this chapter Th-adjectives are regarded as denominal adjectives that are arguments of the deverbal noun, sharing many similarities with Genitives in Romance, i.e., argumental status, ungrammaticality in the predicative position and the same interpretation.

In the light of these observations, I proposed a first hypothesis according to which Th-adjectives in Romance correspond to Genitives.

As follows, I provide a comparison between Genitives and Th-adjectives, showing their similarities and their differences.

7.3.1 *The similarities between Th-adjectives and Genitives*

Marchis (2009) shows that in Romanian Th-adjectives correspond to Gen DP; according to Cornilescu (1995) Genitive is a structural case which fulfils a variety of theta roles in addition to its specific Possessor role. This has been shown also for Spanish, Bosque & Picallo (1996) and Fábregas (2007) who claim that Thematic adjectives are paraphrased with the preposition *de* which has a very weak meaning to the extent that it is used to denote the patient and the agent (Fábregas 2007:142):

- (34) a. *La producción pesquera china* ≈ *La producción de pesca por China.*
The Chinese fishing production ≈ The production of fishing by China
- b. *La importación sedera francesa* ≈ *La importación de seda por Francia*
The French silk import ≈ The import of silk by France

Importantly, the *de* preposition in Spanish corresponds to the Romanian Genitive case which paraphrases Thematic Relational adjectives. According to Cornilescu (1995), like Th-adjectives, Genitives in Romanian fulfil a variety of theta-roles in addition to its specific Possessor role (see chapter 7.1):

- Theme**
- (35) a. *alegerea prezidentiala* ≈ *alegerea presendintelui*
elección presidencial ≈ *la elección del presidente*
 presidential election ≈ the election of the president
- Agent**
- b. *decizie guvernamentala* ≈ *decizia guvernului*
la decisión gubernamental ≈ *la decisión del gobierno*
 governmental decision ≈ the decision of the government
- Possessor**
- c. *revendicarile sindicale* ≈ *revendicarile sindicatelor*
reivindicaciones sindicales ≈ *las reivindicaciones de los sindicatos*
 the union demands ≈ the demands of union
- Absence of grammatical relations**
- d. *analiza microscopică* ≈ **analiza microcopului*
análisis microscópico ≈ **análisis del microscopio*
 microscopic analysis ≈ * the analysis of the microscop

The behaviour of Genitive arguments in Romanian corresponds to the behaviour of Thematic adjectives while the Genitive possessor behaves like those Relational adjectives which do not satisfy Thematic roles of the head noun.

- (36) a. **Aceasta producția este petrolieră.*
**Esta producción es petrolera.*
 This production is oil.TH-adj
- b. *Aceasta analiza este sintactica.*
Este análisis es sintáctico.
 This analysis is syntactic

Moreover, note that Th-adjectives are in complementary distribution with Genitives. (cf. Postal (1969), Alexiadou & Stavrou (to appear))

- (37) a. *Cerința pentru aderare a Persiei.*
 The application for membership AL.GEN Persia
- b. *cererea persană pentru aderare*

The application Persian for membership

- c. **cererea persană pentru aderare a Iranului*
application Persian for membership AL.GEN Iran

Building on Alexiadou & Stavrou (to appear) who argue that Ethnic adjectives have clitic-like properties, Marchis (2009a,b) claims that Th-adjectives in Romanian behave like bare pronouns/ possessives which are weak pronouns, both XP and X. Essentially, like Th-adjectives, bare Gen pronouns and Gen clitics freely alternate with nominal Gen phrases:

- (38) a. *interpretarea actorului*
‘the actor’s performance’
b. *interpretarea lui*
‘his performance’
c. *interpretarea-i*
‘interpretation-his.CL

In the spirit of Cardinaletti (1993), Cornilescu (1995) notices that both bare possessive adjectives and personal pronouns in Gen, partly share the distribution and properties of clitics, i.e., they function like weak pronouns (Cardinaletti 1993). Furthermore, Bosque & Picallo’s (1996) observation that possessive pronominalization of the Theme is ungrammatical with the Th-adjective but it is licit with Cl-adjectives represents strong evidence for the proposal that Th-adjectives behave like weak pronouns (see the examples in (4) & (5) Hence, this may lead us to the conclusion that weak pronouns and Th-adjectives in Romance occupy the same positions for Case checking.

Having discussed the similarities between Th-adjectives and Genitives in Romanian and Spanish, the next section regards their differences. This section is intended to check the validity of the hypothesis 1 according to which Th-adjectives correspond to Genitives in Romanian and Spanish.

7.3.2. *The differences between Th-adjectives and Genitives.*

A first strong piece of evidence against the hypothesis 1 is that Romanian does not allow two Genitive DPs (cf. Cornilescu & Nicolae (2009)):

- (39) **portretul lui Aristotel al lui Rembrandt.*
 the portray of Aristotel of Rembrandt.
 ‘Aristotel’s portray by Rembrandt.’

However, note that two Th-adjectives are allowed to modify a deverbal noun. If hypothesis 1 is right, that Th-adjectives correspond to Genitives DP, then they should not be able occur together.

- (40) *producția cerealieră germană/ a Germanie.*
 production cereal.TH-adj German / of Germany.

Nevertheless, like Spanish, Romanian has also the possibility of a prepositional Genitive, *de* + NP. Importantly, the co-occurrence of the inflectional Genitive and the prepositional Genitive is licit in Romanian:

- (41) *producția de cereale a Germaniei.*
 production DE cereals of Germany.
 Germany’s production of cereals.

A possible explanation for the grammaticality of (41) is that Case is not equally assigned to Genitive DPs and prepositional Genitives. For Romanian, Cornilescu (1995) and Cornilescu & Nicolae (2009) also claimed that the Genitive DP and the prepositional Genitive can have both the agent and the theme role. Nevertheless, a distinction must be made between *de* arguments and *de* modifiers, i.e., *de* arguments cannot occur with another Genitive phrase while *de* modifiers can:

- (42) a. *citirea de romane de către studenți.*
 reading DE novels by students.

- b. **citirea de romane a studenților*.
reading DE novels GEN students.

Another distinction between Th-adjectives and Genitives is that unlike Genitives, Th-adjectives cannot occur with complex event nominals:

- (43) a. *citirea obligatorie a romanului de către studenți*.
reading.the obligatory AL novel.GEN by students
b. *citirea obligatorie de romane de către studenți*.
reading.the obligatory DE novel by students
- (44) a. **producerea cerealiară de către germani*. *Romanian*
producing cereal.TH-adj by the German
b. **la pesca ballenera por parte de los japoneses* *Spanish*
the fishing whale.TH-adj by the Japanese

In the examples above, one can observe that complex event nominals do not allow Thematic adjectives, and their Theme must be realized as either inflectional Genitive or prepositional Genitive while the agent must be realized as the adjunct phrase *de către* in Romanian and *por parte de* in Spanish.

Before putting forward my proposal, I present a last distinction between Genitives and Th-adjectives - unlike Genitive arguments, Th-adjectives cannot control purpose clause and have defective anaphoric properties:

- (45) a. *Invazia americanilor pentru a apăra drepturile irachienilor*.
Invasion-the Americans.GEN to defend the rights of Iraqis.
b. **Invazia americană pentru a apăra drepturile irachienilor*.
Invasion American.TH-adj to defend the rights Iraqis.GEN.

Note that the Th-adjective cannot control purpose clauses which implies that their copy cannot receive a theta-role in the purpose clauses.

Different scholars such as Postal (1969), Levi (1978), Bartning (1976) and Alexiadou & Stavrou (to appear) show that unlike Genitives, Th-adjectives are anaphoric islands:

- (46) a. *propunerea Americii la UN relevă poziția ei rigidă.*
 ‘America’s proposal to the UN reveals her rigid position.’
 b. *Distrugerea Albaniei (a ei insisi) a intristat comunitatea albaneză din exterior.*
 ‘Albania’s destruction (of itself) grieved the expatriot community.’
- (47) a. **Propunerea americană la UN relevă poziția ei rigidă.*
 proposal-the American.TH-adj to UN reveals her rigid position
 b. **distrugerea germană a lor inșiși*
 destruction German.TH-adj AL themselves

7.3.3. *Intermit summary*

In the light of the last subsections, one could observe that in some cases Th-adjectives show the properties of Genitives while in others they do not. These puzzling results lead us to the following issues that must be clarified:

- i. First, inflectional Genitives and prepositional Genitives can occur in complex event nominals while Th-adjectives cannot. According to Grimshaw (1990) only complex event nominals have argument structures while simple event nominals do not have. The problem emerges if we consider Th-adjectives to be arguments of the deverbal noun.
- ii. Second, another related problem is that Romanian has the restriction of one Genitive per DP. Therefore, unlike Genitives, two Th-adjectives can occur together. If both Th-adjectives correspond to Genitives, the question is how they receive Case given that Modern Romanian has only a Genitive Phrase (Cornilescu & Nicolae (2009)). Romanian is similar to Greek in the availability of a single Genitive phrase but unlike Greek it allows the co-occurrence of two Th-adjectives (see Alexiadou & Stavrou (to appear))).
- iii. Third, unlike Genitives, Th-adjectives cannot control purpose clauses. This fact inclines us to believe that their copy cannot receive a theta role in purpose clauses.

In the case of Th-adjectives, there is the strict order where the theme is always closer to the noun:

- (48) a. *producția automobilistică germană.*
 production car.TH-adj German.TH-adj
 ‘German car production’
- b. **producția germană automobilistică.*
 production German.TH-adj car.TH-adj

iv. Forth, I claimed that Th-adjectives correspond to the following construction in Romanian:

- (49) *producția petrolieră americană* ~ *producția de petrol a Americii*
 production oil.TH-adj American ~ production DE oil GEN America

However, Cornilescu & Niculae (2009) claim that in cases above *de* does not correspond to an argument in Genitive case but rather to a modifier as Romanian allows only a Genitive DP in a DP.

Already Grimshaw (1990) pointed out that Genitives surfacing with result nominals are actually – possessors – “argument adjuncts” – rather than arguments.

In this section I aim at discussing these problematic issues regarding the idiosyncratic behaviour of Th-adjectives in contrast to Genitives in Romanian and Spanish. Let us begin with the first potential problem for the analysis of Th-adjectives, i.e., their ungrammaticality with complex event nouns. In order to account for this, I first present an excursus regarding the distinction between complex event nominals and simple event nominals and the types of nominalizations in Romanian and Spanish which may cast more light on the syntactic behaviour of Th-adjectives in these two languages.

7.4. *Complex event nominals vs. simple event nominals*

Grimshaw’s work (1990) presents an essential difference between verb-based nouns designating complex event (e-nominals) and verb-based nouns designating results of events

(r-nominals). Importantly, only the former have argument structure (a-structure) which is completely inherited from the corresponding verbs. Unlike e-nominals, r-nominals lack a-structure and project on the basis of their lexical conceptual structure.

- (50) a. the decoration of the Christmas tree took a long time (ASN-reading)
b. the decoration was expensive (R-reading)

Essentially, Grimshaw's analysis of the event structure and the event identification led to some generalizations. First, it claims that if an event is identified, all the participants count as such. Second, it shows that different types of eventualities require different identifiers. That is: a telic predication, based on a transitive or an ergative verb, is identified if its Object is identified while an activity is sufficiently identified if its Subject (Agent) or some adjunct identifies it. In other words, it is claimed that event participants that are syntactically realized as DPs may be event identifiers.

Regarding deverbal nominalization, Grimshaw makes two important claims regarding the theory of nominalization. First, nominalization is an operation on a-structures which suppresses the external argument of the corresponding verb. Suppressed positions license argument adjuncts such as by-phrase or a Possessor Genitive phrase. Moreover, the Gen subject of an event or result nominal is always a modifier, and this explains why it is always optional, unlike the subject of a finite clause.

Second, like verbs and unlike r-nominals, e-nominals have obligatory arguments. Since the Agent is a modifier in nominalizations, the obligatoriness of arguments concerns only the (Direct) Object of transitive nominalizations.

Cornilescu's (2001) work on Romanian nominalizations has the merit of introducing certain revisions and refinements of Grimshaw's theory on the basis of Romanian data. Explicitly, she argues that the status of the subject in e-nominals is not that of a modifier, but of an argument and the projection of a-structure is related to the aspectual type of the nominalization. In other words, which arguments must be projected, lexicalized and assigned structural Case depends on the aspectual type of the nominalization. Last but not least, Cornilescu accounts for the fact that the projection of the Object is obligatory only with e-nominals by claiming that the projection of Object is required only in (+Telic), that is perfective, nominalizations.

As follows, I present Cornilescu's approach of event nominals in Romanian which represents the key for understanding the idiosyncratic behaviour of Thematic adjectives with e-nominals.

7.4.1 Cornilescu's approach of Romanian nominalizations

Cornilescu (2001) discusses two types of Romanian nominalizations, the infinitive and the supine which are compared regarding their ability to have e-(vent)/ r-(esult) readings. The infinitive and the supine are compared in Noun-Object (NO) and Noun – Subject (NS) structures. Essentially, Cornilescu (2001) shows that all NO structures both in infinitive and supine structures behave alike and have e-readings. Unlike NO, the two NS structures contrast sharply: the infinitive NS is always an r-nominal, the supine NS may be an e-nominals. These distinctions between the infinitive and the supine follow from their aspectual properties. That is: the supine is (-Telic) and may project either an Object or a Subject in e-nominal while the infinitive is (+Telic), and requires the projection of the Object.

As follows I present Cornilescu's empirical data regarding both Noun-Object and Noun-Subject structures with respect to the contrast between event reading and result readings.

a. Noun-object structure

The NO structure is based on transitive verbs. Cornilescu (2001) and Pustejovsky (1992) show that transitive non-stative verbs are mostly accomplishments or achievements which are called "transitions". Importantly, the nominalization of the transitions yield event readings of the same aspectual type, that is, also transitions. In line with Dowty (1979), Grimshaw (1990), Pustejovsky (1992), Kamp & Reyle (1994) and many others, accomplishments are complex transitions which have a composite temporal structure.

As mentioned above, both infinitive and supine nominalizations may have an eventive meaning in the NO structure and the presence of the Object is obligatory as in the case of verbal structures.

- (51) a. *Cumpărarea* *(*casei*) *a fost inutilă.*
Buying.INF-the house-GEN was useless.

- ‘The buying (of the house) was useless.’
- b. *Cumpăratul *(casei) a fost inutil.*
 Buy-SUP.the house-GEN was useless.
 ‘The buying (of the house) was useless.’

One of the particularities of the infinitive and supine NO structures is that the Agent can occur only as an argument-adjunct, *de către* ‘by’ – phrase, never by a Gen, since the Romanian DP has only one structural Gen case position. Moreover, the agent *de către* is realized only if the Object is also present as one can notice in the examples below:

- (52) a. *Cumpărarea *(acestei case) de către Ion a fost inutilă.*
 Buy.INF.the this.GEN house by John was useless.
 ‘The buying of this house by John was useless.’
- b. *Dărâmatul *(acestei biserici) de către stat a fost o eroare.*
 Demolish.SUP this.GEN church by the state was a mistake.
 ‘The demolition of this church by the state was a mistake.’

Thus, the Object is obligatory with the e-nominals both for the infinitive and for the supine. Moreover, aspectual modifiers like *constant* ‘constant’ or *frecvent* ‘frequent’ are characteristic of e-nominals and, as expected, they can co-occur in both nominalizations.

- (53) a. *Studierea constantă a documentelor este o necesitate.*
 Study.INF.the constant AL documents.GEN is a necessary.
 ‘The constant studying of the documents is a necessity.’
- b. *Fumatul constant al trabucurilor l-a ruinat.*
 Smoke.SUP.the constant AL cigards-GEN CL-has ruined.
 ‘The constant smoking of cigars has ruined him.’

Thus, the Supine NO structures are fully parallel with their infinitive counterparts.

Unlike e-nominals, r-nominals can occur with adjectival space/time adjuncts, such as *de la* ‘from’ in Romanian:

- (54) a. *semnarea frecventă a unor importante documente la București*
 sign.INF.the frequent AL some important documents at Bucharest.
 the frequent signing of some important documents in Bucharest
- b. **semnarea frecventă a unor importante documente de la București*
 sign.INF-the frequent AL some.GEN important documents DE at Bucharest.
- (55) a. *cântatul repetat al unor cântece interzise la petreceri.*
 sing.SUP.the repeated AL some.GEN forbidden songs at parties.
 ‘the repeated singing of forbidden songs at parties’
- b. **cântatul repetat al unor cântece inter de la petreceri*
 sing.SUP.the repeated AL some.GEN forbidden songs from at parties.

To sum up, in the light of the example above, one can conclude that the NO structure allows the event interpretation. Since there is only one Case position, and the overt presence of the Object signals the event reading, the unique structural Case position is allotted to the Object (Cornilescu 2001:475).

b. Noun-subject structure

As we saw in the previous section, the infinitive and the supine show a close parallelism in the NO structure. However, they contrast sharply in the NS structure. This is unexpected under Grimshaw’s (1990) theory of nominalization. According to Grimshaw, the Agent is uniformly suppressed in nominalizations and may be specified by a Possessor Modifier phrase.

But how is the Agent represented in e-nominals? Cornilescu (2001) shows that the Agent cannot be realized in e-nominals due to the lack of the second Case position. That implies that the implicit Agent is only semantically active in e-nominals.

Nevertheless, Cornilescu (2001) contradicts Grimshaw’s claim that in all e-nominals the subject must be suppressed. She shows, thus, that the supine NS structure shows all the properties of e-nominals and no result properties. Below I present Cornilescu’s (2001) tests:

First, with the infinitive NS, nominal control properties are lost even though the Agent is overtly present. However, control is allowed in supine NS nominals:

- (56) a. **descrierea minunată a lui Bălcescu pentru a stârni sentimente patriotice*
 describe.INF.the wonderful AL the.GEN Balcescu to stir patriotic feelings
 ‘Balcescu’s wonderful description to stir patriotic feelings’
- b. *cititul lui Ion la micul dejun pentru a-și enerva soacra*
 read.SUP the.GEN John at breakfast to irritate his mother-in-law
 ‘John’s reading at breakfast to irritate his mother-in-law’

Second, aspectual modifiers like *constant* ‘constant’ and *frecvent* ‘frequent’ are not acceptable in the infinitive NS structures, but are licensed in the supine one:

- (57) a. **Introducerea frecventă a criticului la roman a plăcut mult.*
 Introduction.INF frequent AL critic.GEN to novel pleased much
 The frequent introduction to this novel by this critic was well liked
- b. *Cititul lui cu glas tare zilnic i-a corectat rostirea.*
 Read.SUP. his in a loud voice daily CL-has corrected pronunciation
 ‘His constant reading in a loud voice has improved his pronunciation.’

Third, infinitive NS structures allow adjectival place/time adjuncts introduced by *de*, which are excluded in e-nominals and allowed in r-nominals. Hence, the infinitive NS structure proves to be an r-nominal with respect to this test. Unlike infinitive NS structures, the supine NS structures do not allow these types of modifiers which indicates that these structures are e-nominals.

- (58) a. *Interpretarea de la Paris a operei Oedip a dezamăgit.*
 Perform.INF from Paris AL opera.the.GEN Oedip has disappointed.
 The Paris performance of the opera Oedipus was disappointing
- b. **cântatul lui Ion de la baie*
 sing.SUP the.GEN John from bathroom
 John’s singing in the bathroom

In the light of these tests, Cornilescu (2001) concludes that the infinitive NS structure has no event properties as the Agent behaves like a modifier, and the structure is entirely nominals. Moreover, according to Zubizarreta (1987), Valois (1991) and Picallo (1991), in Romance a subjective Gen in a deverbal nominal is the mark of a non-eventive reading. In contrast, the

supine NS structures have no result properties and allow a Gen subject. Therefore, Cornilescu (2001) argues that the supine NS structures in Romanian provides counterevidence to Grimshaw's generalization that the subjective Genitive of a transitive deverbal noun always marks a non-event reading in Romance.

In order to account for the sharp contrast between the NS structures of the infinitive and the supine, Cornilescu (2001) claims that this has to do with the different aspectual properties of the two nominalizations.

7.4.2. The aspectual interpretation of the NO and NS structures

Cornilescu (2001)'s main claim is that the aspectual properties of the nominalising affixes are reflected in the aspectual contrasts between the NO structure, available to both nominalizations, and the NS structure, available only to the supine. In this section both the aspectual properties of the NO and NS structures are examined. Let us start with the former

a. Aspectual interpretation of the NO structure

Essentially, the NO structure is based on transitive verbs. Cornilescu (2001) and Pustejovsky (1992) show that transitive non-stative verbs are mostly accomplishments or achievements which are called "transitions". Importantly, the nominalization of the transitions yield event readings of the same aspectual type, that is, also transitions. In line with Dowty (1979), Grimshaw (1990), Pustejovsky (1992), Kamp & Reyle (1994) and many others, accomplishments are complex transitions which have a composite temporal structure. More exactly, in Parsons' 1990 terms, a complete event (accomplishment) consists of an activity phase, when the event holds, followed by a culmination point and ending with a resulting state when the change of state takes place. As known, the *in* phrase, characteristic of accomplishments, measures the distance between the beginning of the activity and the culmination point.

In line with Kamp & Reyle (1994) the composite temporal structure of a complete event (accomplishment) can be represented as a three-phase structure which includes an activity phase (I), a culmination (II) – the change-of-state moment, and a resulting state (III):

(59)	I	II	III
	activity	culmination	resulting state

According to the above three-phase structure, aspectual operators focalize particular zones of this aspect template. For instance, an accomplishment lexicalizes phases I and II while an achievement focalizes phase II while activities focalize phase I. According to Parsons (1990) and Cornilescu (2001), the crucial distinction between transitions (telic predications) and activities is that the former include, while the latter exclude, the culmination point. Moreover, each particular argument identifies each of these eventualities – the Agent identifies the activity while the Theme measures out the event and identifies the culmination of the event. The Theme is also responsible for expressing the difference between transitions and activities. Since the Theme guarantees the telicity of the event, it also explains why Themes need to be overtly expressed in telic predications (Cornilescu 2001: 485).

In order to support the hypothesis that the infinite and the supine NO structures express transitions, Cornilescu (2001) uses three of Dowty's tests.

To begin with, the NO structures accept 'in' –modifiers:

(60)	a.	<i>construirea podului in două luni</i>	<i>infinitive</i>
		Building.INF of the bridge in two months	
	b.	<i>cititul ziarelor de dimineața intr-o oră</i>	<i>supine</i>
		reading.SUP of the morning newspapers in an hour	

Second, the NO structures appear in the phrase 'take X-much time to Y':

(61)	a.	<i>I-au trebuit numai două luni pentru scrierea romanului</i>	<i>infinitive</i>
		'It took him only two month for the writing of the novel'	
	b.	<i>Le-au trebuit două luni pentru tăiatul lemnelor</i>	<i>supine</i>
		'It took them two months for the cutting of the wood'	

Third, the NO phrases may occur as complements of the verbs 'finish':

(62)	a.	<i>Au terminat deja construirea podului.</i>	<i>infinitive</i>
		They have already finished the building of the bridge	

- b. *El a terminat deja cititul presei de dimineată.* *supine*
 He has already finished the reading of the morning press.

Moreover, the accomplishment reading provided by the supine and the infinitive can be recategorized into an activity when a suitable time-phrase is chosen:

- (63) a. *construirea catedralei vreme de secole* *infinitive*
 building.INFcathedral-GEN for centuries
 b. *cititul de ziare ore intregi pe zi* *supine*
 reading.SUP DE newspapers for hour daily

These tests show that both infinitive and supine NO constructions represent transitions – accomplishments. Let us consider now the aspectual interpretation of the supine NS structure.

b. *Aspectual interpretation of the supine NS structure*

With respect to the interpretation of the supine NS structure, Cornilescu (2001) argues that the supine NS structure is always an activity/ process and, therefore, its Object is not lexicalized. According to her, the Agent is activated through Case-assignment.

Cornilescu's major observation is that there is a clear aspectual contrast between the NO and the NS supine e-nominals. That is: while the NO structures allows an accomplishment and an activity, as well, the NS supine structure is uniquely interpretable as an activity, being compatible with activity modifiers such as 'for' – phrases but incompatible with accomplishment modifiers such as 'in' - phrases:

- (64) a. *pescuitul lui Ion in ape tulburi ani in şir.* *supine*
 'John's fishing in troubled waters for years on end'
 b. **pescuitul lui Ion in ape tulburi in doi ani.* *supine*
 'John's fishing in troubled waters in two years'

More than that, the NS structure is not felicitous in the 'take X-much time to Y'. This is not the case of the NO supine structure:

- (65) a. **Au trebuit ani in şir pentru pescuitul lui Ion in ape tulburi.* (NS)
 ‘John’s fishing in troubled waters took years on end.’
- b. *I-au trebuit ani in şir pentru cumpăratul maşinii.* (NO)
 ‘It took him years on end to buy the car.’

Thus, due to all these tests, Cornilescu (2001) argues that NO structure is interpretable as a transition or as an activity while the NS structure is always an activity. Essentially, this aspectual contrast has syntactic consequences. In order to account for the distinction between NO and NS supine construction, on a one hand and NS infinitive and NS supine structures, on the other hand, the discussion in the next section regards the aspectual features of the two nominalising affixes.

So far Cornilescu (2001) showed that nominalizations of the same verbs based on different suffixes yield e-nominals with different aspectual and syntactic properties:

- (66) a. *cititul cărţii* *supine*
 reading-SUP book-GEN
 ‘the reading of the book’
- b. *cititul lui Ion*
 reading-SUP GEN John
 ‘John’s reading’
- (67) a. *citirea cărţii* *infinitive*
 reading-INF book-GEN
- b. **citirea lui Ion*
 reading-INF GEN John

The above examples mentioned by Cornilescu (2001) clearly indicate that nominalising affixes have aspectual features which act as aspectual operators that focalize different zones of the event template. Explicitly, Cornilescu proposes that the infinitive nominalising affix is + Telic, perfective as the infinitive e-nominal appears only in the NO structures which express transitions. Therefore, it derives transitions and focalizes the culmination (phase II) and the state resulting from the culmination of the event (phase III). These aspectual properties can be observed in the following properties of the infinitive nominals. First, the Object is obligatory

as the culmination of a transition is identified by the object. Second, the infinitive nominalisations can develop result readings by metonymic shift due to the fact that they focalize the resulting state in the event template (phase III):

- (68) a. *Exprimarea adevărului cerea curaj.* *event*
 Expressing the truth required courage.
- b. *Exprimarea lui era greoaie.* *result, abstract*
 The manner of his expressing himself was slow.
- c. *Exprimările de pe table sunt incorecte.* *result, concrete*
 The expressions on the blackboard are incorrect.

Third, infinitive nominalizations are easily recategorized as activities, through suitable time modifiers as the obligatory culmination phase presupposes the activity phase.

All in all, Cornilescu (2001) claims that the infinitive suffix *-re* is + Telic, and infinitive e-nominals are basically transitions hence, by implication, activities. Let us now regard the aspectual characteristics of the supine suffix.

According to Cornilescu (2001), the properties of the supine suffix are noticeable in its occurrence in the NS e-nominals as the infinitive is excluded in this context. As in the previous section presented, the NS e-nominal is always an activity. Hence Cornilescu proposes that the supine suffix *-t* is an activity operator that is – Telic and focalizes the activity phase (I) of the event template. Moreover she puts forth several tests in order to show the – Telic feature of the nominalizer.

To begin with, activities are sufficiently identified by their Subjects (Agent). In the case of the supine NS structures, it is enough to lexicalize this participant. This explains why the event NS structure is possible with the supine.

