THE SEMANTIC DEFINITENESS OF ROMANIAN PLAIN FREE RELATIVE CLAUSES

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All free relatives (henceforth FRs) in English, whether plain or introduced by *-ever wh-*phrases, have been shown to be semantically definite, that is maximalizing (Jacobson 1995; Caponigro 2002a / b, 2003), the apparent quantificational readings of *-ever* FRs being a result of quantification over possible worlds (Dayal 1997; Tredinnick 2005).

Romanian plain FRs (i.e., FRs introduced by simple *wh*-phrases as opposed to compound *ori-* forms), like their English counterparts, have been analyzed as complex nominals (Cornilescu 1986 / 1990), being assigned a D°^CP structure à la Kayne (1994) (vezi David 2012). By using the theoretical framework of Minimalism supplemented by formal semantics this paper aims at showing that Romanian plain FRs are characterized by semantic definiteness (i. e., maximality), patterning like plural definite descriptions, their D° being endowed with a [+Max] feature (cf. Caponigro 2002a for English) and that the definite DP analysis can be maintained, even though free relatives exhibit Quantificational Variability Effects (henceforth QVEs) and get universal readings in non episodic contexts.

The paper is organized as follows: In section 1 we argue for the semantic definiteness (i.e., maximality) of Romanian plain FRs. Sections 2 and 3 show that the definite DP analysis can be maintained even though FRs exhibit QVEs and despite the fact that plain FRs get universal readings in generic contexts.

1. Maximality and FRs

Maximality means that the FR always picks out a maximal individual or the maximal set of individuals as its denotation. Maximalizing semantics is due to a maximalizing operation whose effect can be seen in (1):

(1) *Am invitat pe cine ai spus.*
(I) have invited PE who (you) have said
'I invited who you said'

The FR above refers to the maximal set of persons having the property denoted by the relative clause. More specifically, (1) implies that I invited *all* the persons you told me to invite.

Thus, the plain FR in (1) denotes the same kind of object as definite descriptions (Jacobson 1995), namely the *maximal sum* or *the maximal plural individual* made of the sum

of things that are on the table (Link 1983) (i.e., the singleton set containing that very same maximal plural individual).

In the next sections we will show that the quasi universal reading in (1) is indeed an effect of maximalizing operation. Note that when the *wh*-phrase has no nominal restriction, the FR is ambiguous between *a unique individual* or *a maximal sum* denotation, as in (2):

(2) *Ia ce este în coș.*
take what is in basket
'Take what you find in the basket'
Paraphrase: Take the thing / all the things you find in the basket.

In section 2 we discuss an apparent argument against the definite DP analysis of plain FR, namely that FRs in generic adverbially quantified sentences display Quantificational Variability Effects, that is, they pattern like indefinites. We will show that the definite DP analysis can be maintained (cf. Hinterwimmer 2008).

2. Plain FRs and Quantificational Variability Effects (QVEs)

QVEs were first observed in English in sentences containing singular indefinites and bare plurals (Kamp 1981; Heim 1982) such as the ones in (3a,b–4a,b), which can be paraphrased as in (3c–4c):

(3) a. *A dog is **usually** intelligent.*
b. Dogs are **usually** intelligent.
c. **= Most** dogs are intelligent.
(4) a. *A dog is **sometimes** intelligent.*
b. Dogs are **sometimes** intelligent.
c. = **Some** dogs are intelligent.

In the adverbially quantified sentences above the quantificational force of the respective singular indefinite or bare plural apparently depends on the quantificational force of the Q(uantificational)-Adverb contained in the clause.

The same phenomenon happens with plain FRs contained in adverbially quantified sentences. As a consequence, this interpretive effect has been taken to be evidence that the covert determiner selecting for the CP represented by the *wh*-clause is indefinite (Berman 1994; Wiltschko 1999). Consider the examples in (5–6). Plain FRs get QV readings, according to which the individual denoted by the FR varies with the situations / eventualities quantified over by the Q-Adverb. As can be seen in the (b) sentences below the paraphrases for one and the same FR *ce pictează Maria* 'what Maria paints' change from one sentence to another, depending on the Q-Adverb contained in the sentence.

