ROMANIAN UNEXPECTED RELATIVES[1]

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Abstract. This paper addresses the syntactic-semantic analysis of an apparently *sui generis* construction that has so far been detected in Romanian only. The construction, called the "R(omanian) U(nexpected) R(elative construction)") has the superficial appearance of a degree-denoting complex DP, except that it lacks the definite article that is typically found in the latter. Despite its indefinite appearance, an RUR has definite semantics and differs semantically from a minimally difference DP that possesses the definite article in that the relative-external NP fails to be presupposed. The analysis proposed in this paper locates the difference between RURs and comparable definite DPs in a formal feature [EQ] that is found in RURs only, and which triggers the interpretation of CP as a function from degrees to restricted intensional generalized quantifiers of degrees.

1. INTRODUCTION

This paper deals with a construction that is licensed by the grammar of Romanian, but appears to be absent from other genetically related or geographically close languages I have been able to check. At the same time, there do not seem to be – as far as I can tell at the moment – any distinguishing properties of Romanian that can be conducive to a principled explanation for the presence of this construction and its absence elsewhere. Pending the discovery of such licensing properties, if they exist, I will assume that this construction is the result of historical processes (whose investigation is left for future research), and that it has a synchronically *sui generis* status. From the perspective of other structurally similar languages, the presence of this construction in Romanian is "unexpected", and I will thus call it the "Romanian Unexpected Relative-construction" (RUR), an entirely neutral term, which does not prejudge its analysis.

Despite their apparently *sui generis* status, RURs are theoretically interesting and challenging. They are superficially identical to another cross-linguistically widely attested construction, which I will call the "Degree-denoting Complex DP construction" (DCDP), with one observable difference: RURs lack the definite article, which is typically found in DCDPs. At a more abstract level, RURs and DCDPs share a number of properties, but also differ from each other in subtle and intriguing ways. The characterization of the properties of RURs and DCDPs and the construction of a maximally economical analysis capable of capturing both their similarities and differences are the principal goals of this paper

The remainder of the paper is organized as follows. In section 2, I provide a descriptive characterization of DCDPs and RURs, of the properties that they share, and of those that distinguish between them. I also consider a number of *prima facie* conceivable ways of "regularizing" them, that is, of reducing them to independent 'well known' constructions, and show that such attempts at regularization fail. In section 3, I propose compositional semantic analyses for DCDPs and RURs. In section 4, I argue that the shared and distinguishing properties of the two constructions may be derived from the analyses proposed in section 3, in conjunction with independently motivated assumptions. Section 5 summarizes the results of the paper.

2. DESCRIPTIVE CHARACTERIZATION OF DCDPs AND RURs

DCDPs belong to the larger semantic class of relative constructions that Dayal (1995) called "definite relatives" and Grosu and Landman (1998) called "strange relatives of the third kind" (SRTK); in the remainder of this paper, we will use the latter term. SRTK are characterized by an inability to exhibit existential force, their quantificational force being definite or universal. DCDPs are a special case of SRTKs, characterized by the fact that their denotation is a degree on some scale. The data that we will discuss and analyze in what follows are in fact a sub-variety of DCDPs, characterized by the fact that the 'gap' of relativization lies in the complement position of verbs that select a degree-denoting expression as their internal argument[2]. Data from English, French, and Romanian that illustrate this variety of DCDPs with respect to the scales of weight and time are provided in (1) and (2) respectively (DCDPs are enclosed within square brackets).

(1) a. [*The nine kilos that your hand-luggage weighs __*] *won't prevent you from boarding the plane*.

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[2] The gap within a DCDP may also be found in an individual-denoting argument position, as in (i) (= Grosu & Landman's (39c)).

(i)   At Passover, I drink [the *four glasses of wine* that everybody drinks __].

Note that in this case, the CP-external NP (in italics) is not just a measure phrase, as it is in (1)-(2), but a more complex expression that properly contains a measure phrase, in particular, a pseudo-partitive.

    b. [*Les neuf kilos que pèse __ ton baggage à main*] *ne   t'empêcheront pas de monter dans l'avion.*
    'the nine   kilos that weighs your luggage of hand Neg you will.PL   not of climb in   the plane'
    c. [*Cele nouă kilograme cât cântăreşte __ bagajul   tău de mână*] *nu te vor împiedica să   te urci in avion.*
    'the nine   kilos   how-much weighs   luggage-the your of hand not you will.PL prevent Subj Refl climb in plane'

(2) a. [*The six hours that this movie lasts __*] *will tax the patience of audiences beyond endurance.*

    b. [*Les six heures que dure __ ce film*] *seront insupportables pour les spectateurs.*
    'the six hours that lasts this movie will-be unbearable   for the audience'

    c. [*Cele şase ore cât durează __ filmul ăsta*] *vor pune răbdarea spectatorilor   la grea încercare.*
    'the six hours how-much lasts   movie-the this will.Pl put patience-the spectators-the-Gen at hard trial'

    RURs are illustrated by the bracketed constituents in (3)−(4). As can be seen by contrasting (3)−(4) with (1)−(2), RURs differ superficially from DCDPs only in lacking the definite article. Furthermore, it can be seen that they are deviant in English and French, as existentially quantified SRTK in general are, but are unexpectedly fine in Romanian.