Second, the resulting state (III) does not have to be part of the lexicalized meaning as the supine suffix focalizes the activity phase (I) of the event template. This is an explanation for the fact that the supine fails to generate concrete result nouns based on the NO structure.

Third, as a rule, activities regularly pass into accomplishments if the activity is bounded by specifying an Object which induces the culmination and resulting state (cf. Pustejovsky

1992). Thus, Cornilescu (2001) shows the supine e-nominal may also express transitions but only in the NO structure:

- (69) a. *Cititul capitolului i-a luat o oră.* *accomplishment*
‘The reading of the chapter took him an hour.’
b. *Cititul revistei timp de oră l-a relaxat.* *activity*
‘The reading of the magazine for an hour relaxed him.’

Thus, Cornilescu (2001) argues that the infinitive suffix *-re* is (+ Telic) and basically forms perfective nominalizations (transitions), while the supine is (-Telic) and basically forms activity nominalizations.

7.4.3. *Cornilescu’s account of the dichotomy infinitive vs. supine*

So far Cornilescu (2001) described the infinitive as a + Telic and the supine as a – Telic nominalization. However, as shown above, both nominalizations accept both + Telic and - Telic interpretations through appropriate temporal modifiers. Hence, she argues that a semantic explanation for the distinction between the supine and the infinitive NS structures in terms of the aspectual class of the affix is not sufficient. A further syntactic constraint is necessary, i.e., the infinitive nominalization requires the projection of an Object as telicity identifier while the supine nominal is not subject to such a restriction.

In order to solve this problem, Cornilescu (2001) proposes a Minimalist feature-checking account which is meant to explain how the aspectual type and the functional structure of the DP determine the syntactic organization of the nominalization.

Cornilescu’s major claim is that the feature +/- Telic must be checked by adjunction to some functional head. As the Aspect is not among the grammatical categories of the noun, according to Cornilescu (2001) the only possibility is that the aspectual feature is checked as a free rider when other feature representing some nominal category of the nominalization is checked (Cornilescu 2001: 491). The relevant nominal projection proposed by Cornilescu is Case, in the sense that telicity is checked at the same time as Case, in the Genitive CaseP. Hence the GenCaseP is a functional projection in the DP, in whose specifier the GenCaseP is checked (cf. Cornilescu 1995, 2001, Coene 1999). They propose that the GenCaseP is a good candidate for being the site of Aspect/Case checking in nominals as it is Case which licenses

the DPs projected by virtue of the aspectual properties of the nominalising affix (Cornilescu 2001: 491). Thus, aspectual properties will be verified in the GenCaseP.

This means that the feature + Telic entails the feature + D, forcing Merge with a lexical DP. A lexical Object needs Case. Hence, the features + Gen, + Telic are simultaneously checked when the noun raises to Gen (overtly in Romanian) and the DO object raises to SpecGenCaseP. Cornilescu (2001) argues that the behaviour of the Romanian infinitive nominal follows entirely from the characterization of the *-re* suffix as (+Telic) which needs to check the features (+ Telic, +D). Essentially, as observed above, the feature + D can be checked only if the verb is transitive or ergative, allowing Merge with a DP.

This is the explanation that Cornilescu (2001) provides for the fact that the infinitive suffix does not operate on unergative verbs which – Telic, - D. The infinitive suffix is, thus, a filter on verb bases, selecting only verbs that match its (+D) feature.

(70) *Unergative verbs*

	Infinitives	Supines
<i>a dormi (sleep)</i>	* <i>dormirea lui</i>	<i>dormitul lui</i>
<i>a plânge (cry)</i>	* <i>plângerea lui</i>	<i>plânsul lui</i>
<i>a respira (breathe)</i>	* <i>respirarea lui</i>	<i>respiratul lui</i>
<i>a munci (work)</i>	* <i>muncirea</i>	<i>muncitul</i>

Unlike the infinitives suffix, the supine suffix is marked (-Telic). However, it may inherit a +D transitivity/ergativity feature from the basic verb and then an Object will be projected. In this case the syntax of the resulting supine nominal is the same as the syntax of the infinitive. Essentially, the aspectual feature is checked by the objective GenCaseP:

(71) *Scrisul acestui roman in două luni reprezintă o victorie.*

‘The writing of this novel in two months represent a victory.’

Moreover, as Cornilescu shows, the supine freely combines with unergative verbs as to identify a (-Telic) event is sufficient to identify its Agent. Thus, the feature (-Telic) is checked in the GenCaseP but it is the Subject DP that checks the aspectual feature of the nominalization. Therefore, the uniquely necessary argument that occupies the unique Case position is the Subject:

- (72) *Cântatul lui Ion in baie ii enervează pe vecini.*
sing.SUP GEN John in the bathroom irritates PE.ACC the neighbours.
'John's singing in the bathroom irritates the neighbours.'

Importantly, the relation between telicity and Case assignment proposed by Cornilescu (2001) has often been discussed in the literature (de Hoop 1993, Borer 1994 and many others). It has been proposed that the Accusative feature of the DP should be matched with the Accusative/Aspectual feature of the verb and, therefore, the Accusative case is checked in the specifier of AspPs.

However, as DPs lack the functional category of Aspect, the relation between telicity and Case is expressed in another way: Aspect features of the head noun are checked as free riders by the Case Head (Gen). For Romanian DPs, Cornilescu (2001) shows that aspectual features can only be made manifest through Merge and Case. The bounded nature of an event must be interpreted as the syntactic projection of an Object.

7.4.4. Conclusions

Cornilescu's approach casts more light on the properties of complex event nominals, showing that e-nominals and the corresponding verbs share an a-structure. Cornilescu's major claim is that e-nominals have distinct aspectual properties, i.e., they may be + Telic (transitions) or – Telic (activities). This difference is due not only to the inherent properties of the verbal base and the choice of arguments/ adjuncts but also to the inherent semantic properties of the nominalising suffixes. The aspectual properties of the affix determine the projection of arguments. A + Telic suffix requires the projection of a DP object which is obligatory in e-nominals based on + Telic suffixes (cf. Grimshaw 1990). In contrast, in – Telic nominals, the Subject may be the only lexical DP, and has clear argumental properties.

In Cornilescu's analysis, Aspect and Case features are checked in the same Case projection, so that the checking of the + Telic feature of the nominalization entails the checking of objective Genitive case. Essentially, clausal objects fail to check case and cannot survive if the nominalising affix is + Telic.

Moreover, the aspectual feature of a suffix determines which arguments are Event identifiers and must be lexicalized.

Crucially, her approach provides us all the needed ingredients for understanding the correlation between Genitive DPs and Th-adjectives and the ungrammaticality of the latter with complex event nominals. As follows, I investigate the behaviour of Th-adjectives with different types of nominals in Romanian and account for the ungrammaticality of Th-adjectives with complex event nominals.

7.5. *Thematic adjectives and nominalizations in Romanian and Spanish*

As shown in the section (7.3.1), one of the major distinctions between Th-adjectives and Genitives is that, unlike Genitives, Th-adjectives cannot occur with complex event nominals:

- (73) a. *citirea obligatorie a romanului de către studenți.*
 reading.the obligatory AL novel.GEN by students
- b. *citirea obligatorie de romane de către studenți.*
 reading.the obligatory DE novels by students
- (74) a. **producerea cerealiară de către germani.*
 producing cereals.TH-adj by the German
- b. **la pesca ballenera por parte de los japoneses*
 the fishing whale.TH-adj by the Japanese

In the examples above, one can observe that complex event nominals do not allow Thematic adjectives, and their Theme must be realized as either inflectional Genitive or prepositional Genitive while the agent must be realized as the adjunct phrase *de către* in Romanian and *por parte de* in Spanish.

In the light of Cornilescu's approach of complex event nominals in Romanian, the ungrammaticality of Th-adjectives with infinitives highlighted in (81) is expected. As shown in the previous section, infinitives in Romanian are complex event nominals that like the corresponding verbs, have an a-structure. Crucially e-nominals have distinct aspectual properties, i.e., they may be + Telic (transitions) or – Telic (activities). In Romanian the different aspectual properties are triggered not only but the inherent properties of the verbal

base and the choice of arguments/ adjuncts but also to the inherent semantic properties of the nominalising suffixes. The aspectual properties of the affix determine the projection of arguments. A + Telic suffix requires the projection of a DP object which is obligatory in e-nominals based on + Telic suffixes (cf. Grimshaw 1990). In contrast, in – Telic nominals, the Subject may be the only lexical DP, and has clear argumental properties.

In other words, Cornilescu (2001) argues that the infinitive suffix *-re* is (+ Telic) and basically forms perfective nominalizations (transitions), while the supine is (-Telic) and basically forms activity nominalizations. However, Cornilescu's approach according to which different nominalising affixes trigger different aspectual features cannot be extended to Spanish. Essentially, in Spanish it is not the suffix that triggers the aspectual properties of the nominalization but rather the object:

- (75) a. *la pesca de ballenas por parte de los japoneses*
The fishing DE whales by the Japanese
b. **la pesca ballenera por parte de los japoneses*
fishing whale.TH-ADJ by the Japanese

Notice that in (75) the nominalization is a complex event nominal or a transition only if the internal object is realized as *de* Genitive phrase. This implies that like in Romanian, Spanish complex event nominals can develop result readings analogically to the infinitive nominalisations in Romanian:

- (76) a. *La constante pesca de ballenas por parte de los japoneses* (event)
The constant fishing DE whales by the Japanese
b. *la pesca ballenera daña el medio ambiente.* (result)
The fishing whales.TH-ADJ destroys the environment.
- (77) a. *Exprimarea adevărului de către politicieni cere curaj.* (event)
'Expressing the truth by the politicians requires courage.'
b. *Exprimarea artistică îi lipsește acestui scriitor.* (result)
'The artistic manner of expressing fails to this writer.'

From this one can deduce that +/- Telic aspect of the nominalization is not obligatorily linked to a specific suffix but rather to the realization of the object. However, this observation is accounted with Cornilescu's approach of nominalizations in Romanian.

In this section, I investigate the type of nominals Th-adjectives combine with, showing the aspectual properties of these nouns, the inherent properties of the verbal base and the inherent semantic properties of the nominalising suffixes, i.e., the presence or absence of aspectual properties of these nouns. Importantly, the results of the test provided in this section will provide sufficient arguments for or against the hypothesis 1 put forth in section (7.1), which argues for the correlation between Genitives and Th-adjectives.

As follows, I present Noun-Object structures with Th-adjectives, showing whether they involve event or result readings.

7.5.1 *Noun-object structures with Th-adjectives*

As thoroughly shown in section (7.3), the NO structure is based on transitive verbs. Cornilescu (2001) and Pustejovsky (1992) show that transitive non-stative verbs are mostly accomplishments or achievements which are called "transitions".

In Parsons' 1990 terms, a complete event (accomplishment) consists of an activity phase, when the event holds, followed by a culmination point and ending with a resulting state when the change of state takes place. As known, the *in* phrase, characteristic of accomplishments, measures the distance between the beginning of the activity and the culmination point.

I use three of Dowty's tests in order to show whether like Genitives, Th-adjectives can occur with transitions.

To begin with, the NO transitions with Genitives accept 'in' -modifiers. This is not the case of Th-adjectives:

- (78) a. *construirea podului in două luni* *infinitive*
 building.INF of the bridge in two months
- b. *cititul ziarelor de dimineata intr-o ora* *supine*
 reading.SUP of the morning newspapers in an hour
- c. *la construcción del puente en dos meses.* *Spanish e-nominal*
 the construction of the bridge in two months

- (79) a. **producția cerealiară in două luni* Romanian
 production cereal.TH-adj in two months
- b. **la producción petrolera en dos meses* Spanish
 the production oil.TH-adj in two months

Second, the NO structures with Genitives appear in the phrase ‘take X-much time to Y’. As expected, Th-adjectives are out in these constructions:

- (80) a. *I-au trebuit numai două luni pentru scrierea romanului* infinitive
 ‘It took him only two months for the writing of the novel’
- b. *Le-au trebuit două luni pentru tăiatul lemnelor* supine
 ‘It took them two months for the cutting of the wood’
- c. *Le tomaron dos meses para la construcción del puente.* Spanish e-nominal
 They took two months for the constructing of the bridge
- (81) a. **I-au trebuit numai două zile pentru consumul alcoolic.* Romanian
 ‘It took him only two days for the alcoholic consumption’
- b. **Le tomaron solamente dos meses para la producción petrolera.* Spanish
 ‘It took them only two months for the oil production’.

Third, the NO phrases may occur as complements of the verbs ‘finish’. NO constructions with Th-adjectives are illicit as complements of the verbs ‘finish’:

- (82) a. *Au terminat deja construirea podului.* infinitive
 ‘They have already finished the building of the bridge’
- b. *El a terminat deja cititul presei de dimineață.* supine
 ‘He has already finished the reading of the morning press.’
- c. *‘Acabaron ya la construcción del puente.’* Spanish e-nominal
 They finished already the construction of the bridge.
- (83) a. **Au terminat deja construcția automobilistică.* Romanian
 They have already finished construction-the automobilistic
- b. **El ya acabo la pesca ballenera.* Spanish
 He already finished the fishing whale.TH-adj

Essentially, these tests clearly show that unlike Genitives, Th-adjectives cannot occur with transitions.

7.6. *The syntactic analysis of Th-adjectives – a proposal*

7.6.1. *Noun-Object Th-adjective*

On the basis of Cornilescu's (2001) approach of complex event nominals in Romanian, I argue that the ungrammaticality of Th-adjectives with NO complex event nominals is Case-related. As they cannot check the Genitive case in the Spec,GenP, they cannot provide the telic aspect of the e-noun in NO constructions.

Moreover, according to Grimshaw's theory of event identification, a telic predication is identified only if its Object is identified. Nevertheless, not any type of DP may serve as an event identifier. Chomsky (1981) and Reinhart & Reuland (1993) argue that a DP may serve as an event identifier only if it has the referential property +R.

(84) A NP is +R iff it carries a full specification for ϕ - features and structural Case.
(Chomsky 1981)

As Th-adjectives are Case-deficient, they are –R and cannot serve as event identifier in Spec,Gen/AspP.

The – R property of Th-adjectives provide an explanation for the problematic issues presented in section 7.2.3., their ungrammaticality with complex event nominals, their partial lack of anaphoric and control properties and their occurrence with GenDPs. In these respects, object Th-adjectives are similar to CP objects as both are in complementary distribution with the infinitive e-nominal, i.e., the infinitive e-nominal requires a DP object and excludes a CP object and a Th-adjectives due to their – R property.

- (85) a. **declarația adevărului*
 'the declaration of the truth'
- b. *declarația de ieri a președintelui*
 declaration-the DE yesterday of the president
 'yesterday's declaration of the president'

- c. *declarație lui Ion că Primul Ministru a demisionat.*
 ‘John’s declaration that the Prime Minister has resigned’
- (86) a. *declararea adevărului* (infinitive e-/-r-nominal)
 ‘declaring the truth’
- b. *declararea lui Ion*
 declare.INF the.GEN John
 ‘John’s declaration’
- c. **declararea că Primul Ministru a demisionat.*
 declare.INF-the that the Prime Minister has resigned

These examples cannot be extended to Spanish as complex event nominals are homophonous with result nominals. Therefore, I use Romanian to show the contrast between e-nominal and result nouns.

In (86) the infinitive e-nominal is + Telic and it is grammatical only if the features + D, + Gen have been checked. A CP object, however, cannot satisfy these features and will not be licensed in the infinitive e-nominal. According to Cornilescu (2001), the absence of the CP complement ultimately follows from the Telicity of the suffix.

Like in the case of Th-adjectives, as CPs cannot check Case, the aspectual feature of the e-noun remains unchecked, so the nominal cannot activate its a-structure.

Essentially, this contradicts the hypothesis 1 according to which Th-adjectives correspond to inflectional GenDP in Romanian.

However, as we saw in section (7.1.3), Romanian has not only an inflectional Genitive, but also the prepositional Genitive *de* like Spanish. Analogical to Fábregas’ (2007) observation for Spanish, Cornilescu (2009) argued that the *de* form is structural Case. Crucially, the inflectional and the prepositional Gen in Romanian have different semantic interpretations.

- (87) a. *citirea romanelor*
 Reading.INF novels.GEN
- b. *citirea de romane*
 reading.INF DE novels.

Notice, when the argument is realized as inflectional Genitive, it receives the bound interpretation, referring to specific novels in (95a) while in (95b) the prepositional *de* Genitive is unbounded, corresponding to mass nouns and plural definite.

Importantly, in Marchis (2009), Th-adjectives are argued to lack referential meaning as they correspond to mass/plural definites in Romance and have mass or kind/group interpretation:

- (88) *producția petrolieră / automobilistică* ≈ *producția de petrol/ de masini*
 production oil.TH-adj/ automobilistic ≈ production DE oil/ DE cars
 oil / car production ≈ production of oil/ of cars

In (96) there is one-to-one semantic correspondence between Th-adjectives and *de* phrases both in Romanian and in Spanish. Therefore, the relational between Th-adjectives and *de* prepositional Gen in these two languages is thoroughly discussed in the next section.

7.6.2. *De phrases in Romance*

In the literature *de* phrases are argued to have a very weak meaning to the extent that they are used to denote the patient and the agent (Fábregas 2007, Bosque & Picallo 1996 for Spanish, Barning (1980) for French, Cornilescu & Nicolae (2009), Niculescu (2009) for Romanian.)

- (89) a. *la producción de pesca.* Patient
 production DE fish
 ‘fish production’
 b. *la producción de Alemania* Agent
 production DE Germany
 ‘Germany’s production’

The preposition corresponds to the Genitive case. Cornilescu & Nicolae (2009) claim that Romanian has not only an inflectional Genitive, but also the prepositional Genitive *de*. Analogical to Fábregas’ (2007) observation for Spanish, Cornilescu (2009) argued that the *de* form is structural Case. This is supported by convincing evidence in Romanian where the inflectional Gen and the prepositional Gen co-exist. The arguments presented in chapter 6 are repeated below:

First, both inflectional and prepositional Gen are able to licence the e-reading of nominalizations. Note that in complex event nouns, the internal case-marked argument (Theme) alternatively can be realized as an inflectional or prepositional Genitive (cf. Cornilescu 2009):

- (90) a. *citirea obligatorie a romanului de către studenți.*
 reading.INF obligatory AL novel.GEN by students
 ‘the obligatory reading of the novel by the students.’
- b. *citirea obligatorie de romane de către studenți.*
 reading.INF obligatory DE novels by students.

Recall that according to Cornilescu (2001), in complex event nominals, the Theme is responsible for the accomplishment/achievement aspectual property of the noun as it guarantees the telicity of the event and explains why Themes need to be overtly expressed in telic predications:

- (91) a. *Cumpărarea *(casei) a fost inutilă.* *Inflectional Gen*
 buy.INF house-GEN was useless.
 ‘The buying (of the house) was useless.’
- b. *Cumpărarea *(de case) a fost o eroare.* *Prepositional de Gen*
 buy.INF DE houses was a mistake.
 ‘The buying of houses was a mistake.’ (Cornilescu 2001: 485)

Second, as Romanian, has the restriction of only one Gen DP per phrase, the prepositional Gen *de* cannot occur with another inflectional Gen:

- (92) **citirea de romane a studenților.*
 read.INF DE novels of students.
 ‘the reading of novels of students’

Due to these similarities, *de* phrases are analysed on a par with inflectional Genitives. However, *de* phrases syntactically and semantically also differ from the inflectional Gen in Romanian.

First, unlike inflectional Gen, prepositional Gen can occur with other inflectional Gen in simple event nominals in spite of the fact that Romanian has the constraint of only Gen, DP per phrase:

- (93) a. *producția de cereale a Germaniei.*
 production DE cereals of Germany.
 ‘Germany’s production of cereals.’
- b. **producția cerealor a Germaniei.*
 production cereals-GEN. AL Germany.GEN.
 ‘Germany’s production of cereals.’

Second, as shown above, unlike inflectional Gen, *de* phrases lack referentially, i.e., inflectional Gen refers to specific novels while prepositional Gen receives an unbounded reading:

- (94) a. *citirea romanelor*
 reading-INF novels.GEN
- b. *citirea de romane*
 reading.INF DE novels.

Due to the differences between the properties of *de* phrases which occur in complex event nominals and of *de* phrases in other types of nominals, Cornilescu & Nicolae (2009) and Niculescu (2009) argue that there are two types of *de phrases* in Romanian, *de NP* which acts as a modifier and *de DP* which represents the internal argument of the deverbal noun.

Let us compare the two types of *de* phrases in Romance:

In the Romance literature in general, scholars talk about two types of *de* phrases, i.e., *de* arguments and *de* modifiers (Bosque & Picallo (1996), Cornilescu & Nicolae (2009), Niculescu (2009)). In Romanian, this difference is more obvious as the inflection Genitive co-exists with the prepositional Genitive:

- (95) a. *Citirea obligatorie a romanului de către studenți.*
 read-INF obligatory AL novel.GEN by students
 ‘The obligatory reading of the novel by the students.’

- b. *Citirea obligatorie de romane de către studenți.*
 read-INF.the obligatory DE novels by students.

In the example above the *de* Gen in (95b) is an argument as it occur with a complex event nominals which obligatorily asks for its Theme to be syntactically realized. However, *de* phrases occur also with r-nominals which have optional argument structure (cf. Grimshaw 1990)

- (96) a. *producția de petrol a Germaniei*
 production DE oil AL Germany.GEN.
 b. **citirea de romane a lui Ion*
 reading.INF DE novels AL GEN John

Importantly, there is a major distinction between *de* phrases with simple event nominals and the ones with e-nominals, i.e., in the latter case *de* phrases cannot occur with inflectional Gen. The ungrammaticality of (104b) is motivated by Cornilescu (2009) with the constraint existed in Romanian of only one Genitive DP per phrase. Therefore, she argues that the *de* phrase in (96a) does not represent a Genitive phrase but rather a modifier.

However, I argue that there is a clear distinction between *de* modifiers and *de* phrases with simple event nouns. Notice the distinction between (97a) and (97b):

- (97) a. *producția de petrol*
 production DE oil
 b. *interpretarea de maestru*
 interpretation DE master/ a master interpretation

Essentially, in (97a) there is a grammatical relation between the noun and the *de* phrase while in (97b) *de maestru* only qualifies the interpretation, i.e., it does not mean that the interpretation was made by a master but rather in a masterful way. Therefore, I argue that the *de* phrase in (105a) also represents a prepositional Gen phrase like the one in (97a).

Under the proposed analysis, the grammaticality of (98) where an inflectional Gen co-occurs with a preposition *de* Gen can be accounted for.

- (98) *producția de cereale a Germaniei.*
 production DE cereals AL Germany.
 ‘Germany’s production of cereals.’

Crucially, in (98) the deverbal noun is a simple event nouns which does not obligatory have a-structure and must not obligatory check the + telic aspect. Hence, the GenP must not be projected. In (98) the agent is a Possessor Gen and the internal argument is realized as a *de* phrase. However, the occurrence of a prepositional Gen with an inflectional Gen apparently violates the restriction in Romanian of only one Genitive per DP. I argue that in this case the Possessor Genitive checks case in the Spec NP position while the Object realized as a *de* phrase in the internal Object position. Importantly, Cornilescu (1995) claims that an internal object Gen DP is based under N’.

Analogical to the distinction between Th-adjectives and inflectional Genitive, *de* phrase in (98) is different from the *de* phrase with complex event nominal in (99) only with respect to the locus of Case checking:

- (99) *citirea de romane de către studenți.*
 read.INF DE novels by students.

The crucial difference between (98) and (99) is that in the latter case the prepositional Gen DP checks both the Genitive and the + telic aspect of the noun in the Spec, GenP. Consequently, its occurrence is obligatory. Unlike in (99), *de* phrase in (98) must check its Case internally and since the simple event nominals do not have Aspect to be checked, its occurrence is optional. This difference between e-nominal and simple event nominals was first observed in Grimshaw (1990).

A strong pro-argument for the fact that in structures like (98), the prepositional Gen checks its Case internally comes from Ticio (2003) who shows that in Spanish postnominal adjectives do not appear preceding the complement of the N:

- (100) a. *los productores de petróleo independientes*
 the producers DE oil independent
 b. **los productores independientes de petróleo.*
 the producers independent DE oil

However, with complex event nominals a postnominal adjective can intervene between the deverbal nouns and its complement:

- (101) *citirea frecventă de romane de către studenți.*
 read-INF frequent DE novels by students.

Regarding the other type of *de* phrase, note that they do not represent the argument of the deverbal noun:

- (102) *interpretarea de maestru*
 interpretation DE master/ a master interpretation

The *de* phrase is only a modifier of the noun behaving more like adjectives. The differences between *de* arguments and *de* modifiers are also syntactic. Unlike *de* arguments, *de* modifiers can occur in the predicative position:

- (103) a. *Aceasta interpretare este de maestru.* r-nominal
 This interpretation is of master.
 b. **Citirea este de romane.* complex event nominal
 Read-INF is DE novels.
 c. **Consumul este de alcool.* simple event nominal
 Consumption is DE alcohol.

The three way distinction of deverbal nominals is visible also in the case of *de* phrases. The main distinction in the distribution of *de* phrases is made between event noun (both complex event nominals and simple event nominals) and r-noun that do not have event. That is *de* phrases that occur with event nouns are Genitive arguments of the deverbal noun while those which occur with r-nouns are restrictive modifiers.

- (104) **Complex event nominals + *de* Gen > simple event nominals + *de* Gen > result nouns+ *de* modifiers**

Under the analysis of complex event nominals proposed by Cornilescu (2001), the distinction between *de* prepositional Gens with complex event nominals and *de* prepositional Gens with simple event nominals is only related to Case-checking.

All in all, a three way distinction must be made regarding *de* phrases in Romanian, i.e., *de* prepositional Gen with complex event nominals which check the Gen and the + telic Aspect in Spec, GenP, *de* prepositional Gen with simple event nouns which check the Gen DP-internally under N' and form endocentric subordinate compounds (cf. Marchis (2009 & submitted)) and *de* modifiers which act as restrictive modifiers with no grammatical relations between them and the head noun.

Crucially, it seems that the prepositional *de* Gens with simple event nouns have the same syntactic and semantic properties like Th-adjectives. This is highlighted in the following chapter.

