

ON THE MORPHO-SYNTACTIC PROPERTIES OF RELATIONAL ADJECTIVES IN ROMANIAN AND SPANISH¹

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Abstract: This paper analyzes the morpho-syntactic structure of a subclass of Relational adjectives, Th(ematic) adjectives within the framework of Distributed Morphology (Halle and Marantz 1993). Building on Bosque and Picallo's (1996) classification of Relational adjectives, I show that Thematic adjectives differ from Classificatory adjectives in their ability to absorb thematic roles and to occur in the predicative position. I explain this difference on the basis of different internal morpho-syntactic structures. More explicitly, Th-adjectives are analysed as Genitive DPs with an empty D on a par with *de* Genitive phrases in Romance. In the absence of *de* last resort insertion, Th-adjectives check the Genitive case only nP internally, as a full Gen DP which is in long distance Agree with AgrP. This analysis has the merit of explaining the ungrammaticality of Th-adjectives with complex event nominals as they cannot check the telic aspect of complex event nominals in SpecGenP, outside nP (cf. Cornilescu 2001).

Keywords: Thematic Adjectives, Classificatory Adjectives, *de* Genitive phrases, long distance Agree, complex event nominals

1. Introduction

In the literature, it is standardly assumed that Relational adjectives are classified as Thematic and Classificatory ones (Bosque and Picallo 1996). Essentially, the Th-adjective in (1a) differs from the Cl-adjective in (1b) in its ability to absorb thematic role and to occur in the predicative position

- (1) a. la producción (*es) petrolera b. el 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 is not predicative; *sintactică* in (1b) 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 and Picallo (1996), Thematic 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:

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

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Unlike Thematic adjectives, Classificatory adjectives are regarded as *restrictive modifiers*, relating the noun to a domain according to which the NP is classified. Hence, they are not arguments of the noun:

- (3) análisis sintáctico/estilístico/periódico Spanish
 syntactic/stylistic/periodical analysis

Nevertheless, in spite of the fact that Thematic and Classificatory adjectives are distinct in their ability to absorb thematic roles, they are similar in that they are derived from nouns.

The aim of this paper is manifold. First, following Postal (1969), Levi (1978), Bosque and Piccolo (1996), Fábregas (2007) and Alexiadou and Stavrou (forthcoming), I argue that all Relational adjectives are denominal. Second, the differences between Thematic and Classificatory adjectives are traced down on the basis of a different morpho-syntactic analysis. More explicitly, I regard Thematic adjectives as Genitive DPs on a par with *de* Genitives in Romance. Third, I account for the Case-checking properties of Th-adjectives in the absence of *de* Last Resort Insertion Operation, providing an explanation for the ungrammaticality of Th-adjectives with complex event nominals.

2. The denominal nature of Thematic and Classificatory adjectives

There are several tests that speak in favour of a denominal status of Relational adjectives, i.e. Relational adjectives that occupy Thematic roles cannot be predicative, they show noun-like number properties, noun-like coordination, bracketing paradoxes and Classificatory adjectives behave like subordinate adjectives. As shown below, these tests are valid also for Romanian (cf. Fábregas 2007, Alexiadou and Stavrou forthcoming).

First, Relational adjectives that occupy thematic roles do not appear in the predicative position

- (4) a. *La producción es automovilística/alemana. Spanish
 *Producția este automobilistică/germană. Romanian
 ‘The production is fishing/Chinese.’
 b. La mesa es redonda.
 Masa este rotunda.
 ‘The table is round.’

