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Abstract

Romanian has an articulated system of (non-)interrogative *wh*-clauses that look morphosyntactically similar or even identical to each other on the surface, while exhibiting striking differences in distribution and interpretation. Using a minimal set of criteria, tests and distinctions, this article presents the first systematic comparative overview of all clausal *wh*-constructions attested in Romanian. We show that none of these constructions can be reduced to any of the others and flesh out some of the challenges arising for a unified analysis of *wh*-constructions and *wh*-expressions.

Keywords: *wh*-clause, *wh*-word, Romanian, free relative clause, correlative clause

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1. Introduction

Romanian has an articulated system of *wh*-clauses that look morphosyntactically similar or even identical to each other on the surface, while exhibiting striking differences in distribution and interpretation. Each bracketed *wh*-clause in (1)–(8) exemplifies a different construction with the name of the construction in bold and its abbreviation in parentheses.

(1) **Interrogative Clause** **(INTERR)**
Maria se întreabă [**ce** scrie azi].
Maria REFL wonders what writes today
'Maria wonders what she will write today.'

(2) **Headed Relative Clause** **(HR)**
Autorul [**ce** scrie azi un editorial] va lucra târziu.
author-the what writes today an editorial will work late
'The author who is writing an editorial today will be working late.'

(3) **Maximal Free Relative Clause** **(MAX-FR)**
Maria va edita mâine [**ce** scrie azi].
Maria will edit tomorrow what writes today
'Maria will edit tomorrow what she writes today.'

(4) **Modal Existential Construction** **(MEC)**
Maria are [**ce** scrie azi].
Maria has what write.INF today
'Maria has things to write today.'

(5) **Free-Choice Free-Relative Clause** **(FC-FR)**
Maria va edita mâine [**orice** scrie azi].
Maria will edit tomorrow FC-what writes today
'Maria will edit tomorrow anything she writes today.'

(6) **Correlative Clause** **(CORR)**
[**Ce** scrie azi], aia va edita mâine.
what writes today that will edit tomorrow
'Whatever (s)he writes today, (s)he will edit tomorrow.'

(7) **Exclamative Clause** **(EXCL)**
Ce articol scrie Maria!
what article writes Maria
'What a paper Maria is writing!'

(8) **Rudin Construction** **(RUDIN)**
Editează [**cine ce** scrie azi].
edits who what writes today
'Everyone edits what they write today.'

The constructions above are all productive. The versatility exhibited by *ce* 'what' in (1)–(8) generalizes to the other *wh*-expressions in the language (we use '*wh*-expressions' as a cover term for both *wh*-words and *wh*-phrases). All *wh*-constructions allow for most (if not all) *wh*-expressions to occur, as summarized in Table 1.

Table 1. Inventory of *wh*-expressions across *wh*-clauses in Romanian (in parentheses, the sections in which the constructions are discussed).

***Wh*-words**[1]	**INTERR (§3.1)**	**HR (§3.2)**	**MAX-FR (§3.3)**	**MEC (§3.4)**	**FC-FR (§3.5)**	**CORR (§3.6)**	**EXCL (§3.7)**	**RUDIN (§3.8)**
cine 'who'	√	*	√	√	√	√	*	√
ce 'what'	√	√	√	√	√	√	√	√
când 'when'	√	√	√	√	√	√	*	√
unde 'where'	√	√	√	√	√	√	*	√
cum 'how'	√	√	√	√	√	√	√	√
cât 'how much'	√	√	√	√	√	√	√	√
ce + NP 'what+NP'	√	*	√	√	√	√	√	√
care + NP 'which+NP'[2]	√	*	*	*	√	√	*	√
cât/ă/i/e + XP 'how much/many+XP'	√	*	√	√	√	√	√	√
de ce 'why'	√	*	√	√	*	√	*	√

Table 1 highlights that complex *wh*-expressions like *ce* + NP can introduce MAX-FRs in Romanian (see Caponigro & Fălăuș 2023b), while this is incorrectly predicted to be universally impossible by certain theories of labeling (see Donati & Cecchetto 2011 and the criticism in Caponigro 2023). It also highlights that the *wh*-expression *de ce* 'why' can introduce various kinds of non-interrogative *wh*-clauses in Romanian, a typologically less common pattern (Caponigro & Fălăuș 2023a). Furthermore, it shows that Romanian allows for *wh*-constructions that are either more limited in other Romance languages in terms of the number of *wh*-expressions that can introduce them (HR, MAX-FR, MEC, FC-FR) or are not attested at all (e.g., CORR, RUDIN).

We are thus dealing with a productive and articulated *wh*-system, where *wh*-words seem to be able to undergo systematic meaning changes that allow them to occur across different *wh*-constructions. What distinguishes the different clausal *wh*-constructions illustrated above? What tests can be relied on to investigate any of those constructions? Do the *wh*-expressions in each construction exhibit the same morphosyntactic and semantic properties or, if those properties vary, how do they vary

[1] *Cine* 'who' inflects for case, *care* 'which' and *cât* 'how much' inflect for case, gender and number (see e.g., Giurgea 2013). Both *ce* 'what' and *care* 'which' can combine with mass and count nouns, singular and plural (see e.g., Caponigro & Fălăuș 2023b).

[2] The *wh*-word *care* 'which' can also be used on its own, i.e., without any NP complement. Its distribution and interpretation seem to be different from those of the *wh*-determiner *care* + NP (see Pană Dindelegan 2013), but we are not aware of any detailed description of its properties and further investigation is needed to determine how this item would fit in Table 1.

and relate across these *wh*-constructions? The rich and diverse *wh*-system in Table 1 sets Romanian apart from the other Romance languages and makes it an excellent case study to address these questions.

Notice that plain *wh*-expressions without further morphological enrichment have to introduce *wh*-clauses in Romanian. In other words, *wh*-expressions cannot be used on their own and act as plain indefinites, negative polarity items, free choice items, etc., unlike what we find in languages like Japanese, Korean, or Russian (see Hengeveld, Iatridou & Roelofsen 2021 for recent discussion).[3] The sentence in (9) for instance is completely unacceptable with a statement intonation, as a way to convey that Maria wrote something today (it allows for an echo question interpretation, as long as the appropriate intonation is used and the necessary pragmatic conditions are satisfied).