(3) a. #[*Nine kilos that your hand-luggage weighs __*] *won't prevent you from boarding the plane.*

    b. #[*Neuf kilos que pèse __ ton baggage à main*] *ne t'empêcheront pas de monter dans l'avion.*

    c. [*Nouă kilograme cât cântăreşte __ bagajul tău de mână*] *nu te vor împiedica să te urci in avion.*

(4) a. #[*Six hours that this movie lasts __*] *will tax the patience of audiences beyond endurance*}.

    b. #[*Six heures que dure __ ce film*] *seront insupportables pour les spectateurs.*

    c. [*Şase ore cât durează __ filmul ăsta*] *vor pune răbdarea spectatorilor la grea încercare.*

    The deviance of existentially quantified SRTKs has been explained in the following way in Grosu & Landman (1998) and Grosu (2002): For a variety of reasons, some inherent and some motivated, the CP of SRTKs denotes a singleton set; in (1)−(2), the singleton status of CP follows from the presupposition that

entities have a unique weight/duration. Definiteness and universal quantification are consistent with this state of affairs, but existential quantification implicates that the member of the singleton whose existence is asserted may not be unique. We thus have a conflict of assumptions, which induces infelicity.

As Carlson (1977) observed, existentially quantified SRTKs may become acceptable if they can be construed as elliptical partitives, because the complement of a partitive construction is definite, and thus unproblematic. Thus, if (3a) and (4a) could be construed as elliptical variants of (5a−b), they would presumably be acceptable in the circumstances in which the latter are. I note that data like (5a−b) are accepted by informants only if the larger bracketed expressions can be construed as denoting **entities** that possess a certain weight/duration, not as **weights/durations**, a point to which I return below. For example, (5b) is acceptable if, say the movie contains some interesting and some boring sequences, the boring sequences last six hours, and the matrix subject purports to denote **those sequences**. As far as I can tell, this construal is not available for the matrix subject of (4a).

(5) a. [*Nine of* [*the kilos that your hand-luggage weighs*]]
      exceed the permitted limit.
   b. [*Six of* [*the hours that this movie lasts* __]] *will tax the patience of audiences beyond endurance*}.

Concerning the RURs in (3c) and (4c), it needs to be said at the outset that they do not have a partitive interpretation. Rather, they denote the total weight of the luggage at issue and the total duration of the movie respectively, just like their DCDP counterparts in (1c) and (2c). The obvious challenge is to determine how such a construal comes about.

A number of ways of achieving this result have been suggested to me, and they all aim at "regularizing" RURs. I believe such attempts at regularization are unpromising, so long as there are no grounds for expecting that an explanation for the highly restricted cross-linguistic distribution of RURs should exist. Nonetheless, I will consider the potential tacks that were suggested to me (and may in principle also occur to future readers of this paper) and will show that they fail to achieve descriptive adequacy.

One suggested approach takes as point of departure the observation that expressions like *nine kilos* and *six hours* may be felicitously substituted for the deviant bracketed expressions in (3)−(4), as shown in (6a), and may furthermore be accompanied by appositive relatives, as shown in (6b). The suggestion is thus that data like (3c) are merely Romanian counterparts of English data like (6b), the deviance of (3a,b) being due to nothing more than the fact that the specific relative clauses used in these examples are not possible appositives in the corresponding languages, which tolerate appositives in such cases only with certain alterations, for example, as in (6b) and (7a−b).

(6) a. *Nine kilos won't prevent you from boarding the plane.*
   b. *Nine kilos, which is what your hand-luggage weighs, won't prevent you from boarding the plane.*

(7) a. *Nine kilos, {that is, like} what your hand-luggage weighs, won't prevent you from boarding the plane.*
   b. *Neuf kilos, c'est à dire, ce que pèse __ ton baggage à main, ne t'empecheront pas de monter dans l'avion.*

However, this cannot be a correct account of Romanian data like (3c) for at least two reasons. For one thing, the intonational breaks that typically flank appositive relatives of the post-nominal variety are not acceptable in RURs. If such breaks are inserted in (3c), the result is not much better than in (3a,b), and to turn (3c) into a fully acceptable appositive construction, certain alterations are also needed, e.g., as in (8).

(8) *Nouă kilograme, (adică) atât   cât   cântăreşte bagajul tău de mână,*
                           that is, that-much how-much

   nu te   vor împiedica să te urci in avion.

Second, an appositive approach seems inadequate on semantic grounds as well. In general, the semantic and pragmatic coherence of the matrix of an appositive need not be affected by the appositive, since the appositive does not affect the denotation of its antecedent. In some syntactic analyses, appositives do not form a syntactic constituent with their antecedent (Emonds 1979), and in others, they do not even lie in the same two-dimensional plane (Cinque 1982). The semantic-pragmatic independence of the appositive and its matrix is illustrated in (9), where the appositive is an "aside", whose content does not restrict the content of the matrix. – In contrast, various non-appositive relatives, in particular, restrictives and SRTKs, are syntactically and semantically constitutive parts of a complex DP, and do affect pragmatic coherence. This is illustrated with respect to DCDPs in (10), which is odd. Crucially, RURs behave likewise, as can be seen in (11), which points to the need to view the relative clause as a semantically constitutive part of a larger constituent, in particular, of the RUR. Precisely what semantic contribution the relative clause makes to the meaning of the RUR will be discussed in section 3.

