ON THE ALTERNATION BETWEEN INFLECTIONAL CASE AND PREPOSITIONAL PHRASES IN ROMANIAN

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Abstract: The goal of this paper is to examine the alternation between nominal expressions marked with morphological case (e.g. *fiul regelui* 'the king's son') and certain prepositional phrases (e.g. *fiul de rege* 'the royal son') in Romanian. We will show that the two types of constructions are alike insofar as they involve a relation which may either pertain to the lexical meaning of the head N or else be contextually triggered by the presence of the second argument. We will also observe that they differ regarding the nature of the second argument: a strong correlation can be shown to exist between syntactic categories (DPs vs. NPs), Case marking (morphological vs. prepositional) and semantic type (individuals vs. properties).

Keywords: (inflectional/morpological) case, preposition(s), entity, property

1 Introduction

1.1 What is case?

Traditionally, *case* is a morphological notion that refers to an inflectional morpheme occurring on N(oun)s or on other constituents of the N(oun) P(hrase) / D(eterminer) P(hrase) (e.g., D, A(djectives), Quant(fiers), Num(erals)).

For instance, in English and French, the inflectional morpheme varies with the position of the (pro)noun in the sentence. As shown in the following examples, the pronoun is Nominative when preverbal (i.e. Subject) and it is Accusative when postverbal or post-Nominative (i.e. Direct Object):

- (1) a. John loves Mary. (English)
 - b. He_{Nom} loves her_{Acc} .
 - c. * \mathbf{Her}_{Acc} loves \mathbf{he}_{Nom} .
- (2) a. Jean regarde Marie. (French)
 - b. $\mathbf{Il}_{Nom} \, \mathbf{la}_{Acc} \, regarde.$
 - c. *La_{Acc} regarde il_{Nom}.

On the contrary, in languages like Russian, the inflectional morpheme attaches to all NPs / DPs (and their constituents) in the sentence (apud Matushansky 2007):

(3) Eta talantlivaja studentka znaet dvux lingvistov. (Russian) this_{Nom} talented_{Nom} student_{Nom} knows two_{Acc} linguists_{Acc} 'This talented student knows two linguists.'

Within formal grammars – more precisely, in GB (Chomsky 1981, or in MP (Chomsky 1995, 2000) models –, *case* is a more specific notion that refers to a theory dealing with the assignment of the so-called *abstract case*.

Abstract case is a (syntactic) property of nominal expressions that reflects their relation with a Specifier or with some Head. Abstract case may (or may not) have a morphological (i. e. inflectional) realization.

In other words, *morphological case* is an overt realisation of abstract case. The following examples from Latin illustrate this possibility:

(4) a. **Pater filium** amat. (Latin) father_{Nom} son_{Acc} loves 'The father loves his son.'

b. **Patrem filius** amat. father_{Acc} son_{Nom} loves 'The son loves his father.'

1.2 A few remarks about case in Romanian

Romanian is a Romance language which partially inherits morphological cases from Latin, namely the Dative case and the Genitive case which are homonymous.

Dative is assigned in verbal constructions (5), while Genitive is assigned in nominal constructions (6):

(5) Am dat (cărți) **regelui.** (Dative)
have give_{PastPart} books king-the_{Dat}
'I gave (some books) to the king.'

(6) cărtile **regelui** (Genitive)

(6) cărțile **regelui** books-the king-the_{Gen} 'The king's books.'

The difference between Dative and Genitive is visible when substituting by a (personal / possessive) pronoun as in the examples below:

(7) I-am dat (cărți) **lui** /***sale.** (Dative) him_{CL}-have give_{PastPart} (books) he_{Dat} / he_{Gen} 'I gave him (some books).'

(Genitive)

(8) cărțile **lui** / **sale** books-the he_{Gen} / he_{Gen} 'His books.'

