

Chapter 10

Relative Clause Constructions and unbounded dependencies

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1. Terminological preliminaries

This chapter deals with **relative clause constructions (RCCs)** in Romanian. RCCs in the languages of the world typically consist of a **relative clause (RC)** and some additional material, and it is only in exceptional cases that an RCC consists exclusively of an RC. As will be seen further down in this chapter, both the typical and the exceptional situations are encountered in Romanian.

The notion ‘RCC’ is notoriously hard to characterize in a general way, in view of the great syntactic and semantic diversity of constructions that arguably constitute RCCs. The term ‘relative’ purports to capture the intuition that RCs typically exhibit an internal ‘pivot’ that is semantically related in some way to material within the RC-external portion of the RCCs. For descriptive purposes, we may think of RCCs as exhibiting an ‘internal’ and an ‘external pivot’, keeping in mind that these terms are eminently pre-theoretical. Traditional grammars often state that the internal and external pivots are related as anaphor and antecedent respectively, but as will be seen below, this characterization, while appropriate in some cases, is misleading in others, and it is for this reason that the semantic relationship between the pivots was left unspecified above.

A somewhat more precise characterization of RCCs can be provided in terms of a broadly construed notion of ‘binding’, which subsumes both ‘discourse binding’ (essentially, the antecedent-anaphor relation in discourses) and binding by a logical operator (which most commonly takes place in a syntactic configuration known as ‘c-command’):

- (1) i. A relative clause is subordinated.
- ii. A relative clause includes, at some level of semantic representation, a variable that ultimately gets bound in some way by an element of the matrix.

Going one step further, we may distinguish ‘core’ RCCs, in which both the RC-external binder and the RC-internal bindee have syntactic reflexes of some sort (whether overt or phonologically null), from ‘peripheral’ RCCs, where only one of those two elements has a syntactic counterpart.

This view of RCCs will be assumed in what follows. The usefulness of the two clauses in (1) and of the core/periphery distinction will emerge in ensuing sections, as our discussion of RCCs becomes more specific.

2. Semantic types

2.1 Restrictives and appositives

Semantically, two principal classes of RCCs have been traditionally recognized, usually called (i) **restrictive** and (ii) **non-restrictive** or **appositive** (the boldfaced terms in fact purport to denote properties of the corresponding RCs). Illustrations of these types are provided in (2a) and (2b) respectively. For perspicuousness, RCCs are italicized, RCs are enclosed within square brackets, and (what some traditional grammarians might view as) pivots are boldfaced. ‘_’ indicates a ‘gap’, in particular, the phonetically empty position in which some phrase with the grammatical function of the RC-internal boldfaced element typically occurs in declarative sentences; in the version of grammar we are assuming, the boldfaced element in question (a relative pronoun) is assumed to have been displaced from the position of the gap and to form a ‘chain’ with it; furthermore, the gap – which is phonetically null, but syntactically real – is interpreted as a variable, while the interpretation of the relative pronoun depends on the RC’s semantic type. Given the chain formed by the gap and the relative pronoun, it becomes in principle possible to view this chain as the internal pivot; as will be seen below, such a view makes sense for appositives, but not really for restrictives. The pronoun *care* and its inflected form is glossed as ‘which’ even when it translates into English as ‘who’, because Romanian has no human/non-human distinction in pronouns that bind an entity-denoting gap.

- (2) a. *Fiecare student [căruia Maria i-a scris _ vreodată]*
 every student which.DAT Maria him.DAT-has written ever
e fericit.
 is happy
 ‘Every student to whom Maria ever wrote to is happy.’
- b. *Ion, [căruia Maria i-a scris _ ieri], e fericit.*
 Ion which.DAT Maria him.DAT-has written yesterday is happy
 ‘Ion, to whom Maria wrote to yesterday, is happy.’

The justification for calling RCs like the one in (2a) ‘restrictive’ lies in the fact that the entire RCC may be understood to define a smaller set of students than it would if the RC were suppressed. Thus, in a context where the students in a particular class are at stake, one can use (2a) to indicate that a particular proper subset of students in that class is happy, in particular, those to whom Maria has written at one time or another. When used in this way, (2a) suggests that Maria has not written to every student in the class. At the same

time, (2a) need not be used with respect to a particular situation, but may be construed as a generic statement which says, essentially, that if Maria writes to a student, that student will be happy. In this case, the contextually assumed background set consists of all the students that could in principle exist, and the role of the relative clause is to carve out the proper subset of students to whom Maria has in fact written. In this situation (but not in the previously considered one), it is of course fully coherent to follow up (2a) with the sentence in (3).

- (3) *De fapt, toți studenții din clasa noastră sunt fericiți, căci*
of fact all students-the from class-the our are happy since
Maria le-a scris tuturor.
Maria them.DAT-has written all.DAT
‘In fact, all the students in our class are happy, since Maria has written to all of them.’

The justification for calling RCs like the one in (2b) ‘non-restrictive’ is that they do not affect the denotation of the external pivot (in particular, the number and kind of entities denoted by it); in (2b), for example, happiness is ascribed to exactly the same individual(s), in particular, to Ion, whether the RC is present or not.

The restrictive/appositive contrast may be somewhat harder to detect in data like the following, which are brought up in order to avoid possible confusion.

- (4) a. [*Mama care m-a adus pe lume acum șizeci de*
mother-the who me.ACC-has brought on world now sixty of
ani] *s-a prăpădit ieri.*
years REFL-has passed-away yesterday
‘The mother who brought me into this world sixty years ago passed away yesterday’
- b. [*Mama mea, care m-a adus pe lume acum șizeci*
mother-the my who me.ACC-has brought on world now sixty
de ani,] *s-a prăpădit ieri.*
of years REFL-has passed-away yesterday
‘My mother, who brought me into this world sixty years ago, passed away yesterday.’

While (4b) is an incontrovertible appositive, (4a) may also seem to have this status, despite the absence of flanking comma intonation, on the grounds that the speaker has a single mother. However, the fact that the bracketed expression denotes **the speaker’s** mother is indicated by the relative, not by the external noun. That is to say, the noun denotes the set of all mothers, which gets restricted to the singleton that contains just the speaker’s mother by the relative clause, which denotes a set whose members are those individuals that gave life to the speaker, i.e. his/her parents. Thus, data like (4a) are straightforward restrictive constructions.

The restrictive/non-restrictive contrast is not limited to RCs, but is detectable in a variety of constructions. Limiting ourselves to the nominal domain, the contrast is also found with intersective adjectives, for example, in data like the following (intersective adjectives are adjectives whose semantic effect on a noun may be expressed in terms of set intersection – a point illustrated below; excluded from consideration are adjectives like those found in expressions like *polar bear*, *criminal lawyer*, *fake policeman*).

- (5) [The industrious Chinese] will dominate the world's markets.

The bracketed nominal is ambiguous, depending on the speaker's assumptions. If the speaker assumes that some Chinese, but not all, are industrious, then the nominal at issue denotes just those Chinese who are industrious, and the adjective has a restrictive effect, since its removal would increase the number of individuals claimed to potentially dominate the world's markets. If, on the other hand, the speaker assumes that the Chinese in general are industrious, then the nominal denotes the Chinese in general, just as it would if the adjective were removed; in this case, the adjective has no restrictive effect.

The same ambiguity can in principle be found with Romanian post-nominal adjectives in the double definiteness construction, as in the following example:

- (6) [*Chinezii cei întreprinzători*] vor cuceri piețele lumii.
 Chinese-the the enterprising will conquer markets-the world-the.GEN
 'The enterprising Chinese will conquer the world markets.'

The semantic distinction between the restrictive and non-restrictive readings of the data in (5) and (6) can be graphically represented by taking the noun and the adjective to denote sets of individuals that are Chinese and enterprising respectively, and by taking the bracketed nominals to denote the intersection of these sets. The restrictive construal is obtained when these sets **intersect properly**, and the non-restrictive one, when the set denoted by the noun is a **proper subset** of the set denoted by the adjective. This is schematically shown in (7).

- (7) i. Restrictive construal ii. Non-restrictive construal
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The kind of construal for non-restrictive (intersective) adjectives indicated in (7) is probably also adequate for a variety of internally more complex modifiers of nouns, for example,

for the so called ‘extended participial constructions’ in Dutch and German and prenominal relative clauses in Chinese (when these are not interpreted restrictively, a possibility that also exists in principle). It is, however, not fully adequate for relative clauses like the one in (2a), and more generally for expressions flanked by comma intonation, for example, for the apposition in the reduced version of (8).

- (8) *Ion, (care este) prietenul meu cel mai bun, va cânta la vioară*
 Ion, who is friend-the my the more good will play at violin
la serbare.
 at festivity

‘Ion, (who is) my best friend, will play the violin at the festive occasion.’

Such expressions do not merely fail to restrict the denotation of the external pivot, they also constitute separate speech acts, distinct from the speech acts expressed by their matrices. Thus, the RC in (2b) (and the expressions flanked by commas in the two versions of (8)) constitute assertive illocutionary units, and the corresponding matrices are distinct assertive illocutionary units constituted by their matrices. In contrast, the RC in (2a) is a proper part of a single illocutionary unit formed by the entire complex sentence. This state of affairs is brought out more dramatically by (9a), where the illocutionary force of the RC is imperative, and thus distinct from that of the matrix.

- (9) a. *Ion, pe care nu uita să-l inviți la nuntă,*
 Ion DOM which not forget.IMPV.2SG SUBJ-him invite.2SG at wedding
te-a căutat ieri.
 you.ACC-has sought yesterday
 ‘Ion, whom you should not forget to invite to the wedding, looked for you yesterday.’
- b. **Fiecare student pe care nu uita să-l inviți*
 every student DOM which not forget.IMPV.2SG SUBJ-him invite.2SG
la nuntă e dispus să vină.
 at wedding is ready SUBJ come.3

In contrast, (b) is ill-formed, because the RC purports to have an illocutionary force of its own, and this option is not available to restrictive RCs.

In view of the distinct illocutionary status of RCs like that in (2b), we will from now on use only the term ‘appositive’ in referring to them, and will abandon the term ‘non-restrictive’. The latter is inappropriate for two reasons: First, it fails to bring out an important difference between such RCs and non-restrictive adjectives of the kind illustrated in (4)–(6), namely, the fact that only the former constructions have separate illocutionary force. Second, as will become apparent below, there exist a variety of RCCs that do not fit smoothly into the restrictive class, but are also semantically distinct from the class we have

just proposed to call ‘appositive.’ For these reasons, the term ‘non-restrictive’ is no longer interchangeable with ‘appositive.’

Before proceeding to a characterization of the additional semantic classes of RCCs, we will consider the different relations between the internal and the external pivot that are found in restrictive and appositive RCCs.

As pointed out in our characterization of restrictive modification, a restrictive RC must end up denoting a set (this characterization is simplified in ignoring intensions, but the latter are not relevant in the examples we have looked at so far). This can be obtained by interpreting the gap as a variable, and the relative pronoun as a trigger for forming an abstract over that variable; the abstraction operation provides a set interpretation for the IP. As also noted above, this set needs to intersect with the set denoted by the external NP, and the output of intersection (also a set) serves as argument of a D(eterminer), whose interpretation provides a quantifier that binds the variable abstracted over. Under this characterization of the facts, there does not seem to be any interesting relation that holds between the external pivot (an NP) and the internal pivot (whether the latter is taken to be the relative pronoun, the gap, or the chain formed by these two elements); in any event, there is no obvious sense in which the NP is an antecedent of the relative pronoun, as is often stated in traditional grammars. The only interesting relation (i.e. intersection) holds between NP and the entire RC.

In appositives, however, it makes perfect sense to view the external pivot (i.e. the external DP) and the internal pivot (i.e. the chain formed by the relative pronoun and the gap) as related in essentially the way in which antecedents and anaphors are related in discourses. To appreciate this point, consider the striking parallelism between (10), which illustrates a variety of anaphoric relations found in discourses, and (11), which exhibits comparable relations found in appositive RCCs.

- (10) i. *Ion e fratele meu. El are trei copii.*
 Ion is brother-the my he has three children
 ‘Ion is my brother. He has three children.’
- ii. a. *Ion are trei oi. Maria le hrănește.*
 Ion has three sheep. Maria them.ACC feeds
 ‘Ion has three sheep. Maria feeds them.’
- b. *Fiecare student a predat câte trei lucrări.*
 each student has submitted DISTR three assignments
Profesorul le-a corectat (pe toate) într-o
 teacher-the CL.3FPL.ACC-has corrected DOM all in a
singură zi.
 single day
 ‘Each student submitted three assignments. The teacher graded them
 (all) in a single day.’

- c. *O asistentă va nota numele fiecărui student. El singur va fi apoi răspunzător de terminarea la timp a formalităților de înscriere.*
 an assistant will note name-the each.GEN student he alone will be then responsible of finishing-the at time GEN formalities-the.GEN of registration
 ‘An assistant will take down the name of each student. He will then be alone responsible for completing the registration formalities on time.’
- d. *Fiecare student vrea să se înscrie la acest curs.*
 each student wants SUBJ REFL register.3 at this course
**(El) s-a pregătit temeinic toată vara.*
 he REFL-has prepared solidly all summer-the
 ‘Every student wants to register for this course. He prepared himself intensively all summer.’
- e. *Niciun student nu vrea să se înscrie la acest curs.*
 no student not wants SUBJ REFL register at this course
**(El) e complet nepregătit.*
 he is completely unprepared
 ‘No student wants to register for this course. He is completely unprepared.’
- (11) i. *Ion, care are trei copii, e fratele meu.*
 Ion who has three children is brother-the my
 ‘Ion, who has three children, is my brother.’
- ii. a. *Ion are trei oi, pe care Maria le hrănește.*
 Ion has three sheep DOM which Maria them.ACC feeds
 ‘Ion has three sheep, which Maria feeds.’
- b. *Fiecare student a predat câte trei lucrări, pe care profesorul le-a corectat într-o singură zi.*
 each student has submitted DISTR three assignments DOM which teacher-the CL.3FPL.ACC-has corrected in a single day
 ‘Each student submitted three assignments, which the teacher corrected in a single day.’
- c. *O asistentă va nota numele fiecărui student, care va fi apoi singur răspunzător de terminarea la timp a formalităților de înscriere.*
 an assistant will note name each.GEN student which will be then alone responsible of finishing-the at time GEN formalities-the.GEN of registration
 ‘An assistant will take down the name of each student, who will then be alone responsible for completing the registration formalities on time.’

- d. **Fiecare student, care vrea să se înscrie la acest curs,*
 each student which wants SUBJ REFL register at this course
s-a pregătit temeinic toată vara.
 REFL-has prepared solidly all summer-the
- e. **Niciun student, care e complet nepregătit, nu vrea să*
 no student which is completely unprepared not wants SUBJ
se înscrie la acest curs.
 REFL register.3 at this course

In all the sub-cases of (10), the antecedent and the anaphor are in distinct independent sentences. In (10i), the antecedent is a referential expression, and the meaning of the anaphor is constructed only on the basis of co-reference with the antecedent. In the various sub-cases of (10ii), the antecedent is a non-referential quantified expression, and the meaning of the anaphor is constructed in a more complex way on the basis of the explicit content of the antecedent and the remainder of the sentence that contains it; in current linguistic parlance, this type of relation is known as ‘E-type anaphora’. (10ii-a) illustrates the simplest kind of E-type anaphoric relation, where the anaphor denotes the three sheep that Ion owns and that were explicitly mentioned in the first sentence; note that the possibility that Ion may have additional sheep is not excluded, since (12) is a non-contradictory continuation of (10ii-a), but only the directly mentioned sheep are part of the denotation of the anaphor.

- (12) *Dar Ion mai are încă patru oi, și Maria refuză să*
 but Ion more has still four sheep and Maria refuses SUBJ
le hrănească.
 them.ACC feed.3

‘But Ion also has four additional sheep, and Maria refuses to feed these.’

(10ii-b) illustrates a more complex situation, where the (existentially) quantified antecedent is construed in the scope of another (universally) quantified expression; here, the anaphor denotes the totality of assignments obtained by summing up the triples of assignments submitted by each student. (10ii-c) illustrates a different kind of complexity: the antecedent is universally quantified and distributive over atomic individuals (hence, its grammatically singular status), and the anaphor appears to be construed as an atomic individual variable bound by that quantifier; in particular, as a variable over students whose name was jotted down by an assistant. This ability of distributive quantifiers to apparently ‘reach across’ independent sentence boundaries is restricted to special circumstances, known as ‘modal embedding’, in the absence of which a distributive construal of the anaphor is ruled out, as illustrated by (10ii-d). Roughly put, what licenses cross-sentential quantifier scope in (10ii-c) is the fact that the second sentence is construed with respect to a future modality that is understood as included in the future modality introduced in the first sentence;

in (10ii-d), on the other hand, there are no comparable modalities, and thus, no felicitous cross-sentential quantifier scope. (10ii-e) shows that with negated existential antecedents, no discourse anaphora is possible, presumably because definite anaphors presuppose the existence of what they denote.

Now, observe that the anaphoric options and restrictions illustrated in the various sub-cases of (10) are fully paralleled by those found in the corresponding sub-cases of (11); furthermore, just as with respect to (10ii-a), (12) is a possible and non-contradictory continuation of (11ii-a). This striking parallelism confirms the thesis that the internal pivot of an appositive RCC is related to the external pivot in essentially the way in which discourse anaphors are related to discourse antecedents.

Note that in characterizing the similarity between the two relations I have used the term ‘essentially’, and not ‘exactly.’ The reason is that there are, after all, certain differences between appositive relatives and independent discourse sentences, their shared illocutionary and anaphoric properties notwithstanding.

For one thing, appositives may not be used as independent sentences in discourse, that is to say, they exhibit property (1i).