(9) a. *Nine kilos, which (incidentally) is what your hand-luggage weighs, is/are the weight of my dog.*
   b. *Nouă kilograme, adică cât cântăreşte __ bagajul tău de mână, e/sunt greutatea câinelui meu.*
      nine kilos i.e., how-much weighs luggage-the your of hand is/are
      weight-the dog-the-Gen my
      'Nine kilos, that is, {as much as, what} your hand-luggage weighs, is/are the weight of my dog.'

(10) #*Cele nouă kilograme cât cântăreşte __ bagajul tău de mână e/sunt*
     greutatea câinelui   meu.
     the nine   kilos   how-much weighs   luggage-the your of hand is/are
     weight-the dog-the-Gen my
      '#The nine kilos that your hand-luggage weighs is/are the weight of my
        dog.'

(11) #*Nouă kilograme cât   cântăreşte __ bagajul   tău de mână e/sunt*
     greutatea câinelui   meu.
      nine   kilos   how-much weighs   luggage-the   your of hand is
     weight-the dog-the-Gen my.

I conclude that, on both prosodic and semantic-pragmatic grounds, an appositive analysis is not appropriate for RURs.

Another approach that was suggested to me starts from the proposed assumption that in contrast to DCDPs, which denote degrees, RURs denote entities that possess the degree indicated by the measure phrase. This suggestion comes in two varieties. One variety takes as model pseudo-partitive expressions like the bracketed ones in (12), which is ambiguous between a degree and an individual construal, as brought out by the two possible continuations, which effect disambiguation in both Romanian and English (Braşoveanu 2008).

(12) [*Două kilograme de carne*] {*sunt prea mult pentru o singură*
     persoană, au   fost puse in frigider acum un minut}.
      two   kilos   of meat   are too   much for   a single
      person   have been put   in fridge ago   one minute
      '{Two kilos of meat] {are too much for a single person, were put in the
        fridge a minute ago}'.

However, the expressions in (12) are not plausible models for RURs for at least two reasons: (i) the complement of the measure phrase in (12) denotes a kind of substance, while the putative complement of the measure phrase in an RUR, that is to say, the relative clause, denotes a singleton of degrees. (ii) Assuming, for the sake of argument, that one could devise a way of construing the relative clause of an RUR as denoting a kind of substance (or a kind of object), that kind of object/substance would have to be, in the case of (3a), something like "luggage of yours". But (3a) is not about luggage of "yours" in general, but about a specific piece of luggage that belongs to "you". Thus, this particular tack does not seem promising.

An alternative variant might take as model the kind of ambiguity that is found in certain SRTKs, and in particular, in DCDPs. To illustrate, while the DCDPs in (1)−(2) denote degrees, they can also denote specific entities measured by specific degrees, as was noted in connection with (5), and as further illustrated in (13) with Romanian and English examples.

(13) a. *Cele treizeci de kilograme cât   a cântărit   bagajul   tău*
       ieri   au   fost greu de ridicat.

   the thirty   of   kilos   how-much has weighed luggage-the your
   yesterday   have been hard of lifted

'The thirty kilos that your luggage weighed yesterday were hard to lift.'

     b. *Cele şase ore cât   a durat   filmul   ăsta au fost cele*
     mai neplăcute din viaţa mea.

   the six hours how-much has lasted movie-the this have been the
   more unpleasant from life-the my

'The six hours that this movie lasted were the most unpleasant in my life.'

However, this option is not open to RURs. If the definite article is suppressed in data like (13), the outcome is infelicitous, as illustrated in (14).

(14) a. *#Treizeci de kilograme cât a cântărit bagajul tău ieri au fost greu de*
        ridicat.

     b. *#Şase ore cât a durat filmul ăsta au fost cele mai neplăcute din viaţa*
        mea.

This suggests that RURs, unlike DCDPs, are not ambiguous between degrees and entities measured by them, and that they are restricted to degree denotations.

Summarizing, the various attempts of reducing RURs to better understood constructions with a wide cross-linguistic distribution have failed. I do not view this result as surprising, since if RURs could be regularized, one would expect Romanian to have unique grammatical features that would be indispensable for licensing RURs. Until and unless such features are discovered (which I suspect is unlikely), I propose to view RURs as a *sui generis* construction, and to accept the consequence that their analysis may need to include stipulative features. If so, should we conclude that RURs are simply alternative realizations of DCDPs, which, for unknown reasons, are restricted to degree denotations, and furthermore allowed in Romanian only? This view is not on the right track, either, because RURs are not fully synonymous with minimally different DCDPs.

A first fact which suggests that RURs cannot be assigned the exact semantics of DCDPs is provided by the observation that the range of possible CP-external NPs is more restricted in DCPDs than in RURs. This is brought out by the following pair of examples that exhibit a DCDP and a minimally different RUR. Thus, (15b), which differs from the acceptable (15a) only in lacking the definite article, is severely deviant.

(15) a. *Puţinele kilograme cât   cântăreşte bagajul   tău de mână nu*
       te   vor   împiedica să   te urci in avion.

   few-the   kilos   how-much weighs   luggage-the your of hand not you
   will.PL   prevent SubjM[3] Refl climb in plane

_____

[3] SubjM = Subjunctive Marker

'The few kilos that your hand-luggage weighs won't prevent you from
   boarding the plane.'
   b. #*Puţine kilograme cât cântăreşte bagajul tău de mână nu te vor
      împiedica să te urci în avion*.