Second, Relational adjectives have noun-like number properties as they can be combined with quantifier prefixes such as *multi-*, *bi-* or *mono-*:

- (5) a. *mono-alto b. bi-rojo Spanish
 mono-înalt bi-roșu Romanian
 mono-tall bi-red
 (6) a. mono-cromático b. poli-silábico
 mono-cromatic poli-silabic
 mono-chromatic poly-syllabic

Third, the coordination of two Relational adjectives in the singular can modify plural nouns:

- (7) a. *los embajadores [alto y bajo] Spanish
 the ambassadors-PL tall-SG and short-SG
 b. los embajadores [de México y de Argentina].
 the ambassadors-PL from Mexico and from Argentina
 c. los embajadores mexicano y argentino.
 the ambassadors-PL Mexican-SG and Argentinian-SG

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

- (8) pre-universit-ario, ante-diluvi-ano Spanish
 pre-universit-ar, ante-diluvian Romanian
 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 pronominal adjective *bajomedieval* ‘from the late Middle Ages’, the adjective *bajo* seems to modify the base and not the entire Relational adjective.

Last but not least, Classificatory Relational adjectives behave like subordinate adjectives:

- (9) 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
 coma alcoholic methylated
 ‘methylated alcohol coma’
 c. reguli sanitar veterinare Romanian
 regulations sanitary veterinary
 ‘animal health regulations’

It is important to note 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 semantically, a Relational adjective is equivalent to a noun modifying another. However, this behaviour would not be expected from an adjective.

I argue that Relational adjectives are denominal in Romance. Moreover, they have a non-specific/ non-identificational interpretation:

- (10) a. producția automobilistică Romanian
 la producción automovilística Spanish
 car production
 b. revista literară
 la revista literária
 literary magazine

Observe that both Th-adjectives in (10a) and Cl-adjectives in (10b) do not have specific reference. In (10a) the Th-adjective does not refer to specific cars exactly as the Cl-adjective in (10b) does not classify the noun to a specific kind of literature.

However, as widely assumed, Th-adjectives are syntactically different from Cl-adjectives as they represent the argument of the deverbal noun. Hence, they must have different syntactic structures.

3. The morpho-syntactic structure of Relational adjectives

This section shows that in spite of the fact that Th- adjectives and Cl-adjectives are both denominal, they show a different morpho-syntactic behaviour. Specifically, I argue that unlike Cl-adjectives, Th-adjectives are DPs with an empty D. Moreover, 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 non-argumental bare nouns, i.e. NPs (cf. Marchis in preparation).

In Romance there are two types of bare nouns which differ from a syntactic point of view but not from a semantic perspective, as they all have a non-specific and non-identificational interpretation:

- (11) a. Pisica a mâncat șoareci(*-i).
cat-the has eaten mice -the
'The cat eats mice.'
- b. El gato come (*los) ratones.
the cat eats the mice.
'The cat eats mice.'
- (12) a. Am citit cărți despre lei*(-i).
have read books about lions
'I have read books about lions.'
- b. Lei libros sobre (*los) leones.
read books about the lions
'I have read books about lions.'

By 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 (12).

Hence, I propose two different structures for bare nouns in Romanian and Spanish, i.e. (13) for argumental bare nouns, and (14) for non-argumental bare nouns:

- (13) a. Pisica a mâncat □oareci(*-i).
cat-the has eaten mice -the
The cat eats mice.
- b.
-
- ```

graph TD
 DP --> D
 DP --> NumP1[NumP]
 D --> Empty[□]
 NumP1 --> NumP2[NumP]
 NumP1 --> NP
 NumP2 --> Minus[-i]
 NP --> Soarec[soarec]

```

- (14) a. Am citit cărți despre lei\*(-i).  
Have.1sg read books about lioness.  
b.
- ```

      NumP
     /   \
  NumP   NP
  -i     □oarece
  
```

I claim that Thematic adjectives correspond to argumental 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 and Picallo 1996, Fábregas 2007 and Alexiadou and Stavrou forthcoming). Second, they have a mass/kind interpretation: following Borer (2005) mass nouns contain a simple D and the root.

- (15) a. producția petrolieră/automobilistică ≈ producția de petrol/ de mașini
'oil/car production' 'production of oil/of cars'

Marchis (2009a and 2009b) explains the lack of referentiality of Th-adjectives by claiming that Th-adjectives correspond to mass/plural definites in Romance and have mass or kind/group interpretation. Note that the same interpretation is provided by the *de* Genitive phrase in Romanian:

- (16) a. citirea romanelor
reading-the novels-GEN
b. citirea de romane
reading-the DE novels.