For another, they need to have a syntactically expressed antecedent, in contrast to discourses, where it is often sufficient for an anaphor to have a sufficiently salient ‘antecedent’ in the pragmatic context, as illustrated in (13).

- (13) *Ion a avertizat-o de nenumărate ori pe Maria, și
 Ion has warned-her.ACC of countless times DOM Maria and
 i-a spus că dacă nu-și schimbă comportamentul,
 her.DAT-has told that if not-REFL changes behavior-the
 e posibil ca el s-o ucidă.
 is possible that he SUBJ-her.ACC kill.3*
 ‘Ion has warned Maria countless times, and has told her that if she doesn’t
 change her ways, he might kill her.’

In this example, *el* may refer to Ion, but it may also refer to an unmentioned individual, e.g. Maria’s jealous husband. In contrast, *care* in (14) cannot refer to a contextually salient, but syntactically unmentioned individual, such as Maria’s husband, and the appositive clause cannot mean that **that individual** promised to change **his** attitude.

- (14) *Ion a avertizat-o de nenumărate ori pe Maria, care a
 Ion has warned-her.ACC of countless times DOM Maria which has
 promis să-și schimbe atitudinea.
 promised SUBJ-REFL change.3 attitude-the*
 ‘Ion has warned Maria countless times, who promised to change her attitude.’

Furthermore, the syntactic antecedent of an appositive relative pronoun is subject to PRAGMATIC LOCALITY conditions. For example, *Ion* in (14) may not be construed as the

antecedent of *care*; rather, the only possible antecedent of *care* is *Maria*, with the result that the range of construals available to (13) and (14) is quite different, basically because the person understood to say/promise something is Ion in the former and Maria in the latter.

In Romanian, the locality requirements just illustrated seem to be pretty strong, in the sense that the antecedent needs to be an element of the RC's matrix, and moreover one that immediately precedes the RC. In some languages, e.g. in German, an appositive RC may occur 'extraposed' at the end of its matrix, and need not be adjacent to the pronoun's antecedent. For example, (15a) is a completely natural sentence in German. In contrast, a comparable Romanian sentence, e.g. (15b), is ungrammatical.

- (15) a. *Johann ist vor wenigen Tagen nach Paris geflogen, der an
Johann is before few days to Paris flown who at
einer Tagung teilnehmen soll.
a.DAT meeting part-take must*
'Johann, who is supposed to take part in a conference, flew to Paris a few days ago.'
- b. **Ion a plecat acum câteva zile la Paris, care trebuie să
Ion has left ago a-few days to Paris who must SUBJ
participe la un congres.
participate.3 at a congress*

A fourth feature that distinguishes appositive RCCs from discourses with anaphora is that in discourse, a semantically unsuitable antecedent may be 'accommodated', while in RCCs, this is not possible. This point is illustrated by the contrast between (16) and (17).

- (16) *În autobuz nu se afla niciun șofer. Plecase probabil
in bus not REFL find.IMPF.3SG no driver leave.PLPF.3SG probably
să-și cumpere ceva de mâncare.
SUBJ-REFL buy.3 something of food*
'There was no driver on the bus. He had probably left to get something to eat.'
- (17) **În autobuz nu se afla niciun șofer, care plecase
in bus not REFL find no driver which left.PLPF.3SG
probabil să-și cumpere ceva de mâncare.
probably SUBJ-REFL buy something of food*

Thus, (16) need not have the incoherent reading that someone who does not exist left the bus to buy some food. Rather, it allows the reasonable interpretation that the driver who was supposed to be on the bus, was in fact somewhere else. In contrast, only the incoherent interpretation is available in (17), which is excluded, for the same reasons that (11ii-e) is.

For completeness, we may note that if in data like (11ii-e) and (17), restrictive RCs are substituted for the appositive ones, the result is perfectly acceptable, as can be seen by

comparing (18i) with (18ii). The acceptability of (18ii) is unsurprising, given earlier discussion which established that restrictive RCCs do not involve the kind of anaphoric relations found in appositive RCCs, and that the complex NPs found in RCCs denote sets, just as simplex NPs do, with the only difference that the former result from intersection of NP with CP. In sum, (18ii) is acceptable for the same reasons that (18iii) is.

- (18) i. **Niciun student, care cunoaște limba chineză, nu cunoaște limba germană.*
no student which knows language-the Chinese not knows language-the German
- ii. *Niciun student care cunoaște limba chineză nu cunoaște limba germană.*
no student which knows language-the Chinese not knows language-the German
'No student who speaks Chinese speaks German.'
- iii. *Niciun student nu cunoaște limba germană.*
no student not knows language-the German
'No student speaks German.'

Before turning to other semantic classes of RCCs, it seems appropriate to note that, under appropriate circumstances, both restrictive and appositive RCs may iterate. The iteration of restrictives is a straightforward matter, and is illustrated by data like (19i) and (20i). The iteration of appositives, however, sometimes yields degraded results, as in (19ii) and (20ii).

- (19) i. I like the ties [you wear] [that your sister knits for you].
ii. *They've given the job to Max, [who has no qualifications], [who starts next week].
- (20) i. *Îmi plac cravatele [pe care le porți] [pe me.DAT like.3PL ties-the DOM which CL.3FPL.ACC wear.2SG DOM care ți le-a cumpărat sora ta].*
which you.DAT CL.3FPL.ACC-has bought sister-the your
'I like the ties you wear that your sister bought for you.'
- ii. **L-au angajat pe Marin, [care e necalificat], [care him.ACC-have.3PL hired DOM Marin which is unqualified which începe să lucreze săptămâna viitoare].*
begins SUBJ work.3 week-the next

Given the semantics of restrictive and appositive RCs, one may expect both of them to iterate. In particular, multiple restrictive RCs should be able to intersect with each other and with the NP within the external pivot, and multiple (declarative) appositives should be able to provide multiple statements about the external pivot. Why then are data like

(19ii) and (20ii) unacceptable? As it turns out, the iteration of appositives is in principle possible, but needs to satisfy certain pragmatic coherence requirements. Very roughly put, each non-initial appositive must ‘take into account’ the content of the preceding one(s), e.g. by reinforcing the claim made by the latter, by indicating that something is the case in spite of what the preceding RC(s) said, etc. To see this, observe that (19ii) and (20ii) can be substantially improved by minimal addenda, as shown in (21), and note also that the iteration of appositives can yield a perfectly acceptable result, as in (22).

- (21) *?*L-au angajat pe Marin, care e necalificat, care cu
 him.ACC-have.3PL hired DOM Marin which is unqualified which with
toate astea începe să lucreze săptămâna viitoare.
 all these begins SUBJ work.3 week-the next
 ‘They’ve given the job to Marin, who has no qualifications, who **nonetheless** starts working next week.’

- (22) *Ion, care n-a terminat liceul, care nici măcar nu*
 Ion who not-has finished high-school-the who neither even not
știe să scrie sau să citească, vrea să
 knows SUBJ write.3 or SUBJ read.3 wants SUBJ
fie numit director!
 be.3 appointed director
 ‘Ion, who didn’t finish high school, who can’t even read or write, wants to be appointed director!’

For completeness, we may note that iterated restrictive RCs are also not invariably perfect. For example, the reduced version in (23) seems less good than (19i) and (20i), the corresponding full version of (23) being preferred.

- (23) *Îmi plac cravatele [pe care mi le-a arătat Ana]*
 me.DAT like.3PL ties-the DOM which me CL.FPL.ACC-has shown Ana
??(și) [pe care mi le-a arătat Zoia].
 and DOM which me.DAT CL.FPL.ACC-has shown Zoia
 ‘I like the ties [that Ana showed me] ??(and) [that Zoia showed me].’

To appreciate the possible reason for this, note that coordination has a semantic effect comparable to that of iteration, e.g. the coordination of two RCs (and more generally, of two expressions denoting sets) yields the same output as their iteration, i.e. the intersection of the two sets; similarly, the coordination of two appositive RCs that denote propositions has the same truth conditions as iteration, in the sense that the output of coordination/iteration is true just in case each of the individual propositions is true. The preference for iteration vs. coordination seems to be (partly) determined by the following consideration: when the effect of the multiple RCs is ‘cumulative’, iteration is usually at least as acceptable as coordination. This could be seen in (22), where the second RC reinforces the point made

by the first, and can also be seen in (19i) and (20i). Thus, it seems quite natural to think of the set of ties that the addressee wears as including items that were not bought by his sister, so that the second RC may be viewed as further restricting an already constructed set; in contrast, there is no contextual reason for assuming that the set of ties that Ana showed me is larger than the set of ties that Zoia showed me, and coordination of the two RCs seems to be a more natural alternative.

Whatever the correctness of these last remarks, what needs to be remembered is that iteration is an option for **both** restrictive and appositive RCs.

2.2 Singleton relatives

Having hopefully clarified the semantic distinction between restrictives and appositives, we now turn to a number of additional semantic types. Most of the constructions to be discussed can be grouped into an overarching third class, which, at least according to many current analyses, forms a proper subclass of the class of restrictives, that is to say, of RCCs whose RC denotes a set that intersects with the set denoted by NP. What distinguishes the third class from broadly defined restrictives is that their RC **necessarily** denotes a **singleton set** (i.e. a set with exactly one member, which may be either an atom or a plurality), a state of affairs that is arguably responsible for a variety of restrictions on their felicitous quantificational force. In view of these restrictions, it has become common to view them as forming a third class, which has been called by a variety of names, e.g. ‘maximalizing RCCs’ (in view of a presumed formal operation of maximalization), and ‘definite RCCs’. None of these terms is entirely adequate with respect to the entire third class, the former, because restrictions on quantification are in some cases not traceable to formal operations, and the latter, because the quantificational force is sometimes universal. To avoid such partially misleading terminology, we will refer to this class as ‘(vacuously) intersective singleton relatives.’ The term ‘intersective’ has been added in order to distinguish the third class from certain constructions whose singleton-denoting RC arguably does not intersect with NP in any way, thus in effect forming a fourth class.

In order to avoid confusion, the term ‘restrictive’ will henceforth be used in a narrower sense, in particular, as denoting those RCCs whose RC does not necessarily denote a singleton.

2.2.1 *Intersective singleton relatives*

The necessarily singleton status of the RC has a number of consequences. First, the **proper** intersection option, which is typically available to restrictives, is now unavailable, because intersection of any set with a singleton can only yield a singleton (or the null set), so that the denotation of CP will in general be properly included in that of NP (except in those cases where NP itself denotes a singleton).

A second consequence is that iteration of singleton-denoting RCs may not result in proper intersection either, with the result that the iteration of such RCs is typically infelicitous. Details on available construals will be provided at the end of Section 2 (see §2.3).

A third consequence – the most important, and the one that is usually viewed as characterizing the class – is that the range of quantificational options is limited; in particular, definite, universal, and free-choice quantification are in general felicitous, existential quantification, however, is typically infelicitous. The widely assumed reason for this state of affairs is that existential quantification, which leaves open the possibility that the entity whose existence it asserts may not be unique, conflicts with the presupposition of uniqueness imposed by the singleton status of the RC. In contrast, definite determination picks out the maximal entity within the predicate denoted by the RC, and universal quantification exhaustively enumerates the parts of that entity (I return below to the compatibility of such constructions with free-choice quantification).

There are a number of ways in which RCs may emerge with the status of a necessary singleton, each of them requiring a somewhat different analysis. In particular, we may distinguish three categories: (A) RCCs in which the singleton status of the RC appears to be an inherent property of the construction, underivable from other facts (at least, as far as current knowledge goes); (B) RCCs in which the singleton status of the RC may conceivably be argued to be derivable from other formal properties of the construction; and (C) RCCs in which the singleton status of the RC is attributable to facts about the world.

In category (A), we find **free relative** and **correlative** RCCs, in category (B), certain instances of **externally headed** and **internally headed** RCCs, and in category (C), certain constructions that have no (widely known) name. The constructions denoted by the four boldfaced terms will be described in some detail at the beginning of Section 3, which deals with the syntactic typology of RCCs. Romanian possesses free relatives, and since they have not yet been introduced, their discussion is delayed until Section 3.2.

In the remainder of this section, we will look at a number of externally-headed constructions that belong to categories (B) and (C).

2.2.1.1 *Relativization from an existential context.* A well-known and widely discussed variety of externally-headed singleton RCCs is an entity-denoting construction characterized by relativization out of an existential context. In English, an existential context is characterized by the expletive element *there* and a post-copular semantically ‘weak’ nominal, which necessarily has narrow-scope existential force; a pre-copular position for a nominal does not require existential force, and if the nominal is existentially quantified, its scope need not be narrow. In Romanian, there is no overt expletive, so that the two types of copular constructions are distinguished only by the relative position of the nominal and the verb. The two types of construction are illustrated in (24) with Romanian and English data (the nominals are boldfaced for perspicuousness).

- (24) a. *Trei băieți sunt acum în grădină.*
 three boys are now in garden
 ‘Three boys are now in the garden.’
- b. *Sunt trei băieți în grădină acum.*
 are three boys in garden now
 ‘There are now **three boys** in the garden.’

In view of the quantificational freedom allowed to pre-copular nominals, this position is straightforwardly accessible to relativization. What of relativization out of the post-copular position? The issue is hard to investigate in Romanian, since relativization leaves a gap whose position is hard to identify. In English, the presence of the overt expletive indicates relativization out of the existential position. As shown in (25a), relativization turns out to be possible.

- (25) a. The three boys (that) there were __ in the garden made a lot of noise.
 b. *The three boys who there were __ in the garden made a lot of noise.

Now, the existence of data like (25a) is a *prima facie* puzzle, because the individual variable in the gap is existentially bound within the relative, and it is thus unclear how it can also be accessible to abstraction, as required by relativization. The commonly given answer to this puzzle is that relativization does not target the existentially bound individual variable, but another variable within the gap. This assumption is based on the contrast between (25a) and (25b). The pronoun *who* is typed for abstraction over variables of the (human) individual type only, but the phonetically null operator that causes the gap in (25b) is compatible with variables of many other types. A common assumption is that the target of abstraction is a degree/amount variable which specifies the cardinality/amount of the entity/stuff denoted by the noun. That such variables are possible within an existential context and that they do not have to be existentially bound is brought out by sentences like *there were that many marbles on the table*. In sum, the assumption is that the gap in (25a) translates not as *x*, but rather as *deg-many x*, with the *x* variable targeted by existential quantification, and the *deg* variable, by abstraction.

This solves the puzzle noted above, but confronts us with a new puzzle. If abstraction targets a degree variable, how come the entire RCC does not end up denoting a degree, in particular, a number? To be sure, this option exists in principle, as illustrated in (26):

- (26) The number of persons that there were __ at the party exceeded expectations.

However, (25) says that the noise was made by boys, not by the number three. The question is, how is an entity denotation achieved in such cases? The virtually inevitable answer is that the existentially closed individual variable needs to be ‘disclosed.’ Dekker (1993) proposed that antecedents of e-type anaphors in discourse be disclosed by equating the quantificational bound variable with a free variable, which can serve as basis for constructing

an anaphor. This mechanism, however, seems inappropriate for data like (25a) insofar as it cannot obviously account for the deviance of (25b). A preferable alternative (put forward by Grosu & Landman 1998) runs along the following lines: The values over which the deg variable ranges are cardinalities of **entities**, not abstract numbers. Suppose then that in the situation described by the relative in (25a), each value of the deg variable, in particular, 1, 2 and 3, is paired with an entity that it provides the cardinality of. If abstraction applies to such pairs, the result is a set of pairs of the form $\langle \text{deg}, \text{ent} \rangle$. Now, if one could identify an entity through its cardinality, quantifying over the cardinality will automatically also yield the corresponding entity. There is one catch, however, the correspondence between cardinalities and the entities they measure is not in general one-one, and one can thus not unambiguously deduce an entity from just any cardinality picked out by quantification. There is one pair, however, in which a cardinality is associated with a unique individual: the maximal cardinality. This state of affairs points to the desired operation for unambiguously ‘extracting’ an entity from a cardinality: ignore all pairs, except the maximal one. This state of affairs can be ensured by an operation of maximalization, which maps a set to the singleton that contains only its maximal pair.

To ensure that the appropriate maximal pair is appropriately defined within the denotation of the relative, it is sufficient to assume that the external NP constrains the existentially quantified variable **within the relative** (this state of affairs is descriptively called ‘reconstruction’, and its technical implementation need not concern us here). In the minimal situation described by the relative clause, the entities whose existence is asserted are defined, and so is the cardinality of their total sum. Accordingly, the RC can smoothly denote a set containing just the pair formed by the maximal sum and its cardinality. That both members of this pair are defined within the relative is brought up by the following data, which exhibit the contrasting behavior of two minimally different restrictive and singleton RCCs:

- (27) a. The three boys who **probably** __ are in the garden right now may come to the party.
 b. The three boys that there **probably** are __ in the garden right now may come to the party.

In (27a), *three boys* is construed in its ‘visible’ position, that is, outside the scope of the modal adverb within the RC, which targets the location of the boys (i.e. what is probable, and thus not absolutely certain, is that the boys are now in the garden). In (27b), on the other hand, the most natural interpretation is that probability targets the number of the boys (i.e. the possibility is left open that the boys may be either more or less numerous than three, and this includes the possibility that there may be no boys in the relevant situation). This shows clearly that the external noun and its numeral are both construed within the RC, in particular, within the scope of the modal adverb.

The singleton status of the relative is inconsistent with existential quantification, as illustrated by the various infelicitous versions of (28a, c).

- (28) a. I took away {the (four) / all (the) / every / both / #some / #few / #a few / #four} book(s) that there were/was ___ on the desk.
- b. You may take {any / the longest} book that there is ___ on the desk.
- c. I drank {the two liters of / all the / #some} wine that there were/was in the bottle.