(5) a. *[$_{FR}$ Ce pictează Maria] este **de obicei** interesant.*
what paints Maria is usually interesting
'What Maria paints is usually interesting'
b. ***Multe** lucruri / tablouri pictate de Maria sunt interesante.*
many things / paintings painted by Maria are interesting.
'Many things / paintings by Maria are interesting'

(6) a. *Ce pictează Maria este* ***întotdeauna*** *interesant.*
what paints Maria is always interesting
'What Maria paints is **always** interesting'

b. ***Toate*** *lucrurile / tablourile pictate de Maria sunt*
all thing spaintings painted by Maria are
interesante.
interesting.
'All things Maria paints are interesting'

Now consider the adverbially quantified FRs in temporally specified sentences (i.e., episodic contexts) in (7a–8a) and their paraphrases in 7c–8c). Plain FRs pattern exactly like plural definite DPs modified by a restrictive relative clause in that both structures easily get QV readings (cf. Hinterwimmer 2008) (see 7b–8b). The default interpretation of plain FRs lacking a nominal restriction is, therefore, that of plural definite descriptions (henceforth PDDs).

(7) a. [$_{FR}$ *Cine a ținut conferințe despre maidanezi la*
who has held conferences about stray dogs at
școala de vară de anul trecut] ***era***
school.the of summer of year.the last was
de obicei *deschis la minte.*
usually open at mind
'Who lectured on stray dogs at the summer school last year was usually open- minded'

b. *Persoanele care au conferențiat despre maidanezi*
persons.the which have lectured about stray dogs
la şcoala de vară de anul trecut erau
at school.the of summer of year.the last were
de obicei *deschise la minte.*
usually open at mind
'The people who lectured on kangaroos at the conference last summer were usually open-minded'

c. paraphrase for both (a) and (b):
Majoritatea *persoanelor care au conferențiat*
majority.the persons.the$_{GEN}$ which have lectured
despre maidanezi la scoala de vară de anul trecut
about stray dogs at school.the of summer of year.the last
erau ***de obicei*** *deschise la minte.*
be$_{IMP}$ usually open at mind
'Most of the people who lectured on stray dogs at the summer school last year were open-minded'

(8) a. *Cine a fost sărutat de Maria la petrecerea de aseară*
who was kissed by Mary at party.the from last night
avea ***de cele mai multe ori*** *părul blond.*
have$_{IMP3SG}$ usually hair.the blond.
'Who was kissed by Mary at the party yesterday was usually blond'

b. ***Persoanele*** *pe care le-a sărutat Maria*
people.the PE which CL $_{3PL.ACC}$- has kissed Mary

la petrecerea de aseară *aveau* ***de cele mai multe ori***
at party.the of last night have$_{IMP3.PL}$ usually
părul blond.
hair.the blond
'The people Maria kissed at the party last night were usually blond'.

c. paraphrase for both (a) and (b):
Majoritatea *persoanelor* *pe care le-a sărutat*
most people.the$_{GEN}$ PE which CL$_{3PL.ACC}$ -have kissed
Maria aveau părul blond.
Mary have$_{IMP3PL}$ blond hair.
'Most of the people who were kissed by Mary at the party yesterday were blond'.

However, QVEs are also encountered with singular DPs, as shown in (9–10), which suggests that Q(uantificational)-Adverbs do not quantify over individuals, as previously thought. It is now clear that they exclusively quantify over (minimal) situation which contain *the unique* / *maximal sum individual* denoted by the FR. As seen in (9–10), due to the fact that a set of situations is familiar to the hearer, each situation in this set can be assumed to contain a unique individual that satisfies the predicate denoted by the respective NP. The Q-adverb can thus quantify over the atoms / subsituations of this set. In the examples below the respective DP receives a marked intonation pattern, it bears a focus accent or a contrastive-topic accent (Hinterwimmer 2008).