A second fact, more subtle, is that the attribution of a weight of nine kilos to
the luggage has the force of a presupposition in (1c), but not in (3c). This
distinction is reflected in the fact that in a situation where the weight of the hand
luggage is known to both speaker and addressee, e.g., because it has just been
weighed in front of them, (1c) is more natural than (3c), while in a situation where
the luggage has not yet been weighed, and the speaker evaluates its weight on the
basis, say, of its appearance, (3c) is more natural than (1c). My intuition is that (3c)
asserts not merely that the weight of "your" hand-luggage won't prevent you from
boarding the plane, but also something like (16a). Note that if something like (16a)
is part of the semantics of (3c), the deviance of (15b) becomes potentially
explainable in terms of the deviance of (16b).

   (16) a. *Greutatea   bagajului   tău   de mână este (de) nouă kilograme.*
            weight-the luggage-the-Gen your of hand   is of nine kilos
            'The weight of your hand-luggage is nine kilos.'
       b. #*Greutatea   bagajului   tău   de mână este (de) puţine kilograme.*
            weight-the luggage-the-Gen your of hand   is   of   few   kilos
            '#The weight of your hand-luggage is few kilos.'

The above observations point to the conclusion that DCDPs and RURs need
to be assigned distinct semantic analyses, and it is to this task that we turn in
section 3.

3. THE SEMANTICS OF DCDPs AND RURs

My concern in this section is to provide compositional semantic analyses for
DCDPs and RURs. At the very least, such analyses ought to capture the intuitive
import of the two constructions, and – no less important – to provide an
enlightening account of their shared and distinguishing properties. I discuss the two
constructions in separate sub-sections.

3.1. The analysis of DCDPs

I will discuss DCDPs on the basis of the example in (1a). As noted earlier,
DCDPs are a 'well behaved' sub-instance of SRTKs, and their analysis is a
straightforward matter. I will assume a conservative configurational syntax for

DCDPs, with CP an adjunct to NP, and the constituent [NP CP] a complement of Det(erminer), noting that nothing crucial for the semantics hinges on this particular assumption. In Grosu (2000), I proposed that all relative CPs carry a feature [REL], that restrictive CPs carry the additional feature [PRED], and that SRTKs carry a third feature [MAX], which ensures their singleton status. Since DCDPs are a sub-instance of SRTKs, I will assume them to be featurally characterized in precisely this way.

Turning now to the compositional semantics, I note that the 'gap' within the relative is the inner argument of the verb *weigh*. I propose to view this verb as denoting a function from degrees to functions from individuals to truth values, of type $<\delta, <e,t>>$, and to translate it as in (17) (using the relational notation). Note that the verb specifies the scale on which the degrees are placed.

(17) $[[weigh]] = \lambda\delta\lambda x.\text{WEIGH}(x, \delta)$

The gap thus needs to be a degree variable, of type $<\delta>$, which is represented in (17) as "δ". Earlier literature has proposed a variety of more complex representations for degree-denoting expressions in general and for variables over degrees in particular, and a representation with some internal structure might be enlightening in the present context, in particular, in relation to expressions like *nine kilos*, which consists of a measure unit (*kilo*) and a numeral that counts such units (*nine*). In this paper, however, I will not formalize the internal structure of degree expressions, and will only refer to it informally, where necessary.

Pursuing our compositional analysis, the relative CP in (1a) receives the representation in (18), of type $<\delta, t>$ (YHL is shorthand for 'your hand-luggage').

(18) $\lambda\delta. \text{WEIGH}(\text{YHL}, \delta)$

In restrictive relative constructions like *the man who came to dinner*, NP and CP are both of the type of predicates of individuals, and combine by intersection. Their combination is made possible by shifting CP to the status of intersective modifier of NP, of type $<<e,t>,<e,t>>$, that is to say, a function that takes an NP of type $<e, t>$ as argument and returns the conjunction of CP (prior to shifting) and NP; the shifting operation is shown in (19a). Application of (19a) to (18) yields (19b), which is not directly applicable to NP, because *nine kilos* denotes a degree on the weight scale, not a set of degrees.

(19) a. CP → $\lambda P\lambda\delta.P(\delta) \wedge CP(\delta)$
      b. $\lambda P\lambda\delta.P(\delta) \wedge \text{WEIGH}(\text{YHL}, \delta)$

To allow application, NP needs to be lifted by the operation IDENT, which has the effect shown in (20), where 9k is the degree denoted by *nine kilos*. (19) can apply to (20), yielding (21). Since (21) was derived by intersection with a singleton (i.e., (18)), it is itself a singleton, a state of affairs that licenses (in fact, requires) the application to it of a definiteness operator. The output of this operation is a

degree, and the matrix predicate, i.e., *won't prevent you from boarding the plane*, abbreviated as WPYBP, translates as a predicate of degrees, whose application to the denotation of the DCDP yields (22) as the meaning of (1a).

(20) 9k $\rightarrow$ $\lambda\delta.\delta = 9k$

(21) $\lambda\delta.\delta = 9k \wedge \text{WEIGH}(YHL, \delta)$

(22) $\text{WPYBP}(\sigma(\lambda\delta\ [\delta = 9k \wedge \text{WEIGH}(YHL, \delta)]))$

3.2. The analysis of RURs

As a preamble to proposing an analysis for RURs, it is necessary to describe their intuitive import more precisely. The discussion will be conducted on the basis of (3c). My intuition is that this example has the force of two simultaneous assertions, expressed by the two conjuncts of the paraphrase in (23).