The reason why these versions are infelicitous is arguably the following: on the one hand, their RCCs are not (easily) construable as elliptical partitives (note that substituting, e.g. four of the books for four books results in a perfectly acceptable sentence). If so, they purport to denote four books that were on the desk, leaving open the possibility that there may have been other books on the desk. But this possibility conflicts with maximalization, which implies there are no other books on the desk, and this state of affairs results in infelicity.

In the remaining versions of (28a), and in (28b), there is no comparable conflict between the quantification of the RCC and maximalization within the relative. If the RCC has definite force, definiteness simply picks out the unique member of the singleton created by maximalization, and if it has universal force, universal quantification exhaustively enumerates the parts of the singleton's members; it is thus unsurprising that the versions of (28a) with definite and universal determiners are felicitous. The data in (28b) also avoid conflict, but in a different way. The determiner *any* has here free-choice force, and thus assumes a 'background' sum of entities from which a smaller sum is selected; in the specific case of (28b), the selected sum is in fact an atom, due to the singular number of the noun. Similarly superlatives also assume a background sum from which an atom or a smaller sum exhibiting some property to a higher degree than all the other sum-parts is singled out. In the two versions of (28b), maximalization defines the background sum, and the quantification of the RCC picks out an atom, randomly for free-choice, and according to the degree of length for the superlative. There is thus no conflict between quantification and maximalization, hence, the felicity of these data. The data in (28c) show that the restrictions on determiners extend to RCCs with mass head nouns, which thus denote 'stuff', rather than individuals.

As noted at the beginning of this section, extraction from an existential context is difficult to recognize in Romanian, due to the absence of an overt expletive. There is, however, another feature of Romanian which makes it easy to recognize RCs in which abstraction over a degree variable has operated: relative pronouns typed for abstraction over numerical degrees (in particular, cardinalities and amounts). These are the singular forms *cât*, *câtă* 'how much' and the plural forms *câți*, *câte* 'how many' (these forms are provided in pairs corresponding to the masculine and the feminine respectively). Much like the null degree operators of English, these overt relative pronouns are found both in RCCs that denote degrees (illustration postponed until the next section) and in RCCs that denote individuals. In principle, one may assume that abstraction over degrees in entity-denoting CPs may also occur independently of the existential context, i.e. in contexts where direct abstraction

over an individual variable is possible, and the degree relative pronouns of Romanian provide explicit support for this prediction.

A number of properties of individual-denoting RCCs with such pronouns (including the one just alluded to) are illustrated in (29).

- (29) a. *Cei cinci spioni {care/ câți} {e posibil / e probabil} să fie__ printre noi trebuie demascați.*
 the five spies which how-many is possible is probable SUBJ
 be.3 among us must uncovered
 ‘The five spies {who/ that there} {possibly / probably} are __ among us must be found out.’
- b. *Toți spionii {care / câți} sunt printre noi trebuie demascați.*
 all spies-the which how-many are among us must uncovered
 ‘All the spies {who / that there} are among us must be found out.’
- c. *Toți {care / câți} m-au atacat ieri trebuie trimiși la pușcărie.*
 all which how-many me.ACC-have attacked yesterday must
 sent to jail
 ‘All (those) {who/that} attacked me yesterday must be sent to jail.’
- d. *Am băut toată berea {care/ câtă} era în frigider.*
 have drunk all beer-the which how-much was in fridge
 ‘I drank all the beer {which/ that there} was in the fridge.’
- e. *Cei mai inteligenți elevi {care/ *câți} sunt în clasa mea sunt Ion și Maria.*
 the more intelligent students which how-many are in class-the
 my are Ion and Maria
 ‘The most intelligent students that there are in my class are Ion and Maria.’
- f. *{Fiecare/ orice} student {care/ *cât} este în clasa mea trebuie să scrie o teză.*
 every any student which how-much is in class-the my
 must SUBJ write.3 a thesis
 ‘{Every/any} student that there is in my class must write a thesis.’
- g. *Orice studenți {care / *câți} sunt în clasa mea trebuie să scrie o teză.*
 any students which how-many are in class-the my
 must SUBJ write.3 a thesis
 ‘Any students that there are in my class must write a thesis.’

The versions of (29a) with *care* and *câți* contrast in meaning in essentially the way in which (27a) and (27b) do, the modal adverbs are construed as targeting the whereabouts of the

spies in the former cases, and their number in the latter. In (29b–c), where there are no modal adverbs, no difference in truth conditions seems to be detectable (although subtle differences in preferred circumstances for use may exist). (29a–c) show that RCCs with *câți* are compatible with both definite and universal determiners; (29a–b) and (29c) illustrate, respectively, the possibility of relativizing out of existential and out of non-existential contexts. (29d) illustrates the possibility of data like (29b) with mass nouns. Finally, (29e–g) show, when contrasted with the corresponding English translations, that the Romanian degree pronouns cannot be freely used whenever null operators with degree import may be used in English. By and large, they seem to be usable when the CP-external material includes an explicit numeral (as in (29a)) or a non-distributive universal quantifier (as in (29b–d)), but not with superlatives (as (29e)) or with distributive or free-choice determiners (as in (29f, g)).

Romanian RCs with degree pronouns can, under certain circumstances, be construed appositively (with dubious acceptability, unless additional clarifying material is used), as shown in (29'a). Note that the students who died are not the same as those having dinner with the speaker. Thus, if the flanking commas in (29'a) are removed, as in (29'b), we get the absurd reading that people having dinner with the speaker at the moment of speech died one day earlier (on the fact that (29'b), while absurd, is nonetheless grammatical, see Section 2.2.2). Furthermore, universally quantified data like (29b–d) do not naturally allow flanking commas and an appositive construal.

- (29') a. *Cei cinci studenți, #(de fapt, atâția) câți stau acum cu noi la cină, au murit ieri.*
 the five students in fact that-many how-many sit now with us at dinner have died yesterday
 'Those five students, (in fact,) as many as are now having dinner with us, died yesterday.'
- b. *#Cei cinci studenți câți stau acum cu noi la cină au murit ieri.*
 the five students how-many sit now with us at dinner have died yesterday
 '#The five students having dinner with us right now died yesterday.'

An important conclusion concerning data like the versions of (29a–d) with degree pronouns and without comma intonation is that such data need to be analytically distinguished from the corresponding versions with *care*, since they clearly involve abstraction over degrees.

2.2.1.2 Relativization from a degree context. The RCCs discussed in the preceding section have illustrated the possibility of abstraction over degrees when the gap occurs in a 'nominal' position, due to the possibility of degree 'modification' of nominals. It was

furthermore shown that such RCCs may in principle end up denoting either degrees, or entities possessing the cardinality indicated by degrees.

In this section, it will be shown that the same two options also exist when the gap occurs in a 'degree' position, e.g. in positions like those indicated by boldfacing in (30).

- (30) a. *Bagajul tău de mână cântărește nouă kilograme.*
 luggage-the your of hand weighs nine kilos
 'Your hand luggage weighs **nine kilos**.'
- b. *Filmul a durat două ore.*
 movie-the has lasted two hours
 'The movie lasted **two hours**.'
- c. *Șoseaua se întinde zece kilometri dincolo de peșteră.*
 road-the REFL spans ten kilometers beyond of cave
 'The road runs on for **ten kilometers** beyond the cave.'

The data in (31)–(32) illustrate the possibility of constructing degree-denoting and entity-denoting RCCs.

- (31) a. [*Cele nouă kilograme cât cântărește __ bagajul tău de*
 the nine kilos how-much weighs luggage-the your of
mână] {*depășesc limita permisă / te pot*
 hand exceed.3PL limit-the permitted you.ACC can.3PL
împiedica să te urci în avion}.
 prevent SUBJ REFL climb.2SG in plane
 'The nine kilos that your hand luggage weighs {exceed the permitted
 allowance/may prevent you from boarding the plane}.'
- b. [*Cele patru ore cât durează __ filmul ăsta*] *depășesc*
 the four hours how-much lasts movie-the this exceed.3PL
durata medie a unui film.
 duration-the average GEN a.GEN movie
 'The four hours that this movie lasts __ exceed/exceeds the average
 duration of a movie.'
- c. [*Cei zece kilometri cât se întinde __ șoseaua dincolo*
 the ten kilometers how-much REFL spans road-the beyond
de peșteră] *sunt o distanță mai mare*
 of cave are a distance more great
decât mă așteptam.
 than REFL expect.IMPF.1SG
 '[The ten kilometers that the road runs on for __ beyond the cave] are a
 greater distance than I expected.'

- (32) a. [**(Cele) patru ore cât a durat __ filmul ăla*] *au coincis cu o conferință care a avut loc în Cipru.*
 the four hours how-much has lasted movie-the that have coincided with a conference which has had place in Cyprus
 ‘[**(The) four hours that that movie lasted __*] coincided with a conference that took place in Cyprus.’
- b. [**(Cei) zece kilometri cât se întinde __ șoseaua dincolo de peșteră*] *sunt plini de hârtoape.*
 the ten kilometers how-much REFL spans road-the beyond of cave are full of potholes
 ‘[**(The) ten kilometers that the road runs on for __ beyond the cave*] are full of potholes.’

The data in (31) are unsurprising, but those in (32) are interesting. What they show is that abstraction over degrees can give rise to entity-denoting RCCs even when the gap does not itself include an individual variable; note the infelicity of the indefinite versions of these data. Apparently, the entity measured by the maximal degree in the set formed by abstraction can be derived from information provided elsewhere within the relative. In (32b), for example, this entity is the portion of road that begins at the cave and runs beyond it, and whose length is ten kilometers.

2.2.1.3 *Relativization with non-grammatically imposed restrictions on determiners.*

We now turn to what we called ‘category (C)’ in the introduction to Section 2.2.1, i.e. to RCCs in which restrictions on determiners are determined by facts about the world.

Consider first the following data, which differ minimally from the English data in (31) in lacking the definite article (superficially similar, but semantically distinct, Romanian data will be brought up and discussed in Section 2.2.2).

- (33) a. #[Nine kilos that your hand luggage weighs __] {exceed the permitted allowance/may prevent you from boarding the plane}.
- b. #[Four hours that this movie lasts __] exceed/exceeds the average duration of a movie.
- c. #[Ten kilometers that the road runs on for __ beyond the cave] are a greater distance than I expected.

In the corresponding examples of (31), in (31a), in particular, the complex NP denotes a singleton because both the RC and the external NP denote singletons; the RC, because the luggage has a unique weight, and the NP, because nine kilos denotes a unique weight. The complex NP thus denotes the set of degrees that provide the weight of the luggage *and* that are identical to nine kilos. Since there is only one such degree, the definite article is coerced.

The coercion follows from the fact that suppression of the article is construed as existential quantification, which allows for the possibility that the weight of the luggage may not be unique and – more seriously – that nine kilos may denote more than one degree.

The latter implication is more serious because the weight of the luggage may vary with situations, but the value of nine kilos may not. To appreciate the significance of these facts, consider the data in (34).

- (34) a. Your hand luggage weighs {the (precise) / #a} number of kilos that mine weighs.
 b. Your hand luggage weighs a number of kilos that mine has {never/rarely} weighed.
 c. #Your hand luggage weighs nine kilos that mine has {never/rarely} weighed.

The infelicity of the indefinite version of (34a) may be ‘repaired’ by allowing for a multiplicity of situations, in particular, situations in which the luggage weighs different numbers of kilos, as in (34b), but this step does not salvage (34c), because there are no situations in which nine kilos denotes different weights. The deviance of data like those in (33) is thus not salvageable.

Before moving on to other constructions, let us note that data like (31) also allow universal quantification of the RCCs, as illustrated in (35).

- (35) Your hand luggage weighs {all the/every/all nine} kilo(s) that mine does.

This fact may be unsurprising, but it is worth keeping it in mind, because, as will be seen, the next two constructions to be considered in this section do not allow this option.

A first construction exhibits a gap in predicate position, and the entire RCC denotes a property. Properties may be gradable and appear in a variety of kinds, or be simply a yes/no affair. We focus here on the latter option. Thus, in (36), we are concerned with Ion being or not being an American citizen, not with his being an American citizen of a particular kind, such as loyal, disloyal, etc.

- (36) *Ion este în fine* [{*cetățeanul* / #*un cetățean*} *american* {*care* / *ce*} *a*
 Ion is in end citizen-the a citizen American which what has
dorit mama lui atât de mult ca el să devină ____].
 wished mother-the his so much that he SUBJ become.³
 ‘Ion is finally {the/ #an} American citizen that his mother wanted him so much to become.’

Since the non-gradable property AMERICAN CITIZEN is unique, the infelicity of the indefinite version is expected (note that if we allow for a kind interpretation by substituting *așa cum* ‘such as’ for *ce*, the indefinite version becomes perfectly acceptable, more so, in fact, than the definite one). Note also that given the lack of variability of the non-gradable property across situations, the indefinite version of (36) cannot be salvaged by allowing a

multiplicity of situations within the relative, as shown in (37) (of course, if *așa cum* ‘such as’ is substituted for *ce*, there is no problem with the indefinite version).

- (37) *Ion este în fine* [{*cetățeanul* / #*un cetățean*} *american care încă*
 Ion is in end citizen-the a citizen American which yet
nimeni din familia lui n-a reușit să devină ____].
 noone in family-the his not-has managed SUBJ become.3
 ‘Ion is finally [{the / #an} American citizen that no one in his family has yet managed to become].’

An interesting feature of the construction under consideration is that universal quantification is infelicitous, as illustrated in (38).

- (38) *Ion și Gheorghe sunt în fine* [(**toți*) *cetățenii americani care*
 Ion and Gheorghe are in end all citizens-the American which
mama lor a dorit atât de mult ca ei să devină ____].
 mother-the their has wished so much that they SUBJ become.3
 ‘Ion and Gheorghe are finally (**all*) the American citizens that their mother wanted them so much to become.’

The reason for the deviance of the universally quantified version of (38) is presumably the following: in the definite version, plurality is merely the result of morphological agreement with the subject, the denoted property being unique, just as in (36)–(37). The universally quantified version is infelicitous because it coerces an individual reading, which implies that Ion and Gheorghe have become different individuals. Note that the universally quantified data in (35) are not infelicitous because universal quantification does not apply to a degree, which is unique, but rather to the measure units in terms of which degrees are defined, which are not unique.

The last construction we will consider in this section is illustrated in (39).

- (39) a. [{*Marele* / **un mare*} *matematician ce se spune că ar*
 great-the a great mathematician what REFL says that would
fi ____ *Ion*] *ar trebui să poată rezolva această problemă.*
 be Ion would need SUBJ can.3 solve this problem
 ‘[The great mathematician that Ion **allegedly** is ____] should be able to solve this problem.’
- b. [(**Toți*) *marii matematicieni ce se spune că ar*
 all great-the mathematicians what REFL says that would
fi ____ *Ion și Gheorghe*] *ar trebui să poată rezolva*
 be Ion and Gheorghe would need SUBJ can.3 solve
această problemă.
 this problem
 ‘[(**All*) the great mathematicians that Ion and Gheorghe **allegedly** are ____] should be able to solve this problem.’

What characterizes this construction is that the gap is in post-copular position, and the denotation of the RCC is in effect the denotation of the copular subject (e.g. *Ion* in (39a)) with the proviso that the RCC denotes the subject, say, *Ion*, as he is in certain worlds defined by a modal expression (verb or adverb, boldfaced in (39)), where it crucially possesses the property denoted by the RC-external NP. In (39a), for example, the RCC denotes *Ion* as a great mathematician, a status he has according to current rumors, but not necessarily in reality. Since this ‘version’ of *Ion* is unique in being fully defined by all the properties commonly attributed to *Ion* in conjunction with the single distinguishing property of being a great mathematician, and since this is furthermore so in all the worlds in which this version is defined, this RCC behaves exactly like the preceding one: it is felicitous only when definite, all other forms of quantification being excluded, as shown by the infelicitous version of (39b).

2.2.2 Non-intersective singleton relatives

We now turn to the Romanian counterparts of the deviant English data in (33), which are shown in (40).

- (40) a. [Nouă kilograme cât cântărește __ bagajul tău de
 nine kilos how-much weighs luggage-the your of
mână] {depășesc limita permisă / te pot împiedica
 hand exceed.3PL limit-the permitted you.ACC can.3PL prevent
să te urci în avion}.
 SUBJ REFL climb.2SG in plane
 ‘The nine kilos that your hand luggage weighs {exceed the permitted allowance/may prevent you from boarding the plane}.’
- b. [Patru ore cât durează __ filmul ăsta] depășesc
 four hours how-much lasts movie-the this exceed.3PL
durata medie a unui film.
 duration-the average GEN a.GEN movie
 ‘The four hours that this movie lasts exceed the average duration of a movie.’
- c. [Zece kilometri cât se întinde __ șoseaua dincolo de
 ten kilometers how-much REFL spans road-the beyond of
peșteră] e mai mult decât mă așteptam.
 cave is more much than REFL expect.IMPF.1SG
 ‘The ten kilometers that the road runs on for beyond the cave is more than I expected.’

Surprisingly, these data are acceptable. Importantly, while an appositive construal is in principle possible, as illustrated in (41), it is not the only possible construal of such constructions.

- (41) a. *Nouă kilograme, cât cântărește (și) bagajul tău de*
 nine kilos how-much weighs also luggage-the your of
mână, mă vor împiedica să mă urc în avion.
 hand me will.3PL prevent SUBJ REFL climb.1SG in plane
 ‘Nine kilos, as much as your hand luggage weighs, will prevent you from boarding the plane.’
- b. *Patru ore, cât durează (și) filmul tău,*
 four hours how-much lasts also movie-the your
i-au trebuit lui Cezar să treacă Rubiconul
 him.DAT-have.3PL needed OBL Caesar SUBJ pass.3 Rubicon-the
 ‘Four hours, as much as your movie lasts also, is what Caesar needed to cross the Rubicon.’
- c. *Zece kilometri, cât se întinde șoseaua dincolo de*
 ten kilometers how-much REFL spans road-the beyond of
peșteră, este mai mult decât aș putea eu înota.
 cave is more much than would.1SG can I swim
 ‘Ten kilometers, as much as the road runs beyond the cave, is more than I could swim.’