(9) * Maria scrie **ce** azi.
Maria writes what today

Since no other construction but clausal ones can be introduced by *wh*-expressions in Romanian, "*wh*-construction" should always be intended as clausal *wh*-construction in the remainder of the article, unless otherwise indicated.

To our knowledge, there is not yet a systematic comparative description of clausal *wh*-constructions in Romanian, despite an increasing number of studies on interrogative *wh*-clauses (e.g., Comorovski 1996, Rațiu 2011, Giurgea & Grosu 2020), as well as non-interrogative *wh*-clauses (e.g., Brașoveanu 2008, 2012 on correlative clauses; Grosu 2004, 2013, Caponigro & Fălăuș 2018, 2020 on free relative clauses). Building on previous work, this article aims to fill this gap by presenting the first detailed overview of all clausal *wh*-constructions attested in Romanian. We show that none of these constructions can be reduced to any of the others and flesh out some of the challenges arising for unified analyses of *wh*-constructions and *wh*-expressions. Our goal is not to provide a detailed description or analysis of each of these constructions, but to develop definitions and tests to identify and distinguish them. (We refer to the existing literature for further details, whenever available.) This kind of comparative investigation is relevant not just for a comprehensive description of *wh*-constructions across languages and the broader issue of how they relate to one another, but also ultimately for a better understanding of *wh*-expressions—one of the most powerful and least understood building blocks of the logic behind human language.

The article is structured as follows. Section 2 presents the criteria that are then used to characterize and distinguish the eight different *wh*-constructions that are introduced one at a time in Section 3. Section 4 raises some general observations based on the insights from Section 3, mentions some outstanding issues, and concludes.

[3] Instead, like many other languages, Romanian has various *wh*-based quantificational paradigms. For example, existential quantifiers are formed by adding the suffix *-va* to *wh*-words, e.g., *ceva* 'something', and universal free choice items use the prefix *ori-* (and possibly the additive infix *-și-*), e.g., *ori(și)ce* 'anything'. Less productive *wh*-based paradigms include existential free choice items such as *oarecum* 'somehow', negative concord items such as *nicicum* 'in no way' and the universal quantifier *fiecare* 'every'/'each' (see e.g., Giurgea 2013 for the morphosyntactic properties of *wh*-based DPs).

2. Criteria to characterize and distinguish *wh*-constructions in Romanian

We have worked on identifying the minimal number of criteria to characterize and distinguish *wh*-constructions in Romanian. We have chosen the following morphosyntactic and semantic criteria, which we believe are general enough to apply to *wh*-constructions in other languages as well. We briefly survey these criteria in the remainder of this section and apply them in the next section, in which we discuss each construction individually, as well as provide relevant references.

1. Embedding
Some *wh*-constructions can only occur as clauses embedded within another clause (MAX-FR, FC-FR, MEC, CORR, RUDIN, HR), some are only matrix clauses (EXCL), and some can exhibit either behavior (INTERR).

2. Distribution
Some *wh*-constructions can only occur in argument positions (INTERR, MEC), some only in non-argument (adjunct) positions (CORR, HR, RUDIN), some others in either position (MAX-FR, FC-FR), while some occur on their own as matrix clauses (EXCL).

3. Wh-*expressions*
Different *wh*-constructions vary on the kind and number of *wh*-expressions that can introduce them. Using the *wh*-expressions that can occur in INTERR as the baseline for the full inventory of *wh*-expressions in Romanian (or any language in general), then all the other *wh*-constructions make use of a subset of those. Also, while most *wh*-constructions can have more than one *wh*-expression in the same clause, HR and EXCL can have only one *wh*-expression at a time, while RUDIN require at least two *wh*-expressions. Finally, all *wh*-constructions but one make use of *wh*-expressions that are morphologically identical to those in INTERR. Only FC-FRs enrich their *wh*-expressions with extra morphology: the prefix *ori-*.[4]

4. Meaning
Some *wh*-constructions convey propositional meaning of some kind (INTERR and EXCL), some others behave like DPs in referring to individuals (MAX-FR) or quantifying over individuals (MEC and FC-FR) or behave like nominal modifiers (HR). As for the remaining *wh*-constructions (CORR and RUDIN), their meaning cannot be any of the meanings we already mentioned, but its precise nature is still an open issue.

3. Introducing and distinguishing *wh*-constructions in Romanian

In this section, we use the criteria from Section 2 to characterize *wh*-constructions in Romanian. We discuss each construction individually, in particular: INTERR in Section 3.1, HR in Section 3.2, MAX-FR in Section 3.3, MEC in Section 3.4, FC-FR in Section 3.5, CORR in Section 3.6, EXCL in Section 3.7, RUDIN in Section 3.8.

[4] This morphological enrichment of *wh*-expressions in FC-FRs is attested in other languages as well (see extensive discussion and references in Caponigro & Fălăuș 2018).

3.1. Wh-Interrogative Clauses

Matrix and embedded *wh*-interrogative clauses (INTERR) are the most common kind of *wh*-construction, being almost universally attested across languages.[5] INTERR can be characterized as in (10):

(10) *Properties characterizing INTERR:*
   a. **Question meaning**. An INTERR is interpreted as conveying a question meaning, i.e., the set of the propositions that are conveyed by all the possible answers to a given question.
   b. **Never adjunct**. An INTERR either occurs as a matrix clause or, if embedded, as the argument of an "interrogative" predicate, i.e., a predicate that allows at least one of its arguments to be question-denoting.

Besides satisfying (10a–b), INTERR in Romanian exhibit the extra feature of obligatorily requiring the fronting of the *wh*-expressions, regardless of their base position, as illustrated in (11)–(13).[6]

(11) **Ce**$_1$ vei publica __$_1$ anul acesta?
what will.2SG publish year-the this
'What will you publish this year?'

(12) Alex nu știe [**ce**$_1$ va publica __$_1$ anul acesta.]
Alex not knows what will.3SG publish year-the this
'Alex doesn't know what she'll publish this year.'

(13) [$_{PP}$ **Despre ce articol**]$_1$ crezi că [vom discuta __$_1$ azi]?
about what article think.2SG that will.1PL discuss today
'What paper do you think we will talk about today?'