(23) [*The weight of your hand-luggage is nine kilos*], *and* [*nine kilos as the weight of your hand-luggage*] *won't prevent you from boarding the plane.*

This paraphrase makes a number of points which are brought out by the boldfaced terms in the following characterization: The leftmost conjunct **asserts** that the weight of the luggage **equals** nine kilos, and the rightmost conjunct says that what won't prevent you from boarding the plane is **nine kilos**, not as an abstract measure of weight, but **as the weight of the luggage**, in particular, as its **total** weight. The points in question, which ought to be captured by an optimal analysis, are thus: (A) The weight of the luggage and the weight of nine kilos are **equated** (just as in (16a)). (B) This equation constitutes an **assertion** (see the paragraph that immediately precedes (16a)). (C) The expression *nine kilos* is the **syntactic head** of the subject of the rightmost conjunct, and it needs to have this role in (3c) as well because it triggers number agreement in the matrix predicate (similarly, in (4c)). (D) The weight of nine kilos is relevant **only insofar as it is the weight of the luggage** (see remarks about example (11) in section 2). (E) Nine kilos constitutes the **total weight** of the luggage (see remarks immediately following example (5)).

How should these five points be captured analytically? In particular, what syntactic representation should we attribute to RURs, and how should the attributed syntactic representation be interpreted by the semantics? If we want the syntax to reflect the interpretation associated with the RUR in (23), the RUR would have to be assigned two simultaneous distinct syntactic representations, each with its distinct semantics, corresponding to the two bracketed constituents in (23). That is to say, the RUR would need to function both as a matrix proposition and as a matrix subject argument. While multiple syntactic representations for a single string have certainly been contemplated in earlier literature in relation to a variety of constructions (see, e.g., Haegeman & van Riemsdeijk 1986, van Riemsdijk

1998), I am not aware of proposals to also assign distinct semantics to the multiple syntactic representations. Such a move, while not impossible, would nonetheless exceed the limits of existing theoretical proposals, and should be contemplated only if no reasonably satisfactory more conservative analysis can be constructed, something which, I believe, is not the case.

Let us then explore the consequences of assigning to the RUR only one syntactic structure, in particular, a structure corresponding to one of the bracketed constituents in (23).

If we take as our model the leftmost bracketed sequence in (23), the RUR would need to be an equational **small clause**, since there is no copula between NP and CP. Within the small clause, CP would need to function as one of the equated terms, something that is not initially implausible, because the string corresponding to CP is also a possible free relative in Romanian (see (24)), and thus a possible degree-denoting DP. The small clause in turn would need to function as the subject of the matrix predication, and (3c) would have the essential syntax and semantics of (25), *modulo* the presence/absence of the italicized lexical items.

(24) *Bagajul   meu cântăreşte (exact)* [*cât   cântăreşte   bagajul   tău*].
     luggage-the my weighs (exactly) how-much weighs   luggage-the your
     'My luggage weighs (exactly) [what your luggage weighs].'

(25) [(The fact) that *nine kilos is the weight of your hand-luggage*] *won't prevent you from boarding the plane*.

How well does this analysis capture the properties (A)-(E) that were noted earlier in this section? It seems to capture properties (A), (D), and (E), but it does not capture properties (B) and (C). The expression *nine kilos* in (25) cannot trigger agreement on the matrix predicate, and the proposition expressed by the bracketed constituent in (25) is presupposed. Furthermore, the envisaged small clause would need to be rather exceptional, since 'bare' small clauses do not seem to allow an equational construal, as illustrated with an English example in (26a), and with the RUR under consideration in (26b).

(26) a. *I consider* [*John* {*an idiot, *Mr. Johnson*}].
     b. **Consider* [*nouă kilograme cât cântăreşte bagajul tău de mână*]

In sum, an analysis that derives its inspiration from the leftmost conjunct in (23) has serious drawbacks, and cannot be viewed as optimal.

Before exploring the alternative analysis, I note – for the sake of completeness – that the potential free relative status of CP in RURs cannot be used to justify its presence in a language. Admittedly, the English *that*-relative in (3a) is not a possible free relative, but the bracketed constituent in the translation of (24) is, and nonetheless substituting it for the relative in (3a) does not improve acceptability, as shown in (27).

(27) *Nine kilos what your hand-luggage weighs won't prevent you from
      boarding the plane.*

Similarly, the relative in the Macedonian example in (28) is a possible free
relative, as illustrated in (29), but (28) can only receive the intonation and construal
of an appositive construction (thanks to Olga Tomič for providing these examples
and discussing them with me). In short, a free relative analysis has no independent
advantages.

(28) *Deset   kilogrami,   kolku   što   tvojot   račen bagaž*
      ten kilograms   ow-muchthat your.M.Sg   hand   luggage
      teži,   ne   pretstavuvaat   seriozen   problem.
      weighs.3.Sg not   represent.3.Pl   serious.M.Sg   problem
      'Ten kilos, which is as much as your hand luggage weighs, do not
      represent a serious problem.'
(29) *Mojot   bagaž   teži   kolku što   teži (i) tvojoy*
      my+the luggage weighs how-much that weighs (and) yours+the
      'My luggage weighs as much as your luggage does.'