While (16a) receives the bound interpretation and refers to specific novels, in (16b) the *de* Genitive phrase is unbounded just like Th-adjectives corresponding to mass nouns and plural definites.

Thus, I propose the following structure for Thematic adjectives:

- (17)
- ```

 aP
 / \
 A DP
 / \
 SpecDP D'
 / \
 D nP
 / \
 N 

```

The structure of the DP is minimal in the sense that it is similar to that of mass nouns and bare plurals, i.e. it simply contains a D head and the root (see Borer 2005; cf. Marchis 2009a). This is presumably the reason why such nouns are interpreted as having plural (= group) denotation.

Unlike Th-adjectives, Classificatory adjectives are not arguments of the noun, but rather they behave like restrictive modifiers (cf. Bosque and Picallo 1996). In what follows, I show that Classificatory adjectives correspond to non-argumental bare nouns in Romance, which are NumPs.

To begin with, the first similarity between CI-adjectives and bare nouns is that they both can occur in the predicative position<sup>2</sup>:

- |      |    |                                                                   |          |
|------|----|-------------------------------------------------------------------|----------|
| (18) | a. | Leii sunt animale(*-le) nobile.<br>'Lions are noble animals.'     | Romanian |
|      | b. | Los leones son animales nobles.<br>'The lions are noble animals.' | Spanish  |
| (19) | a. | Această analiză este sintactică.<br>'This analysis is syntactic.' | Romanian |
|      | b. | Este análisis es sintáctico.<br>'This analysis is syntactic.'     | Spanish  |

No doubt, the bare noun *animals* is not an argument of the verb, but rather it is similar to predicative adjectives as it describes or classifies the reference of the noun.

Second, I show that both CI-adjectives and bare nouns allow classifying predication. Dobrovie et al. (2005) claim that bare nouns allow only a classifying predication and correspond to the interpretation of bare nouns in predicative position when they are preceded by an indefinite article:

- |      |    |                   |        |
|------|----|-------------------|--------|
| (20) | a. | C'est un acteur.  | French |
|      | b. | This is an actor. |        |

Essentially, the same type of predication was observed for CI-adjectives by Bartning (1980), who 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:

- |      |                                   |          |
|------|-----------------------------------|----------|
| (21) | NP – be- N- RA                    |          |
|      | Aceasta este o problemă politică. | Romanian |
|      | Este es un problema político.     | Spanish  |
|      | 'This is a political problem.'    |          |

Third, in Marchis (2009a) I argued that CI-adjectives correspond to *de* + bare nouns. This is based on Niculescu (2009), who shows that *de* can appear both with bare singulars and with bare plurals:

- |      |    |                    |    |                   |
|------|----|--------------------|----|-------------------|
| (22) | a. | fiu de nobil       | b. | fiu de nobili     |
|      |    | son DE nobleman    |    | son DE noblemen   |
|      |    | 'a nobleman's son' |    | 'son of noblemen' |

<sup>2</sup> Note that definites can occur in the predicative position only when the noun is modified by a Genitive. However, this behavior is semantically explained by the referential interpretation.

- |     |                                          |
|-----|------------------------------------------|
| i.  | Leii sunt regi*(-i) pădurilor            |
|     | Lions-the are kings-the of the woods.    |
| ii. | Los leones son los reyes de los bosques. |
|     | The lions are the kings of the woods.    |

Giurgea (2008) makes the distinction between DP predicates and NP predicates: NP predicates based on common nouns are always semantic predicates (in languages with articles), while DPs may be argumental (→ identificational constructions) or shifted to a predicative interpretation (→ predicational constructions).