Nominative and Accusative are also homonymous, but – unlike Dative and / or Genitive – they do not have a morphologically marked form (see (9) - (10) below), with the exception of certain forms of the personal pronouns in Accusative. The latter situation is illustrated in (11):

(9) **Studentul** vizitează **profesorul**. (Nominative) Student-the_{Nom} visits professor-the_{Acc} 'The student is visiting the teacher.'

(10) **Profesorul** vizitează **studentul**. (Accusative) professor-the_{Nom} visits student-the_{Acc} 'The teacher is visiting the student.'

(11) a. **Tu** /*tine vii la conferință. (Nominative) you_{Nom} you_{Acc} come to conference 'You are coming to the conference.'

b. Vin la conferință cu **tine** / ***tu**. (Accusative) come to conference with you_{Acc} you_{Nom}
'I am coming to the conference with you.'

In what follows, this paper focuses exclusively on the analysis of Dative and Genitive.

1.3 The puzzle

Among its morphological case paradigm, Romanian displays a remarkable alternation between nominal expressions marked for Dative or Genitive and P(prepositional) P(hrase)s headed by one of the functional prepositions a, de or la.

This phenomenon appears systematically in the case of Genitive which alternates with PPs headed by the preposition *de*. This can be seen in the following examples:

- (12) a. Aceasta este camera oaspeților de la nunta Mariei. (Genitive) this is room-the guests-the_{Gen} of at marriage-the Mary_{Gen} 'This is the room of the guests from Maria's wedding.'
 - b. Aceasta este camera **de** oaspeți la care am visat întotdeauna. this is room-the DE guests to which have dream_{PastPart} always This is the guests' room which I always dreamed of.

The above-mentioned alternation is nevertheless much more restricted in the case of Genitive which alternates with PPs headed by the preposition a (see the constructions in (13) below), or in the case of Dative which alternates with PPs headed by the preposition la (see the constructions in (14)):

- (13) a. deportarea evrei**lor** /*a evrei deportation-the Jews-the_{Gen} A Jews 'The deportation of the Jews.'
 - b. deportarea **a** zece evrei / *zeci**lor** evrei deportation-the A ten Jews ten-the_{Gen} Jews 'The deportation of ten Jews.'
- (14) a. S-a adresat participanţilor / ??la participanţi. (Dative) se_{Refl}-has address_{PastPart} participants-the_{Dat} LA participants '(S)he addressed the participants.'
 - b. S-a adresat **la** cinci participanți / *cinci**lor** participanți. se_{Refl} -has address $e_{PastPart}$ LA five participants five-the_{Dat} participants '(S)he has addressed five participants.'

The goal of the next paragraphs is to discuss the conditions under which these alternances occur in Romanian, on the one hand, and to propose an analysis for each of these constructions, on the other hand.

2. Case-marking and prepositional-marking of DPs

2.1 DPs marked for Genitive and PPs headed by a

As shown in (13) above, adnominal constituents marked with morphological Genitive may alternate with PPs headed by the functional preposition a. Note that this alternation is not free, but it is constrained by the form of the first constituent in the DP as follows:

- (i) if the first constituent of the DP is invariable (i.e., cannot take the inflectional morphemes), *a*-marking is obligatory. The next paradigm illustrates some cases of invariables constituents that trigger obligatorily prepositional marking: numerals (15a), the universal quantifier *tot* 'whole' (15b), the pronoun *ceea ce* 'what' (15c):
- (15) a. familie a doi elevi families-the A two pupils 'The families of two pupils.'
 - b. adunarea **a tot** satul assembly-the A whole village-the 'The assembly of the whole village.'
 - c. consecința **a ceea ce** s-a spus mai devreme consequence-the A what se_{Refl}-has say_{PastPart} more early 'The consequence of what has been said earlier.'

It is important to point out that the case of the constituent preceded by a is a default case which is generally associated to Accusative:

- (15') a. adunarea a **tot** satul assembly-the A whole_{Acc} village-the 'The assembly of the whole village.'
 - b. *adunarea a **totului** satul assembly-the A whole-the_{Gen} village-the
- (ii) if the first constituent of the DP is variable (i.e., can take the inflectional morpheme), case-marking is obligatory as shown in (16) below:
- (16) a. familia **fiecărui** elev family-the every_{Gen} pupil 'The family of every pupil.'
 - b. lectura **unei** cărți reading-the a_{Gen} books_{Gen} 'The reading of a book.'

