

## CLASSIFIERS OF QUANTITY AND QUALITY IN ROMANIAN

Mihaela Tănase-Dogaru\*

**Abstract:** The present paper proposes that classifiers in Romanian pertain to two distinct categories: classifiers of quantity or “massifiers” and classifiers of quality or “count-classifiers”, to borrow the terms from Cheng and Sybesma (1999). The first category is represented by the first nominal in a pseudopartitive construction of the type *o bucată de brânză / a piece of cheese* (Tănase-Dogaru 2009). The second category is represented by the first nominal in the so-called restrictive appositives, an example of which is *Planeta Venus / the planet Venus* (van Riemsdijk 1998, Cornilescu 2007). An important result of the paper is the unification under a similar treatment of concepts which are generally offered different analyses in the literature.

**Keywords:** classifier, massifier, pseudopartitive, restrictive appositives

### 1. Introduction

The paper<sup>1</sup> discusses binominal constructions of the type illustrated in (1), with the aim of offering a uniform treatment of both their syntactic structure and the syntactic status of the first nominal (henceforth N1):

(1) a. o sticlă de vin  
a bottle of wine  
‘a bottle of wine’  
b. orașul București  
city-the Bucharest  
‘the city of Bucharest’

It will be shown that the noun *sticlă* “bottle” in (1a) and the noun *orașul* “the city” in (1b) can receive a uniform treatment in terms of classifiers of quantity and classifiers of quality, respectively.

The paper assumes a nominal architecture for the DP where there are at least two intermediary projections between the lexical NP level and the DP level, i.e. the Number Phrase and the Classifier Phrase: [DP[ClasP[NumP[NP]]].

### 2. Classifiers of quantity

This section is devoted to the syntax and interpretation of the type of constructions illustrated in (1a). The section summarizes the results of previous studies and reiterates

\* University of Bucharest, Department of English, mihaela.dogaru@gmail.com.

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the main points. The type of constructions illustrated in (1a) is shown to consist of a classifier + noun sequence and its syntax is that of a double-headed extended projection (see van Riemsdijk 1998).

## 2.1. Previous studies

In Tănase-Dogaru (2009) it is shown that classifiers and number morphology are not in complementary distribution (cf. Borer 2005). The far-reaching implications of the conclusion regard the well-known parameterization of languages as “classifier languages” – languages where the absence of number morphology correlates with the presence of classifier morphemes ranging over the noun (Simpson 2003, Borer 2005, among others) – and “plural languages” – languages with morphological means of marking number.

Tănase-Dogaru (2009) shows that in “plural languages”, i.e. languages with plural morphology (see Deprez 2004) Number Phrases and Classifier Phrases are not in complementary distribution, as implicit in Borer (2005). Since Classifier Phrases are assumed to project cross-linguistically, languages can be parameterized as in (2):

(2) parameterization of languages in terms of the interplay between number inflection and classifier inflection

- “classifier” languages, e.g. Chinese, Japanese, Thai, Vietnamese, etc.
- “plural-classifier” languages, e.g. English, Italian, Romanian, etc.

The languages in (2a) have a Classifier Phrase, which conflates the roles of the morphologic number and that of the classifier. A Classifier Phrase in such languages is responsible for dividing the stuff denoted by the noun and making it syntactically visible for countability (see, for instance, Doetjes 1997), as in the following example from Chinese (3).

(3) a. yi ge ren  
one CLASS person  
'one person'

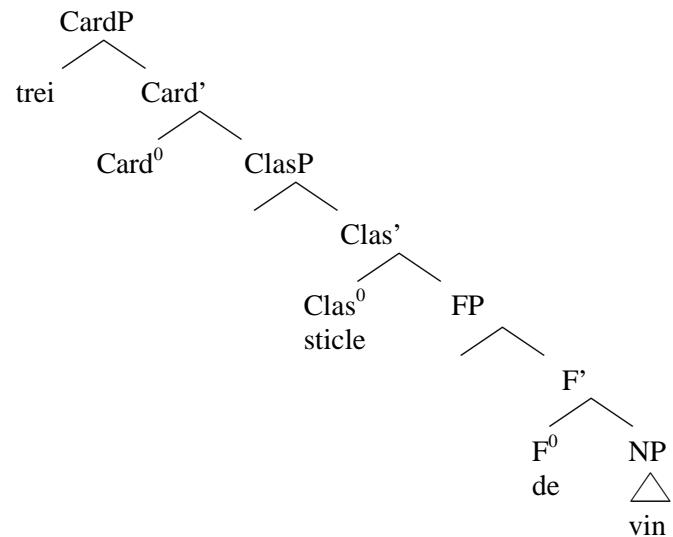
b.