7.6.2.1. *De phrases vs. Th-adjectives*

As shown in previous section, *de* phrases and Th-adjectives show a large number of similarities. To begin with, both *de* phrases and Th-adjectives are widely argued to express the complement-head relations (see chapter 6)

- | | | | |
|----------|-------------------------------|---|--------------------------------|
| (105) a. | <i>la producción pesquera</i> | ≈ | <i>la producción de pesca.</i> |
| | the production fish.TH-adj | ≈ | the production DE fish |
| b. | <i>la importación sedera</i> | ≈ | <i>la importación de seda</i> |
| | the import silk.TH-adj | ≈ | the import DE silk |

Second, neither *de* phrases nor Th-adjectives can occur in predicative positions:

- | | | |
|----------|------------------------------------|----------------|
| (106) a. | <i>*La producción es pesquera.</i> | <i>Spanish</i> |
| | The production is fish.TH-adj | |
| b. | <i>*La producción es de pesca.</i> | |
| | The producton i s DE fishing | |

Hypothesis 1 revisited:

(110) *The more perceivable the grammatical relations between the Relational adjective and the head noun are, the more possible is the reconstruction of Relational adjectives as prepositional de Genitive phrase, de DP.*

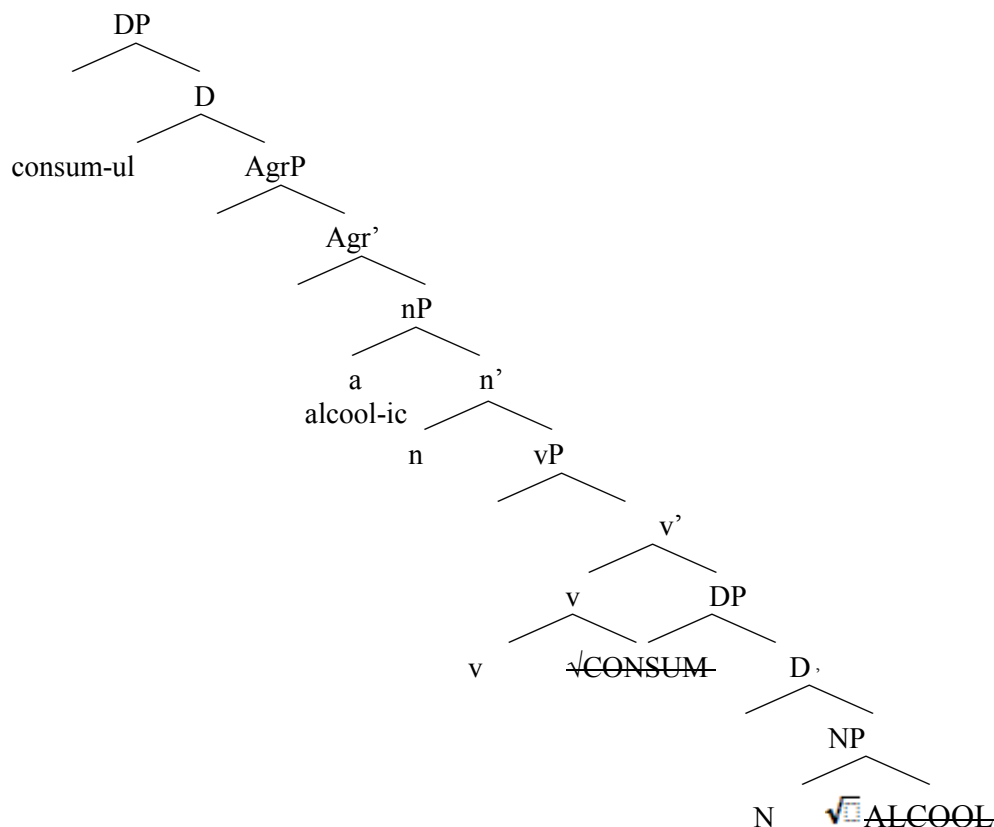
However, a question arises: How is the Genitive Case of Th-adjectives checked in the absence of *de* Last resort operator insertion?

In the spirit of Chomsky (1981) and Reinhart & Reuland (1993), I argue that Th-adjectives cannot serve as an event identifier due to their – R property (see 91). Crucially, like the CP object, their – R property is triggered by their Case deficiency. Because of that, they cannot check the Genitive/ Aspect in SpecGenP and are illicit with complex event nominals which ask for SpecGenP to obligatorily be occupied. Therefore, in line with Marchis (submitted) and Alexiadou & Stavrou (to appear), I propose that Th-adjectives are projected as sisters of the verb, and contain a Case-deficient DP, but they have two ways to solve their Case-problem: Either via movement to AgrP (parallel to the movement of clitics which move as heads and as maximal projections at the same time (Chomsky 1995; Cardinaletti 1998), in which case the DP is spelled-out as an adjective or in the case of a full Genitive DP, via long distance Agree with AgrP (Chomsky 2001).

Unlike complex event nominals, simple event nouns are licit with Th-adjectives. As they do not have aspect, they do not ask for the Spec,Gen phrase to be filled. As Th-adjectives are Case-deficient and simple event nominals do not obligatory ask for a-structure, GenP/Aspect phrase is not projected. Instead, Th-adjectives are projected as a full Gen DP which is in long distance Agree with AgrP.

I provide thus the following structure for Th-adjectives, where n-to D movement gives the correct word order.

- (111) a. *consum alcoholic*
consumption alcohol.TH-adj
- b. [DP [AgrP a - - [nP alcohol-]]]



Thus, Th-adjectives are analyzed on a par with *de* phrase with simple event nominals which check their Genitive case nP internally. However, as *de* phrases are not Case-deficient, they can check both the Genitive and the + telic aspect of complex event nominals, serving as telic event delimiters. Unlike complex event nominals, r-nominals lack a Gen/AspP (cf. Cornilescu 2001). Hence, like Th-adjectives, *de* phrases must check their Genitive case nP internally.

Essentially, the strong connection between object Case and telicity is also observed by de Hoop (1992) who proposes two different object Cases, Strong and Weak, which correlate with different semantic interpretations and syntactic positions: Strong Case is structural Case assigned outside of VP to an object that gets a bound interpretation, while weak Case is assigned within VP and yields an object that functions semantically as a predicate modifier.

Moreover, recall that in chapter 2 dedicated to the Framework of Distributed Morphology, Embick & Noyer (2005) claim that Case features are absent in syntax and are inserted at PF, conditioning the choice of Vocabulary Items expressing Case. In the light of this, it is clear that Thematic adjectives and *de* Genitives have the same structure in syntax, but a choice for one of them has to be made only at PF. I argue that Th-adjectives and *de* Genitives (that with simple event nominals) are allomorphs as there is no semantic distinction among them. The only distinction that *de* Genitives trigger, is that they have full/ strong Case

features, and, therefore, they can serve as event identifiers with e-nominals checking both the Genitive and the Aspect in SpecGenP. Essentially, the choice between *de* Genitives and Th-adjectives is made only with complex event nominals, where at PF both the Case features and the (+Telic) Aspect of the noun has to be checked. As Th-adjectives lack strong Case features, they lose the competition in favour of *de* phrases.

7.6.2.2. *Conclusions*

In this section I discussed object Th-adjectives which are widely argued in the literature to correspond to the object of the deverbal noun (cf. Levi (1978), Bartning (1980), Bosque & Piccallo (1996), Fábregas (2007)). These are analysed on a par with prepositional Genitive arguments by the virtue of the fact that both are arguments of the deverbal noun, have the same unbounded interpretation (mass/plural reading) and the same distribution.

However, if Th-adjectives correspond to *de* Genitives in Romance, how is the Genitive Case of Th-adjectives checked in the absence of *de* Last resort operator insertion?

A possible answer to this question can be provided by the special Case requirements of complex event nominals which are licit with *de* phrases but not with Th-adjectives. Crucially, according to Cornilescu (2001) the + Telic aspect of complex event nominals is checked at the same time as Case, in the Genitive CaseP. In order to account for their ungrammaticality of Th-adjectives with complex event nominals, I argue that they have a Case-deficient feature.

As Th-adjectives are Case-deficient, they are –Referential and cannot serve as event identifier in SpecGen/AspP. Therefore, in line with Marchis (2009a,b, submitted) and Alexiadou & Stavrou (to appear), I propose that Th-adjectives are projected as sister of the verb, and contain a Case-deficient DP which is in Long distance Agree with AgrP (Chomsky 2001).

The consequence of such an approach is that Th-adjectives and *de* phrases are allomorphs, syntactically identical but with different Case features interpretable at PF. The competition between them takes place only with e-nominals where, according to the Subset Principle presented in chapter 2, the Vocabulary Item matching the greatest number of features specified in the terminal node is chosen. In the case of complex event nominals, at PF *de* Genitives are chosen due to the fact that they have strong Case features, otherwise there is a free distribution between *de* Genitives and Th-adjectives.

7.6.3. *Noun-Subject Th-adjective*

7.6.3.1. *Ethnic adjectives in Romance*

On the basis of Bosque & Picallo's (1996) classification of Relational adjectives, I argue that Th-adjectives occur only with deverbal nouns, being either the complement or the agent of the verb (Levi (1978), Bartning (1980), Bosque & Picallo (1996)):

(112) **Object**

- a. *alegere (*este) prezidențială*
*elección (*es) presidencial*
election is presidential

Subject

- b. *atacul american*
el ataque estadounidense
the attack American

Crucially, those Th-adjectives that correspond to the agent of the verb mainly belong to the class of Ethnic adjectives. Such adjectives are argued to refer to groups of entities that share features regarding geographical, race, religion or political identity. However, according to Alexiadou & Stavrou (to appear) this subclass of Th-adjectives is not homogeneous. Their approach represents a major contribution to understanding the ambiguous nature of Thematic Relational adjectives as Ethnic adjectives exhibit a hybrid nature, sharing properties of both nouns and adjectives:

- (113) a. *to egleziko to palto tu* (Greek)
The English the overcoat his
'his English overcoat'
- b. *i amerikaniki anamiksi* (Greek)
the American intervention

In the example above, the adjective in (113a) is a predicative Classificatory adjective as it modifies a common noun while the same adjective in (113b) is a Thematic adjective which saturates the role of Agent for the deverbal noun. Thus, Alexiadou & Stavrou (to

appear) claim that adjectives which modify event nouns are Ethnic adjectives corresponding to Thematic adjectives whereas the adjective modifying common nouns have only descriptive character, being called homophonous descriptive adjectives.

In order to highlight this assumption, they present several tests which cast more light on the basic differences between Ethnic adjectives (EAs) and their homophonous counterparts (CI-adjectives). These tests were presented in detail in chapter 6.

In line with Alexiadou & Stavrou's tests I show that Ethnic adjectives show a dual nature also in Romanian and Spanish: Th-adjectives vs. CI-adjectives.

The first distinctive features of EAs with respect to Classificatory adjectives is that they cannot appear in predicative position:

- (114) a. **interventia a fost americană* *Romanian*
 b. **la intervención fue americana* *Spanish*
 'The intervention was American'

Unlike EAs, homophonous CI-adjectives are allowed in predicative position:

- (115) a. *paltonul lui e englezesc.* *Romanian*
 b. *su abrigo es inglés.* *Spanish*
 His overcoat is English

Second, unlike EAs, homophonous CI-adjectives can easily become lexicalized units in expression such as: *jardin ingles* "gradina englezeasca" "English garden", *tortilla francesa* "omleta frantuzeasca" "French omelette" or *novela rosa* "romanul roz" "pink roman"(romantic novel) (Bosque & Picallo 1996: 362). Due to their lexicalized nature, they can undergo syntactic processes like those above mentioned, namely they can be coordinated and modified.

However, (115) is a very specific case and, therefore it cannot be taken as a general rule for all homophonous CI- adjectives in Romanian and Spanish. Therefore, it seems legitimate to argue that the predicative nature of Romanian and Spanish homophonous CI- adjectives is the only distinctive feature which syntactically sets them apart from the EAs. Crucially, this was also the main distinction between object Th-adjectives and CI-adjectives.

The goal of this section is to show that EAs belong to the class of Th-adjectives, corresponding to Genitive DPs while homophonous adjectives are ‘deep’ adjectives and correspond to Cl-adjectives.

To begin with, in line with Postal (1969) and Alexiadou & Stavrou (to appear), I show that also in Romance there is a distributional and interpretational parallelism between EAs and agents. This is manifested by the existence of exactly parallel selectional restrictions:

- (116) a. **intalnirea americană cu Betty Jones/ *intalnirea Americii cu Betty Jones*
 b. **el encuentro americano con Betty Jones/ * el encuentro de América con B. J.*
 the American meeting with Betty Jones/ America’s meeting with Betty Jones

Second, notice that there is a complementary distribution between EAs and Genitive DPs and by- phrases

- (117) a. **invazia franceză a Americii de Portugalia /* invazia franceză a Frantei de către America*
 b. **la invasión francesa de América por parte de Portugal/ * la invasión francesa de Francia por parte de América*
 ‘The French invasion of America by Portugal/France’s French invasion of America’

Moreover, the deletion of a complement sentence subject when coreferential with a subject in a higher construction runs in parallel with Genitive DPs and Ethnic adjectives:

- (118) a. *tentativa Americii sa atace Cuba la noapte*
 b. *la tentativa de América de atacar Cuba por la noche*
 ‘America’s attempt to attack Cuba at night’
- (119) a. *tentativa americană de-a ataca Cuba noaptea*
 b. *la tentativa americana de atacar Cuba por la noche*
 ‘the American attempt to attack Cuba at night’

In the light of all these tests we may also argue that like in the case of object Th-adjectives, subject Th-adjectives correspond to Genitives in Romance. This is also supported

by the Greek data which show that EAs cannot occur with other Genitives DPs given by the fact that in Greek “two argument Genitives are not licit” (Alexiadou & Stavrou (to appear)):

- (120) a. * *i eliniki kataktisi tis Persias* Greek
the Greek occupation of Persia
b. * *i germaniki katohi tis Eladas*
the German occupation of Greece

However, this is not the case for Romanian and Spanish in spite of the fact that these two languages do not accept constructions with two Genitives, either:

- (121) a. *l'invasione iraquiana de Kuwait* Italian
b. *invadarea irachiana a Kuweitului* Romanian
c. *la invasión iraquí de Kuwait* Spanish
‘the Iraq invasion of Kuwait’

- (122) **spectacolul al Petjei al lui Chopin*
Performance.the AL Petje.GEN AL Chopin
‘Petja’s performance of Chopin’

- (123) **distrugerea a barbarilor a oraşului*
destruction-the AL barbarians.GEN AL city
the barbarians’ destruction of the city

There is, however, another argument that speaks against the parallelism between EA and Genitives, namely that the nominal underlying EA is not accessible to rules of outbound anaphora. (cf. Postal (1969). Levi (1978) and Bartning (1976))

- (124) **propunerea americană către UN relevă poziția ei rigidă*
**la propuesta estadounidense para la UN revela su puesto rígido*
‘the American proposal to the UN reveals its rigid position’

- (125) *propunerea Americii către UN releva poziția ei rigidă.*
la propuesta para la ONU de América revela su puesto rígido.
 ‘America’s proposal to the UN reveals its rigid position.’

Baker (2003) accounts for this ungrammaticality by proposing that adjectives lack a referential index – in contrast to the category “noun”. Thus, EAs cannot bind an anaphor.

Kayne (1984) connects the “deficiency” of the EAs to receive an internal role with their inability to bind an anaphor and to serve as the antecedent of an anaphoric expression:

- (126) a. **Distrugerea albană a lor a întristat comunitatea expatriată.*
 b. **La destrucción albanesa de sí apenó la comunidad de afuera.*
 ‘The Albanian destruction **of itself** grieved the expatriot community’

- (127) a. **Amestecul American in Kosovo i-a expus internațional.*
 Interference American-TH-ADJ in Kosovo CL-has exposed internally.
 b. **La interferencia estadounidense en Kosovo los expusó mundialmente*
 ‘The American interference to Kosovo exposed them internationally’

It is worth mentioning that Grimshaw (1990) argues that Genitives surfacing with result nouns are actually “possessor – argument adjuncts” rather than arguments. In the literature possessors are argued to be introduced by a semi-functional projection which is similar to the light v/ Voice and is labelled PossP or nP (cf. Alexiadou, Haegeman & Stavrou (2007)). According to Alexiadou & Stavrou (to appear), the specifier of this projection is considered to be the locus where the EA in Greek is merged and received the Agent theta role.

Crucially, such an analysis for EAs would correspond to the overall analysis of Th-adjectives presented in the previous sections, namely that they originate nP internally and cannot move to SpecGenPr due to their Case deficient feature. However, EAs in Romance and their counterparts in Greek show some characteristics which set them apart.

First, in Greek Ethnic adjectives cannot co-occur with a postnominal Genitive that stands for an internal complement of a noun:

- (128) **I eliniki kataktisi tis Persias*
 The Greek occupation of Persian.

Essentially, this idiosyncrasy of Greek EAs is associated with the fact that in Greek, as a rule, two argument Genitives are not licit:

- (130) * *i katastrofi tis polis ton exthron*
 The destruction the city.GEN the enemies.GEN

Analogically, Greek does not allow two Th-adjectives (one representing the agent and the other the object) to co-occur. This is not the case for Romanian and Spanish:

- (131) *producția automobilistică germană*
producción automovilística alemana
 production automobilistic German
 ‘German car production’

- (132) *producția automobilistică a Germaniei*
producción automovilística de Alemania
 production automobilistic GEN Germany
 ‘The car production of Germany’

In addition, this empirical difference seems to go hand in hand with the proposed analysis according to which Th-adjectives correspond to *de* Genitives in Romance. In other words, it cannot be just a mere accident that EAs in Greek occur neither with postnominal Genitives nor with Th-adjectives while their Romance counterparts with both.

As follows, I proposed a morpho-syntactic analysis of Ethnic adjectives in Romance which accounts for the crosslinguistic variation between Romance and Greek.

7.6.3.2. *The morpho-syntactic analysis of Ethnic adjectives in Romance*

One of the main goals to pursue in this section is to cast more light on the Case licensing and the realization of Ethnic adjectives in Romance. In the similar fashion to the method used for object Th-adjectives, one first has to determine whether Ethnic adjectives are + Referential, being able to be used as event delimiters for transitions (complex event nominals). Recall that

according to Chomsky (1981) and Reinhart & Reuland (1993) a DP may serve as an event identifier only if it has the referential property +R.

- (133) A NP is +R iff it carries a full specification for ϕ - features and structural Case.
(Chomsky 1981)

According to Grimshaw, the Agent is uniformly suppressed in nominalizations and may be specified by a Possessor Modifier phrase. However, in Romance various scholars such as Zubizarreta (1987), Valois (1991) and Picallo (1991) show that in these languages there is more than one Gen position with underived nouns and derived result nominals, but in e-nominal only one Gen phrase is allowed. Thus, the subject Gen is a mark of a non-eventive result reading (cf. Kupfermann 1991). Nevertheless, in the light of several tests, Cornilescu (1991) shows that infinitive NS structure behaves as predicted in other Romance languages but unexpectedly, the supine NS structure shows all the properties of e-nominals and no result properties. Let us regard the tests that draw a clear line between infinitive and supine NS presented in 7.4.1 and repeated below:

First, with the infinitive NS, nominal control properties are lost even though the Agent is overtly present. However, control is allowed in supine NS nominals:

- (134) a. **descrierea minunata a lui Bălcescu pentru a stârni sentimente patriotice*
 describe.INF wonderful AL the.GEN Balcescu to stir patriotic feelings
 ‘Balcescu’s wonderful description to stir patriotic feelings’
 b. *cititul lui Ion la micul dejun pentru a-și enerva soacra*
 read.SUP the.GEN John at breakfast to irritate his mother-in-law
 ‘John’s reading at breakfast to irritate his mother-in-law’

Second, aspectual modifiers like *constant* ‘constant’ and *frecvent* ‘frequent’ are not acceptable in the infinitive NS structures, but are licensed in the supine one:

- (135) a. **Introducerea frecventă a criticului la roman a plăcut mult.*
 Introduction.INF frequent AL this.GEN critic to novel pleased much
 ‘The frequent introduction to this novel by this critic was well liked’

- b. *Cititul lui cu glas tare zilnic i-a corectat rostirea.*
 Read.SUP his in a loud voice daily CL-has corrected pronunciation.the
 ‘His constant reading in a loud voice has improved his pronunciation.’

Third, infinitive NS structures allow adjectival place/time adjuncts introduced by *de*, which are excluded in e-nominals and allowed in r-nominals. Hence, the infinitive NS structure proves to be an r-nominal with respect to this test. Unlike infinitive NS structures, the supine NS structures do not allow these types of modifiers. This fact indicates that these structures are e-nominals.

- (136) a. *Interpretarea de la Paris a operei Oedip a dezamăgit.*
 Perform.INF.the DE in Paris AL opera.GEN Oedip has disappointed.
 ‘The Paris performance of the opera Oedipus was disappointing’
- b. **cântatul lui Ion de la baie*
 sing.SUP GEN John DE at bathroom
 ‘John’s singing in the bathroom’

In the light of these tests, Cornilescu (2001) concludes that the infinitive NS structure has no event properties as the Agent behaves like a modifier, and the structure is entirely nominals. Moreover, recall that according to Zubizarreta (1987), Valois (1991) and Picallo (1991), in Romance a subjective Gen in a deverbal nominal is the mark of a non-eventive reading. In contrast, the supine NS structures have no result properties and allow a Gen subject. Therefore, Cornilescu (2001) argues that the supine NS structures in Romanian provides counterevidence to Grimshaw’s generalization that the subjective Genitive of a transitive deverbal noun always marks a non-event reading in Romance.

On the basis of the clearly cut distinction between infinitive and supine NS structures, I provide several tests to determine whether Ethnic adjectives can occur with e-nominals or rather with result nominals.

To begin with, according to Cornilescu (2001), the supine NS structure is always an activity/ process and, therefore, its Object is not lexicalized. Hence, the agent is activated through Case-assignment. Essentially, NS structure with the supine is compatible with activity

modifiers such as ‘for’ – phrases but incompatible with accomplishment modifiers such as ‘in’- phrases.

- (137) a. *pescuitul lui Ion in ape tulburi ani in şir.*
 ‘John’s fishing in troubled waters for years on end’
 b. **pescuitul lui Ion in ape tulburi in doi ani.*
 ‘John’s fishing in troubled waters in two years.’

Essentially, the NS structures with Th-adjectives are licit with activity modifiers such as ‘for’ but incompatible with accomplishment modifiers such as ‘in’- phrases

- (138) a. *atacurile americane ani in şir*
 ‘American attacks for years on end’
 b. **atacul american in doi ani* *Romanian*
 ‘the American attack in two years’
 c. **el ataque estadounidense en dos años.* *Spanish*
 ‘the American attack in two years’

Second, like NS supine but unlike NO supine structures, the NS structure with agent Th-adjectives is not felicitous in the ‘take X-much time to Y’.

- (139) a. **Au trebuit ani in şir pentru pescuitul lui Ion in ape tulburi.* (NS)
 ‘John’s fishing in troubled waters took years on end.’
 b. *I-au trebuit ani in şir pentru cumpăratal maşinii.* (NO)
 ‘It took him years on end to buy the car.’
 c. *Le tomó años enteros para comprar el coche.*
 ‘It took him/her many years to buy the car.’

- (140) a. **A trebuit mult timp pentru producţia americană.* *Romanian*
 It took a long timp for the American production
 b. **Les tomó mucho tiempo para la producción alemana.* *Spanish*
 It took them a long time for the German production

As Cornilescu (2001) shows, the aspectual properties of the supine are dual between an accomplishment in NO structures and an activity in NS structures. The nouns modified by Th-adjectives do not show this ambiguity. Neither the NO nor the NS structure show an accomplishment reading, hence Th-adjectives are illicit with transitions.

Third, with the infinitive NS, nominal control properties are lost even though the Agent is overtly present. However, control is allowed in supine NS nominals. Other nominals allow control in purposes with Genitives and less with Th-adjectives:

- (141) a. **descrierea minunata a lui Bălcescu pentru a stârni sentimente patriotice*
 describe.INF wonderful AL.GEN Balcescu to stir patriotic feelings
 ‘Balcescu’s wonderful description to stir patriotic feelings’
- b. *cititul lui Ion la micul dejun pentru a-și enerva soacra*
 read.SUP GEN John at breakfast to irritate his mother-in-law
 ‘John’s reading at breakfast to irritate his mother-in-law’
- c. *atacul americanilor in Cuba pentru a elibera populația.* Romanian
 ‘The attack of the Americans in Cuba in order to save the population’
- c’. *el ataque de los estadosunidense en Cuba para liberar la población.* Spanish
 ‘The attack of the Americans in Cuba in order to save the population’
- d. *¿atacul american in Cuba pentru a elibera populația.* Romanian
 ‘The American attack in Cuba in order to save the population’
- d’. *??el ataque estadounidense en Cuba para liberar la población.* Spanish
 ‘The American attack in Cuba in order to save the population’

Fourth, aspectual modifiers like *constant* ‘constant’ and *frecvent* ‘frequent’ are not acceptable in the infinitive NS structures, but acceptable with the supine. A distinction in the degree of acceptability can be noticed again when the Agent is realized as a Genitive or as a Th-adjective.

- (142) a. **Introducerea frecventă a criticului la roman a plăcut mult.*
 introduction.INF frequent AL-GEN critic.GEN to novel pleased much
 ‘The frequent introduction to this novel by this critic was well liked’
- b. *Cititul lui cu glas tare zilnic i-a corectat rostirea.*
 Read.SUP CL loudly daily CL-has corrected pronunciation.the
 ‘His constant reading in a loud voice has improved his pronunciation.’

- c. *Consumul de alcool frecvent dauneaza sănătății.* Romanian
Consumption DE-GEN alcoholic frequent destroys the health.
- c'. *El consumo de alcohol frecuente hace daño a la salud.* Spanish
The consumption DE alcohol frequent destroys the health.
- d. *???consumul alcoolic frecvent dauneaza sănătății.* Romanian
Consumption alcoholic frequent damages the health.
- d'. *El consumo alcohólico frecuente hace daño a la salud.* Spanish
The consumption alcohol frequent destroys the health.
'The frequent alcoholic consumption destroys the health.'

Last but not least, infinitive NS structures allow adjectival place/time adjuncts introduced by *de*, which are excluded in e-nominals and allowed in r-nominals. Hence, the infinitive NS structure proves to be an r-nominal with respect to this test. Unlike with infinitive NS structures, the supine NS structures do not allow these types of modifiers. This indicates that these structures are e-nominals. However, others deverbal nominals with agents realized both as Genitives and as Th-adjectives are allowed both with place adjuncts introduced by *de* but also with verbal place modifiers such as *in*:

- (143) a. *Interpretarea de la Paris a operei Oedip a dezamăgit.*
Perform.INF DE in Paris AL opera.GEN Oedip has disappointed.
'The Paris performance of the opera Oedipus was disappointing.'
- b. **cântatul lui Ion de la baie*
sing.SUP GEN John DE at bathroom
'John's singing in the bathroom'
- c. *atacul americanilor de la București*
attack of Americans.GEN DE from Bucharest
- d. *atacul american de la Havana/ in Havana*
the American.TH-adj attack DE in Havana/ in Havana

The above presented tests cannot elucidate the type of nominals that accept agent Th-adjectives. Thus, in the light of these tests a three way distinction is noticeable: first, r-nominals such as infinitive NS structures, which cannot control purpose clauses, do not accept aspectual modifiers such as *constant* but accept adjectival modifiers introduced by *de*, second, e-nominals such as supine NS structures that can control purpose clauses, accept aspectual

modifiers but do not accept adjectival modifiers. The nominals licit both with Th-adjectives and Genitives represent the third class, as they behave neither like e-nominals nor like r-nominals, rather they seem to be a mixture of both. Moreover, in the case of these nominals a distinct degree of acceptability can be observed when they occur with Genitives and with Th-adjectives, i.e., with Genitives they are closer to e-nominals (activities) and with agent Th-adjectives, to r-nominals. However, nominals with agent Th-adjectives are not r-nominals as the tests show that unlike infinitives NS (which are r-nominals), the nominals with Th-adjectives are more acceptable in control purposes, with aspectual modifiers and accept both nominal and verbal place/time modifiers. Therefore, I argue that they must belong to a third class of nominals that have event reading. The tests presented above clearly show that simple event nominals are ambiguous between having an a-structure and not having one. Moreover, they are also homophonous with result nouns (according to Grimshaw's 1990 terminology) that do not have e-reading at all. In the spirit of Grimshaw (1990) a hierarchy must be provided for the obligatoriness of argument structure for nominals.