Wh-fronting is also obligatory in multiple *wh*- INTERR, i.e., INTERR with more than one *wh*-expression. This is a feature that Romanian shares with other Balkan languages (e.g., Bulgarian, Czech, Serbo-Croatian) and distinguishes Romanian from Germanic and other Romance languages. All *wh*-expressions have to be fronted; their relative order tends to be rigid and has been shown to be determined by several interacting factors, thoroughly described in e.g., Comorovski (1996) and Giurgea & Grosu (2020). One such factor is the well-known superiority effect, whereby the *wh*-expression linked to the subject of the clause obligatorily precede the *wh*-expressions linked to the object and/or adjuncts, following the linear order of their traces. For instance, (14a) shows a matrix INTERR questioning both its subject and its direct object. The corresponding *wh*-expressions must both be fronted with the one linked to the subject

[5] See Arkadiev & Caponigro (2021) for related typological remarks and exceptions.

[6] Detailed descriptions of the morphosyntactic properties of interrogative structures (e.g., word order, island constraints) can be found in Comorovski (1996), Pană Dindelegan (2013), Giurgea & Grosu (2020) among others. To keep the discussion focused, in the remainder of the article we abstract away from well-known and much debated properties of Romanian clauses, such as direct object marking, clitic doubling, or differences between pre-verbal vs. postverbal subjects.

preceding the one linked to the object, recognizable from the direct object marker (DOM) *pe*. The reverse order is unacceptable, as shown in (14b).

(14) a. [**Cine**$_1$] [**pe cine**$_2$] a recomandat _$_1$ _$_2$?
who DOM who has recommended
'Who recommended whom?'
b. *[**Pe cine**$_2$][**cine**$_1$] a recomandat _$_1$ _$_2$?
DOM who who has recommended

Similarly, if an object and a temporal adjunct are questioned, then the object must precede the adjunct, as shown in (15a). If the object follows the adjunct, the sentence is judged unacceptable, as shown in (15b).

(15) a. **Ce**$_1$ **când**$_2$ ai publicat _$_1$ _$_2$?
what when have.2SG published
'What have you published when?'
b. ***Când**$_2$ **ce**$_1$ ai publicat _$_1$ _$_2$?
when what have.2SG published

Other factors that may play a role include D-linking, with D-linked *wh*-expressions preceding non-D-linked ones, as shown by the contrast in (16), or animacy, with animate-denoting *wh*-expressions preceding inanimate ones, as illustrated by the contrast in (17).[7]

(16) a. [**Pe care student]** [**ce**] îl recomandă?
DOM which student what CL.ACC.3SG recommends
'What recommends which student?'
b. * [**Ce**] [**pe care student**] îl recomandă ?
what DOM which student CL.ACC.3SG recommends

(17) a. [**Despre cine**] [**ce**] se zice?
about who what REFL says
'What is being said about whom?'
b. * [**Ce**] [**despre cine**] se zice?
what about who REFL says

There are also syntactic factors affecting the order of *wh*-expressions. For example, *de ce* 'why' has been argued to be merged lower in the structure and be unable to move to the left periphery positions occupied by the other *wh*-phrases (Shlonsky & Soare

[7] Giurgea & Grosu (2020) note that some speakers also seem to accept standard (i.e., non-echo) interrogatives where the second *wh*-phrase (which is of the form P + *cine* 'who' in all their examples) stays in situ, as in (i).
(i) **Cine** a recomandat **pe cine**?
who has recommended DOM who
'Who recommended whom?'
Not all speakers find examples like (i) acceptable. Further research is needed to determine the extent of this variation.

2011). As a result, in multiple *wh*-configurations, *de ce* 'why' always follows other *wh*-expressions, be they arguments or adjuncts, as shown in (18a–c).

(18) a. [**Cine**] [**de ce**] a venit?
who why has come
'Who came and why they came?'
b. ? [**Când**] [**de ce**] a venit ?
when why has come
'When did he come and why?'
c. *[**De ce**] [**când**] a venit?
why when has come

The question mark on (18b) reflects the fact that multiple *wh*- INTERR with only adjunct *wh*-expressions tend to be dispreferred, as shown in (19a). INTERR with coordinated *wh*-expressions are used, instead, as shown in (19b) and discussed at length in Rațiu (2011) among others. In general, ordering constraints are less strict with coordinated *wh*-expressions.

(19) a. ?? [**Unde]** [**cum]** ai mers?
where how have.2SG gone
b. [**Unde**] și [**cum**] ai mers? / [**Cum**] și [**unde**] ai mers?
where and how have.2SG gone how and where have.2SG gone
'Where did you go and how? / How did you go and where?'

We have spent some time discussing these ordering restrictions because they carry over to the other multiple *wh*-constructions attested in Romanian, as we will see in the following sections.

The meaning of INTERR is commonly assumed to be propositional in nature, more precisely, a set of propositions (see Dayal 2016 for an extensive and insightful overview). Multiple *wh*- INTERR allow both "single-pair" and "multiple-pair" interpretations. For instance, the question conveyed by the multiple *wh*- INTERR in (14a) allows for both the answer in (20a), which mentions only one recommender-recommendee pair (<Maria, Paul>), and the answer in (20b), which mentions multiple recommender-recommendee pairs (<Maria, Paul>, <Lia, Andrei>, <Adrian, Anca>). In the next sections, we show that the availability of the two interpretations doesn't necessarily carry over to the other multiple *wh*-constructions.

(20) a. Maria recommended Paul.
b. Maria recommended Paul, Lia recommended Andrei, Adrian recommended Anca.

Table 2 summarizes the behavior of INTERR with respect to the four main properties we listed in Section 2 as the ones characterizing and distinguishing different *wh*-constructions in Romanian.

Table 2. Main features of INTERR in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- either	- argument only	- all - multiple	- question (sets of propositions)

3.2. Headed Relative Clauses

A *headed relative clause* (HR) in Romanian is an embedded non-interrogative *wh*-clause with a missing constituent that can be characterized by the properties in (21).

(21) *Properties characterizing HRs:*
   a. **NP adjunct**. An HR always occurs as an adjunct/modifier[8] to an NP, which is called the "head" of the HR; in Romanian, as in other Romance languages, the HR always occurs to the right of its head.
   b. **Set denotation.** An HR denotes a set of individuals like other NP adjuncts/modifiers (e.g., adjectives).

Morphosyntactically, an HR in Romanian can agree in gender, person, and number with its head, as shown in (22) with the HR in brackets, its *wh*-word acting as a relativizer (REL) in bold, its head underlined, its copula exhibiting person and number agreement with the head, and its adjectival predicates exhibiting gender and number agreement with the head.