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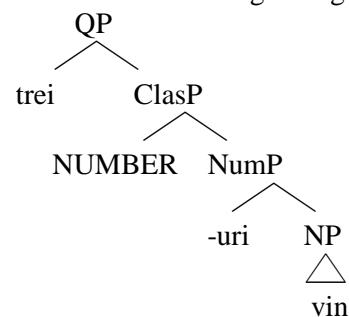
  CardP
  /   \
  yi   Card'
        /   \
        Card0  ClasP
                  /   \
                  Clas'  NP
                    /   \
                    Clas0  N'
                      ge      |
                           |      N0
                           |
                           ren
  
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The languages in (2b) project both a Classifier Phrase and a Number Phrase. The head of the Classifier Phrase may be filled with semi-lexical material in the case of pseudopartitive constructions, as in (4), or, building on Kayne's (2003) proposal, with an abstract noun NUMBER, in (5):

(4) a. trei sticle de vin  
three bottles of wine  
'three bottles of wine'



(5) a. *trei vinuri*  
three wines  
'three kinds / servings of / glasses of wines'



Starting from the general observation that in “plural languages” mass nouns require the presence of measure phrases / amount quantifiers / partitive expressions in order to be counted, Tănase-Dogaru (2009) advances the proposal that such measure phrases in plural languages are classifier phrases, more specifically, they behave like Chinese “massifiers” (see Cheng and Sybesma 1999), i.e. classifiers that create a unit of measure.

After a quick excursus on the classification of partitive expressions in Romanian, the analysis will return to a discussion of “massifiers”. The discussion is necessary in

order to clarify the status of pseudopartitives in Romanian and to reinterpret the first nominal in a pseudopartitive as a classifier.

In Romanian, the “part-of” relation is expressed by means of the prepositions *dintre* ‘from among’, *din* ‘from’ and *de* ‘of’. One important linguistic fact is that these different prepositions c-select NPs with different syntactic properties. *Dintre* c-selects definite plural NPs, while *de* c-selects mass nouns or bare plurals. In the same framework, the differences in c-selection account for the syntactic properties of partitive phrases.

Expressions conveying the “part-of” relation can be classified as (see Tănase-Dogaru 2013):

(i) partitive expressions:  
a. *dintre* partitives:

(6) o parte dintre studenți  
a part from-among students  
'a part of the students'

(7) unul dintre studenții lui  
one from-among students-the his  
'one of his students'

b. *din* partitives

(8) o parte din vin  
a part from wine  
'a part of the wine'  
(9) o sticlă din vinul acela  
a bottle from wine-the that  
'a bottle of that wine'

(ii) pseudopartitive expressions

(10) o bucătă de pâine  
a piece of bread  
'a piece of bread'

The main semantic difference between partitive and pseudo-partitive expressions in Romanian is the fact that, with partitive constructions, N2 denotes a definite or delimited domain, while with pseudo-partitive constructions, N2 refers to an indefinite or unrestricted domain.

The main difference between the two types of partitives proper in Romanian relates to the fact that *dintre* partitives always select a definite plural DP, while *din* partitives select both definite plural DPs (*o parte din studenți / a part of students*) and mass nouns (*o parte din apă / a part of water*). To individualize *din*, notice that only *din* may be used with singular countables/pronouns in types-shifting constructions, which re-interpret

countable singular nouns as uncountables, as in *O parte din/\*dintre/\*de mine/Ion* ‘a part from/\*from-among/\*of me/Ion ‘a part of me/Ion’<sup>2</sup>.

The first nominal in the nominal phrases illustrated in (6) to (10) is a classifier, i.e. a semi-lexical element, which heads a double-headed extended projection. Section 2.2. proceeds with an analysis in terms of their syntax.

## 2.2. The syntactic analysis of classifiers of quantity

Tănase-Dogaru (2008, 2009 and 2013) claims that N1s in Romanian pseudopartitive constructions perform the same function as classifiers in classifier languages. The same view is defended here.