Thus, if the sentences in (41) are pronounced with comma intonation flanking the RC, as indicated, the RC does not affect the interpretation of the matrix, as is typically the case in appositive constructions. In (41a), for example, the nine kilos that are claimed to prevent ‘me’ from boarding the plane need have nothing to do with the weight of ‘your’ luggage, they may simply be the weight of my luggage (this reading is especially salient in the full version, where *și* ‘also’ is naturally construed as implying identity of weight between your and my luggage). In (41b), four hours is simply understood as the time that Caesar needed to cross the Rubicon, and the RC merely adds the information that this time length happened to be identical to the duration of ‘your’ movie. Finally, in (41c), ten kilometers is construed as a distance in a lake, sea, or river, which is greater than the maximal distance I would be able to swim.

The sentences in (41) need not, however, be uttered with flanking comma intonation around the RC, and in this case, the weight, time-length, and spatial distance indicated by the RC-external material is construed as a property of the RC subjects, i.e. of ‘your’ hand luggage, ‘your’ movie, and the stretch of the road that begins at the (contextually relevant) cave respectively. This can be appreciated by contrasting the interpretation of the data in (41) with and without comma intonation. The construals with comma intonation were described in the preceding paragraph. Those without comma intonation are as follows: (41a) is understood as saying that the fact that your luggage weighs nine kilos will somehow prevent me from boarding the plane. (41b) is infelicitous, there being no obvious coherent interpretation that makes the duration of ‘your movie’ the factor that enabled

Caesar to complete the crossing of the Rubicon. Finally, (41c) has the strange construal that 'I' should be able to swim on land. Thus, approximate English paraphrases of the RCCs in (40) might be 'nine kilos as the weight of your luggage', 'four hours as the duration of your movie', and 'ten kilometers as the measure of the road from the cave to its end.'

Returning to the interpretation of the data in (40), we may note immediately that CP and NP cannot be combined by intersection. If they did, they could purport to be construed as indefinites, and would be infelicitous for exactly the reason that the data in (33) were seen to be (essentially, because it would need to be assumed that expressions like nine kilos, four hours, ten kilometers can in principle denote more than one degree on the corresponding scales). In fact, the RCCs in (40) do not have indefinite force. Rather, they are understood as denoting the weight, duration and spatial length denoted by the RC-external NP in the specific minimal situation described by the RC. One possible way of thinking about them is by analogy to proper names in specific kinds of situation, as in the following example:

- (42) Context: John is both the judge and the hangman of some village.
John as a judge has been on strike for three weeks, but **John as a hangman** hasn't stopped working a single day.

One way of looking at the boldfaced expressions in (42) is to view them as denoting the set of properties that John has in those situations where he crucially possesses the explicitly mentioned property. This approach may be extended to the RCCs under consideration.

It is unknown at the moment why this type of RCC is found in Romanian (and in at least one other Balkan language, Albanian), but not in many other languages, such as English, French, Italian and German. That is to say, no grammar-internal factors have been detected so far.

2.3 Conclusion

In this section, we noted and illustrated the following distinctive properties of the three major semantic types of RCCs:

I. Appositive RCs function as illocutionary units distinct from those formed by their matrices; restrictive and singleton RCs are illocutionarily integrated into their matrices.

II. The three types of RCCs differ in the types of determination/quantification they allow. Thus, restrictive RCCs are compatible with every kind of determination/quantification found in simplex nominals. Appositive RCCs are compatible only with those types of determination/quantification that are compatible with discourse-binding of an antecedent. Singleton RCCs are incompatible with existential quantification.

III. The three types of RCCs also differ in the import of iteration of their RCs. Iterated restrictive RCs rely on multiple set intersection, each RC imposing an additional restriction on the set defined by the pivot NP. Iterated appositive RCs express illocutionary

predications about their antecedent, and must satisfy discourse coherence requirements. Singleton RCs do not iterate, except as parenthetical reinforcements or corrections of a single non-parenthetical RC.

3. Syntactic types

The principal syntactic types of RCCs in the languages of the world are the following: (i) Externally headed RCCs, (ii) Internally headed RCCs, (iii) Correlative RCCs, and (iv) Free RCCs. It is important to keep in mind that these terms are pre-theoretical, and that they do not necessarily provide a precise, or even correct, characterization of the classes of RCCs they name.

Internally headed RCCs and Correlative RCCs are entirely absent from Romanian and therefore they will not be discussed here.

3.1 Externally headed Relative Clause Constructions

Externally headed RCCs, which have been extensively illustrated in the preceding section, consist of an RC and some external material (the latter in turn typically consists of a D and an NP). In Romanian and English, the RC *follows* the external material (a state of affairs that is not universally found in externally headed RCCs).

In Romanian, there is in most cases a gap, which forms a chain with a displaced phrase that is overtly ‘visible’ at the left periphery of the RC and exhibits the Case and prepositional requirements of the position occupied by the gap; this phrase, which for lack of a better name, we will call the ‘relative phrase’, is either a relative pronoun, or a more complex phrase that properly includes a relative pronoun.

In some cases, the presence of the gap is partly masked by a ‘doubling’ Accusative or Dative clitic pronoun (see *i-* ‘her/him.DAT’ in (43iii)), which is independently found in Romanian with non-displaced noun phrases under special circumstances. Regardless of the presence/absence of such a clitic, RCCs exhibiting a relative phrase that reflects the Case/prepositional properties of the gap are sensitive to the so called ‘island constraints’ (which are described and illustrated more fully in Section 6 of this chapter). We limit here demonstration of island-sensitivity in relation to one sub-type of the “Complex NP Constraint”, which blocks extraction out of DPs that include a relative clause. (43i–ii) illustrate the sensitivity of relativization with a gap, with and without a doubling clitic pronoun respectively.

- (43) i. **Fata căreia ți-am arătat doi băieți care*
 girl-the which.DAT you.DAT-have.1 shown two boys which
i-au trimis — scrisori de dragoste a plecat la Paris.
 her.DAT-have sent letters of love has left to Paris

- ii. **Fata cu care ți-am arătat doi băieți care au dansat ieri seară a plecat la Paris.*
 girl-the with which you.DAT-have shown two boys which have danced yesterday evening has left to Paris
- iii. %*Fata care ți-am arătat doi băieți care i-au trimis scrisori de dragoste a plecat la Paris.*
 girl-the which you.DAT-have.1 shown two boys who her.DAT-have.3PL sent letters of love has left to Paris
 ‘The girl that I have shown you two boys who have sent her love letters left for Paris.’
- iv. %*Fata care ți-am arătat doi băieți care au dansat aseară cu ea a plecat la Paris.*
 girl-the which you.DAT-have.1 shown two boys which have.3PL danced last-night with her has left to Paris
 ‘The girl who I have shown you two boys who danced with her last night left for Paris.’

In (43i), the Dative Case of the relative pronoun indicates that it has been displaced from the position of the gap; in (43ii), the preposition *cu* constitutes evidence of displacement. The fact that both examples are deviant indicates that the presence/absence of a doubling clitic in no way affects island sensitivity.

The minimally different examples (43iii–iv) illustrate another relativization option that is available for some speakers in the colloquial register of Romanian. The RCs are initiated by the invariant form *care*, which does not reflect the Case or prepositional requirements of an RC-internal pivot. Furthermore, the internal pivot is a definite pronoun, clitic in (43iii) and non-clitic in (43iv). Crucially, there is no island-sensitivity in these examples, a state of affairs which, taken in conjunction with the invariance of *care*, point to the conclusion that nothing has been displaced in such cases, and that *care* is not a relative pronoun, but simply a relative complementizer (comparable, e.g. to *that* in the English example *the book that you wrote about*). Pronouns like those in (43iii–iv) are usually called ‘resumptive’ pronouns.

3.2 Free relative clause constructions

As far as overt appearance goes, these constructions appear to consist entirely of a *wh*-like clause, being in fact very similar, and often superficially identical, to embedded interrogative clauses (also, in many languages other than Romanian). There is, however, a very important difference between interrogatives and superficially similar free RCCs: The former denote propositions, in particular, the set of propositions that are true answers to the question, so that the *wh*-phrase or phrases within it in no way function as ‘pivots’. In contrast, the *wh*-phrase of a free RCC (which, unlike in interrogatives, is always unique), determines the *category and logical type* of the RCC, and thus definitely constitutes a pivot.

As will be seen below, free RCCs can be nominal, adjectival, prepositional, or adverbial (much like appositives, and unlike restrictives: see Section 4), and they may denote entities, degrees, or properties.

What makes them different from externally-headed relatives is that there is a single overt pivot, the *wh*-phrase. Furthermore, the fact that the *wh*-phrase occurs at the left-periphery of the RCC, i.e. in a position where its internal/external status is not automatically obvious (a situation found in numerous languages besides Romanian), has given rise to a multiplicity of analyses concerning the structural status of this pivot. There has been a great deal of discussion arguing in favor of one of the following three views: (i) the *wh*-phrase is internal to the RC; (ii) the *wh*-phrase is external to the RC; (iii) the *wh*-phrase belongs simultaneously to the RC and to its matrix.

For (iii), the *wh*-phrase functions as both internal and external pivot. For (ii), the *wh*-phrase is an external pivot, and the gap within the relative is the internal pivot. For (i), the issue of an external pivot is slightly trickier. One can, in principle, assume a null external noun, but one does not have to do this, because such a noun would in any event need to be semantically vacuous. What does, however, seem to be necessary (or at least, arguably desirable), is to assume a null external functional category, in particular, a determiner or other category-specific functional category, which can account for the fact that free RCCs are in principle freely licensed in the environments in which simplex phrases homocategorial with their *wh*-phrases are. Reviewing the arguments for (i)–(iii) goes way beyond the scope of this chapter, and we will undertake nothing of the kind here (the interested reader may, however, consult the bibliography). Suffice to say at this point that the author of this chapter finds the arguments in favor of (i) most convincing, and this analysis will be assumed in the remainder of this chapter.

A partial illustration of incontrovertible free RCCs is provided in (44). Note that those in (44i–ii) have nominal pivots and occur in a nominal position (that of direct object), while the one in (44iii) has a locative adverbial and occurs in a locative adverbial position. For additional illustration of the categorial ‘matching’ requirement concerning free FRCs and their pivots, see (47)–(49).

- (44) i. *Ion a mâncat* [*ce/ ceea ce*] *a mâncat* ___ *și Maria*.
 Ion has eaten what that what has eaten and Maria
 ‘Ion ate what Maria ate.’
- ii. *Ion a întâlnit* [*pe cine a întâlnit*] ___ *și Maria*.
 Ion has met DOM who has met and Maria
 ‘Ion met who Maria met.’
- iii. *Ion locuiește* [*unde locuiește și Maria*] ___.
 Ion lives where lives and Maria
 ‘Ion lives where Maria also lives.’

Semantically, free FRCs exhibit the restrictions on quantificational force that are typical of intersective singleton RCCs. For example, the RCC in (44ii) cannot be construed with

existential force, but only with definite (possibly also universal) force, and implies that Ion met (all) the people that Maria met, not just some of them; thus, if (44ii) is continued with (45), the resulting discourse is contradictory.

- (45) *A doua zi, Ion le-a întâlnit pe celelalte persoane pe care le întâlnește Maria.*
 the second day Ion them.ACC-has met DOM the-other persons DOM
 care le întâlnește Maria.
 which them.ACC meet.PLPF.3SG Maria
 ‘The next day, Ion met the other persons that Maria had met.’

In addition, free RCCs may also have the essential force of externally-headed relatives headed by free-choice expressions, owing to the fact that their internal pivot may be a free-choice expression. In general, free-choice expressions may have either quasi-universal force, as in *any beer there is in the fridge is mine* (which implies that all the beer in the fridge is mine), or genuine ‘choice’ force, as in *take any book on this shelf that you like* (which is understood as an exhortation to take one book out of the plurality of books on the shelf, the choice being free). Comparable interpretations with free relatives are illustrated by (46a) and (46b). Maximalization needs to be assumed in the analysis of these constructions, just as it was in relation to externally-headed relatives with comparable quantificational force (see discussion of the relevant version of (28b)), as illustrated by the infelicity of using the second sentence in these examples as a continuation of the first.

- (46) a. *Ion mănâncă [orice mănâncă __ Maria], #dar nu atinge alte lucruri pe care le mănâncă Maria.*
 Ion eats whatever eats Maria but not touches
 other things DOM which CL.3FPL.ACC eats Maria
 ‘Ion eats whatever Maria eats, #but does not touch other things that Maria eats.’
- b. *Alege [orice carte îți place], #dar ține cont că sunt cărți care îți plac și pe care nu le poți alege.*
 pick.IMPV.2SG any book you.DAT likes but keep.IMPV.2SG
 account that are books which you.DAT like.3PL and DOM
 which not CL.3FPL.ACC can.2SG choose
 ‘Choose any book you like, #but do not forget there are books you like which you may not choose.’

It is important to stress that the targeted variable need not be an individual one. In particular, it may also be a variable of the type of degrees, kinds, or properties, as illustrated in (47)–(49) respectively.

- (47) *Mâine pot fi [oricâte sticle de bere îmi ceri
tomorrow can.3PL be however-many bottles of beer me.DAT ask.2SG
să cumpăr __] pe masa ta.
SUBJ buy.1SG on table-the your*
‘Tomorrow, there can be [however many bottles of beer you ask me to buy] on your table.’
- (48) *Îți pot procura [orice fel de marfă dorești __].
you.DAT can.1SG get any kind of merchandise want.2SG
‘I can get you [whatever kind of merchandise you desire].’*
- (49) *Ion este astăzi [{ceea ce /[?]ce} a sperat dintotdeauna
Ion is today that what what has hoped forever
mama lui că va fi __ cândva]: respectat,
mother-the his that will be sometimes respected
admirat, și acoperit de onoruri.
admired and covered of honors*
‘Ion is today [what his mother always hoped he would be some day]: respected, admired, and full of honors.’

In concluding our discussion of the properties of free RCs, we will address a property they share with other singleton relatives, and which was alluded to in Section 2: iteration with strict intersecting import, which is the *raison d’être* of iterated restrictive RCs, is typically excluded with singleton RCs. This is certainly so with respect to free relatives. Illustrations from English and Romanian are provided in (50)–(51) respectively.

- (50) [What John said] [{that / *what} upset Mary so much] cannot be revealed.
- (51) a. [*Orice ar spune Ion*] [{*care / *orice*} *n-ar fi pe
whatever would say Ion which whatever not-would be on
placul neveste-sii*] *va fi ignorat de restul familiei.*
taste-the wife-his.GEN will be ignored of rest-the family-the.GEN
‘Whatever Ion may say {that / *whatever} wouldn’t meet with his wife’s approval will be ignored by the rest of the family.’
- b. [[?]*Ce spune Ion*] [*ce nu este pe placul neveste-sii*]
what says Ion what not is on taste-the wife-his.GEN
e de obicei ignorat de restul familiei.
is usually ignored of rest-the family-the.GEN
‘Whatever Ion says which doesn’t meet his wife’s approval is usually ignored by the rest of the family.’

Note that the version of (50) with *that* in the rightmost bracketed structure is fine, because this structure is interpretable as an extraposed restrictive RC modifying the leftmost token of *what*. The version with two tokens of *what*, which forces both RCs to be free relatives, is completely ungrammatical. Similarly, in (51a), the version with *care* is fine, while the version with *orice* is totally out. In this example, *orice* has been used, rather than *ce*, because, as will be seen in Section 5.1, *ce* may have either pronoun or – more marginally – complementizer status, with the result that (51b) is in effect a counterpart of both versions of (50), and is marginally acceptable on the reading that corresponds to the version of (50) with *that*.

The inability of free RCs to intersect in the way restrictive RCs do is arguably due to their singleton status, that is to say, to the fact that the intersection of two singletons with distinct members is null. The inability of free RCs to intersect is also revealed in the following contrast:

- (52) a. *Băiatul* [[*care o iubește pe Maria*] și [*care o iubește și pe Iulia*]] *așteaptă afară*.
 boy-the who her.ACC loves DOM Maria and who her.ACC loves also DOM Iulia waits outside
 ‘The boy [[who loves Maria] and [who also loves Iulia]] is waiting outside.’
- b. [*Cine o iubește pe Maria*] și [*cine o iubește și pe Iulia*] *să aștepte afară*.
 who her.ACC loves DOM Maria and who her.ACC loves also DOM Iulia SUBJ wait outside
 ‘[Who loves Maria] and [who loves Iulia]] should wait outside.’

(52a) is naturally interpreted (in both languages) as implying that the same boy simultaneously loves Maria and Iulia. (52b) does not imply (in either language) that the same people love both Maria and Iulia (it does not exclude this possibility, but does not imply it, either). The reason (52b) is grammatical, unlike the starred versions of (50) and (51a), is that conjunction, in contrast to non-appositive stacking, can rely not only on set intersection, but also on set union. For example, the coordination in *we honor the [men and women] who made this country great* is most naturally interpretable as the union of two sets, one of men and one of women, rather than as single set of hermaphrodites. The meaning of (52) may be obtained by assuming a coordination of CPs interpreted as the union of two singletons (it may, of course, also be obtained by assuming a coordination of two DPs).