(22) Lia admiră <u>femeile</u> [**care** sunt puternice și curajoase].
Lia admires women-the REL be.PRES.3PL strong.F.PL and brave.F.PL
'Lia admires the women that are strong and brave.'

Semantically, an HR denotes a set of individuals (i.e., the extension of a property) that intersects with the set of individuals denoted by the NP, resembling adjectival NP modification (Quine 1960, Montague 1970). For instance, the HR in (22) denotes the set of all the individuals that are strong and brave. It intersects with the set of women that is denoted by its head to return the set of individuals who are women and are strong and brave.

HRs in Romanian require *wh*-expressions in clause initial position to license relativized arguments and adjuncts. The *wh*-expressions introducing HRs act as a relativizer (aka 'relative pronoun'). Only a subset of *wh*-expressions occurring in INTERR is allowed to occur in HRs, as already shown in Table 1 in Section 1. The main relativizer in Romanian is the *wh*-word *care*, as illustrated in the examples in (23), which contain bracketed HRs with a subject (23a), direct object (23b), indirect object (23c) or locative adjunct (23d) relativized.

[8] We use the term "adjunct" in a loose way, since we are aware of different approaches to the syntax of HRs, some of which don't treat an HR as a plain adjunct, e.g., the so-called "head raising analysis" of HRs. See de Vries (2018) for an overview of the syntax of HRs and Gheorghe (2004), Grosu (2013), and Pană Dindelegan (2013) for overviews of relative clauses in Romanian.

(23) a. Fata$_i$ [**care**$_i$ t$_i$ a intrat] e sora mea.
girl-the REL has entered is sister-the my
'The girl who entered is my sister.'
b. Fata$_i$ [pe **care**$_i$ ai cunoscut-o t$_i$] e sora mea.
girl-the DOM REL have.2SG met-CL.ACC.FSG is sister-the my
'The girl whom you met is my sister.'
c. Lia se întâlnește cu fata$_i$ [**căreia**$_i$ îi dă mașina t$_i$].
Lia REFL meets with girl-the REL.DAT.3FSG CL.3SG.DAT gives car-the
'Lia meets the girl to whom she gives her car.'
d. Am plecat din orașul$_i$ [**în care**$_i$ ne-am cunoscut t$_i$].
have.1 left from town in REL REFL-have.1 met
'I left the town where we met.'

Other *wh*-expressions that act as relativizers are *ce* 'what' (24a), *unde* 'where' (24b), *când* 'when' (24c), *cum* 'how' (24d) and, more rarely, *cât* 'how much' (24e).[9]

(24) a. Candidatul [**ce** îmi place mie] a câștigat.
candidate-the REL CL.1SG.DAT likes me.DAT has won
'The candidate that I like has won.'
b. Orașul [**unde** m-am născut] s-a schimbat mult.
city-the REL REFL-have.1SG born REFL-has changed much
'The city where I was born has changed a lot.'
c. Îmi amintesc cu drag ziua [**când** ai venit].
CL.1SG.DAT remember.1SG with pleasure day-the when have.2SG come
'I remember with pleasure the day when you came.'
d. În timpul [**cât** am fost plecat] multe s-au schimbat.
in time-the REL have.1SG been gone many REFL-have.3PL changed
'During the time I was gone, many things have changed.'

An HR can only be introduced by one *wh*-expression: multiple or coordinated *wh*-expressions are unacceptable, which is the attested pattern in Romance and across languages. HRs clause can be stacked or coordinated, as shown in (25), a behavior that is expected from NP modifiers.

(25) Lia citește o carte [**pe care** ai recomandat-o] (și) [**pe care** a
Lia reads a book DOM REL have.2SG recommended-CL.3SG and DOM REL has
găsit-o la librăria ei preferată].
found-CL.3SG at bookstore-the her favorite
'Lia is reading a book that I recommended that she found at her favorite local bookstore.'

Table 3 summarizes the behavior of HRs with respect to the four main properties we listed in Section 2 as the ones characterizing and distinguishing different *wh*-constructions in Romanian.

[9] For an experimental investigation on factors determining the choice of the relativizer in cases allowing *care*, see Boioc (2018).

Table 3. Main features of HRs in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- embedded only	- adjunct only	- some - no multiple	- set of individuals (property)

3.3. Maximal Free Relative Clauses

Free relative clauses (FRs) are embedded non-interrogative *wh*-clauses with a missing constituent that occur as arguments or adjuncts in their matrix clause and behave like DPs or PPs both distributionally and semantically. *Maximal free relative clause*s (MAX-FRs) are FRs that exhibit the following semantic properties:[10]

(26) *Properties characterizing MAX-FRs:*
- a. **Definiteness**. A MAX-FR can be replaced and paraphrased by a definite DP—a DP introduced by a definite marker or determiner in a language that has them, like the suffixal/enclitic determiner *-l* (which inflects for gender, number and case) in Romanian—or by a PP with a definite DP as its complement.[11]
- b. **Referentiality**. A MAX-FR is interpreted as referential: it refers to an (atomic/plural, concrete/abstract, count/mass, kind/not-kind) individual. In this respect, MAX-FRs are like definite DPs in Romanian.
- c. **Maximality**. A MAX-FR is interpreted as maximal: it refers to the largest ('maximal') individual of a set of (atomic and plural) individuals. This is the same semantic behavior as seen with definite DPs in Romanian.

The bracketed clause in (27a) provides an example of a MAX-FR in Romanian and illustrates the properties in (26). It can be replaced and paraphrased by a definite DP (property 26a), as shown by the bracketed DP in (27b), and is interpreted as referring to the largest maximal plural individual out of the set of atomic and plural individuals of the things that were installed before the fire (properties 26b–c).

(27) a. Muncitorii au montat [**ce** era instalat înainte de incendiu].
workers-the have.3PL assembled what was installed before of fire
'The workers assembled what had been installed before the fire.'

b. Muncitorii au montat [$_{DP}$ lucruri**le** care erau instalate
workers-the have.3PL assembled things-the REL were installed
înainte de incendiu].
before of fire
'The workers assembled the things that had been installed before the fire.'