(144) **Complex event nominals > simple event nominals > result nouns.**

In the tests presented above that exhibit two NS structures with different aspectual properties, one could notice a visible distinction in Romanian between infinitive NS structures which clearly are result constructions and supine NS structures which are always activities. Nevertheless, Ethnic adjectives occur with deverbal nominals that share the properties of both activities and results. I name these deverbal nouns *simple event nominals*. Hence, due to the ambiguous status of simple event nominals between having an argument structure and not having one, Ethnic adjectives behave both like possessors and like agent arguments.

Hence, in line with Alexiadou & Stavrou (to appear), I argue that the agent reading of EAs emerges from a combination of aspects in the DP structure, i.e., the lexical properties of the head noun and the Thematic hierarchy:

(145) **POSS < AG < THEME**

Nevertheless, Cornilescu's syntactic approach of supine NS nominal constructions can account for these facts. It is important to recall that the supine NS structure is always an activity/ process, consequently, it is an e-nominal. However, there is a clear aspectual contrast

between the NO and the NS supine e-nominal. According to Cornilescu's (2001), the NS e-nominal is – Telic as it focalizes the activity phase of the event template:

(146)	I	II	III
	activity	culmination	resulting state

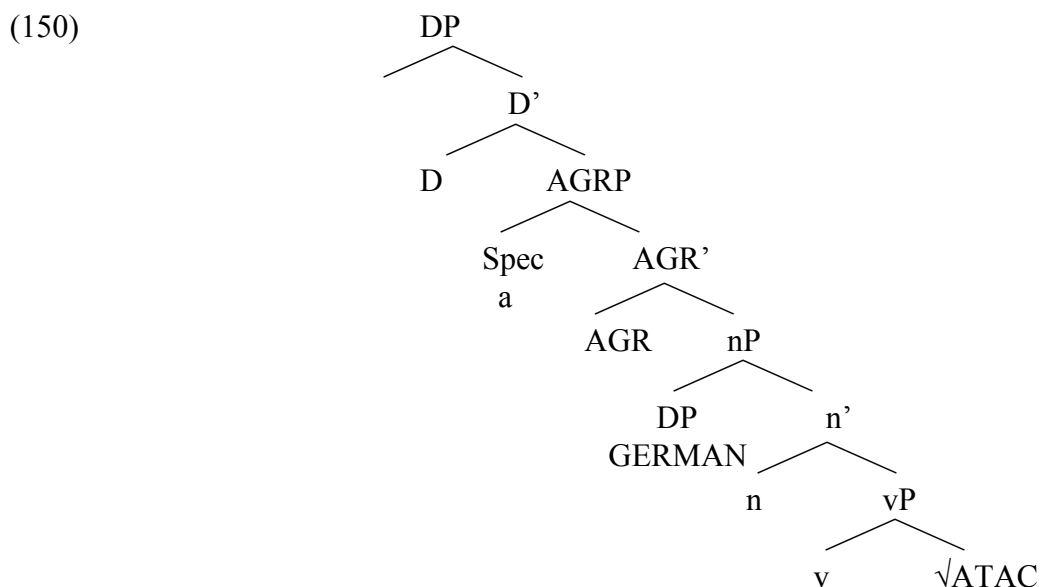
Crucially, unlike NO e-nominals, activities are sufficiently identified by their Subjects (Agents). Another distinction between the NO and the NS e-nominal is that the latter does not include the resulting state in their lexicalized meaning. Moreover, as the supine NS is purely an activity is – Telic. Importantly, the aspectual +/- Telic feature of deverbal nominal constraints the projection of the e-nominal's argument structure. As thoroughly presented in the 7.3, the feature + Telic is checked as a free rider by adjunction to Case, in the Gen CaseP. The Gen Case P is a functional projection in the DP, in whose specifier the GenCase is checked (cf. Cornilescu 2001, 1995). Thus, the aspectual properties will be verified in the lowest GenCaseP if there are several GenCase projections. Explicitly, the feature (+ Telic) entails the feature + D, forcing Merge with a lexical DP. Thus, the features +Gen, + Telic are simultaneously checked when the noun raises to Gen and the DP object raises to SpecGenCaseP. An instance of a + Telic nominals would be infinitive NO structures in Romanian. Unlike the feature (+Telic), the feature (- Telic) is checked in the GenCaseP, but this time it is the subject DP that checks the aspectual feature of the nominalization. The supine NS is a clear example of a – Telic nominals. However, Ethnic adjectives occur per se with neither + Telic nor with – Telic nominals:

- (147) a. **producerea cerealieră de către germani.* Romanian
 producing.INF cereal.TH-adj by the German
 'the cereal production by the Germans'
- b. **la pesca ballenera por parte de los japoneses* Spanish
 the fishing whales.TH-adj by the Japanese
 'whale fishing by the Japanese'
- (148) a. **atacatul american al Cubei.* Romanian
 Attack-SUP American.TH-adj of Cuba
- b. **el atacar estadounidense de Cuba* Spanish
 attacking.INF American.TH-adj of Cuba

In contrast, Ethnic adjectives occur with deverbal nominals that have only optional argument structure. In other words, the subject can be optionally realized. This observation clearly leads to the fact that EAs do not have to check the aspectual properties of the noun they modify:

- (149) a. *atacul german*
 attack German.TH-adj
 b. *el ataque alemán*
 the attack German.TH-adj

I argue that like object Th-adjectives, EAs occur with nominals which are ambiguous between having an argument structure and not having a one. Due to their dual character they are atelic, so they do not have aspect to be checked. Hence, because of their lack of aspect feature, their SpecGenP is not projected and the Genitive case of the optional argument is checked nP internally. Essentially, Grimshaw (1990) pointed out that Genitives surfacing with nominals of no argument supporting type are actually possessor – or “argument adjuncts” being ambiguous between an argument and an adjunct reading. According to Cardinaletti (1998), Alexiadou (2001) and Alexiadou & Stavrou (to appear), the possessor is introduced by a semi-functional projection labelled nP. In the spirit of Alexiadou and Stavrou (to appear), I argue that the specifier of this projection is the locus where the EA is merged, i.e., the position where it received the agent theta role (cf. Kratzer 1994 and Chomsky 1995).



In the general spirit of Marantz (1997, 2001) and Alexiadou & Stavrou (to appear) the noun underlying the EA moves (from nP) to AgrP; there it adjoins, as a head, to a/ASP. According to Alexiadou & Stavrou (to appear), all adjectives contain this a/ASP head. Their movement to a/ Asp is also akin to Case driven movement of arguments. Nevertheless, EAs are Case deficient as it is not valued for Case. This explains why all Thematic adjectives (including Ethnic adjectives) cannot serve as event delimiters in e-nominals.

In the light of all these one can easily realize that the morpho-syntactic behaviour of both object and subject Th-adjectives is the same, i.e. assuming that only DPs can be arguments (Longobardi 1994) they are DPs unvalued for Case (see chapter 5 for arguments in favour of DP layer in the structure of Th-adjectives).

Thus, as EAs are DPs unvalued for Case, they are ill-formed at morphological structure. Hence, an analogical solution like the one proposed for object Th-adjectives can be applied also for EAs: There are two ways the Case checking of EAs can be effected in a structure like (160): either via movement to Asp, in which case the DP is spelled-out as an adjective, or in the case of a full Genitive DP, via long distance Agree with AgrP (Chomsky 2001). The derivational suffix and the Genitive are realizations of a Case checking relationship within a particular domain, in agreement with Marantz (1991), who views Case realization as a morphological property of the clause as a whole. The movement option is available only to the DP with the deficient structure, similarly to what has been proposed by Cardinaletti & Starke (1997) for clitics. Moreover, the similarity between Th-adjectives and clitics was already observed in section (7.2.1).

On the basis of the lack of anaphoric properties of Ethnic adjectives, one can choose which Case checking strategy would be more appropriate for them. As discussed in section 7.1.1, Cornilescu (1995) proposes that Gen is assigned in one of the lower, AgrP in the “agreement area of the Romanian DP”. The evidence that Cornilescu (1995) brings comes from control:

- (151) *angajarea oportună PRO_i a acestui actor_j, pentru a interpreta PRO_j rolul lui Hamlet.*
 Hiring.INF timely of this actor in order to perform role-the of Hamlet

In (151) the unambiguous controller is the object of the nominalization. Cornilescu (1995) claims that the domain governing the PRO subject of the infinitive clause is the DP containing the nominalization. In this domain the PRO subject of the infinite clause should

have a c-command antecedent. However, the object of the nominalization is not in a c-command position with respect to the clause. This should indicate that the object has moved to an appropriate c-commanding position with respect to the purpose clause. Cornilescu proposes that this position is a Spec,AgrGenP, a position where Gen is assigned. Note that unlike Genitives, Ethnic adjectives cannot control purpose clauses:

- (152) a. *Invazia americanilor pentru a apăra drepturile irachienilor.*
 The invasion of Americans.the.GEN to defend the rights of Iraqis.
- b. **Invazia americana pentru a apăra drepturile irachienilor.*
 The invasion American.EA to defend the rights of Iraqis.

Essentially, the examples above provide us with an answer to the puzzling issue regarding the lack of anaphoric properties of EAs. In the light of the discrepancies between (152a) and (152b), I argue that unlike Genitives, EAs do not move in Spec,GenP in order to check the Genitive case but rather they remain in situ, checking their deficient Case through Long Distance Agree. Otherwise they would be in a c-command position like Genitives being able to control in purposes clauses. More than that, GenP is not even projected due to the fact that the nouns modified by EAs are not of argument supporting type and, hence they do not have Aspect to be checked in Spec,GenP.

All in all, the distinction between object and subject (EAs) Th-adjectives is only related to the locus where Th-adjectives first emerge, i.e., the object Th-adjective emerges as a sister of v while the EA emerges in the Spec, nP where it acquires the Agent theta-role (cf. Cardinaletti 1998, Alexiadou 2001 and Alexiadou & Stavrou to appear). However, both object and subject Th-adjectives check the Genitive case in Spec, nP via long Distance Agree with AgrP or move to a/AspP in the Spec,AgrP.

As mentioned before, this analysis is in line with Alexiadou & Stavrou's analysis of Ethnic adjectives in Greek:

- (153) [DP [AgrP a - ik- [nP ital-]]]

However, there is a crucial difference between EAs in Romance and their Greek counterparts. As previously presented, Ethnic adjectives in Greek co-occur neither with a postnominal Genitive that stands for an internal complement of a noun nor with another Th-adjective.

- (154) **I eliniki kataktisi tis Persias*
 The Greek occupation of Persian.

In Alexiadou & Stavrou (to appear), this idiosyncrasy of Greek EAs is associated with the fact that in Greek, as a rule, two argument Genitives are not licit:

- (155) **i katastrofi tis polis ton exthron*
 The destruction the city-GEN the enemies-GEN

Nevertheless, this is not the case for Romance. Romanian allows that EAs co-occur with Genitives in spite of the fact it prohibits two inflectional Genitives:

- | | | |
|----------|--|-----------------|
| (156) a. | <i>l'invasione iraquiana de Kuwait</i> | <i>Italian</i> |
| b. | <i>invazia irachiană a Kuweitului</i> | <i>Romanian</i> |
| c. | <i>la invasión iraquí de Kuwait</i> | <i>Spanish</i> |
| | the Iraq invasion of Kuwait | |

- | | | |
|----------|---|--|
| (157) a. | * <i>spectacolul al Petjei al lui Chopin</i> | |
| | performance-the GEN-the Petje-GEN GEN-the Chopin | |
| | Petja's performance of Chopin | |
| b. | * <i>distrugerea a barbarilor a oraşului</i> | |
| | destruction-the GEN-the barbarians-GEN GEN-the twon | |
| | the barbarians' destruction of the city | |

As thoroughly presented in section 7.5.1., Romanian allows the co-occurrence of the inflectional Genitive with the prepositional *de* Genitive. Crucially, in this work I show that unlike inflectional Genitive, *de* Genitives have different possibilities of Case realization depending on the type of the nominal they occur with. For instance, in complex event nominals, they behave like inflectional Genitives, i.e., they are event delimiters as they are + Referential and can check the Case and the + Aspect in SpecGenPr. In contrast, in simple event nouns that are not + Telic and have optional argument structure, they are similar to Th-adjectives, checking the Case nP internally. Since the inflectional and the prepositional Genitive in Romanian have different realizations and checking mechanisms, they are allowed to co-occur:

- (158) *spectacolul de Chopin al Mariei*
 the performance.the DE.GEN Chopin of.GEN Mary
 ‘Mary’s performance of Chopin’

In line with Alexiadou & Stavrou (to appear), Horrocks & Stavrou (1987) and Alexiadou (2001), I argue that Romanian and Spanish can license arguments and possessors in Spec, DP which functions as an A position. In contrast, Spec,DP is an A’ position in Greek (cf. Alexiadou & Stavrou to appear). Importantly, the distinction between the structural subject position in Greek vs. Romanian and Spanish is highlighted by the fact that unlike Romance languages, Greek lacks possessive adjectives which are argued to occupy a designated position in the internal structure of the DP (cf. Wit & Schoorlemmer (1996). As a consequence, various Greek scholars argued that Greek lacks a structural subject position (cf. Horrocks & Stavrou 1987 and Alexiadou 2001).

To support this, recall that Romanian allows the occurrence of two Genitive only if one of them is realized as X and the other as XP (see section 7.1.2)

- (159) a. *celebra lui interpretare a rolului*
 famous-the his performance of that part
 His famous performance of that part
 b. **interpretarea lui celebră a rolului*
 performance- the-his. famous of the part

Cornilescu (1995) claims that these examples indicate that in these DPs there is a second Case position, where Case is assigned to the pronoun/clitic. Essentially, the post-adjectival Gen position is available only for pronouns, not for nominal phrases:

- (160) a. **celebra lui Oliver interpretare a rolului*
 famous-the of Oliver performance AL of the part

Thus, Cornilescu (1995) shows that in postadjectival position, bare pronouns behave like weak pronouns, sharing the properties of clitics, being X elements rather than XP (Cardinaletti 1998).

Unlike in Greek, in Romance two Th-adjectives corresponding to a different Thematic role co-occur analogically to clitics:

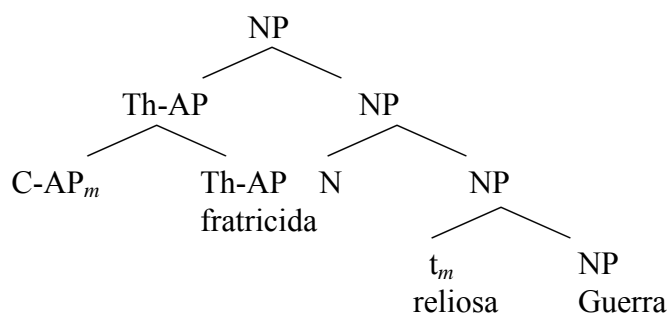
- (161) a. *producția automobilistică germană*
 production car. TH-ADJ german.TH-ADJ
 ‘German car production’
- b. *la producción automovilística alemana.*
 the production car. TH-ADJ german.TH-ADJ
 ‘German car production’

Moreover, Bosque & Picallo (1996) observe that the word order of Th-adjectives obeys the Thematic hierarchy, having the internal argument closer to the head than the external argument:

- (162) a. *producția automobilistică germană.*
 production car.TH-ADJ German.TH-ADJ
- b. **producția germană automobilistică.*
 production German.TH-ADJ car.TH-ADJ.

In order to account for the occurrence of two Relational adjectives, Bosque & Picallo (1996) propose that Th-adjectives and Cl-adjectives form a cluster and move to AgrP for the purpose of gender and number checking (see chapter 6)

- (163) *una guerra religiosa fratricida*
 a fratricial religious war



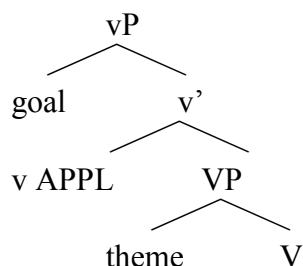
However, such an approach of Relational adjectives does not make justice to their heterogeneous nature: on the one hand, there is the distinction between Classificatory adjectives which are restrictive modifiers realized as “deep” adjectives and Thematic adjectives which are assigned theta roles. On the other hand, Thematic adjectives are not

homogeneous, they are either objects or subjects, most often realized as Ethnic adjectives. Hence, Bosque & Picallo's approach does not make the distinction between the two types of Thematic adjectives: the theme vs. the agent as both are base-generated in the Spec NP and between Thematic adjectives and Classificatory adjectives as they form together a cluster. Thus, I provide a different structure for the cases where an Ethnic adjective (subject Th-adjective) co-occurs with an object Th-adjectives. Explicitly, I argue that EAs and object Th-adjectives emerge in different locus in order to receive their theta roles: EA in the spec, nP which is the projection of the possessor/agent reading while object Th-adjectives as sisters of v. However, both might move in order to check the Genitive case and to transform in adjectives. Their movement is similar to the movement of clitics which move as heads and maximal projections as the same time (cf. Cardinaletti & Starke 1997, Alexiadou & Stavrou to appear).

In the light of this, the analyse I provide for the co-occurrence of the subject and the object Th-adjective is comparable to the structure proposed for Double Object Constructions with clitics in Romance. Crucially, in sentences like (164) a possession relation is involved between Mary and the finger. This possession relation is expressed by a Applicative Head or Relation Head (see Anagnostopolou 1994).

- (164) a. *Câinele i-a mușcat degetul Mariei.*
 b. *El perro le mordió el dedo a María*
 Dog.the CL.D-has bitten finger-the Mary.
 'The dog has bitten the finger to Mary.'

(165) DOCs



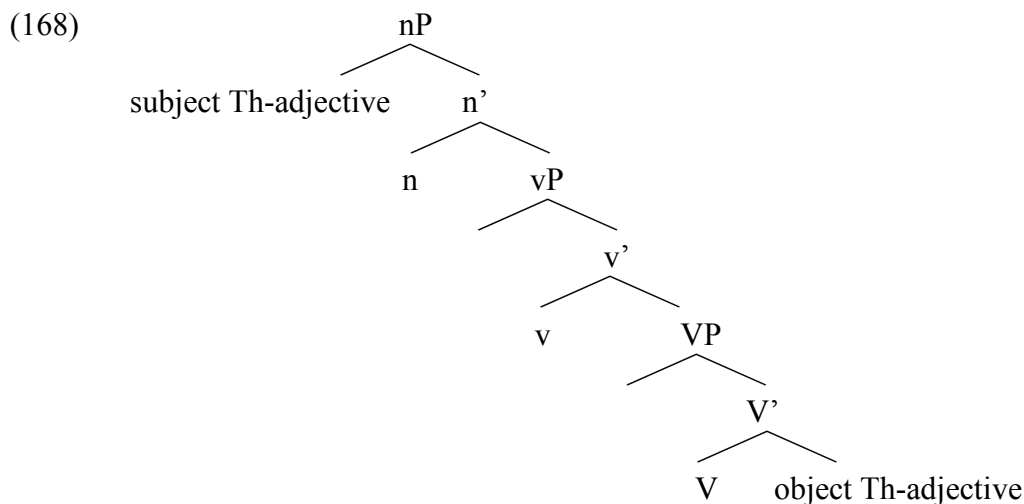
Analogically, the same possession relation is also expressed between the object Th-adjective and the subject Th-adjective in (166).

- (166) *producția petrolieră americană*
 production. oil.TH-ADJ american.TH-ADJ;

Crucially, recall that the Ethnic adjective is usually ambiguous between an agent and a possessor reading (cf. Grimshaw 1990). Nevertheless, the predicativity test shows that the Ethnic adjective is more readily interpreted as a possessor when an object Th-adjective is present:

- (167) a. **atacul este american.*
 The attack is American.TH-adj.
 b. *Această producție automobilistică este germană.*
 This car production is German.TH-adj

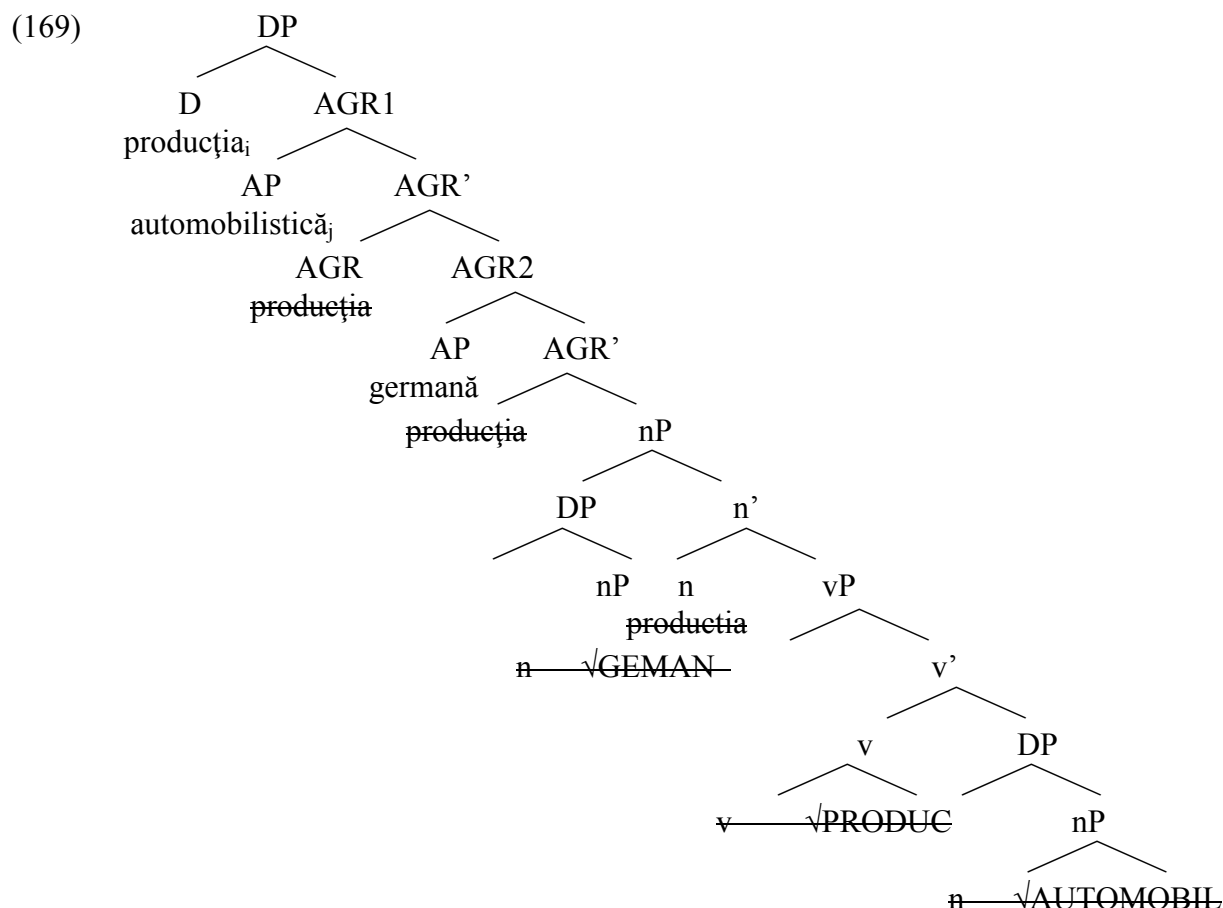
Hence, due to the similarities of Thematic adjectives to DOCs with indirect objects and the possessive interpretation of EAs with other Th-adjectives, I provide the following structure for constructions as in (166):



As shown in detail in this chapter, both object and subject Th-adjectives are Case deficient DPs. Hence, they check their deficient Case nP internally as simple event nominals do not project a GenP for Aspect and the Genitive case. The subject Th-adjectives emerges in the locus where it receives the agent theta role and checks the Genitive case either via Long distance Agree with Agr or through movement to AgrP parallel to the movement of clitics.

In line with Cornilescu (1995), I argue that like object Genitives in Romanian, object Th-adjectives emerge as sister of v and then might move to AgrP to check their deficient Case. Furthermore, I argue that structures like (169) are illicit in Greek due to the fact that in this language the spec, nP is not available which implies that there is only one Genitive

position available, i.e., as sister of *v*. In addition, Alexiadou & Stavrou (to appear) show that the Specifier position in Greek is an A' position while in Romance it is an A position. Crucially, this explains the incongruities between Romanian and Spanish, on the one hand and Greek on the other hand, with respect to the acceptability of internal arguments with EAs.

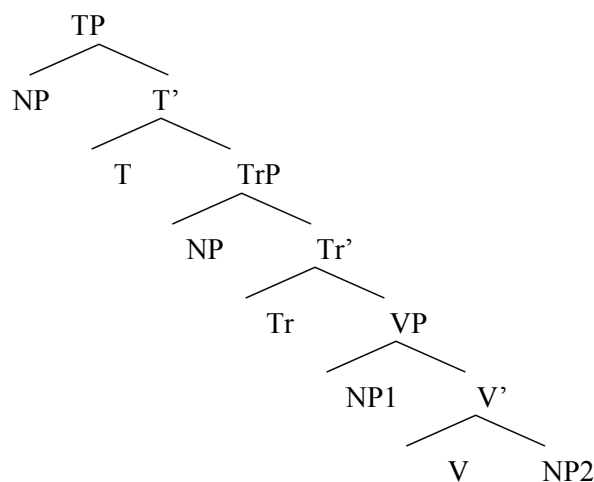


The structure (169), however, does not provide the surface word order of the deverbal noun modified by an object Th-adjective and an Ethnic adjective. Due to locality issues, the object Th-adjectives cannot move past the Ethnic adjective in order to reflect the word order: *N object Th-adjective subject Th-adjective*. Nevertheless, there are several technical solutions to the mismatch between the “deep” word order and the “surface” word order.

One way to solve the potential problem is to assume Cinque’s (2005) NP movement approach. Such an approach creates a complex syntactic analysis according to which the noun and the object Th-adjective move together as a NP past the Ethnic adjective to the determination area. Such an approach would additionally support the proposal in chapter 9 according to which object Th-adjectives represent subordinate compounding in Romance. I leave, nevertheless, the exploration of the advantages and the disadvantages of this syntactic approach for further research.

Another solution could be to provide the structure of a deverbal nominal modified by Th-adjectives on the basis of the syntactic analysis of clauses proposed by Chomsky (1992) and Murasugi (1992):

(170)

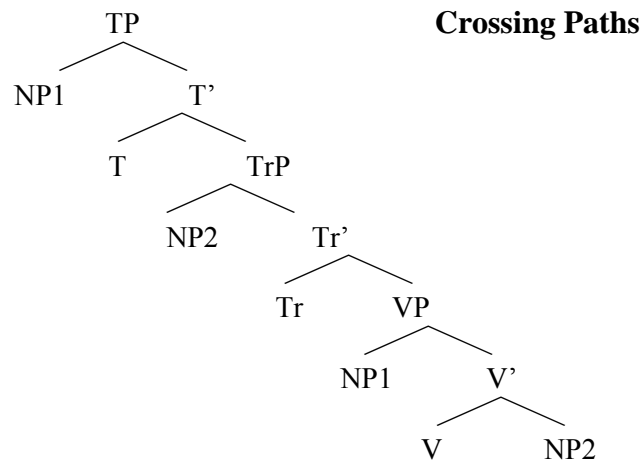


Murasugi (1992) proposes that T has a tense feature and a Case feature, Nominative. Tr triggers a transitivity feature and a Case feature, accusative/ergative. These two functional projections correspond to the V- and N-features of AGRo and AGRs in Chomsky (1992). As is known, NPs have phi-features and Case features. Verbs have the features (+/- tense), (+/- trans) and phi-features corresponding to their arguments.