We now turn to an analysis inspired by the rightmost bracketed constituent in
(23). In terms of configurational syntax, the RUR need not be different from what
we assumed it to be in DCDPs, i.e., an adjunct of NP. At the same time, the
semantic relation between CP and NP needs to be different, and a syntactic basis
for this difference can be provided by adding to the featural characterization of CP
one more feature, call it [EQ(UATIONAL)]. This feature can also be used to
distinguish between languages that allow and that disallow RURs, by assuming that
only the grammar of the former licenses this feature in relative clauses.

What should be the semantic effect of [EQ]? In addition to establishing an
equational relation between the weight of nine kilos and the degree of weight
possessed by the luggage (property (A)), it should also ensure that the weight of
nine kilos is restricted to situations in which it is the weight of 'your' luggage
(property (D); in addition, the equational relation should not be presupposed
(property (B)). To capture property (D), I propose to use the kind of mechanisms
that Landman (1989) appealed to in order to analyze expressions denoting
restricted (or 'partial') individuals, such as *John as a judge*.

Landman assumes the intensional logic of Thomason (1980), in which the
basic types are the type *e* of individuals and the type *p* of propositions, so that
predicates are of type <e, p>. Landman proposes to represent both unrestricted and
restricted individuals as intensional generalized quantifiers of type <<e, p>, p>.
The unrestricted expression *John* denotes the set[4] of properties that John in all his
aspects has, i.e., λP.P(j), and the restricted expression *John as a judge* denotes a

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[4] I follow Landman in loosely referring to these generalized quantifiers as 'sets of properties',
even though it would be more correct to refer to them as 'properties of properties.' Hopefully, this will
create no confusion.

possibly different set of properties, namely, the set of properties that John **as a judge** has, a set that Landman represents as in (30).

(30) j $\uparrow$ J(UDGE)

To see that a restricted version of an individual may include properties that the same individual from an unrestricted (or a differently restricted) perspective does not have, consider (31) in a context where John works both as a judge and as a hangman, and where the hangmen, but not the judges, have been on strike for the preceding three months. While it would be contradictory to assert that John (unrestricted, or restricted in a single way) has worked and has not worked during the last three months, there is no contradiction in either the reduced or the full version of (31).

(31) *John (as a judge) has worked full time during the last three months, but as a hangman, he hasn't worked a single day.*

Landman's approach to individuals generalizes naturally to degrees, which are, in effect, individuals of a special kind. I submit that the expression *nine kilos* may be interpreted not only as a degree on the scale of weight, but also as the set of properties that this degree has, and which may include, for example, the property of being (identical to) the weight of a certain piece of hand-luggage, as well as the property of being (identical to) the weight of a certain baby. Furthermore, just like human individuals, degrees may be restricted to certain aspects, as can be seen by considering expressions like *nine kilos as the weight of your hand-luggage* and *nine kilos as your own weight*. That these two expressions may denote different sets of properties of degrees is brought out by (32), which is not contradictory, although *nine kilos will and will not prevent you from boarding the plane* is contradictory.

(32) *As the weight your hand-luggage, nine kilos won't prevent you from boarding the plane, but as your own weight, it will (because babies are not allowed to board planes unattended).*

Having established that restricted degrees are a coherent notion, in any event, no less coherent than that of restricted human individuals, we can now proceed to construct a compositional analysis for (3c) that relies on this notion.

Up to the level of CP, there need be no difference between (3c) and (1a). Accordingly, CP is assigned the translation in (18), reproduced below for convenience. As noted in section 3.1, this expression denotes a singleton, a denotation consistent with the features [REL], [PRED], [MAX] borne by CP.

(18) $\lambda\delta.$ WEIGH(YHL, δ)

At this point, the feature [EQ] triggers the operation in (33), which maps CP to a function from degrees to restricted generalized quantifiers of degrees.

(33) CP $\rightarrow$ $\lambda\delta.\delta$ $\uparrow$ ($\lambda\delta'.\delta' = \sigma$(CP))

Application of (33) to (18) yields (34), which can be applied to the degree denoted by NP, yielding (35) as the translation of the RUR; in words: the set of properties possessed by the degree 'nine kilos' restricted by the property of being identical to the weight of your hand-luggage. This expression, a generalized quantifier, can now be applied to the matrix predicate (lifted to a property), yielding (36) as the translation of (3c); in words: the set of properties possessed by 9kg as (identical to) the weight of your hand-luggage includes the property of not preventing you (in the future) from boarding the plane. This is equivalent to: nine kilos as the weight of your hand-luggage won't prevent you from boarding the plane, which is in fact the second conjunct of (23).

(34) $\lambda\delta.\delta \uparrow (\lambda\delta'.\delta' = \sigma(\lambda\delta''. \text{WEIGH}(YHL, \delta'')))$

(35) $9kg \uparrow (\lambda\delta.\delta = \sigma(\lambda\delta''. \text{WEIGH}(YHL, \delta'')))$

(36) $9kg \uparrow (\lambda\delta.\delta = \sigma(\lambda\delta''. \text{WEIGH}(YHL, \delta''))) (WPYBP)$

Having completed our compositional analysis of (3c), let us stand back and ask how well it captures the points (A)-(E) noted earlier in connection with (23).