However, there is a small number of constituents that may allow both case-marking (see the examples in (17) below) and a-marking (see the examples in (18) below):

- (17) a. familie câtorva elevi families-the some_{Gen} pupils 'The families of some pupils.'
 - b. adăugarea **unui** pic de zahăr addition-the a_{Gen} little of sugar The addition of a little quantity of sugar.
- (18) a. familie a câțiva elevi families-the A some pupils 'The families of some pupils.'
 - b. adăugarea **a un pic** de zahăr (apud Giurgea (work in progress)) addition-the A a little of sugar 'The addition of a little quantity of sugar.'

2.2 DPs marked for Dative and PPs headed by la

As has been shown in (14) above, nominal constituents marked with Dative may alternate with PPs headed by the functional preposition la.

This alternation observes the same constrains as the ones examined in the previous section:

- (i) if the first constituent of the DP is invariable, prepositional marking with la is obligatory (19):
- (19) a. Am dat (diplome) **la doi** elevi. have give_{PastPart} diplomas LA two pupils 'I have given diplomas to two pupils.'
 - b. M-am adresat **la tot** satul. me_{Refl}-have address_{PastPart} LA whole village-the 'I spoke to the whole village.'
 - c. S-a opus **la ceea ce** s-a spus mai devreme. se_{Refl}-has oppose_{PastPart} LA what se_{Refl}-has say_{PastPart} more early '(S)he opposed to what has been said earlier.'
 - (ii) if the first constituent of the DP is variable, case-marking is obligatory (20):
- (20) a. Am dat (diplome) **unui** elev. have give_{PastPart} diplomas a_{Dat} pupil 'I gave diplomas to a pupil.'
 - b. M-am adresat **întregului** sat. me_{Refl}-have addressed entire-the_{Dat} village 'I spoke to the whole village.'
 - c. S-a opus **tuturor** lucrurilor spuse mai devreme. se_{Refl} -has oppose $e_{PastPart}$ all e_{Dat} things-the e_{Dat} said e_{FemPl} more early '(S)he opposed all the things said earlier.'

Notice that a limited number of constituents may allow both case-marking (see the examples in 21 below) and *la*-marking (see the examples in 22 below):

- (21) a. A telefonat **câtorva** colegi. has phone_{PastPart} some_{Dat} colleagues '(S)he called some colleagues.'
 - b. A acordat premii **fiecărui** elev. has award_{PastPart} prizes every_{Dat} pupil '(S)he gave prizes to every pupil.'
- (22) a. A telefonat **la câțiva** colegi. has phone_{PastPart} LA some colleagues '(S)he called some colleagues.'
 - b. ??A acordat premii **la fiecare** elev. has award_{PastPart} prizes LA every pupil '(S)he gave prizes to every pupil.'

2.3 Towards a generalisation

In the light of the data examined above, we can now tempt to propose the following generalisation with respect to case-marking of DPs (i.e. nouns having a D) in Romanian:

- (23) a. DPs having a variable constituent on the first position are morphologically case-marked;
 - b. DPs having an invariable constituent on the first position are prepositionally case marked.

3 Case-marking and prepositional-marking of NPs

3.1 The data

As illustrated in the examples (12) above, adnominal constituents marked with Genitive systematically alternate with PPs headed by the functional preposition de.