Classifiers are “grammatical means for the linguistic categorization of nouns and nominals” (Aikhenvald 2000: 1). They come in different guises, ranging from purely functional to lexical. Aikhenvald (2000) distinguishes between different types of classifiers, such as: gender systems, noun classifiers, numeral classifiers, possessed/possessor classifiers, verbal classifiers, locative and deictic classifiers.

In traditional analyses, classifiers were considered a subclass of measure phrases, which provide units of mensuration. According to Li (2000), the term “classifier” is due to the fact that the measure word was felt to perform both the function of revealing some characteristics of the entity designated by the noun and that of categorizing nouns into classes. Chen (2003) also notes that nouns in a language like Chinese have their own special sortal classifiers, which indicate in a suggestive manner, the shape, texture, function, etc. of the entities designated by the nouns they are used with. For instance the special classifier for *pen* in Chinese is *zhi*, literally ‘branch’ – suggesting the shape of the pen; the special classifier for *table* is *zhang*, literally ‘stretched, spread’ – suggesting the function of the table.

In languages with plural morphology, such measure phrases are required by mass nouns in order to be countable, i.e. in order to be rendered countable, mass nouns need to be individuated. The examples under (11) show such classifiers at work in English and Romanian:

(11) a. two grains of sand / three drops of whisky / a loaf of bread  
 b. două boabe de orez / trei pahare de lapte / un cub de zahăr  
 two grains of rice / three glasses of milk / a cube of sugar  
 ‘two grains of rice’ / ‘three glasses of milk’ / ‘a sugar cube’

The major difference between purely inflectional classifiers in languages without number morphology and measure phrases in languages with number morphology is that classifiers are required both for what is generally called “mass” nouns (like *rice*, *water*, etc) and for count nouns (*pen*, *book*, etc), while in languages like Romanian they are required only for mass nouns. This has led some linguists to propose that in Chinese all nouns are mass nouns (Chierchia 1998). Another important observation is that in languages with plural morphology, mass nouns can receive plural suffixes in order to

<sup>2</sup> I am grateful to an anonymous reviewer, who pointed out this means of individualizing the preposition *din*.

become countable as an alternative to classifier inflection, as in (12), while in Chinese they cannot.

(12) două zahăruri / trei ceaiuri / multe săruri  
 two sugars / three teas / many salts  
 ‘two types of / cubes of sugar’ ‘three types of / servings of tea’ ‘many types of salt’

Cheng and Sybesma (1999 and 2003) argue that classifiers can be divided into two classes:

(i) classifiers that create a unit of measure or “massifiers”:

(13) a. san ping jiu  
 three bottle liquor  
 ‘three bottles of liquor’  
 b. san ba mi  
 three handful rice  
 ‘three handfuls of rice’  
 c. san wan tang  
 three bowl soup  
 ‘three bowls of soup’

(ii) classifiers that name the unit in which the entity denoted by the noun naturally occurs or “count-classifiers”:

(14) a. san ge ren  
 three CLASS people  
 ‘three persons’  
 b. san zhi bi  
 three CLASS pen  
 ‘three pens’  
 c. san ben shu  
 three CLASS book  
 ‘three books’

There are two main distinctions between massifiers and count-classifiers. First, massifiers allow the appearance of a modification marker *de*, which may intervene in the [massifier + N] sequence, while count-classifiers do not (15). Secondly, massifiers allow the modification of the massifier head with a limited number of adjectives (*da / big, xiao / small*), while count-classifiers do not (16):

(15) a. san bang (de) rou  
 three CLASS-pounds DE meat  
 ‘three pounds of meat’

(16) a. yi da zhang zhi  
 one big CLASS-sheet paper  
 'one big sheet of paper'

b. \*yi da zhi gou  
 one big CLASS dog  
 'one big dog'

On the basis of such evidence, Cheng and Sybesma (1999) conclude that the count-mass distinction is lexically encoded on Chinese nouns, a conclusion the present analysis also adopts. Following in essence Chierchia (1998), the noun can be seen as having a mass denotation and when inserted in the structure, the massifier or count-classifier takes over the job of encoding divisibility.