(9) a. *Paul URĂŞTE să meargă la concerte de jazz:*
Paul hates SĂ go$_{SUBJ3SG}$ to concerts of jazz
Pianistul *$_{C(ontrastive)T(opic)}$ flirtează* ***întotdeauna*** *cu prietena lui.*
pianist.the flirt$_{PRES3SG}$ always with girlfriend his
'Paul hates going to jazz concerts: the piano player always flirts with his girlfriend'

b. Paraphrase:
Toți *pianiștii flirtează cu prietena lui.*
all pianists.the flirt$_{PRES3PL}$ with girlfriend his
'All the piano players flirt with his girlfriend'

(10) *În ceea ce priveşte cursele de formula 1,*
regarding races.the of formula 1
am remarcat un lucru amuzant:
(I) have noted a thing funny:
Bărbatul *care pilotează maşina [ALBASTRĂ]$_{C(ontrastive)T(opic)}$*
man. the who drive$_{PRES.3SG}$ car.the blue
este ***de cele mai multe ori*** *[AGRESIV]$_{F(ocus)}$*
is usually aggressive
'There is one thing that is really funny about car races: The man driving the blue car is usually aggressive'

The data above clearly indicates that the presence of Quantificational Variability Effects is not an argument for the indefiniteness of FRs, as originally thought. On the contrary, on account of their behavior similar to definite DPs (both in the singular and in the plural), Quantificational Variability Effects reinforce the view that plain FRs are definite descriptions.

3. Plain FRs and Genericity

In generic contexts plain FRs encourage a universal reading. This is why they appear in sayings in both English and Romanian (see 11–12). This section shows that this is a recognition of their maximality and is a result of quantification over situations.

As known, at least the singular definite article can be used generically in English, while in Romanian both the singular and the plural definite articles can. Therefore in both languages, maximality can induce genericity (Farkas, de Swart 2007), that is, since FRs are maximal, they are expected to be used generically. Indeed, in both languages, plain FRs manufacture kinds, which are not otherwise lexicalized in the language (e.g., *mărul roşu* 'the red apple' as opposed to *mărul care este pe masă* 'the apple which is on the table' (cf. Cornilescu 1982):

(11) *Cine nu-ncearcă nici nu câştigă.*
who not-tries nor not wins
'He who does not take risks does not win'

(12) *Cine are prieten nărod ajunge din pod în glod.*
who has friend stupid gets from attic into mud
'Those who have stupid friends get into trouble'

As known, generic sentences contain a generic operator Gen understood as a quantificational adverb with sentence scope. Gen is not synonymous with any of the overt quantificational adverbs.

The covert generic operator quantifies over situations containing a (prototypical) individual (atomic, or non-atomic), producing co-variation of individuals with the situations or parts of the situations quantified over (Chierchia 1998). Thus the apparent quantification over entities is actually the result of the interaction between entities and situations / events), as apparent in (13):

(13) *Mary se întâlnește cu cine dorește.*
Mary $\text{REFL}_{\text{3SG.ACC}}$ meets with who (she) likes.
'Mary meets who she likes'
Paraphrase: For all relevant (minimal) situations, Mary meets the person who she likes in that situation.

Consider now the FR in (14). In the episodic (a) sentence the FR denotes the maximal atomic individual having the property of being at the top of the ballot. In the non episodic context created by the adverb *pe atunci* "in those days" the FR has two readings available, both of them generic.

(14) a. *Ieri Ion a votat cu cine era pe prima poziție*
yesterday Ion has voted with who was on first position
pe buletinul de vot. (episodic)
on bulletin.the of vote
= 'Ion voted for the person who was at the top of the ballot.'

b. *Pe atunci Ion vota cu cine era pe prima poziție*
on then Ion vote_{IMP} with who was on first position

pe buletinul de vot. (non episodic)
on bulletin.the of vote

b' = (generic, binding the FR) : Generally, when Ion voted for someone, he voted for the person at the top of the ballot.(co-variation)

$\lambda_{s0} \leq GEN_{S0}$ […][…ιxP(x,s)…]

b'' = (generic, not binding the FR): There was a person who was always on top of the ballot and generally, when Ion voted for someone, he voted for that person.