Point (C), assignment to *nine kilos* of the status of to syntactic head of the RUR, is an automatic consequence of the conservative configurational analysis we have adopted. Point (A), equation of *nine kilos* with the unique member of the singleton denoted by CP, is built into (33), the operation triggered by [EQ]. Point (E), the fact that *nine kilos* denotes the total weight of the hand-luggage is a consequence of the equation of the former with the weight of the luggage. Point (D), restriction of the degree denoted by *nine kilos* to situations in which it is the weight of your hand-luggage, was achieved by extending Landman's theory of partial individuals to degrees, and is also built into (33).

What of point (B), the fact that the attribution of the weight of nine kilos to your hand-luggage is felt to have assertive force? To be sure, the second conjunct of (23), on which we modeled our analysis, does not explicitly assert that nine kilos is the weight of the hand-luggage in the way the first conjunct does. At the same time, it does not presuppose it, either, as can be appreciated in relation to the following data.

37) a. F*ifty-two kilos as your own weight would be OK for you to become a ballerina, but unfortunately you weigh one hundred kilos.*
   b. *#The fifty-two kilos that you weigh would make it OK for you to become a ballerina, but unfortunately you weigh one hundred kilos.*
   c. *#(The fact) that your weight is fifty kilos would make it OK for you to become a ballerina, but unfortunately you weigh one hundred kilos*.

(37a), where the matrix subject is modeled on the second conjunct of (23), is not contradictory, in contrast to (37b)-(37c), in which the matrix subject is modeled on DCDPs and on the first conjunct of (23) respectively, and which are contradictory. What this means is that the analysis under consideration succeeds in distinguishing RURs from DCDPs in relation to point (B), with the proviso that the

perceived assertive force is not directly expressed by the semantics. One could presumably build an additional assertion into the operation in (33), if one wishes, but I will let the matter stand as it is in this paper. With or without this addendum, the analysis we have considered fares considerably better than the one we explored previously: It handles points (A), (D), and (E) at least as well as its competitor, and it does distinctly better in relation to points (B) and (C). I submit it is a reasonably satisfactory analysis of RURs, and thus propose to adopt it.

4. SHARED AND DISTINGUISHING PROPERTIES OF DCDPs AND RURs

Having proposed and defended analyses of DCDPs and RURs, it remains to consider how much light these analyses shed on the properties that the two constructions share and on those that they do not share.

In section 2, we noted the contrast in felicity between (9) and (10)-(11), and attributed it to the fact that the relative clauses of DCDPs and RURs, in contrast to appositive clauses, are a **constitutive part** of a complex nominal expression. The analyses in section 3 make this notion precise by specifying the precise semantic roles played by these constitutive clauses within their complex nominal.

A second property shared by DCDPs and RURs that was noted in section 2 is that in both cases, expressions like *nine kilos* in (1a) and (3c) represent the **totality** of the weight of the luggage. This follows from the fact that CP denotes a singleton of degrees whose unique member is the **total** weight of the luggage, and the analyses proposed in section 3 identify this weight as being nine kilos by **intersection** in the case of DCDPs, and by **equation** in the case of RURs.

Turning now to properties that distinguish between the two constructions, it was noted in section 2 that the attribution of the weight of nine kilos to the luggage in the examples under consideration constitutes a pre-supposition in DCDPs, but not in RURs. This distinction follows from the fact that the proposition which equates nine kilos with another degree is in the scope of a (pre-suppositional) definiteness operator in DCDPs, but not in RURs. In the latter case, only CP is in the scope of a definiteness operator, reflecting the intuition that RURs, just like DCDPs, presuppose that an object, in particular, your hand-luggage, has a unique weight.

It remains to address the fact that the kinds of expression that can occur as alternatives to *nine kilos* in RURs are properly included in the set of expressions that can do so in DCDPs. This was partly illustrated in (15), and I provide in (38) a more extensive illustration of options that are available in both constructions, and in (39), of options that are available in DCDPs only.

(38) a. *Cele {(aproximativ/ cel mult)   nouă, (doar) câteva}   kilograme cât cântăreşte bagajul   tău de mână nu   te   vor împiedica să te urci în avion.*

the   approximately at most   nine   only couple-of   kilos
how-much weighs   luggage-the your of hand not
you will. PL prevent SubjM Refl climb in plane
‘The {(approximately/at most) nine, (mere) couple of} kilos that your
hand-luggage weighs won't prevent you from boarding the plane.’

    b. {*(Aproximativ/cel mult) nouă, (doar) câteva} kilograme cât cântăreşte
      bagajul tău de mână nu te vor împiedica să te urci în avion.

(39) a. {*Puţine-le kilograme cât,   kilogramele ce*} *cântăreşte bagajul   tău*
      de mână   nu te   vor   împiedica să   te   urci   în avion.
    few-the   kilos   how-much   kilos-the that   weighs luggage-the your
    of hand   not you will.PL prevent SubjM Refl climb in plane
    ‘The {few kilos, kilos} that your hand-luggage weighs won't prevent
    you   from boarding the plane.’

    b. {*#Puţine kilograme, *kilograme*} *cât/ce cântăreşte bagajul tău de mână*
      nu te vor împiedica să te urci în avion.

As also noted in section 2, contrasts like that between (38b) and (39b) are also found in equational copular constructions, as illustrated by the contrast between (40a) and (40b). This strongly suggests that the two sets of facts ought to be brought under a common analytical umbrella.