Niculescu (2009) claims that in (22a) the bare noun is a real bare noun, with no functional projection, and with the meaning of property and in (22b), the noun phrase projects a NumP; the noun *noblemen* has the meaning of plurality. Importantly, CI-adjectives can be substituted with *de* + bare nouns:

|      |    |                          |   |                  |          |
|------|----|--------------------------|---|------------------|----------|
| (23) | a. | dragoste de mamă         | ~ | dragoste maternă | Romanian |
|      |    | amor de madre            | ~ | amor maternal    | Spanish  |
|      |    | ‘love of mother’         | ~ | ‘maternal love’  |          |
|      | b. | veșminte de rege/regi    | ~ | veșminte regale  | Romanian |
|      |    | vestimenta de rey/reyes  | ~ | vestimenta real  | Spanish  |
|      |    | ‘garments of king/kings’ | ~ | ‘royal garments’ |          |
|      | c. | lucru de mână            | ~ | lucru manual     | Romanian |
|      |    | trabajo de mano          | ~ | trabajo manual   | Spanish  |
|      |    | ‘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 a NP or NumP is a restrictive modifier.

|      |    |                         |    |                         |          |
|------|----|-------------------------|----|-------------------------|----------|
| (24) | a. | producția de petrol     | b. | veșminte de rege/regi   | Romanian |
|      |    | producción de petróleo. |    | vestimenta de rey/reyes | Spanish  |
|      |    | ‘production of oil’     |    | ‘garment of king/kings’ |          |

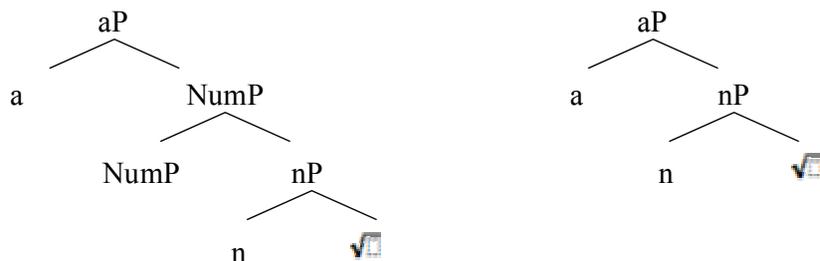
The examples in (24a) and (24b) correspond to the distinction between Th-adjectives and CI-adjectives in (25a) and (25b):

|      |    |                      |    |                      |          |
|------|----|----------------------|----|----------------------|----------|
| (25) | a. | producția petrolieră | b. | vestimentație regală | Romanian |
|      |    | producción petrolera |    | vestimenta real      | Spanish  |
|      |    | ‘oil production’     |    | ‘royal garment’      |          |

All in all, the split classification of Relational adjectives seems to reflect the dual syntactic behaviour of bare nouns in Romanian and Spanish, as DPs when they are post-verbal arguments and NumPs or 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 CI-adjectives:

|      |    |                               |    |                                 |
|------|----|-------------------------------|----|---------------------------------|
| (26) | a. | CI-adjectives as bare plurals | b. | CI-adjectives as bare singulars |
|------|----|-------------------------------|----|---------------------------------|



#### 4. The syntactic analysis of Thematic adjectives

In line with Bosque and Picallo's (1996) syntactic approach to Relational adjectives, I take Th-adjectives to be arguments of deverbal nouns. Specifically, Thematic adjectives correspond to prepositional Genitive DPs, *de* phrases due to several reasons (cf. Marchis 2009a and 2009b):

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

- |      |    |                          |   |                          |
|------|----|--------------------------|---|--------------------------|
| (27) | 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, like Th-adjectives, Genitives in Romanian fulfil, in addition to their specific Possessor role, a variety of theta-roles:

- |      |    |                                |   |                        |
|------|----|--------------------------------|---|------------------------|
| (28) | a. | trădarea cauzei                |   | (Theme)                |
|      |    | ‘the betrayal of the cause’    |   |                        |
|      | b. | trădarea lui Iuda              |   | (Agent)                |
|      |    | ‘Juda’s betrayal’              |   |                        |
|      | c. | cartea lui Ion                 |   | (Possessor)            |
|      |    | Ion’s book                     |   |                        |
| (29) | a. | object:                        |   |                        |
|      |    | alegere (*este) prezidențială  | → | X alege președintele.  |
|      |    | elección (*es) presidencial    | → | X elige el presidente  |
|      |    | election (*is) presidential    | → | X elects the president |
|      | b. | subject:                       |   |                        |
|      |    | decizie (*este) guvernamentală | → | guvernul decide        |
|      |    | decisión (*es) gubernamental   | → | el gobierno decide     |
|      |    | decision (*is) governmental    | → | the government decides |

Third, like Th-adjectives, argumental Genitives cannot occur across copula, while possessor or modifier Genitives can be predicative like non-argumental Relational adjectives:

- |      |    |                                 |  |             |
|------|----|---------------------------------|--|-------------|
| (30) | a. | * Sosirea este a invitaților.   |  | (Agent)     |
|      |    | ‘The arrival is of the guests.’ |  |             |
|      | b. | * Trădarea este a cauzei.       |  | (Theme)     |
|      |    | ‘The betrayal is of the cause.’ |  |             |
|      | c. | Cartea este a lui Ion.          |  | (Possessor) |
|      |    | ‘The book is Ion’s’             |  |             |

Fourth, Bosque and Picallo's (1996) observation represents strong evidence for the proposal that Th-adjectives correspond to GenDPs in Spanish as well. Importantly, Th- and Cl-adjectives behave differently with respect to possessive pronominalization of Genitive arguments:

- |      |    |                                       |          |
|------|----|---------------------------------------|----------|
| (31) | a. | la organización papal de la Curia     | Spanish  |
|      |    | organizarea papală a Curiei           | Romanian |
|      |    | ‘the papal organization of the Curia’ |          |

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

In (31a) the Th-adjective *papal* has the Agent role while the Genitive DP *de la Curia* has the role of the Theme. In (31b), 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 (32a) and grammatical with the Cl-adjective in (32b):

- (32) a. \*su<sub>1</sub> organización papal t<sub>1</sub>  
 its organization papal  
 ‘its organization by the Pope’  
 b. su<sub>1</sub> producción manual t<sub>1</sub>  
 its production manual  
 ‘its manual production’

Clearly, the ungrammaticality in (32a) 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:

- (33) \*la producción de camisas de Alemania  
 \*producerea cămășilor a Germaniei  
 ‘the production of shirts of Germany’

Analogically, Postal (1969) and Alexiadou and Stavrou (forthcoming) show the distributional and the interpretational parallelism between Ethnic adjectives<sup>3</sup> 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:

- (34) a. \*The Persian application for membership by Iran  
 b. \*i eliniki apantisi stis proklisis ton Elinou, apo tus Elines Greek  
 ‘the Greek reply to the provocation of the Greeks by the Greeks’  
 (35) a. America’s attempt to attack Cuba at night  
 b. the American attempt to attack Cuba at night.

I relate the differences between Th-adjectives and Cl-adjectives to the following hypothesis: The more perceivable the grammatical relations between the Relational adjective and the head noun are, the more possible the reconstruction of Relational adjectives is as *de* prepositional Genitive in Romanian and Spanish. Crucially, this hypothesis is supported by convincing arguments showing the semantic and syntactic similarity between Th-adjectives and *de* prepositional Gen.

As shown in section 2, *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 15 repeated below):

<sup>3</sup> Ethnic adjectives in Alexiadou and Stavrou (forthcoming) correspond to external/agent Th-adjectives in this analysis.