Murasugi (1992) claim is that these projections (TrP and TP) are sufficient to reflect the Case and the agreement in accusative and ergative languages. More explicitly, in an accusative language, T is associated with the nominative Case and agreement while in an ergative language, T and Tr are associated with absolutive and ergative Case. In both languages T is associated with the unmarked Case and Tr. with the marked case. For the accusative languages, the unmarked case is nominative and the absolute is the unmarked case for the ergative cases. Given the reverse matching of NPs with T and Tr in accusative and ergative languages, Murasugi (1992) proposes that the two Case patterns result from the different movement paths of the NPs.

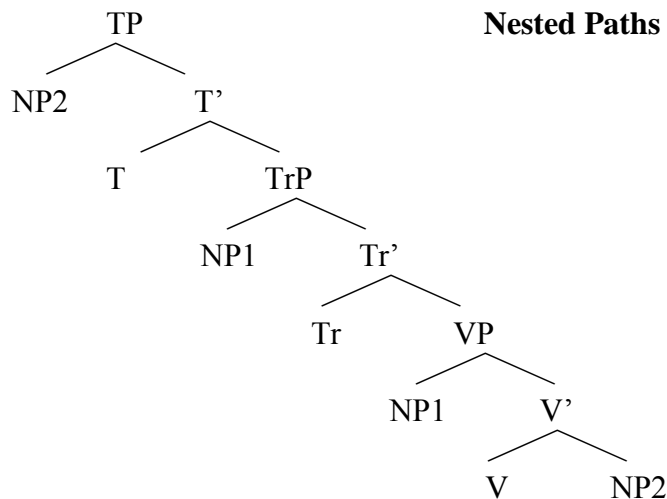
In an accusative language, the subject moves to SPEC TP, and the object, to SPEC TrP.

(171)



In ergative languages, the object raises to SpecTP, and the subject, to SpecTrP

(172)

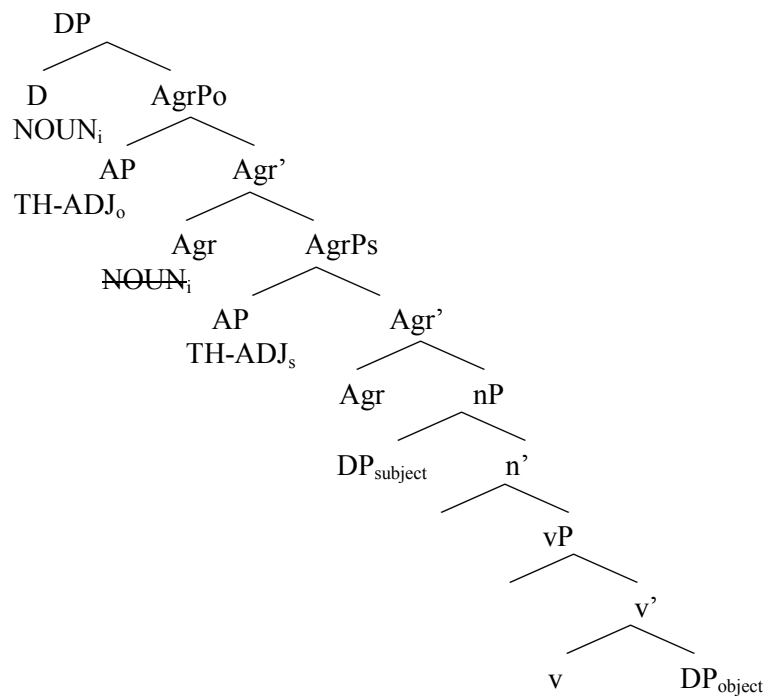


According to Murasugi (1992) the strength of features determines whether the features are checked at the s-structure or LF. The Ergative Parameter imposes that in an accusative language, the strong Case features of T require overt movement to SpecTP at s-structure.

In an ergative language, the strong features of Tr require SpecTrP to be filled at s-structure.

In the structure of Th-adjectives, I use Chomsky's (1992) functional projections Agr.O and Agr.S (instead of Murasugi's (1992) TP and TrP) as unlike Genitives, Th-adjectives have also phi-features. As (172) illustrates, the Agent Th-adjective is the first to be moved in the first Specifier of AgrP as it is the closest available source.

(173)



Observe that the movement of Th-adjectives in Romance correspond to the Nested Path in (182) proposed by Murasugi's (1992) for ergative languages. Unlike verbal arguments, I claim that Agent/ Theme Th-adjectives move always at LF as their case features are always weak. The Agent Th-adjectives moves first because it is the closest source and the AgrP is its closest feature target (Chomsky 1992). As the Agent is not longer available for further movement at LF the object moves to the higher SpecAgr. On the basis of the proposal according to which object Th-adjectives correspond to prepositional *de* Genitive arguments in Romance and the agents in structures like (188) are more similar to possessor modifiers (cf. Grimshaw 1992), it could also be assumed that only object Th-adjectives have weak Case features to be checked. Hence, the object Th-adjective must be locally closer to the head noun. This configurational analysis renders the strict word order of Th-adjectives in Romance languages:

(174) **Noun – object Th-Adjective – subject Th-adjective**

Nevertheless, much more must be said about the parallelism between Murasugi's structure of clauses and the structure of deverbal nominals with Genitives and Th-adjectives. Since this subject goes beyond the scope of this study, I leave this topic for further research.

All in all, this section was meant to cast more light on the mopho-syntactic properties of a subclass of Th-adjectives, Ethnic adjectives which absorb the agent role of the deverbal

noun they modify. On the basis of EAs, I show that Relational adjectives come in a double disguise – either as Thematic adjectives, absorbing Thematic roles of the deverbal noun or as Classificatory adjectives which are restrictive modifiers, realized as ‘deep’ adjectives. The latter are thoroughly discussed in the next chapter. Thematic adjectives are not homogeneous due to the Thematic role they absorb: they can be either the object or the subject. The great majority of subject Th-adjectives belong to the class of Ethnic adjectives. However, both object Th-adjectives and EAs show the same morpho-syntactic properties, i.e., they have the disguise of adjectives belonging to the agreement area in the DP but semantically they are nouns. Hence, they absorb the agent role of the deverbal noun. In addition, I show that in spite of the fact that they absorb the agent role of the deverbal noun, like object Th-adjectives, they are illicit with complex event nominals. This is due to their Case deficiency. According to Chomsky (1981), only DP fully specified with phi features and Case can serve as event identifiers. Therefore, they occur only with simple event nominals which are ambiguous between having an argument structure and not having one. In line with Alexiadou & Stavrou (to appear), I argue that EAs are dual between adjunct arguments and possessors and are introduced by a semiprojection nP. The analysis I propose for EAs is in line with Alexiadou & Stavrou (to appear) and Marchis (to appear), i.e., Ethnic adjectives are merged in the spec nP where they receive the agent role and can check their deficient Case either through movement to AgrP or through Long Distance Agree with AgrP.

Moreover, on the basis of the lack of the anaphoric properties of Ethnic adjectives, I showed that one can choose which Case checking strategy would be more appropriate for them. The data in (162) show that EAs do not move in Spec,GenP in order to check the Genitive case but rather they remain in situ, checking their deficient Case through Long Distance Agree. Otherwise they would be in a c-command position like Genitives, being able to control in purposes clauses. More than that, GenP is not even projected due to the fact that the nouns modified by EAs are not of argument supporting type and, hence they do not have Aspect to be checked in Spec,GenP.

In addition, this section also gives an answer to the idiosyncrasy of Romance languages which unlike Greek allow EAs to occur with internal arguments realized either as object Th-adjectives or as Genitives. The crosslinguistic variation between Romanian/Spanish, on the one hand, and Greek on the other hand, is related to the functional structure of the Greek DP which differs from that of the Romance DP in terms of Case licensing and realization (cf. Alexiadou 2001, Alexiadou & Stavrou to appear).

7.7. Conclusions

In this chapter I discussed the syntactic properties of Thematic adjectives, the subclass of Relational adjectives which correspond either to the object or the subject of the noun they modify. Hence, Th-adjectives occur in Noun Object or Noun Subject constructions. Importantly, the latter belong to the class of Ethnic adjectives, which refer to groups of entities that share features regarding geographical, race, religion or political identity.

The goal of this chapter is, hence, to provide a syntactic analysis for the entire class of Th-adjectives which can make justice to their dual nature of both nouns and adjectives. Both object Th-adjectives and Ethnic adjectives have the disguise of adjectives, belonging to the agreement area of DP, but from a semantic and syntactic viewpoint they are nouns, i.e., they absorb the agent or the object role of the deverbal noun. Crucially, I show that Th-adjectives can be analysed on a par with prepositional Genitive arguments by the virtue of the fact that both are arguments of the deverbal noun, have the same unbounded interpretation (mass/plural reading) and the same distribution. However, due to their dual nature, Th-adjectives have several properties which set them apart from Genitives and must be accounted for. First, unlike Th-adjectives, inflectional Genitives and Prepositional Genitives can occur in complex event nominals. Second, unlike Genitives, two Th-adjectives can apparently occur together. (cf. Cornilescu 1995, Cornilescu & Nicolae 2009). Last but not least, unlike Genitives, Th-adjectives cannot control purpose clauses. In line with Alexiadou & Stavrou (to appear) and Fábregas (2007), I argue that the meaning of these adjectives is relativized of that of the modified noun. In the light of this, I provide an excursus regarding the distinction between complex event nominals, simple event nominals and other types of nominalizations in Romanian which may cast more light on the syntactic behaviour of Th-adjectives in Romanian and Spanish. Regarding first Th-adjective in NO constructions, they are analysed on a par with *de* prepositional Genitives. But if Th-adjectives correspond to *de* Genitives in Romance, how is the Genitive Case of Th-adjectives checked in the absence of *de* Last resort operator insertion? A possible answer to this question can be provided by the special Case requirements of complex event nominals which are licit with *de* phrases but not with Th-adjectives. Crucially, according to Cornilescu (2001), the + Telic aspect of complex event nominals is checked at the same time as Case, in the Genitive CaseP. In order to account for the ungrammaticality of Th-adjectives with complex event nominals, I argue that they have a Case-deficient feature. As Th-adjectives are Case-deficient, they are – Referential and cannot serve as event identifier in Spec,Gen/AspP. Therefore, in line with Marchis (submitted) and

Alexiadou & Stavrou (to appear), I propose that Th-adjectives are projected as sisters of the verb, and contain a Case-deficient DP which is in Long distance Agree with AgrP (Chomsky 2001). Turning now to Th-adjective in NS constructions, the agent role of the deverbal noun is in complementary distribution with agent Genitives. In addition, in spite of the fact that they absorb the agent role of the deverbal noun, unlike Genitives, they are illicit with complex event nominals. This is due to their Case deficiency. According to Chomsky (1981), only DPs fully specified with phi features and Case can serve as event identifiers. Therefore, they occur only with simple event nominals which are ambiguous between having an argument structure and not having one. In line with Alexiadou & Stavrou (to appear), I argue that EAs are dual between adjunct arguments and possessors and are introduced by a semiprojection nP. Crucially, this projection is similar to the applicative phrase in Double Object Constructions with indirect objects in Romance since both involve the same relation of possession (cf. Anagnostopoulou (1994). The analyse I propose for EAs is, thus, in line with Alexiadou & Stavrou (to appear) and Marchis (2009a, b), i.e., Ethnic adjectives are merged in the spec nP where they receive the agent role and can check their deficient Case through Long Distance Agree with AgrP. This explains the lack of control properties of Ethnic adjectives: Since they remain in locus and check the Genitive case through Long Distance Agree, they are not in a position of c-command with the subject copy in the infinitive/ subjunctive phrase and the control is; hence, illicit. Last but not least, another goal of this chapter is to discuss the crosslinguistic variation between EAs in Romance, on the one hand, and EAs in Greek, on the other hand and to come up with an answer to the distributional differences among these languages. I show that unlike in Greek, in Romanian and Spanish two Th-adjectives can co-occur. In order to account of this idiosyncrasy in Romance, I briefly present two different solutions that can deal with the locality issues of the Noun – object Th-adjective – subject Th-adjective word order. The outcome of my approach is that Th-adjectives and *de* phrases are allomorphs, syntactically identical but with different Case features interpretable at PF. The competition between them takes place only with e-nominals where, according to the Subset Principle presented in chapter 2, the Vocabulary Item matching the greatest number of features specified in the terminal node is chosen (cf. Halle 1997). In the case of e-nominals, at PF *de* Genitives are chosen due to the fact that they have strong Case features, otherwise there is a free distribution between *de* Genitives and Th-adjectives. All in all, this analysis explores the advantages of an approach within the Distributed Morphology framework which can account for the hybrid properties of Th-adjectives as nouns and adjectives in terms of their derivation in the syntax (cf. Alexiadou & Stavrou to appear).

8. The Syntax of Classificatory Adjectives

8.1. Introduction

This chapter discusses the second subclass of Relational adjectives, namely Classificatory adjectives. As their name also tells, these adjectives only introduce a domain which classifies the noun. In contrast to Th-adjectives, the most distinctive feature of Cl-adjectives is that they do not saturate thematic roles lexically licensed by the head noun. (cf. Bosque & Picallo 1996:360). Their task is to incorporate different semantic functions to the N head.

Bosque & Picallo advance their proposal to consider Cl-adjectives semantic adjuncts that function as restrictive modifiers. Therefore, Cl-adjectives serve to relate the noun to a domain according to which the NP is classified.

- (1) a. *análisis sintáctico/ estilístico / periódico* Spanish
b. *analiza sintactică/ stilistică/ periodică* Romanian
syntactic/ stylistic/ peridiocal analysis

Regarding the adjectives in (1), they can intuitively be described as elements that add a restriction on the lexical head. The semantic links between Cl-adjectives and nouns can be regarded as a classification of relations between the entities expressed with theta-roles. However, to analyze Cl-adjectives as lexically licensed arguments would imply to postulate that each N can assign as many theta-roles as types of relations between entities can be established in order to classify objects (see Bosque & Picallo 1996: 362).

In support of this view, in this chapter I show that unlike Th-adjectives, Cl-adjectives do not represent arguments of the noun and consequently, they are not DPs. This is supported by the following tests:

First, Fábregas (2007) showed that unlike Th-adjectives, Classificatory adjectives (non-argumental) can be paraphrased with lexical prepositions with strong semantics:

- (2) a. *análisis microscópico* ≈ *análisis mediante microscopio*
analysis microscopic ≈ analysis done using a microscope

- b. *tren pendular* ≈ *tren con péndulo*
 train pendular ≈ train with a pendulum

Moreover, in Romanian, non-argumental Relational adjectives cannot be paraphrased with GenDP:

- (3) *analiză microscopică* ≈ **analiza microscopului*
 análisis microscópico ≈ **análisis del microscopio*
 microscopic analysis ≈ *the analysis of the microscop

Second, unlike Th-adjectives, Cl-adjectives can occur in the predicative position (cf. Cornilescu (2009), McNally & Boleda (2004))

- (4) a. **Restructurarea este urbană.* b. *Concursul este international.*
 **La estructura es urbana.* *La competencia es internacional*
 The structuring is urban The contest is international.

Third, the most viable argument which demonstrates that unlike Th-adjectives, Cl-adjectives do not saturate theta-roles is their co-occurrence with complex event nominals:

- (5) a. *el análisis periódico de las publicaciones por parte del departamento.*
 ‘the periodical analysis of the publications by the department.’
 b. **la producción petrolera por parte de China*
 oil production by China (Bosque & Picallo 1996)

In (5) the Cl-adjective modifies the event of the nominalization – which can be either a transition or an activity:

- (6) a. *interpretarea matematică a teoremei de către student* *infinitive*
 interpretation mathematical AL theorem.GEN by student
 ‘the mathematical interpretation of the theorem by student.’
 b. *cântatul îngeresc/ste al corului bisericii.* *supine*
 singing angelic AL the church’s choir.
 ‘the angelic singing of the church’s choir’

Hence, CI-adjectives behave like adverbs, emerging as sisters of the verb which later turn into adjectives through suffixation.

Fourth, as shown in section 3, unlike Th-adjectives, CI-adjectives correspond to bare plurals in Romance (cf. Marchis 2009a). I show that CI-adjectives can be substituted with *de* + bare nouns as Cornilescu & Nicolae (2009) and Niculescu (2009) showed that *de* can also introduce a bare noun as a modifier. Hence, CI-adjectives are either NumPs or simple NPs:

- (7)
- | | | |
|-------------------------|---|-------------------------|
| <i>amor de madre</i> | ~ | <i>amor maternal</i> |
| <i>dragoste de mamă</i> | ~ | <i>dragoste maternă</i> |
| love DE mother | ~ | maternal love |

A further test from Romanian brings more support for the predicativity of Classificatory adjectives. Notice that like predicative adjectives but unlike Th-adjectives, CI-adjectives can occur with *cel* in case of nominal ellipses. With adjectives *cel* can occur in two main contexts: in case of a lexically expressed N with postnominal predicative adjectives and in case of nominal ellipsis only with predicative adjectives. So in both contexts *cel* can occur only with predicative adjectives which have a contrastive or a partitive meaning.

- (8)
- | | | |
|----|--|------------------------------|
| a. | <i>analiza morfologică</i> | <i>si cea sintactică</i> |
| | The analysis morphological and CEL syntactic | |
| | ‘The morphological analysis and the syntactic one’ | |
| b. | <i>*producția petrolieră</i> | <i>si cea cerealiară.</i> |
| | production oil.TH-adj and CEL cereal.TH-adj | |
| | ‘the oil production and the cereal one’ | |
| c. | <i>decizia guvernamentală</i> | <i>si *cea prezidențială</i> |
| | decision-the governmental and CEL presidential | |
| | ‘the governmental decision and the presidential one’ | |

Nevertheless, simple event nominal with objects realized as Th-adjectives and *de* phrases can occur with *cel*.

- (9)
- | | | |
|----|---|---------------------------|
| a. | <i>producția de alcool</i> | <i>si cea de droguri.</i> |
| | production DE alcohol and CEL of drugs. | |

- b. *producția alcoolică și cea narcotică.*
production alcoholic and CEL narcotic.

Recall, however, that e-nominals can be ambiguous between an event interpretation and a result one:

- (10) a. *La constante pesca de ballenas por parte de los japoneses* (event)
The constant fishing DE whales by the Japanese
- b. *La pesca ballenera daña el medio ambiente.* (result)
The fishing whales.TH-ADJ destroys the environment.
- (11) a. *Exprimarea adevărului de către politicieni cere curaj.* (event)
Expressing the truth by the politicians requires courage.
- b. *Exprimarea artistică îi lipsește acestui scriitor.* (result)
The artistic manner of expressing fails to this writer.

In the light of this, I argue that those Relational adjectives and *de* phrases that can occur with *cel* in nominal ellipses are not arguments of the elided noun. This is so due to the fact that the noun is result, lacking the event layer. One argument in favour of this is the ungrammaticality of the object arguments of complex event nominals with *cel*:

- (12) **citirea de romane și cea de reviste de către studenți*
reading DE novels and CEL DE magazines by the students

This is not so with result nominals:

- (13) *Industria de petrol și cea de automobile au avut de suferit din cauza crizei.*
The industry of oil and CEL of cars suffered due to the crisis.
'The oil industry and the car one have suffered due to the crisis.'

Moreover, note that those Relational adjectives and *de* phrases that can be modified by *cel* in (14) can be copulative. As shown below, this is not the case with Th-adjectives and *de* arguments:

- (14) a. **Această producție este de alcool.*
This production is DE alcohol.
- b. **Această producție este petrolieră.*
This production is oil.TH-adj.
- (15) a. **Esta producción es de petróleo.*
This production is of oil.
- b. **Esta producción es petrolera.*
This production is oil.TH-adj.

Crucially, these deverbal nouns have a different interpretation than simple result nouns. The noun ‘production’ refers to the result product of the act of producing and the entire product is classified according to a specific domain, the domain of ‘oil, cereal, drug, alcohol industry’ and so on.

So far I show that CI-adjectives classify nominals according to a specific domain. As follows, I bring more supporting evidence for the contrastive interpretation and restrictive meaning of CI-adjectives.

8.2. *The contrastive context: Classificatory Adjectives and cel*

Bartning (1980) shows that there is a correlation between the predicative position of Classificatory adjectives and their contrastive interpretation. Note that Classificatory adjectives can occur in the following structure:

NP – be- N- CI-Adj.

- (16) a. *Aceasta este o problemă politică.*
- b. *Este es un problema político.*
This is a political problem.

Semantically speaking, these constructions involve new information in the discourse and contain the entailment that “the problem belongs to the political problems, and not, for instance, to cultural problems” (Bartning (1980):75).

Moreover, explicitly Classificatory adjectives are licit in predications like in (17):

- (17) a. *Aceasta problemă este politică si nu culturală.*
b. *Este problema es político y no cultural.*
'This problem is political and not cultural.'

These contexts, in which C-adjectives appear, show that they have a particular behaviour in comparison to other predicative adjectives.

- (18) a. *¿Aceasta fată este o fată frumoasă.*
b. *¿Esta chica este una chica bella.*
This girl is a beautiful girl

The explanation for the unusual predicativity of classificatory adjectives is given by Sleeman (1996) who claims that they have inherent partitive/contrastive meaning as they relate the noun to a specific domain and, at the same time, exclude other domains. Note that in Romance all predicative adjectives are ambiguous between a restrictive and a non-restrictive interpretation (cf. Cinque (2005). However, in Romanian predicative adjectives can adopt an unambiguously partitive/contrastive meaning if they pattern with *cel* (see Marchis & Alexiadou (2009)):

- (19) a. *fata frumoasă* (ambiguous interpretation)
Girl-the beautiful
The beautiful girl
b. *fata cea frumoasă, (nu cea urată)* (the restrictive interpretation)
girl CEL beautiful one, not the ugly one.

As Classificatory adjectives have an inherent contrastive interpretation they cannot occur with *cel* with a lexically expressed noun:

- (20) a. *industria alimentară (nu petrolieră, nu agrară etc.)*
industry-the food.CL-adj (not oil.CL-adj, not agrarian)
b. **industria cea alimentară*
food industry

However, they are licit with *cel* in the context of nominal ellipses, i.e., with a not lexically expressed noun:

- (21) *industria alimentară si cea agrară.*
 The industry food.TH-ad and CEL agrarian
 The food industry and the agrarian one.

Importantly, in Romanian only predicative adjectives can occur with *cel* in nominal ellipses:

- (22) a. *fostul preşedinte*
 the former president
 b. **preşedintele este fost.*
 The president is former
 c. **preşedintele actual si cel fost*
 the current president and CEL former

For the correlation between the predicative nature of adjectives and their acceptability in nominal ellipses, Sleeman (1996) provides an explanation: noun ellipsis is licensed by those elements which have a partitive/ contrastive meaning. She says that partitivity entails the inclusion in a set and the most important thing is the distinction between elements that always imply inclusion in a set and elements that do not.

Sleeman's (1996) provides us a strong argument for considering Classificatory adjectives predicative adjectives. However, I argue that unlike predicative qualifying adjectives, CI-adjectives are unambiguously restricted and, therefore, they are illicit with *cel* in the presence of a lexically expressed noun.

Thus, the occurrence of *cel* with CI-adjectives and its ungrammaticality with Th-adjectives lead us to the following hypothesis:

Hypothesis 2

- (23) *If there is a grammatical relation between the Relational adjective and the noun head, the Relational adjective cannot occur with cel in Romanian in nominal ellipses.*

For Spanish, the restrictive meaning of Classificatory adjectives is also observed by Bosque & Picallo (1996) who regard them as restrictive modifiers.

Their argument is also supported by the fact that Cl-adjectives correspond to *de* modifiers phrases (cf. Fábregas 2007, Marchis (to appear)). This idea is further developed as follows.

8.3. *Classificatory adjectives and de modifier phrases*

In the Romance literature scholars talk about two types of *de* phrases, i.e., *de* arguments and *de* modifiers (Bosque & Picallo (1996), Cornilescu & Niculae (2009), Niculescu (2009)). In Romanian, this difference is more obvious as the inflection Genitive co-exists with the prepositional Genitive (the arguments illustrated in chapter 7 are repeated below):

- (24) a. *citirea obligatorie a romanului de către studenți.*
 read.INF obligatory AL novel. GEN by students
 the obligatory reading of the novel by the students.
- b. *citirea obligatorie de romane de către studenți.*
 reading.INF obligatory DE novels by students.
- c. *producția de petrol*
 production DE oil
- d. *interpretarea de maestru*
 interpretation DE master/ a master interpretation

Essentially, in (24a,b,c) there is a grammatical relation between the noun and the *de* phrase while in (24d) *de maestru* only qualifies the interpretation, i.e., it does not mean that the interpretation was made by a master but rather in a masterful way. Hence they do not represent the argument of the deverbal noun.

The *de* phrase is only a modifier of the noun behaving more like adjectives. The differences between *de* arguments and *de* modifiers are also syntactic. Unlike *de* arguments, *de* modifiers can occur in the predicative position:

- (25) a. *Aceasta interpretare este de maestru.* *r-nominal*
 This interpretation is DE master.

- (28) a. *dragostea de mamă și cea de tată.*
 love DE mother and CEL DE father
 ‘the mother love and the father one’
- b. **producerea de mașini și cea de avioane.*
 production DE cars and CEL DE planes.
 ‘The car producing and the plane one.’

In the light of all this I analyse CI-adjectives on a par with *de* modifier phrases.

8.4. *The syntactic analysis of Classificatory adjectives*

On the basis of Sleeman’s (1996) approach according to which Classificatory adjectives have an inherent partitive meaning, I propose that they stand for a relative clause with restricted meaning. Essentially, note that CI-adjectives act as restrictive appositional clauses which build a complex unit with the noun they specify.