(40) a. *Greutatea   bagajului   tău   de mână este (de)* {*(aproximativ/   /cel*
      mult)   nouă, (doar) câteva} *kilograme.*
    weight-the luggage-the-Gen your of hand   is of   approximately at
    most   nine   only couple-of kilos
    ‘The weight of your hand-luggage is {(approximately/at most) nine,
    (only) a couple of} kilos.’

    b. *#Greutatea   bagajului   tău   de mână este (de) *(puţine) kilograme.*
      weight-the luggage-the-Gen your of hand   is of   few   kilos
     ‘#The weight of your hand-luggage is *(few) kilos.’

A detailed account of the facts in (40) (which, to the best of my knowledge, have not been discussed, or even noted, in earlier literature), of the parallelism between (40a-b) and (38b)-(39b), and of the contrast between (39a) and (39b), is a topic for a separate study, and I will thus only sketch here the kind of account I believe to be on the right track, leaving a more detailed investigation for another occasion.

We may begin by taking a look at the translations we proposed for the DCDP in (1a) (= the version of (38a) with *nine kilos*) and for the RUR in (3c) (= the corresponding version of (38b)), which translations are indicated in (21) and (35) respectively (reproduced below for convenience).

(21) $\lambda\delta.\delta = 9k \wedge$ WEIGH(YHL, δ)

(35) 9kg $\uparrow$ ($\lambda\delta.\delta = \sigma(\lambda\delta''.$ WEIGH(YHL, δ'')))

Observe that (35) establishes a relation between **the unique member of the singleton denoted by CP** (i.e., the weight of the luggage) and another degree, in particular, one that gets identified as "9kg" by application of the predicate on the right of "$\uparrow$" to 9kg, followed by lambda reduction. A comparable relation obviously exists in the version of (40a) with *nine kilos*, but not in (21). This state of affairs constitutes, I submit, the basis for an account of the parallelism between RURs and equational copular constructions, and for the contrast between both and DCDPs.

In the particular case of the RUR headed by *nine kilos*, the relation in question is one of identity, but it seems to me that a relation between the unique member of CP and another degree also exists in the remaining versions of (38b). More specifically, I suggest that the Romanian expressions translatable as *approximately nine kilos, at most nine kilos, a mere couple of kilos* may be viewed as denoting, with varying degrees of precision, **intervals** on the scale of weight, that is to say, **degree-sums** (which are of the same logical type as atomic degrees), and that the weight of the luggage bears the **part-of** relation, i.e., ¥, to such degree-sums. Assuming that much, I would translate the RUR in the version of (38b) with *at most nine kilos* as in (41) (where δ is a variable over degrees, both atoms and sums). In words: The set of properties of the interval between nine kilos and zero in situations where the weight of your hand-luggage is a part of it.

(41) At most 9kg $\uparrow$ ($\lambda\delta. \sigma(\lambda\delta''.$ WEIGH(YHL, δ'')) ¥ δ)

Crucially, the part-of relation, just like the equation relation, is a relation between **objects of the same type**, in this case, of the type of degrees. The problem with the two versions of (39b) is then, I suggest, that these data purport to establish a part-of relation between the weight of the luggage and the denotation of the expressions like *kilos, few kilos,* **and that these expressions are of the wrong logical type**. I suggest they can only be viewed as denoting **units of weight**, which are presumably of a different logical type than degrees. – If this account is on the right track, it generalizes effortlessly to the versions of (40a-b) other than that with *nine kilos*, since they also rely or purport to rely on the part-of relation between the weight of the luggage and a degree-sum.

As for the acceptability of (39a), it suffices to note that the verb *weigh* tolerates weight-units as its complement, as illustrated in (42). If so, the DCDP with *few kilos* may be viewed as denoting (some number of) measure units, not degrees, and may be translated as in (43), where "u" is a variable over measure units. This avoids the kind of violation we noted in (39b) and (40b), hence, the acceptability of (39a).

(42) Your hand-luggage weighs few kilos.

(43) $\lambda u.$ FEW(u) $\wedge$ WEIGH(YHL, u)

5. SUMMARY OF RESULTS

This paper has addressed the syntax and semantics of a construction that has so far been identified in Romanian only, and which we labeled the R(omanian) U(nexpected) R(elative construction). At the moment, no principled reasons for its absence in other languages have been discovered, and the exploration of the historical developments that have led to its emergence in Romanian is left as a topic for future research.

RURs have the syntactic appearance of an externally-headed relative clause construction whose external head is a measure phrase, and they differ from cross-linguistically attested degree-denoting complex DPs (DCDPs) in lacking a definite article. Despite their *prima facie* indefinite appearance, RURs have definite import, and denote, essentially, a unique degree or degree-sum under restricting circumstances, in particular, circumstances in which it is identical to or includes as a proper subpart another unique degree, which is characterized by the relative clause.

Analytically, I have proposed to treat them as "partial individuals" in the sense of Landman (1989), that is to say, as restricted intensional generalized quantifiers of degrees. On the syntactic side, my analysis assumes a language-specific feature [EQ] as the only formal difference between RURs and DCDPs. The presence/absence of this feature triggers distinct type-shifting operations which lead to distinct denotations for the two constructions, and make it possible to derive two observable properties that set RURs apart from DCDPs, in particular, (i) the content of NP fails to be presupposed, and (ii) their denotation must be (a set of properties of) degrees, not measure units.

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