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

Cornilescu (2001) provides an approach to complex event nominals in Romanian. Essentially the Noun Object structure of e-nouns is based on transitive verbs, which yield event readings of the accomplishment/achievement aspectual type. In line with Kamp and Reyle (1993) 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):

- (42) I                      II                      III  
 activity                      culmination                      resulting state

Crucially, 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. Like in Romanian, in English the theme must obligatorily be realized as *of* Genitive (cf. Grimshaw 1990):

- (43) a. Cumpărarea \*(casei) a fost inutilă. inflectional Gen  
 buy-INF-the house-the-GEN was useless  
 ‘The buying (of the house) was useless.’  
 b. Cumpărarea \*(de case) a fost o eroare. *de* Gen<sup>4</sup>  
 buy-INF-the DE houses was a mistake.  
 ‘The buying of houses was a mistake.’  
 c. The buying \*(of houses) was a mistake. *of* Gen

In order to account for the obligatoriness of the argument Genitive with complex event nominals in (43), Cornilescu (2001) argues that the +telic aspect of NO complex event nominals in Romanian must be checked as a free rider by adjunction to some functional head as the Aspect is not among the grammatical categories of the noun. More exactly, telicity is checked at the same time as Case, in the Genitive CaseP (cf. de Hoop 1993). Hence, GenCaseP is 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).

Note that Th-adjectives cannot occur with complex event nominals:

- (44) a. citirea obligatorie a romanului de către studenți  
 read-INF-the obligatory AL novel-the-GEN by students  
 ‘the compulsory reading of the novel by the students’

<sup>4</sup> Cornilescu (2001) claims that if Genitive has been assigned in an infinitive e-nominal, irrespective of the type of object, +telic feature is checked. For instance, bare plurals realized as *de* Genitives receive structural Case in nominals and hence they license the event-reading of infinitive nominals. But, even though the nominal has syntactically +telic affix and the feature +telic is checked, it acquires an activity reading because of the bare plural object (Cornilescu 2001: 495).

- b. citirea obligatorie de romane de către studenți  
read-INF-the obligatory DE novels by students.  
'the compulsory reading of novels by students'
- c. \*importul petrolier de către Germania  
import-the oil by Germany  
'oil import by Germany'

Bosque and Picallo (1996) made the same observation for Spanish, i.e. Th-adjectives are illicit with complex event nominals:

- (45) a. la pesca de ballenas por parte de los japoneses  
'the fishing of whales by the Japanese'
- b. \*la pesca ballenera por parte de los japoneses  
'whale fishing by the Japanese'

Rappaport and Levin (1992) show that only *of* arguments occur with complex event nominals in English:

- (46) the import of oil by United States

Cornilescu's analogy between the telic aspect of the complex event noun and Case seems to solve the puzzle regarding the ungrammaticality of Th-adjectives in complex event nominals. On the basis of Cornilescu's approach, I argue that Th-adjectives cannot occur with complex event nominals due to their Case-deficient feature. As they cannot check the Genitive case in Spec, GenP, they cannot provide the telic aspect of the e-noun in NO constructions.

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 and Reuland (1993) argue that a DP may serve as an event identifier only if it has the referential property +R: a NP is +R iff it carries a full specification for phi-features and structural Case (Chomsky 1981).