This phenomenon appears with several types of nouns: relational nouns (24a), deverbal nouns (24b), picture nouns (24c), object denoting nouns (24d):

(24)	a.	fiul regelui son-the king-the _{Gen} 'The son of the king.'	VS.	fiul de rege son-the DE king 'The royal son.'
	b.	construirea caselor building-the houses-the _G	VS.	construirea de case building-the DE houses
		'The building of the hous	ses.'	'The building of houses.'
	c.	fotografia grupului picture-the group-the _{Gen}	VS.	fotografia de grup picture-the DE group
		'The picture of the group).'	'The group picture.'
	d.	uşa bisericii door-the church-the _{Gen} 'The door of the church.'	VS.	uşa de biserică door-the DE church 'The church door.'

Both types of construction express similar (lexical) semantic values: alienable possession (25a), inalienable possession (25b), human relationship (25c), goal (25d), content (25e), location (25f), time (25g):

(25)	a.	curtea împăratului court-the emperor-the _{Gen} 'The court of the emperor.'	/	curtea de împărat court-the DE emperor
	b.	gulerul cămășii collar-the shirts-the _{Gen} 'The collar of the shirt.'	/	gulerul de cămașă collar-the DE shirt
	c.	nepotul unchiului nephew-the uncle-the _{Gen} 'The nephew of the uncle.'	/	nepotul de unchi nephew-the DE uncle
	d.	camera oaspeţilor room-the guests-the _{Gen} ,The guests' room.'	/	camera de oaspeți room-the DE guests
	e.	ostrovul florilor isle-the flowers-the _{Gen} 'The isle of the flowers.'	/	ostrovul de flori isle-the DE flowers
	f.	aerul muntelui air-the mountain-the _{Gen} 'The mountain air.'	/	aerul de munte air-the DE mountain

g. căldura verii / căldura de vară heat-the summers-the_{Gen} heat-the DE summer 'The summer heat '

3.2 Formal constraints

It is important to point out that the two types of adnominal constituents mentioned above obey to different formal constraints than the ones examined in § 2:

(i) adnominal constituents marked with Genitive are necessarily nouns with a determiner:

(26)	a.	fiul rege lui	/	fiul unui rege
		son-the king-the _{Gen}		son-the a _{Gen} king
		'The king' s son.'		'The son of a king.'
	b.	*fiul rege		
		son-the king		

(ii) in contrast, adnominal constituents marked with *de* are necessarily nouns without determiner, regardless of its nature (27a), but can have (adjectival or prepositional) modifiers (27b-c):

(27)	a.	*fiul de regele son-the DE king-the	/	*fiul son-the	
	b.	fiul de rege african son-the DE king African			C
		'The African royal son.'			
	c.	construirea de case din			
		building-the DE houses of	wood		
		'The building of wooden ho	ouses.'		

In other words, adnominal constituents marked with Genitive are full nominal expressions (i.e., DPs), while adnominal *de*-marked constituents are incomplete nominal expressions (i.e., NPs).

3.3 Idiomatic expressions

There are exceptions to the free substitution between the constructions with morphological Genitive and the constructions with the preposition de, namely compounds.

On the one hand, there are constructions taking only the Genitive-marking and disallowing *de*-marking. The following paradigm illustrates this possibility:

(28)	a.	floarea soarelui	VS.	*floarea de soare
		flower-the sun-the _{Gen} 'sunflower'		flower-the DE sun
	b.	regina nopții queen-the nights-the _{Gen} 'nicotiana'	VS.	*regina de noapte queen-the DE night
	c.	iarba dracului grass-the devil-the _{Gen} 'tobacco'	VS.	*iarba de drac grass-the DE devil

d. mâna Maicii Domnului vs. *mâna de Maica Domnului hand-the Mother-the_{Gen} God-the_{Gen} hand-the de Mother God-the_{Gen} 'Anastatica hierchuntica'

On the other hand, there are constructions – such as the ones illustrated in (29) below – taking only the *de*-marking and disallowing Genitive-marking:

(29)	a.	floarea de colț	VS.	*floarea colțului
		flower-the DE corner		flower-the corner-the _{Gen}
		'Edelweiss.'		
	b.	laptele de pasăre	VS.	*laptele păsării
		milk-the DE bird		milk-the bird-the _{Gen}
		'snow eggs'		
	c.	dintele de lapte	VS.	*dintele laptelui
		tooth-the DE milk		tooth-the milk-the _{Gen}
		'milk tooth'		

As in the case of the systematic alternations (see the previous sections), the choice between case-marking and *de*-marking for compounds is strictly correlated to the categorial status of the adnominal constituent. More precisely, DPs are case-marked, while NPs are *de*-marked.