Classifiers in English and Romanian behave like Chinese massifiers. Both English and Romanian massifiers allow markers of nominal boundary *of* and *de* respectively (17a) and allow modification by adjectives (17b):

(17) a. three pounds of meat  
 a'. trei kilograme de carne  
 three kilos of meat  
 'three kilos of meat'

b. a big sheet of paper  
 b'. o foaie mare de hârtie  
 a sheet big of paper  
 'a big sheet of paper'

Both features seem to point to the fact that Romanian classifiers involve a distinct projection, headed by a semi-lexical item, which can be modified. Therefore, a category of nouns in Romanian can be seen as performing the job of classifiers, i.e. the first nominal in pseudopartitives. These nominal classifiers are the equivalent of Chinese "massifiers".

Building on existing (non-exhaustive) classifications, Tănase-Dogaru (2009 and 2013) offers the following classification of Romanian "massifiers". The examples under (18) below illustrate the classification of "massifier" expressions in Romanian. Since classifiers are required by mass nouns in order to interact with the count system, but Romanian also features classifiers selecting plural nouns, the classification in (18) is also meant to discuss classifiers regarding the types of complements they select.

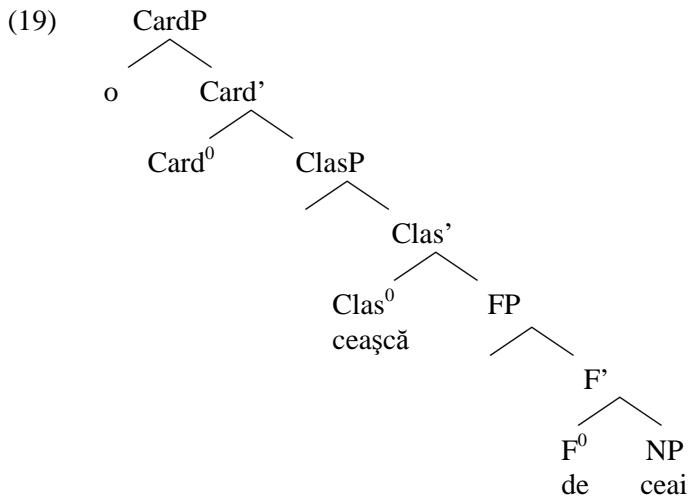
(18) Classification of Romanian massifiers

(i) UNIT NOUNS

a. un act de justiție  
 an act of justice  
 'an act of justice'

- (ii) CONTAINER NOUNS
  - b. un pumn de nisip  
a fist of sand  
'a handful of sand'
- (iii) MEASURE NOUNS
  - c. un dram de speranță  
a grain of hope  
'a little hope'
- (iv) SHAPE NOUNS
  - d. o undă de speranță  
a wave of hope  
'a little hope'
- (v) CARDINAL NOUNS – selecting plural nouns
  - e. o duzină de animale  
a dozen of animals  
'a dozen animals'
- (vi) QUANTIFIER NOUNS – selecting plural nouns
  - f. o pereche de mănuși  
a pair of gloves  
'a pair of gloves'
- (vii) KIND NOUNS – selecting plural nouns
  - g. două tipuri de mamifere  
two kinds of mammals  
'two kinds of mammals'

Pseudopartitive constructions in Romanian are analyzed as involving a single extended projection. The classifier phrase is headed by a semi-lexical item, such as *ceașcă (de ceai)* 'cup (of tea)'.



Section 2 has discussed the relation between the semi-lexical N1s in Romanian pseudopartitives and classifiers in classifier languages. It has been shown that the first nominals in Romanian pseudopartitives perform the same function as “massifiers” in classifier languages, in the sense that they make the noun syntactically “visible” in order to interact with the count system and create a unit of measure for the second nominal in the pseudopartitive construction. The section has advanced a non-exhaustive classification of Romanian “massifiers”, which can be refined by further research.

Section 3 will look at the second type of classifier expressions in Romanian: classifiers of quality or “count-classifiers”.