[10] Based on Caponigro (2021: (10)). For the semantics of MAX-FRs, see also Jacobson (1995), Dayal (1996), and Caponigro (2003, 2004), who, in turn, are inspired by the analyses of definite DPs in Sharvy (1980) and Link (1983). See Šimík (2020) for a thorough overview of the main semantic properties of MAX-FRs and related proposals. See van Riemsdijk (2017) for an overview on the syntax of FRs and related open issues.

[11] Like other Romance languages, Romanian makes use of definite DPs to refer to kinds, while the use of bare nominals is highly restricted.

The properties in (26) are partially redundant on purpose. Although definiteness is equivalent to the combination of referentiality and maximality within the semantic framework that we are adopting, the replacement and paraphrase test in (26a) provides a quick preliminary step to assess whether a *wh*-clause is a MAX-FR in Romanian.

MAX-FRs in Romanian are fully productive in their use of *wh*-expressions—likely the most productive among MAX-FRs in Romance languages. Further examples are given in (28) with adjunct MAX-FRs introduced by 'where', 'when', and 'how'.

(28) Am făcut-o [**unde/ când/ cum** ai făcut-o și tu].
have.1SG did-CL.3SG where when how have.2SG did-CL.3SG also you
'I did it where/when/how you did it.'

All *wh*-expressions in INTERR can introduce MAX-FRs (see Table 1). This also includes *de ce* 'why' (Caponigro & Fălăuș 2023a), as shown in (29), a pattern that is typologically less attested.

(29) Ana a plecat din țară (fix)[12] [**de ce** a plecat și Maria].
Ana has left from country precisely why has left also Maria
'Ana left the country for the (very same) reason(s) Maria left.'

MAX-FRs introduced by *cine* 'who' are possible, but with certain restrictions that require further investigation. For example, subject FRs are more acceptable— at least for some speakers—when they are in postverbal position, as illustrated by the contrast in (30a) vs. (30b). Case marking also seems to make a difference: while *cine*-FRs introduced by the direct object marker *pe* (morphologically a preposition) are degraded, as in (31a), those introduced by other prepositions are fully acceptable, as in (31b). No such restrictions are observed if *cine* is in the oblique case, so MAX-FRs such as the one in (31c) are always acceptable.

(30) a. ?[**Cine** a câștigat mai mult la loto] plătește cina diseară.
who has won more much at lottery pays dinner-the tonight
'The person who won more at the lottery buys dinner tonight.'
b. Diseară plătește cina [**cine** a câștigat mai mult la loto.]
tonight pays dinner-the who has won more much at lottery
'The person who won more at the lottery buys dinner tonight.'

(31) a. ? Bunica a îmbrățișat [pe **cine** a văzut la petrecerea de Crăciun].
Grandma has hugged DOM who has seen at party-the of Christmas
'Grandma hugged the people she saw at the Christmas party.'
b. Îmi place [**cu cine** ai dansat].
CL.1SG.DAT likes with who have.2SG danced
'I like who you danced with.'
c. Am trimis cadouri [**cui** s-a înscris].
have.1 sent presents who.DAT REFL-has registered

[12] Some speakers find *de ce*-FRs more natural if they are immediately preceded by an adverb such as *fix* 'precisely' or *exact* 'exactly' and judge them degraded otherwise.

'We sent presents to the people who registered.'

The only true exception is the *wh*-determiner *care* 'which' + NP (Caponigro & Fălăuș 2023b), as in (32a), while the slightly different variant with *ce* 'what' + NP is fully acceptable, as in (32b).

(32) a. *Bunica a împachetat [**care cadou(ri)** (îl/le) dă de Crăciun].
Grandma has wrapped which gift(s) CL.3SG CL.3PL gives for Christmas
('Grandma wrapped the gifts she'll give at Christmas.')
b. Bunica a împachetat [**ce cadou(ri)** dă de Crăciun].
Grandma has wrapped what gift(s) gives for Christmas
'Grandma wrapped the gift(s) she'll give at Christmas.'

MAX-FRs exhibit restrictions on the morphosyntactic shape of their *wh*-expressions known as 'matching effects'. Simply put, the *wh*-expression introducing a MAX-FR has to satisfy the categorial and case requirements of both clauses, the syntactic category and the morphological case of the missing constituent in the MAX-FR and the syntactic category and the morphological case of the constituent in the matrix clause that is realized by the whole MAX-FR. The nature and the degree of these effects vary across languages. Romanian doesn't require full morphological matching, as illustrated in (31b,c) above.[13]

MAX-FRs in Romanian can be introduced by more than one *wh*-expression, with the same obligatory fronting and ordering restrictions as in multiple *wh*- INTERR. These constructions seem to be restricted to northern varieties of Romanian, as noted by Caponigro & Fălăuș (2020), who first investigated multiple *wh*- MAX-FRs. The possible combinations of *wh*-expressions are also determined by the predicates in the matrix and the MAX-FR. More specifically, only the leftmost *wh*-expression interacts with the matrix clause as far as satisfying its semantic and matching requirements. An example is given in brackets in (33), where the multiple *wh*- MAX-FR clearly satisfies only one argument of the matrix predicate and the lower *wh*-expression *cui* 'to whom' is in no way related to the matrix predicate 'wrap'. A key feature of multiple *wh*- FRs is that the first *wh*-expression affects the interpretation of the other, a "functional" intuition that we tried to partially render with the adjective "appropriate" in the English paraphrase. Accordingly, the bracketed clause in (33) denotes the maximal plural entity of a set of things, each of which is associated with a corresponding person, who will be given one of those things for Christmas. Caponigro & Fălăuș (2020) discuss these constructions extensively and provide a compositional analysis.

(33) Bunica a împachetat [**ce cui** dă de Crăciun].
Grandma has wrapped what who.DAT gives for Christmas
'Grandma wrapped the things she'll give to the appropriate people on Christmas.'

To the best of our knowledge, multiple *wh*- MAX-FRs have been almost completely ignored in the crosslinguistic and typological investigation of MAX-FRs and

[13] See Grosu (2003, 2013) and Pană Dindelegan (2013) for relevant examples and an extensive discussion on matching effects in FRs in Romanian.

wh-constructions in general. As far as we can tell, they are not attested in any other Romance language, but further crosslinguistic investigation is needed.

Table 4 summarizes the behavior of MAX-FRs with respect to the four main properties we listed in Section 2 as the ones characterizing and distinguishing different *wh*-constructions in Romanian.