However, since we are dealing with idiomatic constructions, we may be tempted to think that the choice of one or another type of marking depends on extralinguistic factors.

Indeed, nominal expressions referring to kinds or to unique entities (such as the sun, the devil, the Virgin Mary) are generally realized as DPs (i.e. nouns with the definite article), hence case-marking occurs.

In contrast, nominal expressions referring to non unique entities (such as birds, corners, milk) may be realized as NPs, hence *de*-marking occurs.

3.4 Towards a generalisation

The data examined in this section allow us to propose the following revisited generalisation:

- (30) a. An adnominal nominal projection is (morphologically) case-marked if it is a DP with a variable constituent on the first position (cf. 23a above);
 - b. An adnominal projection is (prepositionally) marked by **de** if it is an NP.

3.5 Syntactic structure and interpretation

The contrast described above between case-marking of DPs and prepositional marking of NPs may be represented in a twofold manner.

From a **syntactic** point of view, the following representations may be proposed:

(31)
$$DP < e >$$
 (32) $DP < e >$ $DP < e >$

The structure given in (31) differs from the one in (32) with respect to the categorial nature of the embedded constituent: PPs headed by a so-called "functional" preposition in (31) and DPs carring the inflectional morpheme in (32).

They also differ from a **semantic** point of view: while in the constructions with Genitive the head N denotes a relation between two individuals (the one denoted by DP_1 and the one denoted by DP_2) (see Beyssade and Dobrovie-Sorin 2005), in prepositionally marked constructions, the head N denotes a relation between an individual (denoted by DP_1) and a property (denoted by NP_2) (see Kolliakou 1999, Mardale 2007).

In old Romanian, as well as in some contemporary regional dialects, there are constructions in which adnominal *de*-constituents may have an <e>-type denotation. Note however that in that case, *de* introduces a DP headed by the indefinite article (not a NP):

- (32) a. *c-ar fi pierdut urma d-o căprioară* (apud TDR: 258) that-AUX_{PAST.COND} be lost track-the DE-a_{FEM.SG} deer '... that (s)he would lost the track of a deer'
 - b. o coadă de un topor (apud TDR: 372) a_{FEM.SG} handle DE an_{MASC.SG} axe 'a handle of an axe'

3.6 Distributional constraints

The correlations established in the previous sections explain a number of distributional constraints. In what follows, we will examine these constraints.

3.6.1 Distribution in predicate position¹ (cf. Milner 1982)

Adnominal constituents marked with Genitive case cannot appear after the copula:

- (33) a. *fiul este regelui son-the is king-the_{Gen}
 - b. *fotografia este grupului picture-the is group-the_{Gen}
 - c. *uşa este bisericii door-the is churches-the_{Gen}

In order for them to appear after the copula, we need to insert the so-called *genitive* article al, a, ai, ale (made up of the preposition a followed by the definite article) in front of the Genitive DP:

- (34) a. Fiul este **al** regelui. son-the is A-the king-the_{Gen}
 - b. Fotografia este a grupului. picture-the is A group-the_{Gen}
 - c. Uşa este **a** bisericii. door-the is A church-the_{Gen}

In contrast, we can observe that *de*-marked constituents can appear after the copula (35):

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¹ By predicate position we understand post-copular position.

- (35) a. Fiul este de rege (nu de sclav). son-the is DE king (not DE slave) 'This is a royal son (not a slave son).'
 - b. Uşa este de biserică (nu de casă). door-the is DE church (not DE house) 'This is a church door (not a house door).'