### 3. Classifiers of quality: Count-classifiers

A central set of data to be considered in section 3 of the present paper is that of descriptive proper names or complex proper names (Cornilescu 2007). These are proper names formed of a common noun + proper name. The descriptive noun designates (see Cornilescu 2007) a social role (kinship, profession, institutional role), or a sort of place (city, street, river, village, etc), some other entity (a theatre, a planet, etc.):

(20) a. Profesorul Ionescu  
           professor-the Ionescu  
           ‘Professor Ionescu’  
   b. Regina Elisabeta  
       queen-the Elisabeth  
       ‘Queen Elizabeth’  
   c. Mătuşa Tamara  
       aunt-the Tamara  
       ‘aunt Tamara’

- d. Prințul Carol  
prince-the Charles  
'Prince Charles'
- e. Orașul Iași  
city-the Iasi  
'the city of Iași'
- f. Strada Paris (examples from Cornilescu 2007)  
street-the Paris  
'Paris street'

This construction can be described in terms of a nominal projection with a semi-lexical head (see van Riemsdijk 1998 and Löbel 2001). This paper claims that the semi-lexical noun functions as a classifier of a specific kind, i.e. a classifier of quality or "count-classifier". Subsection 3.1. summarizes the results of previous studies that have dealt with this type of construction; subsection 3.2. offers an analysis of this type of construction in terms of count-classifiers + noun sequences.

### 3.1. Previous studies

Van Riemsdijk (1998) calls the construction in (21) "qualificational construction", while the semi-lexical head is dubbed "qualifier".

- (21) a. der Planet Venus  
the Planet Venus  
'the Planet Venus'
- b. die Stadt Wien  
the city Vienna  
'the city (of) Vienna'
- c. der Paragraph 218  
the paragraph 218  
'the paragraph 218'
- d. der Monat März  
the month March  
'the month (of) March'

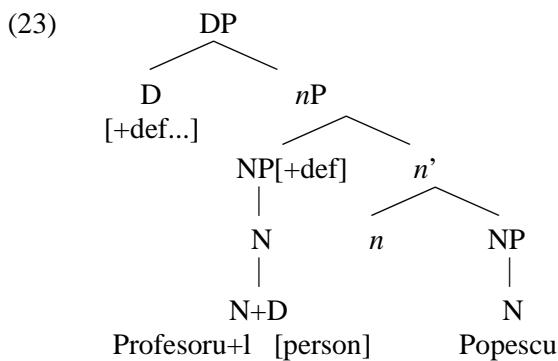
Löbel (2001) refers to the same construction as a non-relational noun licensing the non-participant role of Name. In analyzing examples such as (22), Löbel (2001) endorses the view that these constructions consist of two elements with the same referent, i.e. they are single projections. As put by Löbel (2001: 260), "Names, too, denote a property of the referent of the respective head noun, with which they are coindexed. In this sense they are referentially dependent".

- (22) a. the book "The Name of the Rose"  
b. the poet Shakespeare  
c. the film "Gone with the Wind"  
d. the report No. 26

This semi-lexical “qualificational” noun in restrictive appositives functions as a classifier. The present paper claims that this particular type of classifier is an instance of what Cheng and Sybesma (1999) call “count-classifier”, i.e. a classifier that names the unit in which the element naturally occurs.

Cornilescu (2007) argues against the appositive analysis of this type of construction. The author convincingly demonstrates that English clearly shows their PN status, by the conspicuous absence of the definite article: *Prince Charles*, etc. The hypothesis of a classifier in the functional structure of proper names provides a natural analysis for descriptive proper names, since the classifier is practically visible in their structure. Intuitively, the common name has a classifying role, indicating the kind of entity the proper name denotes, as in *Professor Smith*. While for simple proper names, the proper name itself checks the classifier feature, by Move or Agree, for descriptive proper names, the descriptive common noun merges as the specifier of the nominal-class head, since the feature of this n-head is one of the features of the common noun. With descriptive proper names the silent classifier head is overt.

The structure of a Romanian descriptive proper name is given in (23), where the proper name is claimed to be too low to check [+def, +φ + person], so the descriptive NP must be definite, and checks the D[+def] feature. English, in contrast, allows long-distance Agree.



Cornilescu (2007) shows that in descriptive proper names, the proper name is not part of an appositive structure. While in appositive modification both the modifier and the modifiee should be DPs, as in: *They admire the author of this play, the best known English writer.* // *They admire the best known English writer, the author of this play*, the proper name in the descriptive name construction is an NP not a DP. This is shown by the impossibility of replacing PNs by pronouns in this construction:

(24) a. Profesorul Popescu  
professor-the Popescu  
b. \*Profesorul el  
professor-the he

In contrast, in genuine appositive constructions involving proper names proper names are interchangeable with pronouns, and are thus syntactic DPs:

(25) a. Brâncuși românul  
       Brâncuși Romanian-the  
       b. el românul  
       he Romanian-the

Descriptive nouns should be viewed as semi-lexical categories (see Löbel 2001) with the following properties: they become relational, requiring a complement; they are not referential, since in a phrase like *domnul Popescu*, there is only one referent, that of the proper name.