(29)

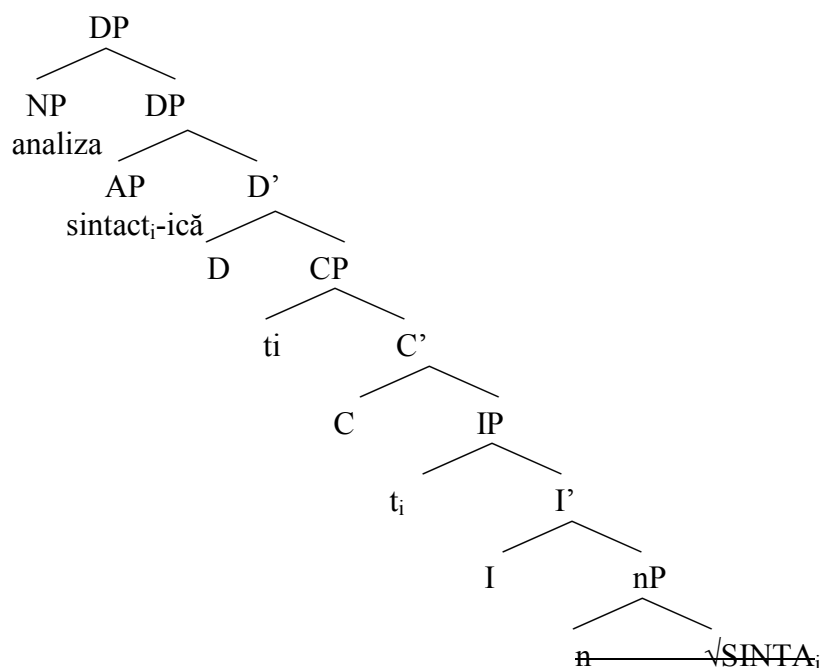
- locative path: *acrobații aeriene/ acrobațiile (cele) care sunt făcute în aer*
acrobacias aéreas/ acrobacias que son hechas en el aire.
 air acrobatics/ acrobatics which are made in air
- locative source: *căldură solară/ căldura (cea) care vine de la soare*
calor solar/ calor que viene del sol
 solar heat/ heat which comes from the sun
- locative (goal): *călătorie stelară/ călătorie care are loc spre stele*
viaje estelar/ viaje que tiene lugar a las estrellas
 star trip/ trip which takes place to the stars
- locative (place): *localitate lacustră/ localitate (cea) care este situată lângă un lac*
poblado lacustre/ poblado que esta situado al lado de un lago
 lake town/ town which is situated near a lake
- cause: *discriminare rasială/ discriminare (cea) care exista între rase*
discriminación racial/ discriminación que existe entre rasas
 racial discrimination/ discrimination which exists among races
- benefective: *literatura infantilă/ literatura (cea) care este pentru copii*

literatura infantil/ literatura que es para los niños
 children's literature/ literature which is for children
 instrumental: *lucru manual/ lucru (cel) care este făcut cu mâna*
trabajo manual/ trabajo que es hecho con la mano
 manual work/ work which is made by hand
 purpose: *ustensile chirurgicale/ ustensile (cele)care folosite in chirurgie*
utensilios quirúrgico/ utensilios que se usan en cirugía
 surgical material/ material that is used in surgery

Hence, I propose that the relative clause which stands for the Classificatory adjective is the right sister of nominal head (NP) with which it forms a complex lexical unit. When the first NP is lexically expressed, the Relational adjective moves up to the specifier DP in order to agree in phi features with the head noun (through a c-command relation) and the syntactic relation looks like a noun to noun conjunction (NP & DP) as the set of the noun intersects with the set of elements expressed by the denominal adjective:

(30) *analiza sintactică*
 syntactic analysis

[DP [&:P [NP analizal]_i &: [DP sintactică_i [CP [C' [IP Ø AP_i]]]]]



In the above structure the adjective is generated in the predicative position within the relative clause. Importantly, the second conjunct is co-indexed with the first one, hence; they both agree in all features and have unique reference.

In the second context of nominal ellipses with *cel*, when the first conjunct has previously been mentioned in the discourse it can be elided; ellipsis is licensed as the remaining part is partitive/contrastive (Marchis & Alexiadou 2009). In this case the Classificatory adjective cannot move to the Spec,DP due to its lack of case so *cel* must be spelled out in order to check case.

(31) [$\&$:P [NP ~~analiza~~]_i &: [DP cea_i [CP [C' [IP \emptyset _i sintactică]]]]]

According to Marchis (2009), this construction corresponds to attributive compounding but this new perspective on Cl-adjective is discussed in chapter 9.

As presented in the previous section, Classificatory adjectives can occur also with complex event nominals. As expected these constructions are amenable to a different syntactic analysis.

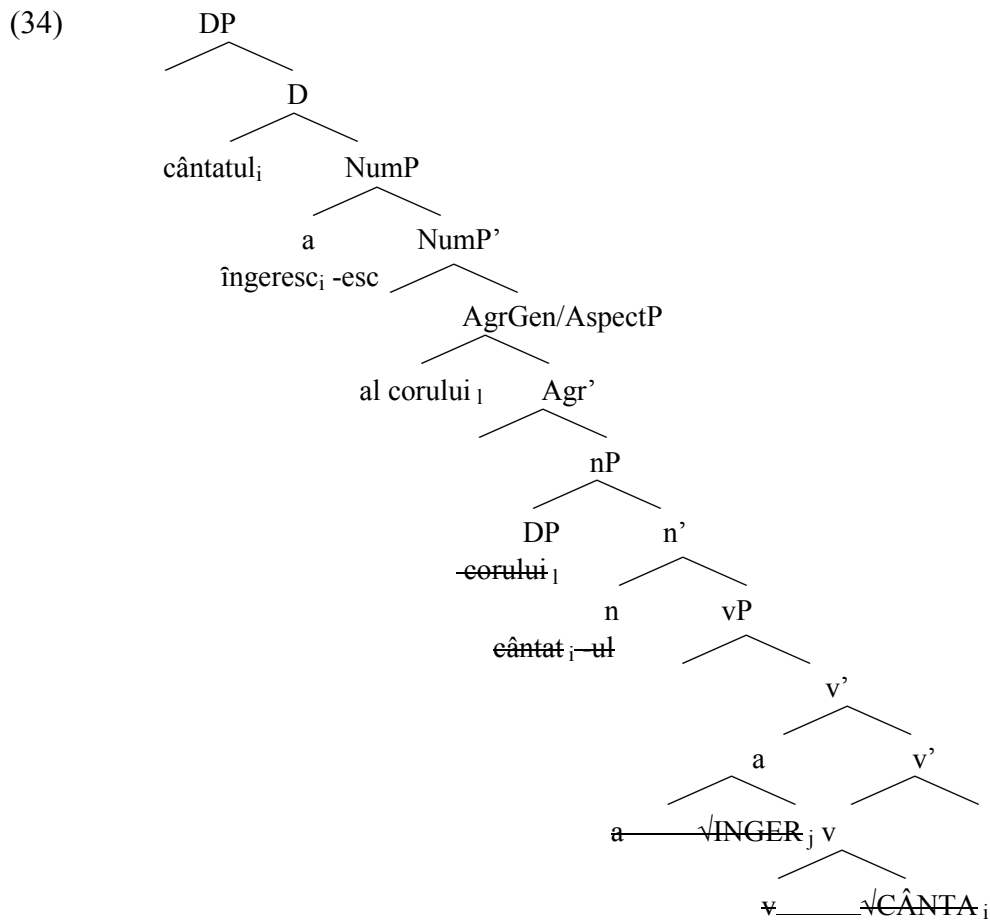
- (32) a. *interpretarea matematică a teoremei de către student*
 interpretation mathematic AL theorem.GEN by student
 ‘the mathematical interpretation of the theorem by the student’
- b. *cântatul îngeresc al corului bisericii.*
 singing.INF angel.CL-adj AL choir church.GEN
 ‘the angelic singing of the church’s choir.’

In line with Borsley and Kornfilt (2000), I assume that the nominalizations of a verbal form project a VP in the low part of the tree but it can be modified by nominal functional projections in the higher part. In other words, the nominal functional categories precede the verbal functional categories.

(33) [NP [NP[NP[VP[VP]]]]]

On the basis of the interpretation of Cl-adjectives with deverbal nouns, one can easily realize that they modify the event underlying the verbal projection within the nominalization. For instance, (32b) receives the interpretation that “the choir sang in an angelic way” or (32a)

has the interpretation that “the scholar interpreted the novel in literary way”. Thus, I argue that the CI-adjective modifies the lowest VP in the tree.



It is worth mentioning that the CI-adjective *ingeresc* “angelic” has the same morphological form like the adverb modifying the verb *a cânta* “to sing”:

- (35) a. *cântatul ingeresc/ingerește al corului bisericii.*
 ‘the angelic singing of the church’s choir.’
- b. *Corul bisericii a cântat ingeresc/ingerește.*
 ‘The church’s choir sang angelically.’

Therefore, within the Distributed Morphology approach I propose that the root of the Classificatory adjective modifying an e-nominal, merges first with a null realized adverbial head and then moves further in the Agreement Domain, in Spec,Number and it turns into an adjective through the suffix *-esc*. The two layers within the structure of CI-adjectives with e-nominal explain both their morpho-syntactic form as agreeing adjectives and their function as event modifiers.

8.5. *Conclusions*

In this chapter I discussed the subclass of Classificatory adjectives. The goal of this section was to show that they contrast to their Thematic counterparts not only with respect to their semantics but also to their syntactic analysis. Explicitly, I showed that unlike Th-adjectives, Cl-adjectives are not arguments of noun but rather they relate the noun to a domain according to which the NP is classified. Hence, they are restrictive modifiers of the noun they modify.

This is highlighted on the basis of several tests, i.e., they do not correspond to Genitives, are predicative, can occur with *cel* and correspond to *de* modifier phrases in Romance.

In the light of all this, I propose that a restricted relative clause stands for the Classificatory adjective that is the right sister of nominal head (NP) with which it forms a complex lexical unit. This is proven by the fact that Cl-adjective can occur with *cel* in Romanian, which is argued to introduce a reduced relative clause which has a specifying function, rendered in English via the use of e.g. the adverb *namely* (cf. Cornilescu (2005), Marchis & Alexiadou (2009)).

A different structure is given to the structures with e-nominal modified by a Cl-adjective. On the basis of the interpretation of Cl-adjectives with deverbal nouns, I argue that they modify the event underlying the verbal projection within the nominalization. Hence, they involve an adverbial layer before turning in adjectives. Essentially, the two layers within the structure of Cl-adjectives with e-nominal capture both their dimensions: as adjectives agreeing with nominal and as adverbs modifying the event underlying the deverbal noun.

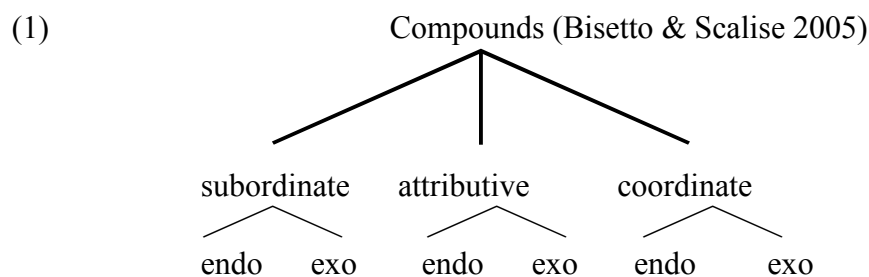
9. Relational adjectives as Compounding across languages

9.1. Introduction: A novel classification of Compounding

This chapter provides a novel perspective over Relational adjectives, regarding them as Compounding across languages. Crucially, within the Distributed Morphology Framework, I consider Compounding as a case of morphology-as-syntax (Harley (2008).

Compounds in English do not form a homogeneous class as their class includes synthetic compounds such as *truck-driver*, root compounds like *nurse shoes* or phrasal compounds like *bikini-girls-in-trouble genre* (cf. Harley 2008). However, such a classification captures neither the grammatical relation between the two constituents nor their semantics *endocentric* vs. *exocentric*. Moreover, it does not hold crosslinguistically as Romance languages use other strategies to build compounds, such as *de* – insertion: *la producción de pesca* or Thematic adjectives: *la producción pesquera*.

Bisetto & Scalise (2005) put forth a novel classification of compounds which universally captures both the grammatical relation between the two constituents and their endocentricity or exocentricity:



This classification of compounds is based on the assumption that a compound always involves two constituents linked by a grammatical relation that is not overtly expressed. Explicitly, subordinate compounds express a complement relation like in *taxi driver*, attribution compounds express a modification relation like in *blue cheese* and coordinate ones are tied by the conjunction “and” like in *poet painter*. Moreover, compounds are either endocentric like *coffe cup* or exocentric such as *pickpocket*.

9.2. *The aim of this chapter*

The goal of this chapter is to show that in line with Bisetto & Scalise's (2005) classification, Relational adjectives in Romance correspond crosslinguistically to two types of Compounding, i.e., Thematic adjectives to subordinate compounds while Classificatory adjectives to attributive one. Moreover, it provides additional support for the syntactic proposed for Relational adjectives in chapter 7 and chapter 8.

Regarding first the subordinate compounding across languages I show that languages employ different mechanisms to build compounds expressing a complement relation. Specifically, I discuss the variation between English and Romanian & Spanish in endocentric subordinate compounds, showing that that the different strategies employed by languages in this type of compounding are only Case-related, i.e., the Case of the complement can be checked by incorporation in English, *de*-insertion in Romance or Thematic adjectives in Romance and English. Importantly, this approach of subordinate compounding brings more evidence in favour of the hypothesis according to which Thematic adjectives correspond to *de* Genitive phrases in Romance. Analogically, the correspondence between English noun-noun compounds and Russian relational adjectives has also been discussed in Mezhevich (2002).

Unlike subordinate compounding, attributive compounds express a modification relation, building either endocentric or exocentric compounds. For the purpose of this work, I discuss only endocentric attributive compounds which can be realized in Romance by Classificatory adjectives and *de* modifier phrases. Hence I provide more support for the analysis of Classificatory adjectives as restrictive modifiers on a par with *de* modifier phrases.

9.3. *Subordinate compounds – a classification*

According to Bisetto & Scalise's (2005) classification of compounds, subordinate compounds always express a complement relation. Moreover, they can be exocentric or endocentric.

- | | | | |
|-----|----|-------------|--------------------------------|
| (2) | a. | taxi driver | <i>subordinate endocentric</i> |
| | b. | pickpocket | <i>subordinate exocentric</i> |

Harley (2008) argued that English employs different Case-related strategies to realize grammatical relations: incorporation in compounds and *of*-insertion in non-compounds.

Incorporation is; thus, a Case-driven phenomenon like the Late Resort operation *of* in non-compounds. However, this is not a cross-linguistic phenomenon.

In this paper I show that while in English compounds, the theme argument incorporates into the head, their Romance counterparts are not readily recognized as compounds, as they contain *de* phrases and Th-adjectives.

a. *De phrases:*

As thoroughly presented in chapter 7, *de* phrases have a very weak meaning to the extent that they are used to denote the patient and the agent argument of a noun (Fábregas 2007, Bosque & Picallo 1996 for Spanish, Barning (1980) for French, Cornilescu & Nicolae (2009), Niculescu (2009) for Romanian.)

- | | | | |
|-----|----|----------------------------------|----------------|
| (3) | a. | <i>la producción de pesca.</i> | Patient |
| | | production DE fish | |
| | | ‘fish production’ | |
| | b. | <i>la producción de Alemania</i> | Agent |
| | | production DE Germany | |
| | | Germany’s production | |

The preposition corresponds to the Genitive case. Cornilescu & Nicolae (2009) claim that Romanian has in addition an inflectional Genitive, but also the prepositional Genitive *de*. These authors argued that the *de* form is structural Case. This is supported by convincing evidence in Romanian where the inflectional Gen and the prepositional Gen co-exist (see chapter 7)

Moreover, in contrast to other Romance languages, Italian has a non-prepositional endocentric subordinate compounds whose head is a deverbal noun taking a base Genitive as its syntactic argument:

- | | |
|-----|--------------------------|
| (4) | <i>rimozione veicoli</i> |
| | removal vehicle |

Importantly, according to Delfitto & Paradisi (2007) and Delfitto, Fábregas & Melloni (2008), the difference in the realization of arguments in subordinate compounds within Romance is

explained by the fact that Italian allows for a non-prepositional/base Genitive, the so-called “juxtaposition Genitive” found in early phases of Romance.

Thus, *de* phrases correspond to the *of*-strategy employed in Germanic languages such as *driver of taxi* where *of* is inserted as a Last resort operation to realize the inherent case of the argument DP (cf. Grimshaw 1990). However, in contrast to *of* phrases in English, they are included in endocentric subordinate compounds in Romance.

Another strategy for expressing the theme argument in endocentric subordinate compounds is realized by Th-adjectives.

b. Thematic Adjectives

Like *de* Genitive arguments, Th(ematic)-adjectives are widely argued to express the same complement-head relations (cf. Levi 1978, Bartning 1980, Bosque & Picallo 1996).

- | | | | |
|-----|----|--|-----------------|
| (5) | a. | <i>producția automobilistică germană.</i> | <i>Romanian</i> |
| | | <i>la producción automovilística alemana</i> | <i>Spanish</i> |
| | | production car German | |
| | | German car production | |
| | b. | * <i>producția germană automobilistică.</i> | <i>Romanian</i> |
| | | * <i>la producción alemana automovilística</i> | <i>Spanish</i> |
| | | production German car. | |

Importantly, note that the word order of Th-adjectives obeys the thematic hierarchy, having the internal argument closer to the head than the external argument.

Furthermore, recall that in chapter 7 Th-adjectives are argued to correspond to Gen DPs (Marchis 2009). There are several arguments in favor of this hypothesis. All these arguments are presented in detail in chapter 7 and briefly mentioned below:

First, Bosque & Picallo (1996) and Fábregas (2007) claim that Thematic adjectives in Spanish are paraphrased with the preposition *de* Gen (Fábregas 2007:142).

Second, like Th-adjectives, Genitives in Romanian fulfil a variety of theta-roles in addition to its specific Possessor role.

Third, like Th-adjectives, argumental Genitives cannot occur across copula, while possessor or modifier Genitives can be predicative like non-argumental Relational adjectives.

In the light of the properties shown by Th-adjectives and *de* phrases in Romance, I argue that like incorporation in English, they represent different strategies to realize the Genitive Case of the argument. Unlike English, which uses incorporation for building endocentric subordinate compounds, Romanian & Spanish employ *de* phrases or Th-adjectives.

The variation between Romance and Germanic languages regarding subordinate structures is summarized in the tables below:

Table 9.1 English

subordinate	incorporation	(Of-strategy)	Th- adj.
exocentric	loudmouth	—	—
endocentric	truck driver	driver of trucks	presidential election

Table 9.2 Romanian and Spanish

subordinate	incorporation	De-strategy	Th- adj.
exocentric	zgârâie-brânză	—	—
endocentric	—	consum de alcool	consum alcoolic

These two tables illustrate that the variation among English and Romanian & Spanish involves only endocentric subordinate compounds. While in all three languages incorporation is the only strategy to build exocentric subordinate compounds, Romanian and Spanish differ from English in that they do not allow incorporation for endocentric compounds. Hence, they use *de* Genitive phrases. Unlike the *of* strategy in English, *de* phrases in Romance represent cases of endocentric subordinate compounds on a par with incorporation.

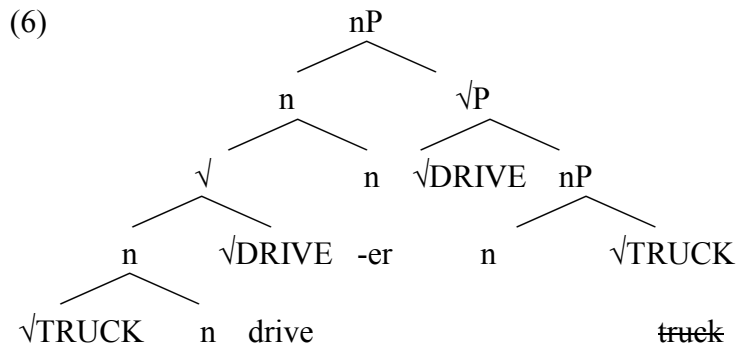
In the following, I present the morpho-syntactic contrasts among the different realizations of endocentric subordinate compounds.

9.3.1. Morpho-syntactic differences in subordinate compounding

As incorporation, *de* phrases, and Th-adjectives represent different ways to realize the structural Case, they differ in the morpho-syntax.

a. *Incorporation*

To begin with, according to Harley (2008), incorporation compounds like *truck driver* are constructed when phrasal elements Merge with a Root before that Root is itself Merged with a categorizing terminal node. Harley (2008) assumes that arguments of nouns are introduced at the root level. Thus, according to her, the compound *truck driver* has the structure in (11):



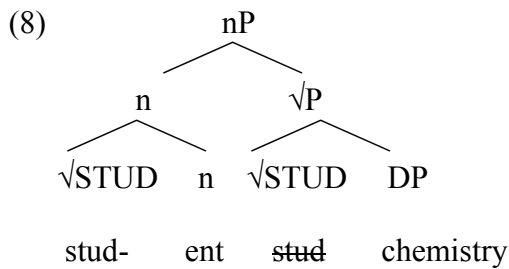
Essentially, in English the argument of the Root $\sqrt{\text{DRIVE}}$ must be an nP and not a DP. Evidence for that is that the argument is incorporated and cannot be stranded like in case of *driver of the truck* and, furthermore, it cannot be introduced with the definite article or inflected: **the-truck-driver* or **trucks-driver*. Moreover, Harley (2008) shows that compounds are constructed when phrasal elements Merge with a Root before that Root is itself Merged with a categorizing terminal node. The *one*-replacement test motivates Harley's hypothesis.

As is well-known, in English arguments and adjuncts behave differently with respect to their inclusion in the antecedent of anaphoric *one*:

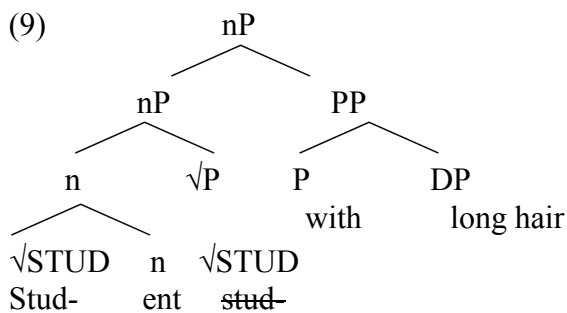
- (7) a. *That student of chemistry and this one of physics sit together.
 b. That student with short hair and this one with long hair sit together.

Thus, in *student of chemistry*, she shows that the argument of that nominal must be included in the interpretation of anaphoric *one*, while superficially similar adjuncts may be excluded.

Harley (2008) claims that the argument PP *of chemistry* is not an argument of *student* per se, but rather an argument of the Root, $\sqrt{\text{STUD}}$, considering that it is also an argument of the verb in *she studies chemistry, and he studies physics*.



In contrast, the modifier *with long hair* in *student with long hair* does not modify the Root \sqrt{STUD} , rather it modifies the nP *student*:



In (9) the Root \sqrt{STUD} first Merges with n and then head-moves to incorporate into it. In conclusion, Harley's test shows that the anaphoric *one* necessarily takes an nP as its antecedent, not a $\sqrt{\quad}$ or \sqrt{P} . As a consequence, *chemistry* merges as part of \sqrt{P} before the nP is added and, therefore, is included in the interpretation of *one* in (8).

According to Harley (2008), incorporation is Case-related (Baker 1988). This implies that if an nP is merged with D material, that Case-related nP feature must be checked DP-internally. Hence the feature is not longer accessible for checking via incorporation into a root (Harley 2008). Therefore, **trucks-driver* is not possible.

Another Case-related strategy in English is *of* insertion as a Last Resort operation to realize the inherent case of the argument DP (cf. Chomsky 1986).

- (10) a. truck driver - *incorporation*
 b. driver of truck - *of Last Resort insertion*

However, there are differences between these constructions: First, unlike *of* arguments, incorporated arguments occur to the right of the noun (see (10)). Second, unlike *of* arguments, incorporated nouns cannot be stranded:

- (11) a. *This driver is truck.
 b. This driver is of trucks.

Third, incorporated nouns must be bare while *of* arguments can be also inflected:

- (12) a. *trucks-driver
 b. driver of trucks

Unlike English, Romanian & Spanish extensively make use of two other strategies to build compounds that encode a complement - head relation.

b. De phrases and Th-adjectives

First, unlike in English, in Romanian and Spanish, the argument of the noun cannot be included in the interpretation of anaphoric *cel/el* “one” as in (18):

- (13) a. *profesorul de matematică si cel de fizică* *Romanian*
 b. *el profesor de matemática y el de física* *Spanish*
 professor-the DE maths and the one DE physics.

Second, in Romance both *de* arguments and the Th-adjectives can have plural/mass reading, while this is out in English **trucks-driver*:

- (14) *el consumo de alcohol/ de ballenas /alcohólico / ballenero*
 consumption of alcohol/ of whales / alcohol.TH-ADJ./ whales.TH-ADJ.

Unlike in English subordinate compounds, in Romance both *de* compounds and Th-adjectives have a D layer. In Marchis (2009 & to appear) I provide evidence in favour of a DP layer in *de* compounds and Th-adjectives.

First, they occupy the theme theta role of the deverbal noun. By the virtue of the fact that only DPs can be arguments (Longobardi 1994), they must have a D layer. Second, they have a mass/kind interpretation and following Borer (2005) mass nouns contain a simple D and the root.

Nevertheless, in spite of the fact both *de* phrases and Th-adjectives have a DP layer, I argue that their differences are Case-related.

9.3.2. *De phrases vs. Th-adjectives*

As shown in chapter 6 and chapter 7, *de* phrases and Th-adjectives show a large number of similarities. To begin with, both *de* phrases and Th-adjectives are argued to express the complement-head relations:

- (15) a. *la producción pesquera* ≈ *la producción de pesca.*
 the fishing production ≈ the production of fish
 b. *la importación sedera* ≈ *la importación de seda*
 the silk import ≈ the import of silk

Second, neither *de* phrases nor Th-adjectives can occur in predicative positions:

- (16) a. **La producción es pesquera.* *Spanish*
 The production is fishing.TH-adj
 b. **La producción es de pesca.*
 The producton is DE fishing
- (17) a. **Producția este petrolieră.* *Romanian*
 Production is oil.TH-adj.
 b. **Producția este de petrol.*
 Production is DE oil

A further similarity between *de* phrases and Th-adjectives is their lack of referentiality (cf. Marchis 2009). Th-adjectives are argued to lack referential meaning as they correspond to mass/plural bare nouns in Romance and have mass or kind/group interpretation (see 14). Crucially the same interpretation is provided by *de* phrases:

- (18) a. *citirea romanelor* *inflectional Gen*
 read-INF novels.Gen

- b. *citirea de romane* *prepositional Gen*
 read.INF DE novels.

Notice that when the argument is realized as an inflectional Genitive, it receives the bound interpretation, referring to specific novels in (18a) while in (18b) prepositional *de* Genitive is unbounded just like Th-adjectives corresponding to mass nouns and plural bare nouns:

- (19) a. *producția petrolieră* ≈ *producția de petrol*
 production oil.TH-adj ≈ production DE oil
 oil production ≈ production of oil
- b. *producția automobilistică* ≈ *producția de mașini*
 production automobilistic ≈ production DE car
 car production ≈ car production

Thus, by the virtue of the fact that Th-adjectives are complements of the deverbal noun (cf. Levi (1978), Bartning (1980), Bosque & Picallo (1996), Alexiadou & Stavrou (to appear)) and have the same unbounded interpretation (mass/plural reading), they are analyzed on a par with *de* Genitive phrases in chapter 7 and Marchis (submitted & to appear).

However, two questions arise:

- i. How is the Genitive Case of Th-adjectives checked in the absence of *de* Last resort operator insertion?
- ii. Why are *of* phrases in English not cases of endocentric compounds on a par with *de* phrases in Romance?

Nevertheless, the analysis I propose for Thematic adjectives may provide an answer to these questions. Explicitly, in chapter 7 I showed that the special Case requirements of infinitives in Romanian which are complex event nominals, can solve the puzzle of the Case checking of Th-adjectives.

Recall, unlike inflectional Gen and *de* Gen phrases, Th-adjectives cannot occur with complex event nominals:

- (20) a. *Citirea obligatorie a romanului de către studenți.*
 Read-INF obligatory AL novel.GEN by students
 ‘The obligatory reading of the novel by the students.’
- b. *Citirea obligatorie de romane de către studenți.*
 Read-INF obligatory DE novels by students.
- c. **importul petrolier de către Germania.*
 import oil.TH-adj by Germany
 ‘oil import by Germany’

Essentially, Bosque & Picallo (1996) made the same observation for Spanish :

- (21) a. *la pesca de ballenas por parte de los japoneses*
 The fishing DE whales by the Japanese
- b. **la pesca ballenera por parte de los japoneses*
 the fishing whale.TH-adj by the Japanese

Moreover, like *de* prepositional Genitive and inflectional Genitive, Rappaport & Levin (1992) argue that *of* arguments occur with complex event nominals in English:

- (22) the import of oil by United States

In the spirit of Cornilescu (2001), I argued in chapter 7 that Th-adjectives cannot occur with complex event nominals due to their Case-deficient feature. As they cannot check the Genitive case in the Spec,GenP, they cannot provide the telic aspect of the e-noun in NO constructions.