The impossibility of an intersective construal of a conjunction of singletons may also be demonstrated with respect to relatives in *cât*, which, as was shown in 2.2.1.1 above, are singleton relatives. We can thus correlate the impossibility of a set intersection interpretation

of conjunction with the singleton interpretation of such conjoined relatives. Consider (53), which is a coordinate counterpart of data like (29b):

- (53) *Toți băieții* [{*care* / *câți*} *se aflau în biroul meu la*
all boys-the which how-many REFL find.IMPF in office-the my at
ora 4] *și* [{*care* / *câți*} *se aflau (și) în biroul*
hour-the 4 and which how-many REFL find.IMPF also in office-the
tău la ora 5] *mi s-au plâns de felul*
your at hour-the 5 me.DAT REFL-have complained of way-the
cum au fost tratați.
how have.3PL been treated
- 'All the boys {who/that there} were in my office at 4 o'clock and {who/that there} (also) were in your office at 5 o'clock have complained to me about the way they were treated.'

The reduced version with *care* in both relative clauses allows an interpretation based either on set intersection or on set union, and the corresponding full version (in which *și* 'also' appears in the second conjunct) strongly favors the intersective construal. In contrast, both the reduced and the full versions of (53) with *câți* in both clauses allow only a construal based on set union. For concreteness, assume that the boys a, b, and c were in 'my' office at 4 o'clock and that the boys b, c, and d were in 'your' office at 5 o'clock. In the versions with *care*, the complex DP may denote either the sum of boys b+c (by intersection) or the sum a+b+c+d (by union). In the version with *câți*, only the denotation a+b+c+d is available.

To conclude on the semantics of free relatives, we have seen that, whereas externally headed RCCs may exhibit appositive, restrictive, or singleton semantics, free RCCs have only singleton semantics.

4. Nominal and non-nominal relative clause constructions

The RCCs that have appeared in our illustrations so far have been of nominal category. The only exception to this generalization is the free RCC in (49), which is categorially underspecified, being compatible with any contextually appropriate predicative category. In this particular example, the colon is followed by APs, but it can in principle also be followed by NPs, e.g. *un actor celebru și un tată bun* 'a famous actor and a good father', or by PPs, e.g. *într-o stare de pace sufletească* 'at peace with himself'.

In this section, it will be shown that some externally-headed RCCs, although not all, may be of other categories as well.

Externally-headed non-appositive RCCs are necessarily nominal, whether they function as arguments (as in (2i)) or as predicates (as in (36)).

Appositive RCCs, on the other hand, occur in a wide range of categories; in particular, they may be of category NP/DP, AP, VP, IP and CP. Furthermore, the RCs exhibit special morphological properties when the external pivot (the antecedent) is something other than a nominal argument, in particular, a nominal predicate, an adjectival predicate, a VP, an independent sentence, or a complement clause, as in (54)–(58) respectively. In all these examples, the antecedent is boldfaced.

- (54) *Ion e (un) soț bun, ceea ce fratele lui n-a fost niciodată.*
 Ion is a husband good that what brother-the his not-has been never
 ‘Ion is a good husband, which his brother never was.’
- (55) *Ion e curajos, ceea ce fratele lui n-a fost niciodată.*
 Ion is brave that what brother-the his not-has been never
 ‘Ion is brave, which his brother never was.’
- (56) *Ion se exprimă într-un mod neglijent, ceea ce fratele lui nu face niciodată.*
 Ion REFL expresses in a way careless that what brother-the his not does never
 ‘Ion expresses himself carelessly, which his brother never does.’
- (57) *Ion a sosit după miezul nopții, ceea ce a șocat pe toată lumea.*
 Ion has arrived after mid-the night-the.GEN that what has shocked DOM all world
 ‘Ion arrived after midnight, which surprised everybody.’
- (58) *Ion susține că doi și cu doi fac cinci, ceea ce fratele lui n-ar susține niciodată.*
 Ion claims that two and with two make five that what brother-the his not-would claim never
 ‘Ion claims that two and two are five, which his brother would never claim.’

Thus, in English, the internal pivot is invariably *which*, even when the antecedent is nominal and denotes a human property (see (54)). In Romanian, as in Romance languages in general, the appositive expression is not even clausal; rather, it appears to be a DP that

properly includes an RC and is headed by a demonstrative pronoun, and which nonetheless has the semantics of an appositive RC. That such expressions are not construed as DPs typically are, can be appreciated by contrasting the full version of (59) with its reduced version on the one hand, and with (54)–(58) on the other.

- (59) {*Fata / Cartea*} *asta, (cea) care i-a plăcut lui Ion atât*
 girl-the book-the this the-one which him.DAT-has liked OBL Ion so
de mult, nu i-a plăcut mamei lui.
 of much not her.DAT-has liked mother-the.DAT his
 ‘This {girl/book} (the one) {who/that} Ion liked so much, did not find favor with his mother.’

- (60) *Ion locuiește la Paris, (acolo) unde locuiește și sora lui.*
 Ion lives at Paris there where lives also sister-the his
 ‘Ion lives in Paris, (the place) where his sister also lives.’

- (61) *Maria a sosit la ora cinci, (atunci) când era încă prea*
 Maria has arrived at hour-the five then when was still too
devreme pentru cină.
 early for dinner
 ‘Maria arrived at five o’clock, (the time) when it was too early for dinner.’

- (62) *Maria mănâncă repede și pe nemestecate, (așa) cum mănâncă și*
 Maria eats quickly and on not-chewing like how eats also
sora ei.
 sister-the her
 ‘Maria eats quickly and without chewing, {in the way/as} her sister also does.’

- (63) *Maria aleargă zilnic câte zece kilometri, (atâta) cât*
 Maria runs daily DISTR ten kilometers that-much how-much
de altfel aleargă și sora ei.
 actually runs also sister-the her
 ‘Maria runs ten kilometers daily, {the distance/as} her sister also runs.’

In the full version of (59), the appositive expression is normally understood as *anaphoric to earlier discourse or the non-linguistic context*, rather than just to the expression that immediately precedes it, as is the case in the corresponding reduced version and in (54)–(58)); in fact, the appositive expression in (59) tends to have the force of a reminder. A comparable effect, if somewhat less strong, is detectable with respect to the full and reduced versions of (60)–(61). In (62)–(63), the effect is even weaker, it being possible to construe the full versions in the same way as the reduced ones.

For completeness, it may be noted that contrasts like those just noted exist in other Romance languages, for example, in French. Thus, the full version of (64i) contrasts with its reduced version and with (64ii) in that the expression after the comma tends to have context-anaphoric import and the force of a reminder.

- (64) i. *Jean a embrassé Marie, (celle) qui lui fait la cour*
 Jean has kissed Marie that who him.DAT makes the court
depuis longtemps.
 since long
 ‘Jean kissed Marie, who has been courting him for a long time.’
- ii. *Jean est intelligent, ce que son frère n’ est pas.*
 Jean is smart this that his brother NEG is NEG
 ‘Jean is smart, which his brother is not’

The ability to exhibit non-nominal categorial status is also a property of free RCCs, in both Romanian and English. This is illustrated in (65i–ii), where the free RCCs have adjectival and adverbial status respectively.

- (65) i. *Maria poate fi [oricât de servibilă i se cere să fie].*
 Maria can be as-much of helpful her.DAT REFL ask SUBJ be.3
 ‘Maria can be [however helpful she is asked to be].’
- ii. *Maria poate alerga [oricât de repede i se cere să alerge].*
 Maria can run as-much of fast her.DAT REFL ask
 SUBJ run.3
 ‘Maria can run [however fast she is asked to run].’

5. Introductory elements

5.1 Relative pronouns vs. complementizers

RCCs whose RC exhibits an internal gap, and in particular, those of Romanian, may (also) be classified according to the morphology of the elements at the left periphery of their RCs.

As was already seen in the examples in (43), Romanian RCs may begin either with a relative pronoun or adverb or with a complementizer; we will see in the next sub-section (§5.2) that a relative pronoun may also have been displaced as part of a larger phrase, a phenomenon known as ‘Pied Piping’. We note that English exhibits, in addition to these two options, a third: the RC may fail to exhibit any overt introductory item (a situation known as ‘contact relatives’).

Concerning relative pronouns, these are basically homonymous with interrogative pronouns (see §5.2.1 below), except that *cine* ‘who’ and *ce* ‘what’ are not used as relative pronouns in externally headed relatives, *care* ‘which’ being used with both human and non-human external nouns. *Cine* and *ce* are, however, used in free RCCs.

Concerning complementizers, we have seen that invariant *care* can have this function, and so can *ce*, which may be substituted for *care* in (43) with preservation of insensitivity to island constraints. The complementizer status of *ce* in externally-headed relatives is brought out both by the insensitivity to islands just noted, and by the fact that, unlike interrogative *ce* and the relative pronoun *care*, it is not allowed after prepositions, as illustrated in (66ii).

- (66) i. *Muntele* {*care* / *ce*} *se* *înalță* *în* *zare* *e*
 mountain-the which what REFL rises in horizon is
acoperit de zăpadă.
 covered of snow
 ‘The mountain {which/that} rises in the horizon is covered with snow.’
- ii. *Muntele* *la* {*care* / **ce*} *se* *uită* *Maria* *e* *foarte* *înalt.*
 mountain-the at which what REFL looks Maria is very high
 ‘The mountain at {which/*that} Maria is looking is very high.’

As a relative complementizer, *ce* differs in status from construction to construction. One can distinguish three types of situation: (A) The external pivot is an overt full NP, as in (66i) or (67i), in which case it has a literary, somewhat obsolescent flavor. (B) There is no overt external NP, only some form of the definite determiner *cel*; in this case, the complementizer is a fully acceptable alternant of relative pronouns, as illustrated in (67ii). (C) The complementizer constitutes the only grammatical option. This happens when the (overt) external material is the neutral counterpart of *cel*, i.e. *ceea*, or the ‘bare’ quantifier *tot* ‘all’, as illustrated in (67iii–iv). The fact that the neutral form of this definite determiner behaves differently than the non-neutral forms may appear surprising, but the reason seems to be that the neutral form and the complementizer have contracted into a single, coupled with the fact that there is no free form *ceea*. Evidence for contraction comes from the behavior of *ceea ce* as a relative pronoun in free RCCs, a point that will be addressed in Sections 5.2.1 and 5.2.2.2.

- (67) i. [?]*Fata* *ce* *ți-a* *plăcut* *nu* *se* *află* *acum* *în* *cameră.*
 girl-the what you.DAT-has liked not REFL finds now in room
 ‘The girl that you liked is not in the room now.’
- ii. *Cei* {*ce* / *care*} *doresc* *să* *ia* *parte* *la* *curs* *trebuie*
 the.MPL what which wish SUBJ take.3 part at course must
să se înscrie din timp.
 SUBJ REFL register.3 in time
 ‘Those {who/that} wish to take part in the course must register early.’

- iii. {*Ceea ce* / **Ceea care*} *te* *deranjează* *va fi* *suprimat*.
 that what that which you.ACC bothers will be suppressed
 ‘{What / *which} bothers you will be eliminated’
- iv. *Tot* {*ce* / **care*} *te* *deranjează* *va fi* *suprimat*.
 all what which you.ACC bothers will be suppressed
 ‘Everything {that/ *which} bothers you will be eliminated.’

5.2 Distinctions in the nature and size of ‘relative phrases’

5.2.1 Simplex relative phrases

The relative pronouns and adverbs are by and large identical with the set of interrogative pronouns and adverbs, which is provided below:

- (68) i. *Cine* (NOM/ACC), *cui* (DAT/GEN) ‘who’
 ii. *Ce* ‘what’
 iii. *Care* (NOM/ACC), {*căru(i)a* MSG, *cărei(a)* FSG, *cărora(a)* PL} (DAT/GEN)
 ‘which’
 iv. {*Cât* MSG, *câtă* FSG ‘how much’; *câți* MPL, *câte* FPL ‘how many’} (NOM/ACC),
câtor(a) (DAT/GEN) ‘how many’
 v. *Unde* ‘where’
 vi. *Când* ‘when’
 vii. *Cum* ‘how’
 viii. *De ce* ‘why’

Observe that the forms in (68ii, v–viii) are invariant, and that the forms in (68i, iii, iv) exhibit a limited amount of inflection. In particular, the form in (68i) inflects for direct/oblique Case, but not for Gender or Number. As elsewhere in Romanian, the distinction between NOM and ACC is sometimes indicated by the pre-nominal ACC marker *pe*, and the distinction between DAT and GEN is sometimes indicated by the pre-nominal GEN marker *al* (the circumstances under which this marker is used are discussed in Chapter 6). The form in (68iii) also inflects for Case, and the oblique Case also inflects for Gender and Number. The form in (68iv) inflects for Number and Gender, and the Plural also inflects for Case. The full forms in (68iii–iv) correspond to pronominal uses, and the reduced forms, to determiner uses (i.e. when heading a DP in which they exhibit an overt NP complement; on this morphological distinction in Romanian, see Chapter 16 §8, Chapter 3 §3).

Of the forms in (68), *de ce* ‘why’, is not used in any of the core RCCs described so far, in contrast to English, where constructions like *the reason why I did it* are possible.

Concerning the remainder of the forms, overtly headed RCCs disallow *cine* ‘who’ and *ce* ‘what’, using only *care* ‘which’ instead (as already noted in Section 5.1). Free RCCs allow all the forms in (68i–vii), and also exhibit doublets with prefixed *ori-*, which have

the ‘free-choice’ import of English forms with suffixed *-ever*. Some illustrations of the use of relative pronouns and adverbs in restrictive, appositive, and free RCCs are provided, respectively, in (69)–(72), (73)–(75), and (76)–(82).

- (69) i. {*Fata/ Cartea*} *care ți-a plăcut nu se află*
 girl-the book-the which you.DAT-has liked not REFL finds
acum în cameră.
 now in room
 ‘{The girl/The book} that you liked is not in the room now.’
- ii. *Studentții cărora le-ai cerut să scrie un*
 Students-the which.DAT them.DAT-have.2SG asked SUBJ write.3 a
referat vor să te vadă.
 paper want.3PL SUBJ you.ACC see.3
 ‘The students that you asked to write a paper want to see you.’
- (70) i. *Ion locuiește în cartierul {în care / unde} locuiești*
 Ion lives in neighborhood-the in which where live.2SG
și tu.
 also you
 ‘Ion lives in the neighborhood {in which/where} you also live.’
- ii. *Ion locuiește acolo {unde /*în care} locuiești și tu.*
 Ion lives there where in which live.2SG also you
 ‘Ion lives there {where/*in which} you also live.’
- (71) i. *Maria a sosit în momentul {în care / când} ai*
 Maria has arrived in moment-the in which when have2.SG
ajuns și tu.
 arrived also you
 ‘Maria arrived at the moment {in which/when} you also arrived.’
- ii. *Maria a ajuns atunci {când /*în care} ai ajuns*
 Maria has arrived then when in which have.2SG arrived
și tu.
 also you
 ‘Maria arrived (then) {when/*in which} you also arrived.’
- (72) i. *Felul {în care /cum} te comportă tu mă deranjează.*
 way-the in which how REFL behave.2SG you me.ACC bothers
 ‘The way {in which/how} you behave bothers me.’
- ii. *Maria se comportă așa {cum /*în care} se comportă*
 Maria REFL behaves so how in which REFL behaves
și Ion.
 also Ion
 ‘Maria behaves the way Ion also behaves.’

- (73) {*Fata / Cartea*} *asta, care i-a plăcut lui Ion atât de*
 girl-the book-the this which him.DAT-has liked OBL Ion so of
mult, i-a plăcut și mamei lui.
 much her.DAT-has liked also mother-the.DAT his
 ‘This {girl/ book}, which John liked so much, his mother also liked.’
- (74) *Ion locuiește la Paris, unde locuiește și sora lui.*
 Ion lives at Paris where lives also sister-the his
 ‘Ion lives in Paris, where his sister also lives.’
- (75) *Maria a sosit la ora cinci, când era încă prea devreme*
 Maria has arrived at hour-the five when was still too early
pentru cină.
 for dinner
 ‘Maria arrived at five o’clock, when it was too early for dinner.’
- (76) i. *Cine îl cunoaște pe Ion nu poate decât*
 who him.ACC knows DOM Ion not can but
să-l admire.
 SUBJ-him.ACC admire.3
 ‘Whoever knows Ion can’t help admiring him.’
- ii. *Oricine traversează podul trebuie să plătească o taxă.*
 whoever crosses bridge-the must SUBJ pay.3 a fee
 ‘Whoever crosses the bridge must pay a fee.’
- (77) i. *Ce te interesează pe tine mă interesează de obicei*
 what you.ACC interests DOM you me.ACC interests usually
și pe mine.
 also DOM me
 ‘Whatever interests you interests me also.’
- ii. *Orice va apărea la orizont va fi semnalat de*
 whatever will appear at horizon will be signaled at
îndată comandantului.
 once commander-the.DAT
 ‘Anything that might appear in the horizon should be signaled immediately to the commander.’
- (78) i. *Care nu înțelege de vorbă bună va fi făcut să*
 which not understands of word good will be made SUBJ
înțealgă de vorbă rea.
 understand.3 of word bad
 ‘Whoever doesn’t understand things in the easy way, will be forced to understand them in the hard way.’

- ii. *Oricare dorește să se înscrie e binevenit.*
 whoever wishes SUBJ REFL register.3 is welcome
 ‘Anyone who wants to register is welcome.’
- (79) i. *Sunt dispus să procedez exact cum mi se cere*
 am willing SUBJ act.1SG exactly how me.DAT REFL asks
să procedez.
 SUBJ act.1SG
 ‘I am willing to act exactly the way I am being asked to act.’
- ii. *Ion poate cânta oricum i se cere să cânte.*
 Ion can sing anyway him.DAT REFL asks SUBJ sing.3
 ‘Ion can sing anyway he is asked to sing.’
- (80) i. *Vreau să locuiesc unde locuiești și tu.*
 want.1SG SUBJ live.1SG where live.2SG also you
 ‘I want to live where you live.’
- ii. *Sunt gata să locuiesc oriunde ți se pare ție*
 am ready SUBJ live.1SG wherever you.DAT REFL seems you.DAT
că e cazul (să locuiesc).
 that is case-the SUBJ live.1SG
 ‘I am ready to live anywhere you think I should (live).’
- (81) i. *Ion a plecat tocmai când a sosit Maria.*
 Ion has left precisely when has arrived Maria
 ‘Ion left precisely when Maria arrived.’
- ii. *Ion va pleca oricând i se cere să plece.*
 Ion will leave anytime him.DAT REFL asks SUBJ leaves
 ‘Ion will leave anytime he is asked to leave.’
- (82) i. *Ion bea doar cât îi permite doctorul.*
 Ion drinks only how-much him.DAT allows doctor-the
 ‘Ion drinks only as much as allowed by the doctor.’
- ii. *Ion bea oricât i se cere să bea.*
 Ion drinks ever-much him.DAT REFL asks SUBJ drinks
 ‘Ion drinks as much as he is required to drink.’