Table 4. Main features of MAX-FRs in Romanian based on the properties in Sec. 2.

Main/Embedded	**Distribution (if embedded)**	***Wh*-expressions**	**Meaning**
- embedded only	- argument/adjunct	- all but 'which'+NP - multiple with restrictions	- referential (individual)

3.4. Modal Existential Constructions

Modal Existential Constructions (MECs) (also known as *Existential FRs*) are embedded non-interrogative *wh*-clauses satisfying the properties in (34).[14]

(34) *Properties characterizing MECs:*
- a. **Existential meaning**. MECs can be replaced and paraphrased by existentially quantified nominal expressions—indefinite DPs, which are introduced by indefinite markers (e.g., determiners like *un/o* 'a' or *niște* 'some' in Romanian).
- b. **Existential predicate**. MECs always occur as the complement of an existential predicate, like existential *a avea* 'to have' in Romanian.

The bracketed strings in (35) provide three examples of MECs in Romanian, all introduced by *ce* 'what' + NP, but with the NP varying between a count singular noun (35a), a count plural noun (35b) and a mass noun (35c), without any difference in acceptability.

(35) a. Maria are [**ce carte** { lua/ să ia}].
Maria has what book take.INF SBJV take.3SG
'Maria has a book to take.'
b. Maria are [**ce cărți** {lua/ să ia}].
Maria has what books take.INF SBJV take.3SG
'Maria has books to take.'
c. Maria are [**ce mâncare**} {lua/ să ia}].
Maria has what food take.INF SBJV take.3SG
'Maria has food to take.'

The MECs in (35) satisfy the properties in (34): they can all be replaced and paraphrased by indefinite DPs and occur as the complement of the existential verb *a avea* 'to have', as shown in (36).

[14] Based on Caponigro (2021: (15)). For the syntax and semantics of MECs see Izvorski (1998), Grosu (2004, 2013), Caponigro (2003, 2004), Šimík (2011). Šimík (2017) provides a thorough review of the relevant literature on MECs and related constructions.

(36) Maria are [{**o carte/ nișteă cărți/ nișteă mâncare**} de luat].
Maria has a book some books some food of taken
'Maria has a book/books/food to take.'

Because of the properties in (34), it has been suggested that MECs denote a set of individuals over which the existential quantification triggered by the matrix predicate applies. In addition to existential *a avea* 'to have', MECs in Romanian can also be introduced by *a fi* 'to be', although this construction is rather marginal in contemporary Romanian (see Gheorghe 2011, Pană Dindelegan 2013 and references therein). Other existential predicates that have been claimed to license MECs in Romanian are *a găsi* 'to find', *a căuta* 'to seek', *a alege* 'to choose', *a trimite* 'to send' (see Grosu 2004, 2013, and Šimík 2011).

MECs in Romanian obligatorily require subjunctive or infinitive forms, although the latter is less frequent in Romanian. In other Romance languages with a much more productive use of infinitival forms, infinitive is required, although Caponigro (2021: ex. 19) shows that MECs can occur in the indicative as well in Italian, while Caponigro *et al* (2021) show that MECs do not necessarily require any specific mood in several Mesoamerican languages.

MECs are not attested in English or other Germanic languages (except for Yiddish and varieties of English spoken in New York City; see Caponigro 2003), but are common in Romance, Balto-Slavic, Semitic languages, and Mesoamerican languages. They are extremely productive in Romanian: all *wh*-expressions occurring in INTERR can introduce MECs, except for the *wh*-determiner *care* 'which' (Caponigro & Fălăuș 2023b). The examples in (37) are all unacceptable, although they are identical to the fully acceptable ones in (35) except for replacing the *wh*-determiner *ce* 'what' inside the MEC with *care* 'which'.

(37) *Maria are [**care** {**carte/ cărți/ mâncare**} să (o/le) ia].
Maria has which book books food SBJV CL.3SG/CL.3PL take.3SG

MECs don't exhibit any matching effects, patterning like INTERR and unlike MAX-FRs. MECs allow for multiple *wh*-expressions with the same obligatory fronting and ordering restrictions as in INTERR. An example is given in (38a) with the paraphrase by means of an indefinite DP in (38b).

(38) a. Bunica are [**ce cui** da de Crăciun].
Grandma has what who.DAT give.INF for Christmas
'Grandma has things to give to people for Christmas.'
b. Bunica are [(**nișteă**) **lucruri** de dat **unor copii** de Crăciun].
Grandma has some things of given some.DAT children for Christmas
'Grandma has (some) things to give to (some) children for Christmas.'

Like INTERR, MECs allow for coordinated *wh*-expressions as well.

(39) Nu am [**cum și de ce** să îți dau explicații].
not have how and why SUBJ CL.2SG.DAT give.1SG explanations
'I don't have ways and reasons to explain things to you.'

Table 5 summarizes the behavior of MECs with respect to the four main properties we listed in Section 2 as the ones characterizing and distinguishing different *wh*-constructions in Romanian.

Table 5. Main features of MECs in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- embedded only	- argument only (complement of an existential predicate)	- all but 'which'+NP - multiple	- set of individuals

3.5. Free Choice Free Relative Clauses

Free choice free relative clauses (*FC-FRs*) are non-interrogative embedded *wh*-clauses that satisfy the properties in (40).

(40) *Properties characterizing FC-FRs:*
a. **Free-choice inference**. A sentence containing an FC-FR obligatorily triggers an inference of ignorance or indifference.
b. **Free-choice marker**. An FC-FR always contains a free-choice (FC) marker, the prefix *ori-* in Romanian.

Let us illustrate these two properties by discussing specific examples of FC-FRs in Romanian, as the bracketed clauses in (41) and (42).

(41) Poliția a arestat pe [**oricine** a protestat ieri].
police-the has arrested DOM FC-who has protested yesterday
'The police arrested anybody who protested yesterday.'

(42) Alege [**orice carte** îți place]!
pick.IMP.2SG FC-what book CL.2SG.DAT like.3SG
'Pick any book you like!'