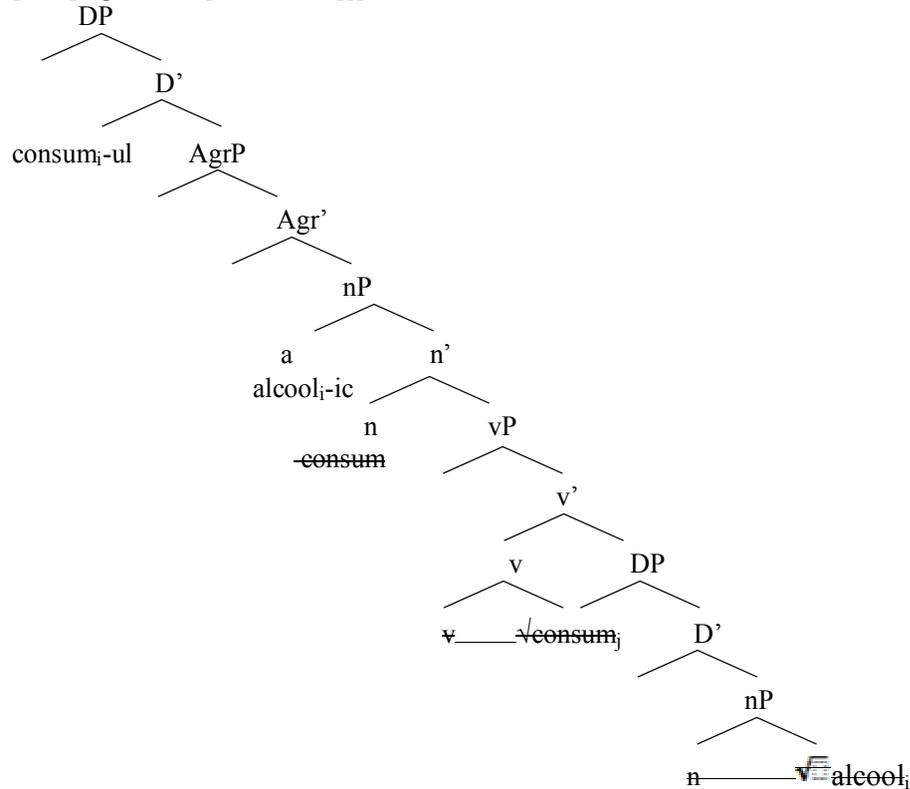
As Th-adjectives are Case-deficient, they are –R and cannot serve as event identifier in Spec, Gen/AspP. Therefore, in line with Marchis (2009a and 2009b) and Alexiadou and Stavrou (forthcoming), I propose that Th-adjectives are projected as sister of the verb, and contain a Case-deficient DP, but they 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<sup>5</sup>, r-nominals in Grimshaw's (1990) terminology, 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 obligatorily 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.

The structure for Th-adjectives is shown in (47), where n-to D movement yields the correct word order.

<sup>5</sup> For the distinction between r-nominals and simple event nominals see Marchis (in preparation). Due to space limitations, the types of nominalizations are not discussed here.

- (47) a. consum alcoolic  
consumption alcohol  
b. [DP [AgrP a - - [nP alcool-]]]



Th-adjectives are analyzed on a par with *de* phrases in 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, simple event nominals lack a Gen/AspP (cf. Cornilescu 2001). Hence like Th-adjectives, *de* phrases with simple event nominals must check their Genitive case nP internally.

The strong connection between object Case and telicity is what de Hoop (1993) observed, who proposed two different object Cases, Strong and Weak, correlating 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.

The lack anaphoric properties of Ethnic adjectives, a subclass of Th-adjectives offers more support for the proposal that Th-adjectives check their Genitive case internally through long distance Agree with AgrP:

- (48) a. invazia americanilor pentru a apăra drepturile irakienilor.  
invasion-the Americans-the-GEN to defend rights-the Iraqis-GEN  
b. \*invazia americană pentru a apăra drepturile irakienilor  
invasion-the American to defend rights-the Iraqis-GEN

On the basis of the discrepancies between Genitives (48a) and Th-adjectives (48b) regarding the lack of anaphoric properties of the latter, 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. Importantly, the proposed analysis for Th-adjectives provides us with an answer to the puzzling issue regarding the lack of anaphoric properties of Ethnic adjectives.

## 5. Conclusion

In this paper I discussed the morpho-syntactic properties of Relational adjectives. On the basis of Bosque and Picallo's (1996) classification of Relational adjectives as Thematic vs. Classificatory, I show that the former differ from the latter in a systematic way in spite of the fact that both are nominal. More specifically, unlike Cl-adjectives, Th-adjectives are analysed on a par with prepositional Genitive arguments by virtue of the fact that both are arguments of the deverbal noun (cf. Levi (1978), Bartning (1980), Bosque and Picallo (1996), Alexiadou and Stavrou (forthcoming)) and have the same unbounded interpretation (mass/plural reading).