A few remarks on the above examples follow. The import of the locative, temporal, and manner adverbs *unde*, *când*, and *cum* respectively may also be conveyed by prepositions whose object is the pronoun *care*, as illustrated in the (i) subcases of (70)–(72); the latter option is, however, excluded when the external pivot is an adverbial pro-form, as shown in the (ii) subcases of (70)–(72), since *care* has no suitable corresponding external pivot under these circumstances.

In (76)–(82), the (i) subcases illustrate the ‘plain’ pro-forms, and the (ii) subcases, the corresponding free-choice forms. The ‘division of labor’ between the plain and free-choice

forms of Romanian corresponds to a certain extent to what is found in English, except that the range of uses of both kinds of forms is more limited in Romanian than in English, partly due to the fact that the form *ceea ce* 'that which' is 'in competition' with *ce* 'what' (something that does not happen in English, where RCCs initiated by *that which* are stilted in character, and do not constitute a natural alternative to *what*-RCCs).

To illustrate the points just made, observe first that plain and free choice forms can sometimes be used interchangeably in both Romanian and English, as illustrated in (83), where the plain forms may have free choice import. Furthermore, both *ce* and *ceea ce* may sometimes be used interchangeably with referential import, as illustrated in (84).

- (83) i. *Voi angaja pe {cine / oricine} îmi recomanzi tu.*
will.1SG hire DOM who anyone me.DAT recommend.2SG you
'I will hire {who(m)/who(m)ever} you recommend to me.'
- ii. *Mă voi duce {unde / oriunde} mi se cere.*
REFL will.1SG go where wherever me.DAT REFL asks
'I will go {where/wherever} I am asked to go.'
- (84) i. {*Ce / Ceea ce*} *am văzut acolo m-a umplut de spaimă.*
what that what have.1 seen there me.ACC-has filled of dread
'What I saw there filled me with dread.'
- ii. {*Ce / Ceea ce*} *mi-a spus Maria nu mi-a plăcut deloc.*
what that what me.DAT-has told Maria not me.DAT-has
liked at-all
'What Maria told me was not at all to my liking.'

The free-choice forms of English can, however, also be used with referential import (and in fact accompanied by a pointing gesture), the function of *-ever* being to indicate that the speaker views the identity of the denoted entity as unimportant; this is not possible in Romanian, where only a plain form may be used, as shown in (85).

- (85) i. I gave the book to whoever is sitting over there (right now).
ii. *Am dat cartea {*oricui / cui} se află acum pe canapea.*
have.1 given book-the anyone.DAT who.DAT REFL finds now
on couch
'I gave the book to {*whoever/whom} is on the couch right now.'

Furthermore, the use of *ceea ce* is preferred to the use of *ce* (or even required) in at least two situations: (i) when the free RCC is predicative and (ii) when it is of the so called 'transparent' variety, i.e. when it has the essential import of a 'hedge'. Point (i) was illustrated in (49), point (ii) is illustrated below:

- (87) *Ion mănâncă {ceea ce / ?ce} pare a fi un cotlet de porc (dar Ion eats that what what seems to be a steak of pork but ar putea în principiu să fie și o falcă de măgar). would can in principle SUBJ be also a jaw of donkey*
 ‘Ion eats what looks like a pork steak (but in principle it could also be a donkey jaw).’

A plausible reason for this preference is that *ce* seems easier to construe with the essential import of *orice* than *ceea ce*, and substitution of *orice* for one of these two forms in the three examples just mentioned yields completely unacceptable results. More generally, items with free-choice import are excluded in pseudo-clefts and transparent free relatives in general, and are possible in predicative free relatives only when licensed by some item in the matrix, e.g. by a modal verb, as in (49') (cf. with (49)).

- (49') *Ion poate deveni orice vrea mama lui (ca el) să devină, de pildă, doctor, aviator, etc. Ion can become anything wants mother-the his that he SUBJ become.3 of example doctor, aviator etc.*
 ‘Ion can become anything his mother wants him to become, e.g. doctor, aviator, etc.’

5.2.2 Complex relative phrases (Pied Piping)

In most of the constructions examined in Section 5.2.1. (except for the (i) subcases of (70)–(72)), RCs were initiated by a relative phrase that consisted exclusively of a relative pronoun or adverb. It is however possible for relative phrases to *properly* include a simplex relative element, with the range of options differing from construction to construction. There are a number of ways of analyzing this state of affairs, one of which relies on the assumption that some feature ‘percolates upward’ from the simplex relative word to some phrase that properly contains it, and thereby ‘licenses’ the presence of the latter in RC-initial position. This view will be adopted here. Models of grammar which assume that relative words/phrases are ‘born’ in the position of the gap and get raised from there describe the raising of complex phrases as a ‘Pied Piping’ phenomenon, with the relative word playing the role of the ‘pied piper’ (on the analogy of the Pied Piper from Hamelin), e.g. by triggering feature percolation, and with the remainder of the phrase playing the role of the ‘rats’.

The presence of a simplex vs. a complex relative phrase at the beginning of an RC has consequences for semantics in a way that can be appreciated by examining the following pair:

- (88) i. *Studentul care spui că — doarme e bolnav.*
 student-the who say.2SG that sleeps is sick
 ‘The student who you say is asleep is sick’

- ii. *Omul în buzunarul căruia spui că au fost găsite drogurile este un cetățean respectabil.*
 man-the in pocket-the which.GEN say.2SG that have been found
 drugs-the is a citizen respectable
 ‘The man in whose pocket you say that the drugs have been found is a respectable citizen.’

In (88i), the chain formed by *care* and the gap constitutes the internal pivot of the RCC, but in (88ii), the chain formed by *în buzunarul căruia* and the gap is not a pivot in any useful sense. Rather, if anything, it is *căruia* that constitutes the internal pivot. To get the semantics right, one must somehow ‘deconstruct’ the relative phrase in (88b) in a way that allows the RCC to be interpreted as essentially ‘the man x such that you say that the drugs have been found in x’s pocket’.

From the perspective of the various kinds of RCCs found in both Romanian and English, Pied Piping options appear to be most liberal in appositive RCCs, somewhat more limited in restrictive RCCs, and severely restricted in free RCCs. This state of affairs seems to hold cross-linguistically. We now proceed to illustrate the various options available in Romanian, comparing them with the options available in English.

5.2.2.1 Pied Piping in externally-headed Relative Clause Constructions. TYPE I:

When a relative word is the object of a P(reposition), the P always pied-pipes with its object (in contrast to English, where objects of Ps may be fronted without the P, this being in fact the preferred option in most cases). This is illustrated in (89i–ii) with respect to restrictive and appositive RCCs respectively (we omit illustration of the fact that Romanian disallows constructions with ‘orphan’ prepositions, such as *the student (who) you were talking to*, where *to* is not followed by a nominal expression, even though it is understood that ‘you’ were necessarily talking to someone).

- (89) i. *Studentul cu care vorbeai vrea să*
 student-the with which talk.IMP.F.2SG wants SUBJ
părăsească universitatea.
 leave.3 university-the
 ‘The student to whom you were talking wants to leave the university.’
- ii. *Ion, cu care vorbeai acum un minut, vrea să*
 Ion with which talk.IMP.F.2SG now a minute wants SUBJ
părăsească universitatea.
 leave.3 university-the
 ‘Ion, to whom you were talking a minute ago, wants to leave the university.’

TYPE II: A second form of Pied-Piping found in externally-headed RCCs concerns nominals that consist of a ‘possessor’ pivot and its ‘possessed’ noun. The possessor, which

exhibits Genitive Case, may either follow the possessed N, as in (90), or precede it, as in (91) (in the latter case, and more generally, whenever the possessor fails to immediately follow a possessed N bearing the enclitic definite article, the possessor needs to exhibit the prepositional genitive marker *al*). The prenominal position of the genitive (arguably due to reordering within DP) is specific to relative and interrogative pronouns, otherwise being restricted to the poetic style, as an archaism (see Chapter 5). As can be gathered from the primed examples, Pied Piping of the possessed N is obligatory, just as in the English Saxon Genitive construction. Moreover, the order N-*wh*-Genitive is only allowed if combined with Pied-Piping of type I (see (90i-ii vs. iii, iv)):

- (90) i. *Studentul cu mama căruia spui că ai vorbit __ e bolnav.*
 student-the with mother-the which.GEN say.2SG that have.2SG
 talked is sick
 ‘The student whose mother you say you talked to is sick.’
- i'. **Studentul (a) căruia spui că ai vorbit cu mama __ e bolnav.*
 student-the (GEN) which.GEN say.2SG that have.2SG talked with
 mother-the is sick
- ii. *Ion, cu mama căruia spui că ai vorbit __ e bolnav.*
 Ion with mother-the which.GEN say.2SG that have.2SG
 talked is sick
 ‘Ion, whose mother you say you talked to, is sick.’
- ii'. **Ion, (a) căruia spui că ai vorbit cu mama, e bolnav.*
 Ion (GEN) which.GEN say.2SG that have.2SG talked with mother-the
 is sick
- iii. **Studentul mama căruia spui că __ doarme e bolnav.*
 student-the mother-the which.GEN say.2SG that sleeps is sick
 ‘The student whose mother you say is asleep is sick.’
- iv. **Ion, mama căruia spui că __ doarme, e bolnav.*
 Ion, mother-the which.GEN say.2SG that sleeps is sick
 ‘Ion, whose mother you say is asleep, is sick.’
- (91) i. *Studentul a căruia mamă spunea că __ doarme e bolnav.*
 student-the GEN which.GEN mother say.IMP.F.2SG that sleeps
 is sick
 ‘The student whose mother you said was asleep is sick.’

- i'. **Studentul a cărui spuneaai că __ mamă doarme*
 student-the GEN which.GEN say.IMPF.2SG that mother sleeps
e bolnav.
 is sick
- ii. *Ion, a cărui mamă spuneaai că __ doarme, e bolnav.*
 Ion, GEN which.GEN mother say.IMPF.2SG that sleeps is sick
 'Ion, whose mother you said was asleep, is sick.'
- ii'. **Ion, a cărui spuneaai că __ mamă doarme, e bolnav.*
 Ion, GEN which.GEN say.IMPF.2SG that mother sleeps is sick

In general, Pied Piping of various types may combine. For example, type I and II may do so, in the sense that a complex nominal of type II may be the object of a P, in which case, both the possessed N and the P must pied-pipe with the nominal, as in (92).

- (92) i. *Studentul cu mama căruia stăteai de vorbă*
 student-the with mother-the which.GEN sit.IMPF.2SG at talk
e bolnav.
 is sick
 'The student to whose mother you were talking is sick.'
- ii. *Ion, cu mama căruia stăteai de vorbă nu de mult,*
 Ion, with mother-the which.GEN sit.IMPF.2SG at talk not of much
e bolnav.
 is sick
 'Ion, to whose mother you were talking not long ago, is sick.'

TYPE III: In both languages, when the pivot is the object of a P and the resulting PP serves as complement of an adjective, the preferred relativization option is for as little material as possible to be dragged along (in Romanian, but not in English, the P must be dragged along; see remarks on TYPE I), the PP to undergo fronting leaving the remainder of the AP behind, as in (93). At the same time, the entire AP may undergo dislocation, but only in very formal style and only in appositive constructions, as illustrated by the contrast between (94) and (95), which exhibit appositive and restrictive RCCs respectively.

- (93) i. *Studentul de care nici un profesor nu are motive să*
 student-the of which neither one teacher not has reasons SUBJ
fie mândru __ va trebui să părăsească școala.
 be proud will must SUBJ leave.3 school-the
 'The student (who) no teacher has reasons to be proud of will have to leave school.'

- ii. *Ion, de care niciun profesor nu are motive să fie*
 Ion, of which no teacher not has reasons SUBJ be
mândru __, va trebui să părăsească școala.
 proud will must SUBJ leave.3 school-the
 ‘Ion, who no teacher has reasons to be proud of __, will have to leave school.’
- (94) i. *Îi cunosc bine pe frații tăi, cel mai înalt*
 CL.ACC know.1SG well DOM brothers-the your, the more tall
dintre care e fără îndoială Ion.
 of which is without doubt Ion
 ‘I am well acquainted with your brothers, the tallest of whom is undoubtedly Ion.’
- ii. *L-am cunoscut de curând pe fiul tău, mândru de*
 CL.ACC-have.1 known of soon DOM son-the your proud of
care nu ai absolut nici un motiv să fi.
 which not have.2SG absolutely neither one reason SUBJ be.2SG
 ‘I have recently become acquainted with your son, proud of whom you have absolutely no reasons to be.’
- (95) i. *#Îi cunosc bine pe băieții cel mai înalt dintre*
 CL.ACC know.1SG well DOM boys-the the more tall of
care nu trece de 1.50 m.
 which not passes of 1.50 m
 ‘#I am well acquainted with the boys the tallest of whom is below 1.50 m.’
- ii. *#Îl cunosc bine pe studentul mândru de care sunt*
 CL.ACC know.1SG well DOM student-the proud of which are
toți profesorii.
 all teachers-the
 ‘#I am well acquainted with the student proud of whom is every teacher.’

TYPE IV: Another highly formal Pied Piping option, which, like the preceding one, is limited to appositive RCCs in both Romanian and English, is the Pied Piping of a non-finite VP or clause. Some illustrations are provided in (96).

- (96) i. *Am făcut de curând cunoștința unui mare savant, a*
 have.1 made of soon acquaintance-the one.GEN great savant to
discuta în mod serios cu care mi-ar cere
 discuss in way serious with which me.DAT-would.3 require

cunoștințe pe care nu le am.
 knowledge.PL DOM which not CL.3FPL.ACC have.1SG

'I have recently made the acquaintance of a great scholar, to carry out serious discussions with whom would require knowledge I do not possess.'

- ii. *S-au făcut de curând un număr de propuneri, pentru a le pune în aplicare pe care ne-ar trebui resurse financiare pe care nu le avem.*
 REFL-have.3PL made of soon a number of proposals for to CL.3FPL.ACC put in application DOM which us.DAT-would.3 need resources financial DOM which not CL.3FPL.ACC have.1PL

'A number of proposals have recently been made, to implement which would require financial resources that we do not have.'

TYPE V: A last form of Pied Piping, which, like types III and IV, is restricted to appositive RCCs, involves Pied Piping of a DP headed by *care* 'which', which – importantly – is a determiner, not a pronoun, as was the case in earlier examples. The NP complement of D may be identical to an NP that occurs in the antecedent, as in (97i), but this is not always so, as shown in (97iii).

- (97) i. *Guvernul a făcut o propunere cu ramificații multiple și complexe, care propunere fusese deja făcută de opoziție cu mulți ani în urmă.*
 government-the has made a proposal with ramifications multiple and complex which proposal be.PLPF already made of opposition with many years ago

'The government has recently made a proposal with multiple and complex implications, a proposal which had already been made by the opposition many years ago.'

- ii. *E posibil ca guvernul să demisioneze în curând, în care caz va urma o lungă perioadă de incertitudine politică.*
 is possible that government-the SUBJ resign.3 in soon in which case will.3SG follow a long period of uncertainty political

'It is possible for the government to fall soon, in which case a long period of political uncertainty will follow.'

5.2.2.2 Pied Piping and Case/P'matching' in Free Relative Clause Constructions. Pied Piping in free RCCs is distinctly more limited cross-linguistically than in appositive RCCs, Pied Piping of types II, III and IV of the preceding section being completely impossible.

Comparison with restrictive RCCs yields a more complex picture. On the one hand, free RCCs allow Pied Piping of type V, which, as noted above, is possible in appositives, but not in restrictives; on the other hand, Pied Piping of type II is in general excluded.

We begin by illustrating Pied Piping of type V. The relative elements that can head a DP (i.e. relative determiners) are *ce* ‘what’, *orice* ‘whatever’ and *oricare* ‘whichever’, as illustrated in (98) and (48). Those that can head a Degree Phrase (i.e. relative degree words) are *oricât* ‘however much’ and its inflected forms, see (47) and (67). All these items may trigger the Pied Piping of the larger phrases they head (for convenience, the earlier examples just referred to are reproduced below).

- (98) a. *Voi cumpăra [{orice/ oricare} carte despre fizică ești gata să-mi vinzi __]*.
 will.1SG buy whatever whichever book about physics are.2SG
 ready SUBJ-me.DAT sell.2SG

‘I will buy [whichever book about physics you are ready to sell me].’

- b. *Citesc [ce carte citești și tu]*.
 read.1SG what book read.2SG also you
 ‘I’m reading the same book as you.’
- c. *Am ales [ce mașină am vrut]*.
 have.1 chosen what car have.1 wanted
 ‘I/We chose the/whichever car I/we wanted.’
- d. *Am venit [cu ce mașină am putut]*.
 have.1 come with what car have.1 could
 ‘I/We came in whatever car I/we could.’

- (47) *Mâine pot fi [oricâte sticle de bere îmi ceri să cumpăr __] pe masa ta*.
 tomorrow can.3PL be however-many bottles of beer me.DAT ask.2SG
 SUBJ buy.1SG on table-the your

‘Tomorrow, there can be [however many bottles of beer you ask me to buy] on your table.’