The sentence in (41) conveys that, for all the speaker knows, the police arrested all the people who protested the day before the speaker is talking. The identity of the arrested people is unknown to the speaker. If the scenario made it clear the speaker knew the people arrested, or even just saw them getting arrested, then (41) would be judged awkward and inappropriate. The sentence in (42), instead, conveys that the speaker is indifferent to which book the listener will pick up, out of a group that the speaker may be familiar with. The bracketed *wh*-clauses in (41) and (42) are both introduced by *wh*-expressions whose *wh*-words have been morphologically enriched with the FC prefix *ori-*: *oricine* 'FC-who' and *orice* 'FC-what'. It is this marker that is responsible for the FC inference property in (40a). This is a feature of all FC-FRs in Romanian. A FC marker seems to be present in all FC-FRs across languages: it has the shape of a suffix in other Romance languages (e.g., *-unque* in Italian), it can be any kind of affix across languages in general or can result from other morphological processes such as reduplication. All these patterns are exemplified in the Mesoamerican languages investigated in Caponigro *et al* (2021).

Caponigro & Fălăuș (2018) discuss these facts extensively and argue that FC-FRs in Romanian semantically behave like DPs headed by the free choice determiner *any* in English: they are existentially quantified expressions that necessarily trigger alternatives whose exhaustification results into a universal flavor. Caponigro & Fălăuș (2018) also consider semantic and syntactic differences between the use of FC *wh*-expressions in FC-FRs and their occurrence as FC items on their own, without introducing FC-FRs.[15] We refer the interested reader to this work for more details and a compositional semantic analysis.

Almost all Romanian *wh*-words occurring in INTERR can take the prefix *ori-* and form FC *wh*-expressions introducing FC-FRs, the only exception being the compound form *de ce* 'why'. Examples like (43a) may be taken to indicate that FC-FRs can be introduced by more than one FC *wh*-expression. Note however that only the first FC-element must be fronted, suggesting that we are dealing with a FC-FR containing a FCI licensed *in situ* (see fn. 15). This configuration thus differs from the other instances of multiple *wh*-constructions discussed in this article.

(43) a. Trimite [**orice** **oricui** îți place]!
send.IMP.2SG FC-what FC-who.DAT CL.2SG.DAT like.3SG
'Send anything to anyone you like!'
b. Trimite [**orice** îți place **oricui**]!
send.IMP.2SG FC-what CL.2SG.DAT like.3SG FC-who.DAT
'Send anything you like to anyone !'

The following examples illustrate the fact that FC-FRs can be stacked (44), as well as coordinated, with or without ellipsis (45):

(44) Trimite [**orice** îți place] [**oricui** are nevoie]!
Send.IMP.2SG FC-what CL.2SG.DAT like.3SG FC-who.DAT has need
'Send anything you like to anyone who needs it!'

(45) Trimite [**orice** (e nevoie)] și [**oricând** e nevoie]!
send.IMP.2SG FC-what is need and FC-when is need
'Send anything is necessary anytime it's necessary!'

Like MAX-FRs, FC-FRs can occur in an argument position within the matrix clause or as clause-internal adjuncts. They thus differ from so-called "unconditional" clauses, which look identical to FC-FRs, but are always left-dislocated and behave very differently semantically (see Rawlins 2013, Fălăuș & Nicolae 2022 among others). An example of an unconditional clause introduced by a *wh*-expression with FC morphology in Romanian is given in (46).

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[15] An example of FC *wh*-word used independently is given in (i) below.
(i) Pot dormi **oriunde**.
can.1SG sleep FC-where
'I can sleep anywhere.'
Like in other languages, FCIs in Romanian need to be licensed by a modal operator and require no fronting, unlike what is observed in FC-FRs.

(46) **Oricine** mă caută azi, sunt ocupat.
FC-who me looks-for today am busy
'Whoever is looking for me today, I am busy.'

Last, FC-FRs exhibit categorial and case matching effects similar to those observed in MAX-FRs and unlike all the other *wh*-clauses we have surveyed so far.

Table 6 summarizes the behavior of FC-FRs with respect to the four main properties we listed in Section 2 as the ones characterizing and distinguishing different *wh*-constructions in Romanian.

Table 6. Main features of FC-FRs in Romanian based on the properties in Sec. 2.

Main/Embedded	**Distribution (if embedded)**	***Wh*-expressions**	**Meaning**
- embedded only	- argument/adjunct	- all but 'why' - no multiple	- generalized quantifier (existential)

3.6. Correlative Clauses

Correlative clauses (*CORR*) are non-interrogative embedded *wh*-clauses that exhibit the following defining properties:[16]

(47) *Properties characterizing CORR:*
a. **Dislocation**. A CORR is obligatorily dislocated with respect to a main clause; in Romanian a CORR is always left-dislocated.
b. **Correlate**. Each *wh*-expression in a CORR is picked up by—correlated with—an anaphoric marker (typically a demonstrative or a pronominal) in its main clause.

The sentences in (48a–d) illustrate these properties. In all these examples, the correlate in the main clause is italicized.

(48) a. [**Cine** va câștiga premiul], *acela* va fi contactat de organizatori.
who will win prize-the that-one will be contacted by organizers
'The person who wins the prize will be contacted by the organizers.'
b. [Pe **care fată** o alegi], cu *aceea* mergi la petrecere.
DOM which girl CL.3FSG choose.2SG with that-one go.2SG to party
'You will go to the party with the girl you choose.'
c. [**Unde** merge Maria], *acolo* lucrurile se îmbunătățesc.
where goes Maria there things-the REFL improve.3PL
'Wherever Maria goes, things there improve.'
d. [Cu **cât** află mai multe], cu *atât* este mai interesat.
with how-much finds-out more many with that-much is more interested
'The more he finds out, the more interested he gets.'

[16] See Srivastav (1991), Dayal (1995, 1996), Bhatt (2003), as well as the overview in Lipták (2009). For correlatives in Romanian, see Brașoveanu (2008, 2012).

To the best of our knowledge, CORR are not (productively) attested in other Romance languages. In Romanian on the other hand, they are highly productive. All *wh*-expressions that introduce INTERR can also be used in CORR. As illustrated in (48b) for example, CORR do not exhibit matching effects: the *wh*-expression and its correlate can have different functions and syntactic positions.

Multiple *wh*- CORR, with or without coordination, are also possible, as shown in (49) and (50), with the same ordering restrictions as we discussed for INTERR. Note that in multiple *wh*- CORR, one of the correlates may be absent, e.g., in (49a) where the subject demonstrative is optional (Romanian being a pro-drop language) or in (49b) where the temporal correlate *atunci* 'then' may be missing. Similar facts hold for multiple *wh*- CORR involving coordinated *wh*-expressions as well, as shown in (50).