### 3.2. The syntactic analysis of classifiers of quality

Recall that count-classifiers in Chinese cannot be used with the modification marker *de* (26a) and cannot be modified by adjectives (26b):

(26) a. san bang (de) rou  
       three CLASS-pounds DE meat  
       ‘three pounds of meat’  
       b. liang xiang (de) shu  
       two CLASS-box DE book  
       ‘two boxes of books’  
       c. yi da zhang zhi  
       one big CLASS-sheet paper  
       ‘one big sheet of paper’  
       d. \*yi da zhi gou  
       one big CLASS dog  
       ‘one big dog’

Count-classifiers in Romanian have some parallel features: the lexical nouns they classify cannot be used with *de* (27a) and are not case-marked (27b), with the nominative being used as the default case or citation form (see also Löbel 2001). In addition, agreement is triggered by the functional head, i.e. the classifier (27c). All these features point to the fact that the lexical is inert syntactically.

(27) a. Planeta (\*de) Venus  
       planet-the (\*of) Venus  
       ‘the Planet Venus’  
       a’. orașul (\*de) București  
       city-the (\*of) Bucharest  
       ‘the city (of) Bucharest’  
       b. Planeta Pământ (\*ului)  
       planet-the Earth (\*GEN)  
       ‘the Planet Earth’  
       b’. orașul București(\*ului)  
       city-the Bucharest(\*GEN)  
       ‘the city (of) Bucharest’

- c. Planeta Pământ e foarte frumoasă  
planet FEM Earth MASC is very beautiful FEM  
'The Planet Earth is very beautiful'
- c'. Planeta Pământ e foarte \*frumos  
planet FEM Earth MASC is very beautiful \*MASC  
'The Planet Earth is very beautiful'

It is interesting to notice the fact that Romanian has another option available for restrictive appositives: N1 assigns genitive case to N2 (see (28)).

(28) a. apa Sâmbetei  
water-the Sâmbăta-GEN  
'the water of Sâmbăta'

b. târgul Iașilor  
town-the Iași-GEN  
'the town of Iași'

c. orașul Londrei  
city-the London-GEN  
'the city of London'

The examples point to the fact that, as far as restrictive appositives are concerned, Romanian has two options: the "count-classifier" option and the "genitive" option.

As shown in Tănase-Dogaru (2009 and 2013) the genitive case in Romanian has two semantic values: the partitive and the pseudo-partitive. As shown in section 2.1 of the present paper, Romanian encodes partitivity by means of the prepositions *din* and *dintre* while pseudo-partitivity is encoded by means of the preposition *de*. In Tănase-Dogaru (2013), it is shown that Old Romanian used *de* to express standard partitivity and the preposition was gradually replaced by the two specialized prepositions *din* and *dintre*. In Modern Romanian, remnants of the former standard partitive *de* are to be found in the so-called "possessive partitive" construction.

Section 3 has shown that structures like *orașul Viena* / *city-the Wien* can a receive a treatment on a par with "standard" pseudopartitives, in the sense that the first nominal, the "qualifier" in van Riemsdijk's (1998) terms, behaves like a particular type of nominal classifier, i.e. a "count-classifier".

Summing up, the so-called "restrictive appositives" can plausibly be analyzed as involving a count-classifier and a lexical noun in a single projection.

#### 4. Conclusions

The paper has focused on binominal constructions of two types: pseudopartitives and "restrictive appositives". The major aim has been to show that the two types of binominal constructions can receive a uniform treatment of both their syntactic structure and the syntactic status of the first nominal.

It has been shown that the noun *sticlă* ‘bottle’ in *o sticlă de vin* ‘a bottle of wine’ and the noun *orașul* / *the city* in *orașul București* / *the city (of) Bucharest* can receive a uniform treatment in terms of classifiers of quantity and classifiers of quality, respectively.

In pseudopartitives, the first nominal behaves like a Chinese classifier, in the sense that it creates a unit of measure for the second nominal. In “restrictive appositives”, the first nominal has been shown to act like a Chinese count-classifier, in the sense that it names the unit in which the noun naturally appears.

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