- (48) *Îți pot procura [orice fel de marfă dorești __]*.
 you.DAT can.1SG get whatever kind of merchandise want.2SG
 ‘I can get you [whatever kind of merchandise you desire].’

- (67) i. *Maria poate fi [oricât de serviabilă i se cere să fie]*.
 Maria can be however-much of helpful her.DAT REFL asks
 SUBJ be.3

‘Maria can be [however helpful she is asked to be].’

- ii. *Maria poate alerga [oricât de repede i se cere
 Maria can run however-much of fast her.DAT REFL asks
 să alerge].*
 SUBJ run.3
 ‘Maria can run [however fast she is asked to run].’

Discussion and illustration of restrictions on Pied Piping of type II are postponed until after we have taken a look at an additional class of restrictions on free RCCs, which need to be carefully distinguished from Pied Piping proper. The restrictions at issue, which are commonly known as ‘matching effects’, differ in nature and severity from language to language, and prevent the affixal Case and/or prepositional properties of the relative pronoun/phrase from differing (in certain ways) from the affixal Case and/or P that the RCC would be expected to exhibit, if it had an overt head. There are no comparable matching requirements on RCCs with overt internal or external pivots.

We begin by discussing the matching phenomenon with respect to affixal Case. Unlike some languages that require full morphological matching in free RCCs, Romanian has the weaker requirement that when oblique and non-oblique Cases clash, the overt pivot (which, in RCCs, is the internal one) must realize the oblique Case. This can be seen with respect to the counterparts of *who(ever)*, which are *(ori)cine* (non-oblique) and *(ori)cui* (oblique). Illustrative data are provided below.

- (99) i. [{*Cui* / **cine*} *îi e foame*] *trebuie să muncească.*
 who.DAT who him.DAT is hungry must SUBJ work.3
 ‘Who(ever) is hungry needs to work.’
- ii. *Voi trimite cadouri numai [cui / *cine] mă iubeste.*
 will.1SG send presents only who.DAT who me.ACC loves
 ‘I will send presents only to who(ever) loves me.’

In (99i), the relative pronoun bears the Dative Case required within the RC, irrespective of the fact that the RCC, and thus the null external pivot, require Nominative Case. In (99ii), the relative pronoun is the subject of the RC, and thus ought to bear Nominative Case, but since the RCC, and the null external pivot, require Dative Case, *cine* induces ungrammaticality. However, since Romanian allows a repair strategy called ‘Case Attraction’, whereby the Case of the RCC may be overtly realized on the relative pronoun, this example is grammatical with *cui*.

Partly similar effects are found with Ps, which play, by and large, syntactic and semantic roles similar to those of Case, languages differing in the extent to which they make use of Case and/or Ps to express specific syntactic and semantic functions; to capture the functional parallelism between affixal Case and Ps, we will use the term ‘Kase’ for the union of the two categories. The data in (100) illustrate Kase conflicts comparable to that in (99i), except that the oblique Kase is here prepositional, rather than affixal. Note that, just as in (99i), only the versions with overtly realized oblique Kase are grammatical.

- (100) i. [*Cu cine / *Cine*] *iese Maria* *e un om de nimic*.
with who who goes-out Maria is a man of nothing
'The one with whom Maria goes out is a nobody.'
- ii. [*La ce / *Ce*] *se uită Maria* *costă (de obicei) mulți bani*.
at what what REFL looks Maria costs usually many money
'What Maria looks at usually costs a lot of money.'

It may be noted here that the proposed parallelism between affixal and prepositional Kase leads to the expectation that, just as there are free RCCs with matching affixal Kase, there ought to be free RCCs with matching P-Kase (i.e. in which both the matrix and the RC require a particular P, but only the one in the RC is overtly realized). This expectation is confirmed by data like (101).

- (101) i. *Voi angaja [pe oricine îmi recomanzi tu]*.
will.1SG hire DOM anyone me.DAT recommend.2SG you
'I will hire anyone you recommend.'
- ii. *Sunt gata să lucrez [cu cine lucrezi și tu]*.
am ready SUBJ work.1SG with who work.2SG also you
'I am ready to work with the/any person you work with.'
- iii. *Nu te uita [la ce se uită Maria]!*
not REFL look at what REFL looks Maria
'Don't watch what Maria watches!'
- iv. *Bicicleta asta provine [de unde ne-au fost trimise și celelalte vehicule]*.
bike-the this comes of where US.DAT-have.3PL been sent also
the-other vehicles
'The bike comes from (there) where the other vehicles had been sent to us.'
- v. *Ion s-a așezat tocmai [pe ce vroia soția lui să se culce]*.
Ion REFL-has sat precisely on what wanted wife-the his SUBJ
REFL lie.3
'Ion sat precisely on what his wife wanted to sleep on.'

In this connection, we may also note that at least some data that exhibit *ce* with P-Kase have variants with *ceea ce* 'that which', which suggests that this item is not necessarily construable as an RC-external demonstrative followed by a (contracted) relative complementizer, as the sequence *cel ce* 'he that' and its inflected variants must be, but can (also) be analyzed as a relative pronoun. This can be appreciated by contrasting (102), which is basically acceptable, with (103i), which is severely deviant, and whose purport can only be rendered by a straightforward externally-headed RCC, such as (103ii). If *ceea ce* were to be always analyzed as an external demonstrative followed by a complementizer, data like (102ii) would be expected to be as deviant as (103i), contrary to fact.

- (102) i. *Ion s-a așezat tocmai [pe ceea ce vroia soția lui
 Ion REFL-has sit precisely on that what wanted wife-the his
 să se culce].*
 SUBJ REFL sleep
 ‘Ion sat precisely on the thing that his wife wanted to sleep on.’
- ii. *Ion se ocupă [de ceea ce se ocupă și Maria].*
 Ion REFL occupies of that what REFL occupies also Maria
 ‘Ion does (as a profession) what Maria does/takes care of what Maria takes care.’
- (103) i. **Ion se ocupă de cei ce se ocupă și Maria.*
 Ion REFL occupies of the.MPL what REFL occupies also Maria
- ii. *Ion se ocupă de cei de care se ocupă și Maria.*
 Ion REFL occupies of the.MPL of which REFL occupies also Maria
 ‘Ion takes care of those of whom Maria also takes care.’

Kase conflicts that involve distinct oblique Kases are not allowed in Romanian, even if the overtly realized Kase is arguably more oblique than the unrealized one. Thus, cross-linguistic data point to the existence of a hierarchy of Kase obliqueness, which marks certain types of P-Kase, in particular, comitative Kase, as more oblique than affixal Dative Kase. Nonetheless, data like (104), where the Dative Kase required by the matrix is unrealized and the comitative Kase required by the RC is realized, are severely deviant.

- (104) **Mă voi adresa [cu cine iese Maria].*
 REFL will.1SG address with whom goes-out Maria

For completeness, we will note here an additional kind of restriction that seems to affect certain free RCCs that are otherwise consistent with the characterization of Kase-matching options brought up several paragraphs earlier.

It is usually assumed that Kase-matching constructions are always acceptable, regardless of the functional status of the Cases. This assumption relies on data like (109i), which contrasts in acceptability with (109ii), bringing out the fact that English is, unlike Romanian, a language that requires full matching. Note that in the former example, *what* receives Acc Case within the RC, while the RCC receives Nom Case in the matrix, but the compatibility of *what* with both Cases is apparently sufficient to ensure full acceptability.

- (109) i. [What I saw] pleased me.
 ii. *[At what Mary stares] is usually expensive.

However, morphological matching is in general sufficient only for direct Cases, in particular, NOM and ACC. Insofar as oblique Kases are concerned, they usually also need to match in functional and semantic import. This requirement appears to be satisfied in (101ii–v), where the various oblique prepositions are construed in the same way with respect to the RC and the matrix, even when the verbs in the two clauses are not identical

(as in (101iv–v)). In (110i), on the other hand, the import of the DAT in the matrix, where it satisfies a preposition, and the RC, where it satisfies a verb (as an oblique experiencer), appear to be too far apart for full acceptability; similarly, in (110ii), the senses of *cu* in the matrix and in the RC seem to be too different.

- (110) i. [?]**Proiectul a reușit datorită [cui i-a*
 project-the has succeeded thanks who.DAT him.DAT-has
plăcut Maria].
 liked Maria
- ii. [?]**Sunt gata să lucrez [cu (ori)cine te distrezi tu].*
 am ready SUBJ work.1SG with who(ever) REFL amuse.2SG you
- iii. [?]**Sunt gata să invit [pe (ori)cine cad fulgi*
 am ready SUBJ invite.1SG on/DOM who(ever) fall.3PL flakes
de zăpadă].
 of snow

(110iii) reveals an interesting aspect of this restriction. The preposition *pe* is sometimes a necessary concomitant of ACC Case, and would thus appear to have non-oblique status (the exact distribution of this element will be discussed in the second volume). So long as *pe* functions as ACC marker in both clauses, as, for example, in (101i), any choice of verb yields acceptable outputs. If, however, *pe* needs to function as Acc marker in the matrix and as (directional) locative marker in the RC, as in (110iii), unacceptability results.

Having outlined and illustrated the major restrictions on Kase-(non)matching in Romanian, we turn to the restrictions on Pied Piping of type II, which were alluded to earlier in this section. Two completely unacceptable instances of Pied Piping of a DP by a possessor in (Spec, DP) are illustrated in the (i) subcases of (111)–(112) (approximate versions of their intended meanings are provided by the corresponding (ii) subcases).

- (111) i. ^{*}[*Casa (ori)cui e de vânzare] trebuie să stea lângă*
 house-the who(ever).GEN is on sale must SUBJ stay.3 near
telefon în permanență
 phone in permanence
- ii. *Persoana a cărei casă e de vânzare trebuie să stea*
 person-the GEN which.GEN house is on sale must SUBJ stay
lângă telefon în permanență.
 near phone in permanence
 ‘The person whose house is on sale needs to stay by the phone all the time.’

- (112) i. ^{*}*Voi negocia cu fiica cea mare [a (ori)cui*
 will.1SG negotiate with daughter-the the big GEN who(ever).GEN
casă a fost vândută săptămâna trecută].
 house has been sold week-the last

- ii. *Voi negocia cu fiica cea mare a persoanei*
 will.1SG negotiate with daughter-the the big GEN person-the.GEN
a cărei casă a fost vândută săptămâna trecută.
 GEN which.GEN house has been sold week-the last
 ‘I will negotiate with the older daughter of the person whose house has
 been sold last week.’

Observe that the deviance of the (i) subcases is not attributable to violations of conditions on Kase-(non)matching. In (111i), the overt internal pivot has oblique (Genitive) Case and the RCC has unrealized Nom Case, a state of affairs tolerated by the grammar of Romanian (cf. (99i)). In (112), both the internal pivot and the RCC have Genitive Case, in both instances with possessive import. The severe deviance of these data can thus not be blamed on Kase problems, and appears to be due to a ban on type II Pied Piping.

Summarizing, free RCCs allow Pied Piping of type I (see (100)–(102)) and V (see, e.g. (98)), and disallow Pied Piping of types II, III and IV.

In concluding this section, a remark about the (partial) Kase-matching effects is in order. It was proposed in Section 3.2 that free RCCs are DPs or PPs headed by a null functional category, rather than bare clauses. In general, bare clauses do not exhibit Kase-matching effects of any sort. In particular, none are found in constructions with embedded interrogative clauses. In complex DPs or PPs, however, such effects are sometimes found, in particular, in situations where one of the arguably understood pivots is not overtly expressed. An illustration of this state of affairs that does not involve RCCs is provided in (113) with comparative structures (the boldfaced phrase is the external pivot and the gap, the internal one). Observe that, just as in RCCs (see, e.g. (99)), certain forms of mismatch are allowed, and others are not.

- (113) i. *Ion i-a prezentat Mariei mai multe persoane decât*
 Ion CL.DAT-has introduced Maria.DAT more many persons than
i-a prezentat vreodată ea lui __.
 his.DAT-has introduced ever she him.DAT
 ‘Ion introduced to Maria more persons than she has ever introduced
 to him.’
- ii. *Am scris mai multor autori decât ai scris*
 have.1 written more many.DAT authors than have.2SG written
tu vreodată
 you ever
 ‘I wrote to more authors than you have ever written to’
- iii. *Ion a prezentat-o pe Maria mai multor persoane*
 Ion has introduced-her.ACC DOM Maria more many.DAT persons

decât i-a prezentat vreodată ea lui __.
 than him.DAT-has introduced ever she him.DAT

'Ion has introduced Maria to more persons than she has ever introduced to him.'

- iv. **Ion i-a prezentat Mariei mai multe persoane*
 Ion her.DAT-has introduced Maria.DAT more many persons

decât l-a prezentat vreodată ea pe el __.
 than him.ACC-has introduced ever she DOM him

Thus, (113i–ii) show that comparative constructions are acceptable when the Cases match, whether they are direct or oblique; (113iii–iv) show that the Cases do not need to match, provided that the overt Case is more oblique than the null one.

In Section 7, we will examine a construction which is arguably 'non-core' in that numerous facts (which properly include the total absence of Case-matching) point to a bare CP status, and the construction is nonetheless not interpreted as a proposition or set of propositions, but as an existential generalized quantifier.

6. Possible gap locations

In principle, gaps within RCs (created without or with Pied-Piping) may be located in argument positions, in adverbial positions, and in predicative positions, both within the matrix and within a complement clause, subject to a number of restrictions usually known as 'island constraints'. Some illustrations follow (the syntactic function of the gap is indicated at the right of each example); in (114), the gap is in the RC's matrix clause, in (115), in a subordinate clause.

- (114) a. *Copilul [care [__ plânge]] trebuie calmat* Subject
 child-the which cries needs calmed
 'The child who is crying needs to be calmed.'
- b. *Copilul [pe care [l-ai crescut __]]* Direct Object
 child-the DOM which CL.ACC-have.2SG raised
e bolnav.
 is sick
 'The child whom you have raised is sick.'
- c. *Copilul [căruia [i-ai dat __ un Indirect Object*
 child-the which.DAT CL.DAT-have.2SG given a
cadou]] râde încântat.
 present laughs delighted
 'The child to whom you have given a present laughs with delight.'

- d. *Cuțitul* [cu care [tăiem pâine ___]] **Instrumental Adjunct**
 knife-the with which cut.1PL bread
e ascuțit.
 is sharp
 ‘The knife we cut bread with is sharp.’
- e. *Locuim acolo* [unde [au locuit **Place Adverb**
 live.1PL there where have.3PL lived
părinții noștri ___]].
 parents-the our
 ‘We live where our parents lived.’
- f. *Vom veni numai atunci* [când [ajungeți **Time Adverb**
 will.1PL come only then when arrive.2PL
voi toți ___]].
 you(PL) all
 ‘We will come only when all of you arrive.’
- g. *Ion este fără niciun dubiu marele gânditor* **Predicate**
 Ion is without neither no doubt great-the thinker
 [ce [a fost ___ pe vremuri tatăl lui]]
 what has been on times father-the his
 ‘Ion is without any doubt the great thinker his father was in the old days.’
- h. *Marele matematician* [ce [pare a fi ___ Ion]] *va putea*
 great-the mathematician what seems to be Ion will can
rezolva, să sperăm, problema în **Equative Predicate**
 solve SUBJ hope.1PL problem-the in
 timp record.
 time record
 ‘The great mathematician that Ion seems to be will hopefully be able to solve the problem in record time.’
- (115) a. *Copilul* [care se pare că [___ plânge]] *ar* **Subject**
 child-the which REFL seems that cries would
trebui calmat.
 need calmed
 ‘The child who seems to be crying should be calmed.’
- b. *Copilul* [pe care se spune că [l-ai **Direct Object**
 child-the DOM which REFL says that CL.ACC-have.2SG raised
e bolnav.
 is sick
 ‘The child whom they say you have raised is sick.’

- c. *Copilul [cărui-a mi s-a dat a înțelege*
 child-the which.DAT me.DAT REFL-has given to understand
că [i-ai fi dat _ o Indirect Object
 that CL.DAT-would.2SG PRF given a
jucărie]] râde încântat.
 toy laughs delighted
 ‘The child to whom I gathered you have given a toy is laughing with delight.’
- d. *Cuțitul [cu care ni s-a spus că [putem*
 knife-the with which us.DAT REFL-has told that can.1PL
tăia pâine _]] nu e destul de ascuțit. Instrumental Adverb
 cut bread not is enough of sharp
 ‘The knife which we were told we could cut bread with is not sharp enough.’
- e. *Locuim acolo [unde am aflat nu de mult că*
 live.1PL there where have.1 found out not of much that
[au locuit și părinții voștri _]] Place Adverb
 have.3PL lived also parents-the yours
 ‘We live in the place where we have recently found out that your parents also lived.’
- f. *Vom veni atunci [când bănuim că veți*
 will.1PL come then when suppose.1PL that will.2PL
[ajunge și voi _]] Time Adverb
 arrive also you(PL)
 ‘We will come at the time when we suspect that you will arrive as well.’
- g. *Ion este fără îndoială marele gânditor*
 Ion is without doubt great-the thinker
[ce știm cu toții că [a fost _ pe vremuri
 what know.1PL with all-the that has been on times
tatăl lui]] Predicate
 father-the his
 ‘Ion is undoubtedly the great thinker we all know his father was in the old days.’
- h. *Marele matematician [ce se spune că [ar fi fost _*
 great-the mathematician what REFL says that would PRF been
Ion]] n-a avut probabil niciodată dificultăți
 Ion not-has had probably never difficulties
în niciun domeniu al matematicii Equative Predicate
 in no domain GEN mathematics-the.GEN
 ‘The great mathematician that Ion is said to have been has probably never encountered difficulties in any domain of mathematics.’