Moreover, according to Grimshaw’s theory of event identification, a telic predication is identified only if its Object is identified. Nevertheless not any type of DP may serve as an event identifier. Chomsky (1981) and Reinhart & Reuland (1993) argue that a DP may serve as an event identifier only if it has the referential property +R.

- (23) A NP is +R iff it carries a full specification for phi-features and structural Case.

(Chomsky 1981)

As Th-adjectives are Case-deficient, they are – R and cannot serve as event identifier in SpecGen/AspP. Therefore, in line with Marchis (2009) and Alexiadou & Stavrou (to appear), I propose that Th-adjectives are projected as sister of the verb, and contain a Case-deficient DP, but they have two ways to solve their Case-problem: either via movement to AgrP (parallel to the movement of clitics which move as heads and as maximal projections at the same time (Chomsky 1995; Cardinaletti 1998), in which case the DP is spelled-out as an adjective or in the case of a full Genitive DP, via long distance Agree with AgrP (Chomsky 2001).

Unlike complex event nominals, simple event nouns are licit with Th-adjectives. Hence, as they do not have aspect, they do not ask for the Spec,Gen phrase to be filled. As Th-adjectives are Case-deficient and simple event nominals do not obligatory ask for a structure, GenP/Aspect phrase is not projected. Instead, Th-adjectives are projected as a full Gen DP which is in long distance Agree with AgrP.

Thus, Th-adjectives are analyzed on a par with *de* phrase with simple event nominal nominals which check their Genitive case nP internally. However, as *de* phrases are not Case-deficient, they can check both the Genitive and the + Telic aspect of complex event nominals, serving as telic event delimiters. Unlike complex event nominals, simple event nominals lack a Gen/AspP (cf. Cornilescu 2001). Like Th-adjectives, *de* phrases must check their Genitive case nP internally.

The strong connection between object Case and telicity is also observed by de Hoop (1992) who proposes two different object Case, Strong and Weak, which correlate with different semantic interpretations and syntactic positions: Strong Case is structural Case assigned outside of VP to an object that gets a bound interpretation, while weak Case is assigned within VP and yields an object that functions semantically as a predicate modifier.

On this view then, I argue that when Th-adjectives and *de* phrases internally check the Genitive case, they represent cases of endocentric subordinate compounding like incorporation in English. Explicitly, in chapter 7 Th-adjectives and *de* phrases are analysed as allomorphs, syntactically identical but with different Case features interpretable at PF.

Regarding the second question, i.e., why endocentric compounds in English are not built with *of* phrases, the idea is that *of* phrases check their Gen outside the nP, i.e., Spec,Gen/AspP. As they are not Case-deficient, they check both the Genitive and the + Telic aspect of complex event nominals (cf. Borer 1994 & 2005, Kiparsky 1998):

(24) the attack of Cuba by the United States in three days

Let us now regard the other subclass of Relational adjectives, Classificatory adjectives and their relation to Compounding.

9.4. *Attributive compounding*

According to Bisetto & Scalise's (2005) classification of compounds, attributive compounds are formed either by a noun or an adjective where the adjective expresses a property and is in a modifier relation to the noun or by two nouns. The non-head is often used metaphorically, expressing an attribute of the head.

Table 9.3 : Attributive Compounds

endocentric	exocentric
<i>blue cheese, atomic bomb, back yard, French kiss, ape man, ghost writer, key word, public opinion</i>	<i>white collar, green house, pale face, long legs, free lance</i>

It is worth noticing that Classificatory adjectives express the same relation of attribution like endocentric attributive compounds where two nouns are in a modifier relation. As their name also tells, these adjectives only introduce a domain which classifies the noun. Bosque & Picallo (1996) regard CI-adjectives as semantic adjuncts that function as restrictive modifiers. Hence, CI-adjectives serve to relate the noun to a domain according to which the NP is classified.

- (25) a. *análisis sintáctico/ estilístico / periódico* Spanish
b. *analiza sintactică/ stilistică/ periodică* Romanian
syntactic/ stylistic/ peridiocal analysis

Moreover, in line with Marchis (to appear) and Fábregas (2007), I proposed in chapter 8 that CI-adjectives should be analysed on a par with *de* modifier phrases which act as restricted modifiers (cf. Niculescu 2009):

- (26) a. *dragoste de mamă* ~ *dragoste maternă*
amor de madre ~ *amor maternal*
 love of mother ~ maternal love
- b. *lucru de mână* ~ *lucru manual*
trabajo de mano ~ *trabajo manual*
 hand work ~ manual work

Unlike *de* argument phrases, *de* modifiers can occur with *cel*, which represents the hallmark of predicativity in Romanian:

- (27) a. *dragostea de mamă si cea de tată.*
 love DE mother and CEL DE father
 ‘the mother love and the father one’
- b. *dragostea maternă si cea paternă.*
 love maternal and the paternal one.
 ‘The maternal love and the paternal one.’

Due to their occurrence with *cel* in Romanian, I analysed CI-adjectives as restrictive appositional clauses which build a complex unit with the noun they specify.

- (28) *analiza sintactică*
 syntactic analysis
 [DP [&:P [NP analizal]_i &: [DP sintactică_i [CP [C' IP Ø AP_i]]]]

Drawing a parallel between attributive compounds (see the table 9.4 vs. 9.5), on a one hand and CI-adjectives and *de* modifier phrases, on the other hand one can realize that they all show the same selection restrictions; there is the same modality by which the head selects the non-head. Importantly, both with attributive compounds and CI-adjectives/ *de* modifier phrases, the non-head matches at least one of the encyclopedic features of the head. Hence, the non-head has the only function of specifying an attribute of the head. This implies that the non-head is almost an adjective. Crucially, in chapter 8, I showed that unlike Th-adjectives, CI-adjectives have an adjectival nature. Moreover, also in case of Ethnic adjectives, those “ethnic” adjectives which show the property of belonging to a specific nation are regarding as

adjectives rather than subject Th-adjectives and are called homophonous adjectives. (see Alexiadou & Stavrou to appear)

- (29)
- | | | |
|------------------------|---|-----------------------|
| <i>lucru de mână</i> | ~ | <i>lucru manual</i> |
| <i>trabajo de mano</i> | ~ | <i>trabajo manual</i> |
| hand work | ~ | manual work |

Table 9.4: Cl-adjectives and *de* modifier phrases

<i>lucru/ trabajo</i> “work”	<i>manual/de mână/de mano</i> “manual/handmade”
< physical> < must be made with the help of an instrument>	< physical> < can be an instrument for making things>

Table 9.5: Attributive compounds in English

<i>snail</i>	<i>mail</i>
< very slow>	< takes time>

Nevertheless, one of the distinctions between Cl-adjectives and *de* modifier phrases, on a one hand and attributive compounding in English, on another hand, would be the different degree of lexicalization. Attributive compounds in English seem to build a much tighter relation between the head and the modifier non-head. Hence, they cannot be used predicatively:

- (30)
- a. *This mail is snail
 - b. *Acest lucru este manual.*
 - c. *Este trabajo es manual.*
This work is manual.

Importantly, I account syntactically for this distinction. In line with Harley (2008), I argue that both endocentric and exocentric compounding in English is predominally formed via incorporation. In contrast, Romance uses more readily Relational adjectives and *de* phrases.

9.4.1. Primary ('root') compounds vs. Cl-adjectives

In this part I discuss modificational compounds, another subtype of synthetic (or incorporated) compounds where the incorporated element can be something other than an argument of the root. Crucially, Harley (2008) and Roeper & Siegel (1978) show that this kind of compounds can be only formed whether the modifier would be the “first sister” of the Root. In other words, modifiers can incorporate as long as they are the first things Merged with the root of the head (cf. Harley 2008).

There is a clear-cut distinction between argument synthetic compounds and primary (modificational) compounds. In the former case, the compounded noun is an internal argument of the Root of the head noun, and the interpretation of the compound is unambiguous. In the latter, there is a free interpretation between the two nominal roots. Essentially, this free interpretation is observed also for Classificatory adjectives by Bosque & Picallo (1996).

- (31) a. alligator shoes
 b. *călătorie stelară* ≈ *călătorie care are loc spre stele*
viaje estelar ≈ *viaje que tiene lugar a las estrellas*
 star trip ≈ trip which takes place to the stars

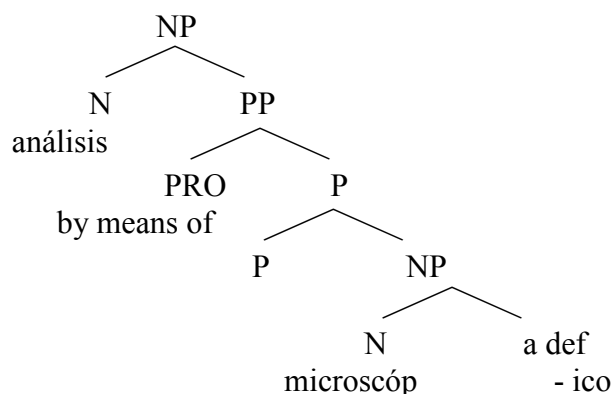
The primary compound in English *alligator shoes* represents “shoes of alligator skin” exactly as *călătorie stelara/ viaje estelar* can mean a trip which takes place to the stars. Importantly, for the former case in Harley (2008) it was proposed that a null P head may select the modifying nominal prior to incorporation.

- (32) $([[\sqrt{\text{SHOE}}]\sqrt{[\text{P}[\text{n}[\sqrt{\text{ALIGATOR}}]\sqrt{\text{nP}}]\text{PP}}]\sqrt{\text{P}}])$

The preposition P in (32) provides a locus for the underspecified semantic relationship between the two nouns.

Analogically, Fábregas (2007) claim that Cl-adjectives in Spanish are equivalent to noun phrases introduced by prepositions. Hence, Cl-adjectives are selected by P without phonological materialization (see chapter 6).

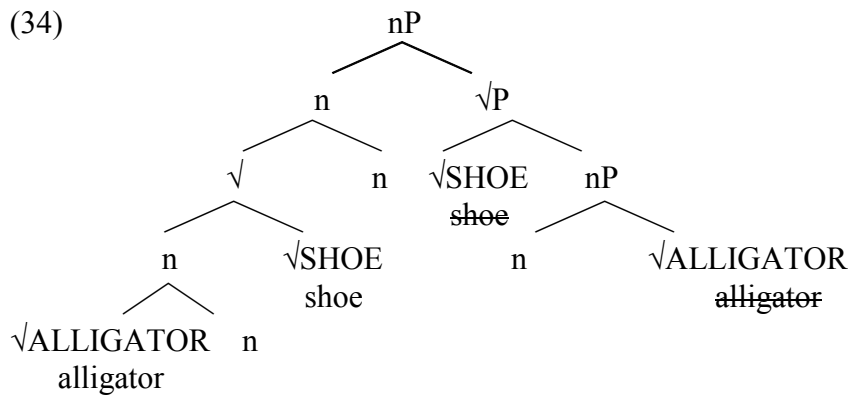
- (33) *análisis microscópico*
 analysis by means of a microscope



The preposition has the meaning of instrument, which determines that the adjective *microscopic* represents the instrument used to perform the analysis. Prepositions are considered to be a relational head (Hale & Keyser 1993) that selects the two entities that stand in a specific relationship. Importantly, different prepositions give raise to different meanings in such a way that a Classificatory- adjective will enter into different semantic relationships with the noun they modify (see Bosque & Picallo 1996),

Nevertheless, in the spirit of Harley (2008) I argue that such a relational head is necessary neither with primary compounds in English, nor with CI-adjectives in Romance. What is important in case of Classificatory adjectives is that the head noun's root and the modifying noun are in a direct sisterhood relationship. Thus, as long as the head noun's root is not itself multivalent, no argumental interpretation for the sister noun will be available, and consequently, it is up to the interpretive component to construct some plausible relationship between the incorporated noun and head noun, on a one hand, and CI-adjectives and the head noun, on the other head. (cf. Harley 2008:17).

In the light of these interpretative effects, I argue that Classificatory adjectives correspond to primary compounds in English. However, they differ with respect to their morpho-syntactic formation. The crucial thing for the formation of primary compounds in English is that the modifying nominal must be introduced as sister to the Root of the head noun before the Root is categorized by its own n head (see Harley 2008):



In contrast, in chapter 8 I show that those Classificatory adjectives that modify common nouns stand for an appositive restrictive relative clause merged as the right sister of nominal head (NP) with which it forms a complex lexical unit.

When the first NP is lexically expressed the Classificatory adjective moves up to the specifier DP in order to agree in phi features with the head noun (through a c-command relation) and the syntactic relation looks like a noun to noun conjunction (NP & DP) as the set of the noun intersects with the set of elements expressed by the denominal adjective:

- (35) *analiza sintactică*
 syntactic analysis
 [DP [&:P [NP analizal]_i &: [DP sintactică_i [CP [C'
 [IP Ø AP_i]]]]]

One of the strongest arguments in favour of this analysis comes from the fact that Cl-adjectives modifying common nouns can occur with *cel* in Romanian in nominal ellipses.

- (36) a. *analiza morfologică și cea sintactică.*
 ‘the morphological analysis and the syntactic one.’

Semantically, in such a construction the second element specifies the first, and necessarily is a logical subset of the first element. The semantics crucially involve set intersection, giving, thus, the restrictions on the adjectives presented here. In addition, this structure explains the fact that the adjective is never ambiguous, it is always generated in the predicative position of the relative clause. It also explains why it cannot be iterated, since the NP can receive only one specification. (cf. Marchis & Alexiadou 2009).

In Marchis & Alexiadou (2009), we assume that *cel* is the one to introduce a reduced relative clause which has a specifying function, rendered in English via the use of e.g. the adverb *namely* in (37):

(37) the horse, namely the beautiful one

In addition, as shown in section 8 there is a second context where Classificatory adjectives can occur, namely complex event nominals:

(38) a. *interpretarea socialistă a romanului de către critic*
interpretation socialist of.GEN novel.GEN by scholar
the socialist interpretation of the novel by the scholar.

In the following, I show that Cl-adjectives modifying e-nominals may be regarded similar to other modificational synthetic compounds in English where the incorporated element is a modifier of the verb.

9.4.2. Modificational synthetic compounds vs. Cl-adjectives with e-nominals

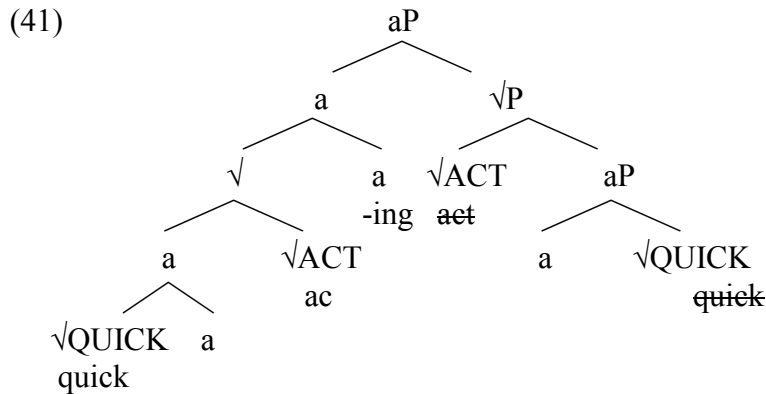
This section discusses another type of synthetic compounds that is an adjectival compound composed of a deverbal adjective plus an incorporated adjective as a modifier of the verb:

(39) a. quick-acting baking powder
b. fast-falling snow

Importantly, it seems that Classificatory adjectives express the same modificational relation:

(40) a. *interpretarea socialistă a romanului de către critic*
interpretation socialist AL novel.GEN by scholar
'the socialist interpretation of the novel by the scholar.'
b. *la demonstración matemática del teorema por parte de Juan*
the mathematical demonstration of the theorem by Juan

Nevertheless, Harley (2008) and Roeper & Siegel (1978) show that this kind of compound in English can only be formed from verb-modifier pairs where the modifier would be the first sister of the verb. The “first sister” constraint represents one of the syntactic constraints on incorporation in English (the only governed item may be incorporated):



In contrast, Cl-adjectives modifying e-nominals do not obey this constraint. Notice the argument of the deverbal noun can intervene between the deverbal head and them when they are modified:

(42) *Interpretarea romanului extrem de socialistă de catre criticul X a deranjat cititorii.*

Interpretation novel.GEN extremely socialist by the scholarship bothered the readers.

In the light of this test, I justify the analysis given for Cl-adjectives with e-nominal in chapter 8 which is repeated below for infinitive NO constructions:

I propose that the Root of the Classificatory adjective *socialistă* modifying an e-nominal, merges first with a null realized adverbial head and then moves further in the Agreement Domain, in Spec,Number and it turns into an adjective through the suffix *-esc*. The two layers within the structure of Cl-adjectives with e-nominal explain both their morpho-syntactic form as agreeing adjectives and their function as event modifiers.

9.5. *De phrases and Relational adjectives as compounds – pros and cons*

An analysis that assumes that Relational adjectives and *de* phrases are endocentric compounds is not in line with the standard theory of compounding due to several reasons (cf. Bosque & Picallo 1996).

First, unlike standard compounds, such as *taxi driver*, Relational adjectives overtly agree with the noun in gender and number.

- (45) a. *consum*_{neuter, sing} *alcoholic*_{neuter.sing}
*consumo*_{masc.,sing} *alcohólic*_{masc.,sing}
 ‘alcoholic consumption’
- b. *producția*_{fem.,sing} *petroliera*_{fem.,sing}
*producción*_{fem.,sing} *petrolera*_{fem.,sing}
 ‘oil production’
- c. *some taxis drivers

Second, Bosque & Picallo (1996) show that Relational adjectives can undergo syntactic processes which are untypical of compounds, i.e., they allow the N head to be null. This is also the case of *de* phrases:

- (46) a. *consumul alcoholic si cel narcotic* *Romanian*
el consumo alcohólico y el narcótico *Spanish*
 ‘the alcoholic consumption and the narcotic one.’
- b. *consumul de alcool si cel de droguri* *Romanian*
el consumo de alcohol y el de drogas. *Spanish*
 consumption DE alcohol and DE drugs
- c. **Vi los hombres-rana y los (hombres-)anuncio.* *Spanish*
 I saw the frogmen and the sandwich men.

In the light of these contrasts between Th-adjectives and standard incorporated compounds, Bosque & Picallo (1996) argue that, unlike the latter, adjectives do not represent a case of compounding as Relational adjectives must expend into full XP projections

However, under the proposed analysis these differences between incorporation and Relational adjectives/*de* phrases can be accounted for.

First, as Harley (2008) and Lieber (1992) show, nominal compounding can include also syntactically complex phrases such as:

- (47) a. When he's not in that mode, though, he does an excellent job with the *bikini girls-in-trouble genre*.
 b. I've always found it odd that the people who complain most about realism are *comic-book and science-fiction fans*.

(Harley, 2008 examples taken from *Tucson Weekly*)

Phrasal compounds are analysed in English as:

- (48) $[[XP]n]_{nP}$

Analogically, I claim for Th-adjectives and *de* phrases that they are full XP projections which merge with noun only after the Root is categorized with a functional head. As evidence for that, recall that Relational adjectives and *de* phrases can occur in nominal ellipses in Romanian (with *cel*) and Spanish.

Moreover, under the analysis I propose, Th-adjectives are similar to clitics in that they have the syntactic properties of both heads and as maximal projections at the same time (Chomsky 1995; Cardinaletti 1998)

Second, I argue that inflection is possible with Th-adjectives as they are DPs and incorporation fails. According to Harley (2008), the feature which drives incorporation of nP is Case-related. Thus, if an nP is merged with Num or D material, that Case-related nP feature must be checked DP-internally, i.e., the feature is no longer accessible via incorporation into a Root. Essentially, this supports again the hypothesis according to which the distinction between Th-adjectives and incorporation is Case-related.

In addition, Delfitto, Fábregas & Melloni (2008) point out that Germanic and Romance compounds show differences regarding the inflectional markers. Essentially, these are interpreted in Romance and not interpreted in Germanic:

- (49) a. *Sonn-en-schein* *sunshine*
 b. *Kind-er-wagen* *pram for one child*
 c. *Freund-es-kreis* *circle of more than one friend*

Note that in the examples above there is no correlation between the number inflection of the non-head noun and its interpretation. For instance, even if a pram is meant for only one child or belonging to one child, the compound in (517b) contains the plural form *Kinder* ‘children’. In contrast, in Romance the internal inflection is interpreted. In (518a) the singular form of sun is used as there is only one sun the solar system but in (518b), the plural form ‘stripes’ is used in order to reflect that a striped shirt has more than one stripe (for more details see . Delfitto, Fábregas & Melloni (2008))

- (50) a. *gafas de sol* *sunglasses*
 b. *camisas a rayas* *striped T-shirt*

Moreover, compounds may show inflection also crosslinguistically. Lohrmann (submitted) observes that in standard Swedish the non-head is inflected in agree with the head:

- (51) a. *det VIT-A hus-et* *Standard Scandinavian*
 DEF white-INF. house-DEF
 ‘the white house’
 b. *Vit-a HUS-ET* *Standard Scandinavian*
 white-INF. house-DEF
 ‘the White House (in Washington)’

Third, in the Romance literature, it is widely accepted that Romance compounds can be constructed with intermediate prepositions such as *de*. They are regarded as ‘prepositional compounds’:

- (52) a. *occhiali da sole* *Italian*
 b. *ochelari de soare* *Romanian*
 c. *gafas de sol* *Spanish*
 sunglasses

Crucially, this observation strengthens my proposal according to which *de* phrases and their corresponding Relational adjectives represent cases of compounding in Romance.

Fourth, Bosque & Picallo (1996) show that Th-adjectives (and *de* phrases) can undergo syntactic processes which are untypical of compounds, i.e., they can occur in nominal ellipses. However, there are a large of Noun - Relational adjectives that are attested as lexical units/compounds which can also undego such syntactic processes, for instance *goma arábica* ‘arabic glue’, *cifra romana* ‘Roman numeral’ or *jardín ingles* ‘English garden:

- (53) a. *Nu mai sunt grădini ca cele englezești.*
No hay jardines como los ingleses.
 ‘There are no gardens like the English ones.

Fifth, according to Bisetto & Scalise (2005) compounds are subordinate in the sense that the non-head enters in a complex semantic relation with the non-head:

- (54) winter weather skin troubles

Fábregas 2007 shows that Relational adjectives also combine with other Relational adjectives in subordinate structures: that is the second Relational adjective specifies the meaning of the first one. This is not the case with other adjectives:

- (55) a. *una mesa redonda y grande.* *Spanish*
o masă rotundă și mare. *Romanian*
 a table round big
 # a table characterised by a big roundness
- b. *coma alcohólico metílico* *Spanish*
comă alcoólico-metilică. *Romanian*
 coma alcoholic methylated
 ‘methylated alcohol coma’
- c. *reguli sanitar veterinare* *Romanian*
 regulations health animal
 animal health regulations

Furthermore, as thoroughly presented in chapter 3, Radatz (2001) considers the modification relation of Relational adjectives a special case of synthetic interpretation which

is properly illustrated by German, a language in which the entire construction appears as compound

- | | | | | |
|------|----|-----------------------------------|---------------------|----------------|
| (56) | a. | <i>Verfassungsreform</i> | <i>Milchkuh</i> | <i>German</i> |
| | b. | <i>una reforma constitucional</i> | <i>vaca lechera</i> | <i>Spanish</i> |
| | | a Constitutional reform | milk cow | |

According to Quine (1960) the noun modified by a prototypical adjective builds composite terms, whose predication is only then true if the predication of their components is true. This means that the predication X is a white Mercedes is true if X is a Mercedes and if X is white. This is not the case for expression with Relational adjectives. For instance, *a* ‘chemical cleaning’ is true if X is a cleaning but not X is chemical. The specific meaning of the adjective ‘chemical’ from the expression ‘chemical cleaning’ is lost when this adjective is separated from the noun while the meaning of white remains the same. As pointed out in Radatz (2001), Relational adjectives correspond semantically to compounding.

Last but not least, unlike other types of adjectives, Th-adjectives allow neither other modifiers to intervene between them and the head noun nor to occur in the predicative position:

- | | | |
|------|----|--|
| (57) | a. | <i>producția petrolieră obligatorie</i>
<i>producción petrolera obligatoria</i>
‘production oil.TH-adj obligatory’ |
| | b. | * <i>producția obligatorie petrolieră</i>
* <i>producción obligatoria petrolera</i>
production obligatory oil.TH-adj |
| | c. | * <i>alegerea este prezidențială.</i>
* <i>la elección es presidencial</i>
The election is presidencial. |

Crucially, when *de* phrase occurs with modifiers that are closer to the head noun, the noun must be a complex event nominal as it accepts an agent realized as an adjunct PP ‘by’:

- | | | |
|------|----|---|
| (58) | a. | <i>producerea frecventă de petrol de către Venezuela.</i>
production.INF frequent DE oil by Venezuela. |
|------|----|---|

In the light of all these arguments, I claim that an approach of Relational adjectives and *de* phrases which regards them as instances of compounding is justified and is worth taking into account. Crucially, such an approach provides solid support for the proposed hypothesis in chapter 7 and chapter 8 according to which Relational adjectives are to be analysed on a par with *de* phrases in Romance, either as modifiers or as arguments.

9.6. *Conclusions*

In this last chapter I aimed at providing a novel perspective on the morpho-syntactic status of Relational adjectives in Romance. Such a new perspective is facilitated by the innovative view on compounding in Bisetto & Scalise (2005).

I showed that the merit of their classification of compounds is that it universally captures both the grammatical relation between the two constituents and their endocentricity or exocentricity. The previous classification of compounding such as the one proposed in the English tradition makes distinction only between two types of compounds: root or primary compounds and synthetic compounds. This classification does not hold crosslinguistically as Romance languages use other strategies to build compounds. Crucially, I argue that Romance languages do not use incorporation for building endocentric compounds, but rather Relational adjectives and *de* phrases.

Regarding first Thematic adjectives, I proposed that they represent one of the crosslinguistic strategies to build subordinate endocentric compounding on a par with *de* arguments in Romance and incorporation in English. Thus, I discuss the variation between English and Romanian & Spanish in endocentric subordinate compounds, showing that the different strategies employed by languages in this type of compounding are only Case-related, i.e., the Case of the complement can be checked by incorporation in English, *de*-insertion in Romance or Thematic adjectives in Romance and English. Importantly, this approach of subordinate compounding brings more evidence in favour of the hypothesis according to which Thematic adjectives correspond to *de* Genitive phrases in Romance.

Second, Classificatory adjectives correspond to the second type of compounding within the classification proposed in Bisetto & Scalise (2005), namely attributive compounds. Unlike subordinate compounding, attribution compounds express a modification relation. This is in line with the proposal in chapter 8 according to which Classificatory adjectives are restrictive modifiers of the noun. As shown in chapter 8, Classificatory adjectives can occur

both with common nouns and with e-nominals (complex event nominals). Essentially, in the former case, Cl-adjectives are analysed as restrictive modifiers of common nouns on a par with *de* modifier phrases. Thus, I argue that both Cl-adjectives and *de* modifier phrases are instances of attributive compounds on a par with primary or root compounds in English. Of course, they have different morpho-syntactic analyses.