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 –R and cannot serve as event identifier in Spec,Gen/AspP. Therefore, in line with Marchis (2009a and 2009b) and Alexiadou and Stavrou (forthcoming), 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).

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## References

- Alexiadou, A. and Stavrou, M. forthcoming. Ethnic adjectives as pseudo-adjectives: A case study in syntax-morphology interaction and the structure of DP. *Studia Linguistica*.
- Bartning, I. 1980. *Remarques sur la syntaxe et la sémantique des pseudo-adjectifs dénominaux en français*. Stockholm: Almqvist and Wiksell International.
- Borer, H. 2005. *Structuring Sense*, vol. II, *The Normal Course of Events*. Oxford: Oxford University Press.
- Bosque, I. and Picallo, C. 1996. Postnominal adjectives in Spanish DPs. *Journal of Linguistics* 32: 349-385.
- Cardinaletti, A. 1998. On the deficient/strong opposition in possessive systems. In A. Alexiadou and C. Wilder (eds.), *Possessors Predicates and Movement in the DP*, 17-53. Amsterdam/Philadelphia: John Benjamins.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, N. 2001. Derivation by phase. In M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1-52. Cambridge, MA: MIT Press.
- Cornilescu, A. 1995. Rumanian Genitive Constructions, In G. Cinque and G. Giusti (eds.), *Advances in Romanian Linguistics*, 1-52. Amsterdam: John Benjamins.

- Cornilescu, A. 2001. Romanian nominalizations: Case and aspectual structure. *Journal of Linguistics* 37: 467-501.
- Dobrovie-Sorin, C., Bleam, T. and Espinal, M. T. 2006. Bare nouns, number and types of incorporation. In S. Vogeleer and L. Tasmowski (eds.), *Non-definiteness and Plurality*, 51-81. Amsterdam/Philadelphia: John Benjamins.
- Fábregas, A. 2007. The internal syntactic structure of relational adjectives. *Probus* 19: 135-170.
- Giurgea, I. 2008. On Romanian predicative bare nouns. Paper presented at Workshop on bare singulars, argument structure and their interpretation, 11-12 December 2008, Barcelona.
- Grimshaw, J. 1990. *Argument Structure*. Cambridge, MA: MIT Press.
- Halle, M. and Marantz, A. 1993. Distributed morphology and the pieces of inflection. In K. Hale and S. J. Keyser (eds.), *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*, 111-176. Cambridge, MA: MIT Press.
- de Hoop, H. 1993. Case configuration and noun phrase interpretation. PhD Dissertation, University of Groningen.
- Kamp, H. and Reyle, U. 1993. *From Discourse to Logic*. Dordrecht: Kluwer.
- Levi, J. N. 1978. *The Syntax and Semantics of Complex Nominals*. New York: Academic Press.
- Longobardi, G. 1994. Reference to kinds and proper names: A theory of N movement in syntax and logical form. *Linguistic Inquiry* 25: 609-665.
- Marchis, M. 2009a. On the properties of relational adjectives in Romanian and Spanish. Poster at the 19<sup>th</sup> Colloquium on Generative Grammar, 1-3 April 2009, University of the Basque Country.
- Marchis, M. 2009b. Compounding across languages. Paper presented at Going Romance 23, 3-5 December 2009, University of Nice.
- Marchis, M. in preparation. Relational adjectives at the syntax/morphology interface in Romanian and Spanish. PhD Dissertation, Stuttgart University.
- 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.
- Postal, P. 1969. Anaphoric islands. In R. L. Binnick, A. Davison, G. Green, and J. Morgan (eds.), *Papers from the Fifth Regional Meeting Chicago Linguistic Society*, 205-239. Chicago: University of Chicago.
- Rappaport, H. M., Levin, B. 1992. -er nominals: Implications for a theory of argument structure. In T. Stowell and E. Wehrli (eds.), *Syntax and Semantics*, vol. 26, 127-153. New York: Academic Press.
- Reinhart, T. and Reuland, E. 1993. Reflexivity. *Linguistic Inquiry* 24: 657-720.