The island constraints operative in Romanian are not very different from those found in English, and just as in English, they affect not just relative clauses, but a whole class of constructions that exhibit ‘unbounded dependencies’. In relative clauses, the dependencies concern the gap and the relative pronoun/adverb or null operator, and such dependencies are said to be ‘unbounded’ because the gap may be found not only in a complement of the matrix, but also in a complement of a complement of the matrix, and more generally, in arbitrarily complex recursive structures of this kind. A suggestive illustration of this state of affairs is provided in (116).

- (116) *Candidatul* [*căruia* *Maria* *ne-a* *spus* [*că* *Ion* *a*
 candidate-the which.DAT Maria us.DAT-has told that Ion has
informat-o *pe* *cumnata* *lui* [*că* *e* *posibil* [*că*
 informed-her.ACC DOM sister-in-law-the his that is possible that
îi *va* *scrie* __]]]] *a* *decis* *să-și*
 him.DAT will.3SG write has decided SUBJ-3.REFL.DAT
retragă *candidatura*.
 withdraw.3 candidacy-the

‘The candidate that Maria told us that Ion had informed his sister-in-law it was possible he would write to __ has decided to withdraw his candidacy.’

While in principle unbounded, such dependencies are not unrestricted. In particular, they are ill-formed if one of the dependent elements (in particular, the gap), but not the other, is contained within an island. We illustrate below a few of the islands that are operative in Romanian (the named island is indicated by the symbol ‘#’).

Complex DPs with an RC:

- (117) **Candidatul* [*cu* *care* *Maria* *cunoaște* [#*fiecare* *alegător* [*care*
 candidate-the with which Maria knows every elector which
a *votat* __]]]] *s-a* *retras* *din* *viața* *politică*.
 has voted REFL-has withdrawn from life-the political

Complex DPs with a noun complement:

- (118) **Candidatul* [*cu* *care* *Ion* *regretă* [#*faptul* [*că* *Maria*
 candidate-the with which Ion regrets fact-the that Maria
a *votat* __]]]] *s-a* *retras* *din* *viața* *politică*.
 has voted REFL-has withdrawn from life-the political

Adverbial clauses:

- (119) **Candidatul* [*pe* *care* *Ion* *a* *părăsit* *orașul* [#*din* *cauză* *că*
 candidate-the DOM which Ion has left town-the of cause that

Maria îl simpatizează __]] s-a retras din
 Maria him.ACC sympathizes REFL-has withdrawn from
viața politică.
 life-the political

Coordinate terms:

- (120) a. **Fata [pe care Ion [#o iubește __] și [o urăște*
 girl-the DOM which Ion CL.ACC loves and CL.ACC hates
pe Maria]]] e Zamfira.
 DOM Maria is Zamfira
- b. **Fata [pe care Ion [[o iubește pe Maria] și*
 girl-the DOM which Ion CL.ACC loves DOM Maria and
[o urăște __]]]] e Zamfira.
 CL.ACC hates is Zamfira

There is one circumstance, however, under which gaps are allowed within islands, in particular, in coordinate structures, if all the terms are gapped in parallel fashion.

- (121) *Fata [pe care [[Ion o iubește __] și [Gheorghe o*
 girl-the DOM which Ion CL.ACC loves and Gheorghe CL.ACC
urăște __]]]] e Zamfira.
 hates is Zamfira

‘The girl that Ion loves and Gheorghe hates is Zamfira.’

Apart from island constraints, English exhibits a restriction which disallows the extraction of a subject immediately preceded by a complementizer, and this constraint is absent from Romanian, as shown below.

- (122) i. *Persoana [care știi bine [că __ te admiră]]*
 person-the which know.2SG well that you.ACC admires
te-a căutat de câteva ori.
 you.ACC-has searched of several times
 ‘*The person who you know that __ admires you has been looking for you.’
- ii. *Persoana [care nu știu încă [dacă __ o va place*
 person-the which not know.1SG yet if her.ACC will like
pe Maria]]] e mama ta.
 DOM Maria is mother-the your
 ‘*The person who I don’t know yet whether __ will like Maria is your mother.’

7. Non-indicative Relative Clause Constructions

All the RCCs of Romanian discussed so far had the RC's verb in the indicative mood. We will now consider RCs whose verb is in some non-indicative form. Three possibilities are attested: subjunctive, supine, and infinitive.

Non-indicative RCCs fall into two broad categories, which arguably belong to the core and the periphery of grammar respectively. We discuss them in that order.

7.1 Core Relative Clause Constructions

These RCCs are externally headed, and have the rough import of English infinitival RCCs, such as the one in (123).

(123) [An ointment [to put ___ on painful burns]] will be sent to you by mail.

The Romanian counterparts of data like (123) do not, however, use the infinitival mood (at least, not in the contemporary standard language). The essential import of (123) can be rendered with either a supine or a subjunctive, as illustrated in (124).

(124) i. [O *alifie* [de *pus* ___pe *arsuri dureroase*]] *îți va fi*
 an ointment SUP put.SUP on burns painful you.DAT will be
trimisă prin poștă.
 sent by mail

'An ointment to put on painful burns will be sent to you by mail.'

ii. [O *alifie* [care ___ să *aline* *arsurile dureroase*]] *îți*
 an ointment which SUBJ relieve.3 burns-the painful you.DAT
va fi trimisă prin poștă.
 will be sent by mail

'An ointment to relieve painful burns will be sent to you by mail.'

In most cases, however, only the subjunctive is a possible option, because the supine is basically possible only when the gap is the direct object of the RC (see Chapter 9 §§3.1, 3.3). That is to say, the supine may not be used with a different gap location, or with a direct object gap that is located in a subordinate clause within the RC. For example, the following data have no supine counterparts.

(125) i. *Caut o secretară care ___ să poată stenografia.*
 search.1SG a secretary which SUBJ can.3 write-in-shorthand
 'I'm looking for a secretary who can write in shorthand.'

ii. *Caut o asistentă cu care ___ să pot discuta*
 search.1SG an assistant with which SUBJ can.1SG discuss
chestiuni profesionale.
 matters professional

'I'm looking for an assistant with whom I can discuss professional matters.'

- iii. *Caut o secretară căreia să-i pot*
 search.1SG a secretary which.DAT SUBJ-her.DAT can.1SG
încredința ___ dosare complexe.
 entrust files complex
 ‘I’m looking for a secretary to whom I could entrust complex files.’
- (126) i. *Caut o secretară care să fiu convins că ___ poate*
 search.1SG a secretary which SUBJ be.1SG convinced that can.3SG
traduce orice materiale în cel puțin trei limbi.
 translate any materials in the little three languages
 ‘I’m looking for a secretary of whom I am convinced she can translate any materials in at least three languages.’
- ii. *Caut o secretară căreia să ne fie clar că*
 search.1SG a secretary which.DAT SUBJ us.DAT be.3SG clear that
i se pot încredința ___ orice fel de lucrări.
 CL.DAT REFL can.3PL trust any kind of papers
 ‘I’m looking for a secretary who could clearly be trusted with any kind of papers.’
- iii. *Caut o secretară pe care să fiu convins că*
 search.1SG a secretary DOM which SUBJ be.1SG convinced that
Maria nu ar ezita s-o angajeze ___.
 Maria not would hesitate SUBJ-CL.ACC hire.3
 ‘I’m looking for a secretary whom I’m convinced Maria wouldn’t hesitate to hire.’

7.2 Non-core existential Relative Clause Constructions

Romanian possesses, along with other languages (in particular, Slavic, Romance, and a few other languages, but not the major Germanic languages, including English), a construction that has the import of a non-specific existential DP, but seems to consist entirely of a bare CP, and is arguably an RCC that belongs to the periphery of the grammar in possessing no RC-external pivot, overt or null. In Romanian and a number of other languages, this construction exhibits superficial similarities with both free RCCs and embedded interrogative complements, but differs both syntactically and semantically from each of these two constructions in a number of ways. For reasons that will become clear below, we will call these constructions Modal Existential Constructions (MECs).

Concerning interrogatives, MECs have very different semantics, being interpreted as existential Generalized Quantifiers (GQs), while interrogatives are interpreted as sets of propositions. Concerning syntax and morpho-syntax, MECs are almost indistinguishable from embedded interrogatives in Romanian (except for the fact that they may, unlike the latter, exhibit the infinitive mood), but are easy to distinguish from the

latter if cross-linguistic evidence (e.g. from Hungarian and Modern Hebrew) is taken into account. Concerning free RCCs, MECs differ from them semantically in having existential, rather than definite or free-choice force, as well as morpho-syntactically, in having either infinitive or subjunctive, rather than indicative mood, and in disallowing relative pronouns of the free-choice type, i.e. those with a prefixed *ori-* ‘-ever’; additional, less immediately apparent differences will be indicated below.

An illustration of a MEC is provided in (127i). Its import is roughly comparable to that of the externally-headed RCCs in the Romanian and English versions of (127ii).

- (127) i. *Nu am [pe cine {invita / să invit} la nuntă].*
 not have.1SG DOM whom invite.INF SUBJ invite.1SG to wedding
- ii. *Nu am [pe nimeni [pe care să-l invit
 la nuntă]].*
 not have.1SG DOM noone DOM which SUBJ-him.ACC invite.1SG
 to wedding
- ‘I have noone {to invite/that I can invite} to the wedding.’

However, MECs differ from RCCs like those in (127ii) in having a distinctly more limited distribution, which moreover differs significantly cross-linguistically, Romanian being a rather tolerant language in this respect. For example, RCCs like those in (127ii) may function as subjects of the verb *a sosi* ‘to arrive’, but MECs have low acceptability in this situation, as illustrated in (128).

- (128) i. *Cineva care să aibă grijă de copii a sosit nu
 de mult.*
 someone which SUBJ have.3 care of children has arrived not
 of much
- ‘Someone to take care of the kids has just arrived.’
- ii. **Cine să aibă grijă de copii a sosit nu de mult.*
 who SUBJ have.3 care of children has arrived not of much

We will examine the issue of the distribution of MECs in more detail after providing some arguments that they are bare clauses.

The argumentation rests on a comparison of MECs with embedded interrogatives on the one hand, these being incontrovertible bare CPs, and with free RCCs on the other, these being arguably complex DPs. The ensuing discussion will provide support both for the thesis that MECs are bare CPs and for the thesis that free RCCs are complex DPs.

A first point is that complex DPs are strong extraction islands (see (117)) and that non-indicative interrogative complements are not islands in Romanian, as illustrated in (129i). Free RCCs, on the other hand, are strong islands, as illustrated in (129ii). Now, extraction out of MECs is as acceptable as out of non-indicative interrogative complements, as shown by a comparison of (129i) and (129iii). Furthermore, extraction out of MECs is significantly more acceptable than extraction out of free RCCs or externally-headed RCCs with

a non-indicative RC, as can be seen by comparing (129iii) with (129ii) and (129iv). All this points to the conclusion that free RCCs are complex DPs (as proposed and argued on independent grounds in Sections 3.2 and 5.2.2.2), and that MECs are bare CPs.

- (129) i. *Despre ce_i nu știi [cu cine_j să vorbești —_j —_i]?*
 about what not know.2SG with who SUBJ talk.2SG
 ‘What is such that you don’t know who to talk to about it?’
- ii. **Despre ce_i nu ai pe [cine_j —_j vorbește cu Maria —_i]*
 about what not have.2SG DOM who speaks with Maria
în clasa ta?
 in class-the your
- iii. *Despre ce_i nu ai [cu cine_j {vorbi / să vorbești} —_j —_i]?*
 about what not have.2SG with who talk.INF
 SUBJ talk.2SG
 ‘What is such that you have no one with whom to discuss it?’
- iv. *?*Despre ce_i nu ai [pe nimeni [cu care_j să vorbești —_j —_i]]?*
 about what not have.2SG DOM nobody with who
 SUBJ talk.2SG

A second argument in favor of the conclusion just reached is that the Kase-matching effects and the constraint on Pied Piping of type II discussed in Section 5.2.2.2 in relation to free RCCs, which are entirely absent from interrogative complements (see (130)), are also absent from MECs (see (131)).

- (130) i. *Nu știu [cu cine să vorbesc].*
 not know.1SG with who SUBJ talk.1SG
 ‘I don’t know who to talk to.’
- ii. *Nu știu [cu fica cui să mai vorbesc].*
 not know.1SG with daughter-the who.DAT SUBJ more talk.1SG
 ‘I don’t know whose daughter I can still talk to.’
- (131) i. *N-am [cu cine {vorbi / să vorbesc}].*
 not-have.1SG with who talk.INF SUBJ talk.1SG
 ‘There is nobody with whom I can talk.’
- ii. *N-am [cu fica cui să mai vorbesc].*
 not-have.1SG with daughter-the who.DAT SUBJ more talk.1SG
 ‘There is nobody whose daughter I can still talk to.’

The significance of the lack of matching effects in (130i) and (131i) may not be immediately apparent, since Romanian also tolerates mismatched free RCCs in object position, as noted in Section 5.2.2.2, and as shown in (132ii).

- (132) i. *Am cumpărat [ce o interesa pe Maria].*
 have.1 bought what REFL interest.IMPF DOM Maria
 'I/We bought the thing Maria was interested in.'
- ii. *Am cumpărat [la ce se uita Maria].*
 have.1 bought at what REFL look.IMPF Maria
 'I/We bought the thing Maria was looking at.'

It should be noted, however, that at least some speakers of Romanian feel that data like (132ii) are more 'marked' than matching data like (132i), while data like (130i) and (131i) are judged as completely straightforward by all speakers. Furthermore, from a cross-linguistic perspective, numerous languages that require strict matching in free RCCs impose no restrictions on data like (130i) and (131ii). We illustrate this point in relation to French.

- (133) i. **Je déteste [à qui Marie s'est adressée].*
 I hate to who Marie REFL-is addressed
- ii. *Je me demande [à qui Marie s'est adressée].*
 I REFL ask to who Marie REFL-is addressed
 'I wonder who has Marie talked to.'
- iii. *Je n'ai plus [à qui m'adresser].*
 I not-have more to whom REFL-address.INF
 'I have no one to talk to anymore.'

We may conclude from the above that the general lack of matching effects in interrogative complements (which are bare CPs) strengthens the proposal made in Section 5.2.2.2 to the effect that matching effects are a property of complex DPs/PPs with internal and external pivots in which exactly one of the pivots is null, and thus, that free RCCs possess a null external pivot. This result, in conjunction with the lack of matching effects in MECs, provides further support for the thesis that MECs are bare CPs. These conclusions concerning free RCCs and MECs are further supported by the fact that MECs allow Pied Piping of type II, just like interrogative complements, and unlike free RCCs (see (111)–(112)).

A third argument in favor of the proposed view of free RCCs and MECs is provided by the (im)possibility of multiple internal pivots. Thus, multiple *wh*-like phrases are allowed in interrogative constructions in many, probably most, languages, but they are generally disallowed in finite RCCs (even when they would arguably make semantic sense), as illustrated by the contrast in (134).

- (134) a. *Mă întreb [cine pe cine vrea să prindă].*
 REFL ask.1SG who DOM who wants SUBJ catch.3
 'I wonder [who wants to catch whom].'

- b. **[Cine a dansat cu cine ieri seară] se vor*
 who has danced with who yesterday evening REFL will.3PL
căsători săptămâna viitoare.
 marry week-the next
 Intended meaning: ‘The pair of individuals that danced last night will get married next week.’
- b. **[Cine cu cine a dansat ieri seară] se vor*
 who with who has danced yesterday evening REFL will.3PL
căsători săptămâna viitoare.
 marry week-the next

Importantly, what we may call the ‘basic’ class of MECs also allows multiple *wh*-phrases, as illustrated in (135) (which may be imagined uttered by a matchmaker), pointing to the conclusion that these constructions are bare clauses.

- (135) *Nu mai avem [pe cine cu cine împerechia].*
 not more have.1PL DOM who with who match.INF
 ‘We no longer have pairs of individuals we can match.’

The semantic force of the MEC in (135) is that of an existential generalized quantifier of ordered pairs of individuals.

The cross-linguistic variation exhibited by MECs is rather complex, and need not be examined here in detail. It is, however, important to note, that they form two principal classes (with further subdivisions) in the languages where they are found. The basic class, exhibited by all languages with MECs, consists of MECs that occur in contexts that assert existence, and which are typically found in the languages of the world with counterparts of the verbs *be* and/or *have*. All the examples provided so far in this section fall in this category. Some languages, however, also exhibit MECs as arguments of predicates that denote coming into existence, into ‘view’, or into someone’s possession. Romanian is one such language, and a few examples are provided below.

- (136) a. *Îți voi trimite [cu ce să te bărbiești].*
 you.DAT will.1SG send with what SUBJ REFL shave.2SG
 ‘I will send you what to shave with’
- b. *[Cine să ne scoată din bucluc] încă nu s-a născut.*
 who SUBJ US.ACC get-out.3 of trouble yet not REFL-has born
 ‘The one who could get us out of trouble is not born yet.’
- c. *Am găsit în fine [cine să supravegheze copiii].*
 have.1 found in end who SUBJ supervise.3 children-the
 ‘I/We have finally found the person who would take care of the children.’

This ‘extended’ class of MECs is more restricted than the basic one, not only cross-linguistically, but also intra-linguistically. For example, the basic class may be formed in Romanian with either the infinitive or the subjunctive, while the extended class can be formed with the subjunctive only.

Furthermore, it is not clear that acceptable MECs with multiple *wh*-phrases exist in the extended class. The following example arguably makes semantic sense (assume ‘I’ am sending ‘you’ both the materials and the tools needed for installation), but its acceptability is highly questionable.

- (137) ^{?*}Îți voi trimite [ce cu ce să instalezi în noul
 you.DAT will.1SG send what with what SUBJ install.2SG in new-the
 tău apartament].
 your apartment

This concludes our presentation of the principal properties of MECs.