For the second context of Cl-adjectives with complex event nominals, I argue that they act as modifiers of the event underlying in the e-nominal. I draw a parallel between Cl-adjectives and modificational synthetic compounds in English of the type *quick-falling*.

By the virtue of the fact that Relational adjectives have a large number of syntactic properties that set them apart from the standard compounds, in the last part of the chapter I discussed how legitimate is to consider Relational adjectives in Romance to represent instances of compounding on a par with incorporation in English. I bring positive evidence for such an approach and also more support for the hypothesis put forth in chapter 7 and chapter 8 according to which Relational adjectives correspond to *de* phrases in Romance which can be either modifiers or arguments.

10. Conclusions & questions for further research

The overarching objective of this dissertation was to examine the morpho-syntactic and syntactic properties of Relational adjectives at the Syntax/Morphology interface. The theoretical contribution of this work is that it supports the idea that derivation and compounding represent cases of morphology-as-syntax. Relational adjectives are syntactically explored from a micro-dimension as underlying nouns to a macro-dimension as compounding.

Following in the long English and Romance syntactic tradition, such as Postal (1969), Levi (1978), Bartning (1980), Bosque & Picallo (1996), Fábregas (2007) and Alexiadou & Stavrou (to appear) among others, this study empirically supports the claim that Relational adjectives (apart from adverbial Relational adjectives) are underlying nouns but it brings mounting evidence that they do not have a homogeneous syntactic behaviour. In the spirit of Bosque & Picallo (1996), I put forth evidence for a split classification of Relational adjectives, i.e., Thematic adjectives, corresponding to arguments of the deverbal head and Classificatory adjectives, as restrictive modifiers. In spite of the fact that both behave like nouns, they are syntactically different. I account for the syntactic differences between Th-adjectives and Cl-adjectives by arguing that they correspond to different types of bare nouns.

A syntactic classification of bare nouns in Romance is provided, offering new insights on the semantic and syntactic status of plurals and mass nouns in the languages under discussion. First, it supports the idea proposed in Quine (1960) and Lasnik (1989) according to there are significant parallels between plural and mass expressions and, hence, plurals should be analysed on a par with mass nouns. Second, I show that there are systematic differences between bare arguments and bare modifier nouns in Romance. Thus, due to the semantic and syntactic similarities between bare nouns and Relational adjectives, I argue that they should be analysed on a par. Concretely, Th-adjectives and Cl-adjectives correspond to the two types of bare nouns in Romanian and Spanish, argument bare nouns which are DPs and non-argument bare nouns which act as restrictive modifiers and are NumPs (cf. Dobrovie & Bleam & Espinal 2005 Giurgea 2005). However, both types of bare nouns do not differ from a semantic perspective as they all have a non-specific and non-identificational interpretation. Analogically, all Relational adjectives trigger the same semantic interpretation like bare nouns, i.e., they cannot occur with individual level predicates with a kind-reading.

I justified the split classification of Relational adjectives also from a syntactic viewpoint. On the basis of the syntactic differences between Thematic and Classificatory adjectives, they are amenable to different syntactic analyses.

One of the major goals of this study was to draw a parallel between Thematic adjectives and Genitives. In order to do so, this study extensively presented the different aspects of Genitive assignment in Romanian and Spanish, supporting the approach proposed for Genitive constructions by Cornilescu (2005). Moreover, it thoroughly regarded the parallelism between event constructions versus deverbal nominalizations and the realization of the Genitive object in the latter. On the basis of significant tests, a three way distinction for the types of nominalizations in Romanian and Spanish was proposed: complex event nominals with + Telic aspect, simple event nominals without aspect but with an event layer and optional argument structure and result nominals without argument structure at all.

In the light of the comprehensive overview on nominalizations, Genitive assignment and the argument structure of Genitives, I drew some definitive conclusions regarding the syntactic status of Thematic adjectives: Th-adjectives can be analysed on a par with prepositional Genitive arguments by the virtue of the fact that both are arguments of simple event nominals, checking the Case nP internally. This hypothesis was further explored in a subclass of Thematic adjectives, namely Ethnic adjectives. I used several tests proposed in the literature in order to show the agent Ethnic adjective of the deverbal noun is in complementary distribution with agent Genitives. Analogical to object Thematic adjectives, Ethnic adjectives show several properties which set them apart from Genitives and must be accounted for, i.e., they are illicit with complex event nominals and cannot control purpose clauses. In line with Alexiadou & Stavrou (to appear), I argued that EAs are dual between adjunct arguments and possessors and are introduced by a semiprojection nP, similar to the applicative phrase in Double Object Constructions with indirect objects in Romance as both involve the same relation of possession. Hence, I analysed EAs as merged in the spec nP where they receive the agent role and can check their deficient Case through Long Distance Agree with AgrP. Importantly, this analysis can explain the lack of control properties of Ethnic adjectives and their ungrammaticality with complex event nominals. First, they lack control and anaphoric properties due to the fact that they remain in locus, nP and check the Genitive case through Long Distance Agree. This means that they are not in a position of c-command with the subject copy in the infinitive/ subjunctive purpose clauses and the control is, then, illicit.

Like in case of object Th-adjectives, the Genitive case of EAs is checked nP internally because they occur only with simple event nominals which lack Gen/AspP. As these nominals do not have aspect to be checked, they do not project GenP which is regarded in Cornilescu (2001) as the locus for Genitive and Telic Aspect. Second, on the basis of the three way distinction of nominals, I showed that like all Th-adjectives, Ethnic adjectives are Case-deficient and, therefore, they cannot serve as event identifier (cf. Chomsky 1981). This is the explanation for the puzzling fact that EAs and Th-adjectives cannot occur with complex event nominals as they ask for an event identifier to have full referential properties (full Case) in order to check both their Genitive case and their + Telic/- Telic aspect in Spec,GenP (cf. Cornilescu 2001). In addition, I aimed at showing the crosslinguistic variation between EAs in Romance, on one hand hand, and EAs in Greek, on the other hand and at providing an answer to the distributional differences among these languages.

A different syntactic analysis was given to Classificatory adjectives, the other subclass of Relational adjectives. Like Thematic adjectives which can be either the agent or the object of the deverbal nouns, Classificatory adjectives are regarded as either modifiers of common nouns or of an event underlying in e-nominals. The former are analysed as a restrictive relative clause that is the right sister of nominal head (NP) with which it forms a complex lexical unit. This is proven by the fact that Cl-adjectives can occur with *cel* in Romanian, which is argued to introduce a reduced relative clause with a specifying function (Marchis & Alexiadou (2009)). On the other hand, Classificatory adjectives modifying e-nominals are regarded as morpho-syntactically distinct. As they modify the event underlying in the deverbal nominalization, they must involve an adverbial layer before turning into adjectives. Essentially, the two layers within the structure of Cl-adjectives with e-nominal capture both their dimensions: as adjectives agreeing with the nominal and as adverbs modifying the event underlying the deverbal noun.

The final element of this work provides a novel perspective over the morpho-syntactic analysis of Relational adjectives. On the basis of Bisetto & Scalise's (2005) classification of compounds, I propose that Relational adjectives in Romance correspond crosslinguistically to two types of Compounding, i.e., Thematic adjectives to subordinate compounds while Classificatory adjectives to attributive ones. Moreover, it provides additional support for the syntactic proposal for Relational adjectives presented in previous chapters.

One of the main goals was to show that languages employ different mechanisms to build compounds that express a complement relation. More exactly, I discuss the variation between English and Romanian & Spanish in endocentric subordinate compounds, showing that the different strategies employed by languages in this type of compounding are only Case-related, i.e., the Case of the complement can be checked by incorporation in English, *de*-insertion in Romance or Thematic adjectives in Romance and English. Importantly, this approach of subordinate compounding brings more evidence in favour of the hypothesis according to which Thematic adjectives correspond to *de* Genitive phrases in Romance. Thus, in this approach, the syntactic feature of Case is responsible for the idiosyncratic behaviour of Thematic adjectives, i.e., their lack of anaphoric properties, ungrammaticality with complex event nominals and last but not last, the failure of incorporation with endocentric subordinate compounds in Romance.

Unlike subordinate compounding, attributive compounds express a modification relation, building either endocentric or exocentric compounds. I argued that both CI-adjectives and *de* modifier phrases modifying common nouns are instances of attributive compounds on a par with primary or root compounds in English but with different morpho-syntactic analyses. In addition, a parallel is drawn between CI-adjectives modifying the event underlying complex event nominals and modificational synthetic compounds in English of the type *quick-falling*. I proposed that they should be analysed on a par but with different syntactic derivation: incorporation vs. adjectival suffixal insertion.

Nevertheless, in spite of the fact Relational adjectives syntactically behave similar to standardly accepted compounds, they have many properties that set them apart. Therefore, I found justified to address the question of how legitimate is to consider Relational adjectives as instances of compounding on a par with incorporation in English. I presented positive arguments in favour of such an analysis. To begin with, as presented in chapter 2, Radatz (2001) shows that Relational adjectives semantically participate in a synthetic type of modification relation with the noun which differs from the one where prototypical adjectives are involved. From a syntactic viewpoint, Relational adjectives have a less lexicalized status than prototypically accepted compounds and, hence, are allowed to appear in nominal ellipses. Their less lexicalized status is syntactically reflected in the fact that they do not incorporate. In line with Delfitto, Fábregas & Melloni (2008), I show a brief parallel between Relational adjectives and compounds in Romance and Germanic languages, pointing out that like Relational adjectives, compounds in both families of languages show inflection. This was the major argument that Bosque & Picallo (1996) put forth against an analysis of Relational

adjectives as compounding in Romance. As inflection, predication and other syntactic processes are existent also with standardly accepted compounds, there is no reason not to regard also Relational adjectives as such. Nevertheless, further investigation work should be done in this field. Further research efforts could certainly be devoted to the Genitive assignment in Romance versus incorporation in Germanic. It is widely known that incorporation in German takes place with the help of some Linking Elements, homophonic with the Genitive case marker (cf. Delfitto, Fábregas & Melloni (2008)):

- (1) a. *Sonn-en-schein* *sunshine*
 b. *Freund-es-kreis* *circle of more than one friend*

Interestingly, various scholars such as Johnston & Busa (1999), Bassac & Bouillon (2001) argue that the light prepositions in Romance compounds correspond to Linking Elements in Germanic languages:

- (2) a. *gafas de sol* *sunglasses*
 b. *camisas a rayas* *striped T-shirt*

An interesting topic for further research would be to show the crosslinguistic variation of different types of Compounding in Romance and Germanic. This would cast more light on the idea proposed in Backer (1981) and Harley (2008) according to which incorporation is always Case-related.

Another issue open for future investigation is the parallelism between Murasugi's (1992) structure of clauses and deverbal nominalizations with arguments realized either as Genitives or Th-adjectives. In order to do so, a more fine-grained approach of the Genitive Case is required. In this study, I showed that the Case features are valued only at PF conditioning the choice of introducing the Agreement node (AGR) where the noun turns into an adjective through suffixation or introducing the Case feature Genitive which is spell-out as *de* preposition in Romance languages. Nevertheless, much more should be said about the relations between verbal (ergative) and nominal constructions with arguments in order to account of , for instance, the correct word order in deverbal nominals modified by two Th-adjectives or by one Th-adjective and a Genitive. The two solutions proposed here can be extended in the future, i.e., Cinque's (2005) NP movement vs. Murasugi's (1992) clause structure.

References

- Alexiadou, A. 2001. *Functional structure in nominals: nominalization and ergativity*. Amsterdam: John Benjamins.
- Alexiadou, A. & E. Anagnostopoulou. 2008. Structuring participles. *Proceedings of WCCFL 26*, ed. Ch. B. Chang & H. J. Haynie, 33-41. Somerville, MA: Cascadilla Press.
- Alexiadou, A. & M. Stavrou. 2005. "Ethnic Adjectives as pseudo adjectives: a case study in syntax-morphology interaction and the structure of DP". Paper presented at *LAGB Annual Meeting 2005*, University of Cambridge, September 2005.
- Alexiadou, A. & M. Stavrou. to appear. "Ethnic adjectives as pseudo adjectives". *Studia linguistica*.
- Anderson, S. R. 1992. *A-morphous morphology*. Cambridge: Cambridge University Press.
- Aronoff, M. 1992. "Noun classes in Arapesh". *Yearbook of morphology 1991*, Geert Booij and Jaap van Marle (eds), Dordrecht: Kluwer, 21-32.
- Bally, C. 1965. *Linguistique générale et linguistique française*. Berne.
- Baker, M. 1985. "The Mirror Principle and the Morphosyntactic explanation." *Linguistic Inquiry* 16, 373-416.
- Baker, M. 1988. *Incorporation*. Oxford: OUP.
- Baker, M. 2003. *Lexical categories. Verbs, nouns, and adjectives*. Cambridge: Cambridge University Press.
- Bartning, I. 1980. *Remarques sur la syntaxe et la sémantique du pseudo adjectif dénominaux en français*. Stockholm: Almqvist & Wiksell International.
- Bassac, C. & P. Bouillon. 2001. "The telic relationship in compounds in French and Turkish." 1st International Workshop on Generative Approaches the Lexicon. Geneva, Switzerland.
- Beard, R. 1991. "Decompositional Composition: The Semantics of Scope Ambiguities and Bracketing Paradoxes." *Natural Language and Linguistic Theory* 9.2: 195-229.
- Bisetto, A. & S. Scalise. 2005. "The classification of compounds". *Lingue e linguaggio*. IV. 2 319-322.
- Bolinger, D. 1967. "Adjectives in English: attribution and predication." *Lingua* 18, 1-34.
- Bonet, E. 1991. *Morphology after syntax: Pronominal clitics in Romance*. Ph.D dissertation, MIT

- Borer, H. 1994. "On the projection of arguments". *Functional projections* (University of Massachusetts Occasional Papers 17), eds. Benedicto, E & Runner, J. 19-48
- Borer, H. 2005. *In name only*. Oxford: Oxford University Press
- Borsley, R. D. and J. Kornfilt. 2000, "Mixed extended projections." *The Nature and Function of Syntactic Categories*, R.D. Borsley (ed), NY: Academic Press, 101-131.
- Bosque, I. 1993. "Sobre las diferencias entre los adjetivos relacionales y los calificativos." *Revista Argentina de Linguística* 9.9-48.
- Bosque, I. & C. Picallo. 1996. "Postnominal adjectives in Spanish DPs". *Journal of Linguistics* 32: 349-385
- Cardinaletti, A. 1998. "On the deficient/ strong opposition in possessive systems". *Possessors, predicates and movement in the DP*, ed. A. Alexiadou & C. Wilder, Amsterdam: John Benjamins, 17-32
- Cardinaletti, A. & M. Starke. 1995. "The Typology of Structural Deficiency. On the Three Grammatical Classes." *FAS Papers in Linguistics*, vol. 1, Alexiadou, Artemis et al. (eds) Zentrum für Allgemeine Sprachwissenschaft, Typologie und Universalienforschung, Berlin: 1-55.
- Carlson, G. 1977. "A unified analysis of the English bare plural." *Linguistics and Philosophy* 1, 413-457.
- Cinque, G. 1993. "On the evidence for Partial N Movement in the Romance DP." *University of Venice Working papers in Linguistics* 3.1, 21-41.
- Cinque, G. 2005. "The dual source of adjectives and phrasal movement in the Romance DP", Ms., University of Venice.
- Chierchia, G. 1998. "Reference to kinds across languages." *Natural Language Semantics* 6, 339-405
- Chomsky, N. 1972. "Some empirical issues in the theory of transformational grammar." *Goals of linguistic theory*. Eaglewood Cliffs, 63-130-
- Chomsky, N. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger
- Chomsky, N. 1994. "A Minimalist Program for Linguistic Theory." *The View from Building 20*. MIT Press, Mass, 1-59
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Coene, M. 1999. *Definite null-nominals in Romanian and Spanish: a generative approach to the syntax of DP*. Ph.D. dissertation, University of Antwerpen.

- Cornilescu, A. 1995. "Rumanian Genitive Constructions". *Advances in Romanian Linguistics*, G. Cinque & G. Giusti (eds.) Amsterdam: John Benjamins, *Linguistik Aktuell* 10.
- Cornilescu, A. 2001. "Romanian nominalizations: Case and Aspectual Structure". *Journal of linguistics* 37:3. 467-501
- Cornilescu, A. 2005. Invited talk at the Romania Computational Linguistics Summer School, Sinaia <http://www.sfs.uni-tuebingen.de/rocoli/talks.html>
- Cornilescu, A. 2009. "Adjectives and Nominal Peripheries". Presentation at University of Paris 7
- Cornilescu, A. & A. Nicolae. 2009. "One the syntax of Romanian definite Phase: changes in the patterns of definiteness checking". Paper presented at *Annual Meeting Variation and Change in the Romance and Germanic noun phrase*, Amsterdam
- Crisma, P. 1990. *Functional categories inside the NP: a study on the distribution of nominal modifiers*. Ph.D dissertation, Universita di Venezia.
- Delfitto, D., A. Fábregas & C. Melloni. 2008. "Compounding at the interfaces." Presentation at *NELS 39*, Ithaca, New York.
- Delfitto, D. & P. Paradisi. 2007. "Prepositionless genitive and N+N compounding in (Old) French and Italian". Paper presented at *Going Romance 20*, December 7-8, 2006, Vrije Universiteit, Amsterdam.
- Dobrovie-Sorin, C, T. Blear and M. Teresa Espinal. 2006. Bare nouns, number and types of incorporation. In: Vogeleer, Svetlana and Liliane Tasmowski (eds.) *Non definiteness and Plurality*, 51–79.
- Dowty, D. R. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel.
- Dubois, J. & F. Dubois-Charlier. 1970. *Eléments de linguistique française: syntaxe*. Paris.
- Embick, D. 1997. *Voice and the Interfaces of Syntax*, Doctoral dissertation, University of Pennsylvania.
- Embick, D. 1998. "Voice Systems and the Syntax/Morphology Interface." The Proceedings of the Penn/MIT Workshop on Aspect, Argument Structure, and Events, MITWPL.
- Embick, D. 2000 "Features, Syntax and Categories in the Latin Perfect," *Linguistic Inquiry* 31:2, 185–230.
- Embick, D. 2003. "Locality, listedness and morphological identity." *Studia Linguistica* 57, 143 -169.
- Embick, D. & R. Noyer. 2006. "Distributed Morphology and the Syntax/Morphology Interface." *Oxford Handbook of Linguistic Interfaces*, Oxford.

- Fábregas, A. 2007. "The internal syntactic structure of relational adjectives." *Probus* 19: 135-170
- Giurgea, I. 2005. „La linéarisation des adjectifs en roumain : mouvement du N ou contraintes sémantiques ?" *On Space and Time in Language*, Coene M. And L.Tasmowski (eds.) Cluj, Clusium, 2005, 51-73
- Giurgea, I. 2008. "On Romanian predicative bare nouns." Paper presented at Workshop on bare singulars, argument structure and their interpretation. Barcelona 11-12 December 2008.
- Giurgi, A. & G. Longobardi. 1991. *The syntax of noun phrases: configuration, parameters, and empty categories*. Cambridge: Cambridge University Press.
- Grimshaw, J.1990. *Argument Structure*. Cambridge, Mass.: MIT Press
- Halle, M. 1997. "Distributed Morphology: Impoverishment and fission." *MIT Working Papers in Linguistics 30: Papers at the Interface*. Cambridge, Mass: MITWPL, 425-449
- Hale, K. & J. Keiser. 1993. "On argument structure and the lexical expression of syntactic relations." *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. K. Hale & J. S. Keyser (eds). Cambridge, Mass.: MIT Press, 51-109.
- Halle, M. & A. Marantz. 1993. "Distributed morphology and the pieces of inflection." *The View from Building 20*, ed. K. Hale & S.J. Keyser, 111-176. Cambridge, MA: MIT Press.
- Harley, H. 2008. "Compounding in Distributed Morphology." *The Oxford Handbook of Compounding*. Eds. R. Lieber & P. Stekauer
- Harley, H. & R. Noyer. 1999. "Distributed morphology." *Glott International* 4, 4, 3-9.
- Hawkins, J. A. 1991. "On (in)definite articles: implicatures and (un)grammaticality prediction." *J. Linguistics* 27: 405-442
- de Hoop, H. 1993. *Case configuration and noun phrase interpretation*. Ph.D dissertation, University of Groningen
- Horrocks, G & M. Stavrou. 1987. "Bounding theory and Greek syntax: evidence for wh movement in NP." *Journal of Linguistics* 23, 79-108.
- Johnston, M. and F. Busa. 1999. "Qualia structure and the compositional interpretation of compounds." *Breadth and Depth of Semantics Lexicons*, E. Viegas (ed.), Dordrecht: Kluwer Academic, 167-187.
- Lamarche, J. 1991. "Problems for N-movement to NumP." *Probus* 3(2), 215-316.
- Lasersohn P. 1989. "On the readings of plural noun phrases." *Linguistic Inquiry* 20, 130-134.

- Lasersohn, P. forthcoming. "Mass Nouns and Plurals." *Semantics: An international Handbook of Natural Language Meaning*. Gruyter.
- Levi, J. N. 1978. *The Syntax and Semantics of Complex Nominals*. New York: Academic Press.
- Lieber, R. 1992. *Deconstructing Morphology*. Chicago: University of Chicago Press.
- Longobardi, Giuseppe. 1994. "Reference to kinds and proper names: A theory of N movement in Syntax and logical form". *Linguistic Inquiry* 25: 609-665.
- Lohrmann, S. submitted. *The structure of the DP and its reflex in Scandinavian*. Ph.D dissertation, Stuttgart Universität.
- Kamp, H. & Reyle, U. 1994. *From discourse to logic*. Dordrecht: Kluwer Academic Publishers.
- Kayne, R. 1984. *Connectedness and binary branching*. Dordrecht: Foris.
- Kayne, R. 1994. *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.
- Kiparsky, P. 1993. "Elsewhere in phonology". *A Festschrift for Morris Halle*. S.A. Anderson & P. Kiparsky (eds). New York: Holt, Rinehart and Winston, 93-106.
- Kiparsky, P. 1998. "Partitive case and aspect". *Projecting from the Lexicon*. eds. Butt M. & W. Gender. Standford, CSLI.
- Kupferman, L. 1991. "L'aspect du groupe nominal at l'extraction de *en*. Le Français Moderne LIX 2. 113-147.
- Kurylowicz, J. 1936. "Dérivation lexicale et dérivation syntaxique." *BSL* 37: 79-92.
- Kratzer, A. 1994. "On external arguments." University of Massachusetts Occasional Papers 17, 103-130.
- Marantz, A. 1991. "Case and Licensing". *Proceedings of ESCOL 8*, 234-253
- Marantz, A. 1997. "No escape from Syntax: Don't try a morphological analysis in the privacy of you own lexicon." *U. Penn Working Papers in Linguistics* 4.2, ed. A. Dimitriadis, L. Siegel, C. Surek-Clark & A. Williams, 201-225. Philadelphia.
- Marantz, A. 2001. *Words and Things*. Ms., MIT
- Marchand, H. 1969. *The Categories and Types of Present Day English Word Formation*. München, Beck'sche Verlagsbuchhandlung.
- Marchis, M. & A. Alexiadou. 2009. "On the distribution of adjectives in Romanian: the *cel* construction". In Enoch Aboh, Elisabeth van der Linden, Josep Quer & Petra Sleeman (eds.) *Romance Languages and Linguistic Theory*. Amsterdam: Benjamins.

- Marchis, M. 2009a. Relational adjectives in Romanian and Spanish. Paper presented as the *Annual Conference of the English Department* of the University of Bucharest.
- Marchis, M. 2009b. "On the properties of Relational adjectives in Romanian and Spanish." Poster Presentation at 19th Colloquium on Generative Grammar, University of the Basque Country, April 1-3. 2009
- Marchis, M. (to appear). "Thematic Adjectives." *Bucharest Working Papers 12*.
- Marchis, M. submitted. "Compounding across languages". *Romance Languages and Linguistic Theory*. Amsterdam: John Benjamins.
- McFadden, T. 2004. *The position of morphological case in the derivation: a study on the syntax-morphology interface*. Ph.D. dissertation, University of Pennsylvania, Philadelphia.
- McNally, L. & G. Boleda. 2004. "Relational adjectives as properties of kinds." *Empirical issues in formal syntax and semantics 5*, ed. O Bonami & P. Cabredo Hofherr, 179-196, online publication
- Mezhevich, I. 2002. "English Compounds and Russian Relational Adjectives." *Proceedings NWLC*.
- Murasugi, K., G. 1992. *Crossing and Nested Paths: NP movement in accusative and ergative Languages*. MIT Working Papers in Linguistics.
- Niculescu, D. 2009. "On two de phrases in the Romanian DP". Paper presented at the Conference Variation and change in the Romance and Germanic noun phrase, Amsterdam.
- Parsons, T. 1990. *Events in the semantics of English*. Cambridge, MA: MIT Press.
- Picallo, C. 1991. "Nominals and nominalization in Catalan." *Probus 3*. 279-316.
- Postal, P. 1969. "Anaphoric Islands". Papers from the fifth regional meeting Chicago Linguistic Society. University of Chicago. 205-239.
- Pustejovsky, J. 1992. "The syntax of event structure." In Levin, B & Pinker, S. (eds), *Lexical & conceptual semantics*. Oxford: Blackwell. 47-83.
- Quine, W. 1960. *Word and Object*. Cambridge Mass, MIT.
- Radatz, H. 2001. *Die Semantik der Adjektivstellung. Eine kognitive Studie zur Konstruktion „Adjektiv + Substantiv“ im Spanischen, Französischen und Italienischen*. Tübingen: Niemeyer. 52- 126.
- Rappaport Hovav, M. and B. Levin (1992) "--er Nominals: Implications for a Theory of Argument Structure". In: *Syntax and Semantics 26: Syntax and the Lexicon*, T. Stowell and E. Wehrli, eds., Academic Press, New York, NY, 127-153.

- Reinhart, T. and E. Reuland. 1993. "Reflexivity". *Linguistic Inquiry* 24:657-720.
- Roeper, T. & M. E. A. Siegel. 1978. "A lexical transformation for verbal compounds". *Linguistic Inquiry* 9.2, 199-260.
- Ronat, M. 1974. *Echelles de base et mutation en syntaxe française*. M.A. thesis, Vincennes University, Paris.
- Schweickard, W. 1992. *Deonomastik: Ableitungen auf der Basis von Eigennamen im Französischen unter Berücksichtigung des Italienischen, Rumänischen und Spanischen*. Tübingen, Niemeyer.
- Sleeman, P. 1996. *Licensing Empty Nouns in French*. PhD. Thesis. HIL. Leiden.
- Spencer, A. 1999. "Transpositions and argument structure." *Yearbook of Morphology 1998*, G. Booij and J. van Marle (eds.), Dordrecht: Kluwer, 73–102.
- Ticio, M. E., 2003. "Adjective Placement". *Locality Domains in the Spanish Determiner Phrase*, Maria Ticio, University of Connecticut, 104-156.
- Valois, D. 1991. *The internal structure of DP*. Ph.D. dissertation, UCLA.
- Vendler, Z. 1967. "The grammar of goodness." *Linguistics in Philosophy*. Ithaca, Cornell University Press, 172-195.
- De Wit, P. & M. Schoolermmer. 1996. "Prenominal arguments in Russian, German and Dutch." *ZASPIL* 5, 184-202.
- Zamparelli, R. 1993. "Aspects of a ADJP=DP=CP hypothesis". Ms., University of Rochester.
- Zubizarreta, M., L. 1978. *Levels of representation in the lexicon and in the syntax*. Dordrecht: Foris.