3.6.2 Alternance with APs

Certain *de*-marked constituents may alternate with an AP (36), while Genitive-marked constituents may not do so:

(36)	a.	fiul de rege	\rightarrow	fiul regal
		son-the DE king		son-the royal _{Adj}
				'The royal son.'
	b.	uşa de biserică	\rightarrow	uşa bisericească
		door-the DE church		door-the church _{Adj}
				'The ecclesiastic door.'

3.6.3 Alternation with pronouns

Adnominal constituents marked with Genitive case may alternate with personal pronouns (which are equally marked with Genitive case):

(37)	a.	fiul	regelui	\rightarrow	fiul lui
		son-th	e king-the _{Gen}		son-the him _{Gen}
		'The k	ing's son.'		'His son.'
	b.	uşa	bisericii	\rightarrow	uşa ei
		door-t	he church-the _{Gen}		door-the her _{Gen}
		'The d	loor of the church.'		'Its door.'

In contrast, de-marked constituents cannot alternate with personal pronouns.

3.6.4 Anaphora

The complement of *de*-marked constituents cannot serve as anaphoric antecedents for another DP (38). In other words, *de*-marked constituents are not referential. For instance, in (38a) the relative *care* 'that' cannot refer to the andominal constituent *(de) rege* 'royal' since the latter denoted a quality (i.e. a property) and not an individual. In this sense, compare the construction given in (38a) with the one in (38b):

- (38) a. *El este fiul de [rege]_i pe care_i tânăra speră să îl_i întâlnească. he is son-the DE [king]_i PE_{Acc} which_i youngwoman-the hopes that him_i meet
 - b. El este [fiul de rege]_i pe care_i tânăra speră să îl_i întâlnească. he is [son-the DE king]_i PE_{Acc} which_i youngwoman-the hopes that him_i meet 'He is the royal son that the young woman hopes to meet.'

In constrast, the adnominal constituents marked with Genitive may serve as antecedents for anaphoric pronouns since the Genitive marked constituents denote individuals (see 39). In other words, constituents marked with Genitive are referential:

- i. El este fiul regelui pe care tânăra speră să îl întâlnească. (ambiguous) he is son-the king-the_{Gen} PE_{Acc} which youngwoman-the hopes to him meet 'He is the son of the king that the young woman hopes to meet.'
 - ii. El este fiul [regelui]_i pe care_i tânăra speră să îl_i întâlnească. he is son-the [king-the_{Gen}]_i PE_{Acc} which_i youngwoman-the hopes to him_i meet
 - iii. El este [fiul regelui]_j pe care_j tânăra speră să îl_j întâlnească.
 - he is [son-the king-the_Gen]_j PE_{Acc} which_j youngwoman-the hopes that him_j meet b. i. Ea este fiica [profesorului]_i pe care_i l_i-am văzut ieri. (non ambiguous) she is daughter-the [teacher-the_Gen]_i PE_{Acc} which_i him_{CLi} -has $see_{pastpart}$
 - ii. Ea este [fiica profesorului]_j pe care_j am văzut-o_j ieri. she is [daughter-the teacher-the_{Gen}]_j PE_{Acc} which_j has $see_{pastpart}$ -her_{CLj} yesterday 'She is the daughter of the teacher that I saw yesterday.'

3.7 To sum up

The following table summarizes the results of this section.

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Table 1

	Genitive-marked constituents	adnominal de-marked constituents
have a D(eterminer)	yes	no
denote properties	no	yes
can appear in predicate position	no	yes
can alternate with APs	no	yes
can alternate with pronouns	yes	no
can be antecedents for anaphoric	yes	no
pronouns		

3. Conclusion

The constructions analyzed here are alike insofar as they involve a relation (which may either pertain to the lexical meaning of the head N or else be contextually triggered by the presence of the second argument).

They differ regarding the nature of the second argument: a strong correlation can be shown to exist between syntactic categories (DPs vs. NPs), Case marking (morphological vs. prepositional) and semantic type (type \leq vs. type \leq e, t \geq).

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