$\lambda_{s0} \leq GEN_{S0}$ […][…ιxP(x,s_0)…]

In (14b) the adverbial phrase *pe atunci* 'in those days', although not quantificational, facilitates a generic / habitual reading by delimiting a period of time across which minimal situations can be defined. It divides the period of time s, which contains voting situations s' (cf. Tredinnick 2005), as shown in (15):

(15) s ("*those days"*)

s'(day 1) s' (day2) s'(day3) …

Thus, in the episodic (i.e. temporally specified) sentence in (14a) the FR denotes a unique person, while in a generic context, the FR has two interpretations: in (14b') the reference of the FR covaries with the situation (i.e., it evinces Quantificational Variability Effects), while in (14b'') the FR has a fixed reference, in the sense that it denotes the same person in every situation.

Therefore, in each of the cases above (episodic, generic co-varying value and generic fixed value) the FR denotes a *unique* / *maximal individual*.

In conclusion, FRs in generic contexts are not universally quantified. The apparent universal effects are in fact a result of quantification over situations.

To conclude, in plain FRs the determiner selecting the CP contributes uniqueness / maximality, like the determiner of singular and plural definite descriptions. Consider the DP in (16) *lucrurile din coș* 'the things in the basket', where *the* overtly triggers maximality, its denotation being expressed by the iota operator[1].

(16) **Plural Definite Descriptions**

lucrurile din coș
things.the from basket
'the things in the basket'

DP **ι x.[(din-coș)(x)∧ inanimate (x)]**

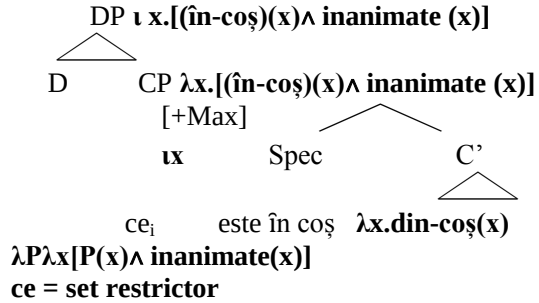
D NP
-le
ι *lucruri din coș* **λx.[(din-coș)(x)∧ inanimate (x)]**

We therefore assume that, as illustrated in (17), the external D° of plain FRs is endowed with the feature [+*Max*]. Following Caponigro (2002 / 2003), we take maximality not to be

[1] We borrowed Caponigro (2003)'s notation, while Link (1983) uses the sigma operator.

encoded in the *wh*-words themselves (contra Jacobson 1995). Thus, since other w*h*-constructions such as modal-existential constructions and some questions[1] do not trigger maximality we take semantic definiteness, that is maximality, to be encoded in the covert external determiner selecting the CP.

(17) **FR** Ia [$_{FR}$ ce este în coș].
take what is in basket.
'Take what there is in the basket'



Summing up, the denotation of **both** plural definite descriptions and plain FRs in Romanian is the individual resulting from the sum of all the atomic / plural individuals that are in the basket (i.e., **ιx.în-coș(x)**). As a consequence, both constructions can receive the same syntactic representation. Romanian plain FRs are DPs whose covert D° is endowed with the feature [+Max] which accounts for their semantic definiteness[2].

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[1] Examples of non-maximal *wh*-constructions are given below :

a. Am ce citi / ce să citesc. (modal-existential construction)
(I) have what read$_{INF}$ / what SĂ read$_{SUBJ1SG}$
'I have what to read / = I have something to read'

b. Pe cine ai văzut la manifestația contra lui B? (question)
PE who (you) have seen at manifestation.the against the$_{DAT}$ B
'Who did you see at the manifestation against B?'
= Who (from among our mutual acquaintances) did you see at the meeting against B?

[2] For English plain FRs this proposal is supported by the experimental study conducted by Caponigro & al. (2011) which tested the acquisition of plural definite descriptions and FRs and found that children acquire a maximal interpretation for these constructions around the same time – even if maximality is overtly expressed in the case of PDDs and covertly triggered in the case of plain FRs, and even if these two constructions have different degrees of frequency in children's input.

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