(49) a. **Cine ce** aduce, (*acela*) *aia* va mânca.
who what brings that-one that will.3SG eat
'Everybody eats whatever they bring.'
b. **Ce invitat când** pleacă, (*atunci*) *îl* voi trece pe listă.
what guest when leaves then CL.3MSG will.1SG put on list
'Whatever guest leaves at any point, I'm putting him on the list.'

(50) **Ce şi cum** gătea bunica, *asta (şi aşa)* vreau să gătesc.
what and how cooked Grandma that and that-way want.1SG SUBJ cook.1SG
'I want to cook whatever Grandma cooked and however she cooked it.'

Semantically, CORR have been shown to receive either a referential/unique interpretation, or a universal interpretation, as illustrated by their paraphrases in English. The following examples (due to Brașoveanu 2008: 48) illustrate these readings. The CORR in (51a) is episodic and is interpreted as referring to one specific girl in the relevant situation, whereas the CORR in (51b) can refer to any man interrogated by the secret police.

(51) a. [**Care fată** și-a uitat ieri haina], pe *aceea*
which girl CL.3SG-has forgotten yesterday coat-the DOM that-one
o caută tatăl ei.
CL.ACC.3FSG looks-for father-the her
'The father of the girl that forgot her coat yesterday is looking for her.'
b. [Pe **care om** l-a interogat Securitatea], în *acela*
DOM which person CL.ACC.3MSG-has interrogated security-the, in that-one
nu mai am încredere.
not more have.1SG trust
'I do not trust any person interrogated by the secret police anymore.'

Multiple *wh*- CORR allow both "single-pair" and "multiple-pair" interpretations, although the latter seems to be preferred. For example, the correlative in (52a) would typically be used in a situation with more than one attacker-victim pair, as described in (53b), although it is still compatible with the situation in (53a), with a unique attacker-victim pair. On the other hand, if we add an expression enforcing the single event reading, such as *primul* 'the first', the single-pair reading becomes prominent, as in the minimally different CORR in (52b).

(52) a. **Cine pe cine** a atacat, *acela* îi cere scuze *celuilalt.*
who DOM who has attacked that-one CL.DAT asks apologies other.DAT
'Whoever attacked the other first, that one apologized (to the other one).'
b. **Cine pe cine** a atacat *primul, acela* îi cere scuze *celuilalt.*
who DOM who has attacked first that-one CL.DAT asks apologies other.DAT
'Whoever attacked the other first, that one apologized (to the other one).'

(53) a. Alex attacked Paul.
b. Alex attacked Paul, Sam attacked Andrei, Ana attacked Dana.

Table 7 summarizes the behavior of CORR with respect to the four main properties listed in Section 2 as characterizing and distinguishing different *wh*-constructions in Romanian.

Table 7. Main features of CORR in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- embedded only	- adjunct only (obligatorily left-dislocated)	- all - multiple	- referential or quantificational (universal)

3.7. Exclamative Clauses

Exclamative clauses perform non-assertive speech acts conveying that a particular proposition has violated the speaker's expectations.[17] Romanian exclamative clauses introduced by *wh*-expressions (EXCL) exhibit the following defining properties:

(54) *Properties characterizing EXCL:*
a. **Matrix only**. An EXCL cannot be embedded.
b. **Scalarity**. An EXCL has an obligatory scalar/degree interpretation.

The EXCL in (55), for example, is introduced by the *wh*-word *ce* 'what' and conveys that the speaker desires an ice cream to a degree that exceeds common expectations.

(55) **Ce** aș mânca o înghețată!
what would.1SG eat an ice cream
'How much I'd like to eat some ice cream!'

Further examples of EXCL in Romanian are given in (56)–(59), showing that EXCL can also be introduced by the simple *wh*-words *cum* 'how' (56), *cât* 'how much' (57), as well as by the *wh*-phrases *ce* 'what'+NP/AdjP/AdvP (58) and *cât/ă/i/e* + NP/AdjP/AdvP 'how much/ many' (59).

(56) **Cum** ninge!
how snows
'The way it snows!'

[17] See Zanuttini & Portner (2003), Castroviejo (2006), Rett (2008, 2011), Nouwen & Chernilovskaya (2015) among others. For EXCL in Romanian, see Pană Dindelegan (2013).

(57) **Cât** călătorește Maria!
how-much travels Maria
'How much Maria travels!'

(58) a. **Ce cărți** interesante ai!
what books interesting have.2SG
'What interesting books you have!'
b. **Ce frumoasă** e casa ta!
what pretty is house yours
'How pretty is your house!'
c. **Ce bine** că ai venit!
what well that have.2SG come
'How good that you came over!'

(59) a. **Câți participanți** au venit!
how-many participants have.3PL come
'How many participants came!'
b. **Cât de frumoasă** e casa ta!
how-much DE pretty is house your
'How pretty is your house!'
c. **Cât de bine** dansează Maria!
how-much DE well dances Maria
'How well Maria dances!'

The degree interpretation mentioned in (54b) is even more salient with *wh*-expressions that inherently express quantity, e.g., *cât* 'how much' or that combine with gradable phrases, e.g., *ce* 'what'+NP/AdjP/AdvP. In all these cases, the *wh*-expression is taken to instantiate some gradable property/referent/event to a degree higher than the speaker expected. This explains why EXCL in Romanian exclude *wh*-expressions such as *cine* 'who' or *unde* 'where' (see Table 1), which disallow degree interpretations.

Semantically, EXCL have been taken to denote sets of propositions (e.g., Grimshaw 1977, Zanuttini & Portner 2003), whose content is presupposed and which have an additional widening component ultimately responsible for their illocutionary force. More recent analyses take EXCL to be some type of degree construction (e.g., Castroviejo 2006, Rett 2011).

In Romanian, many EXCL only differ from their INTERR counterparts by rising intonation, which varies in order to reflect the information structure of the sentence. Unlike most other *wh*-constructions discussed so far, there are no multiple *wh*-exclamatives, as attested by the unacceptability of (60).[18] Coordinated *wh*-expressions are sometimes attested in EXCL, arguably a result of ellipsis, as illustrated in (61).

[18] An anonymous reviewer finds examples of multiple *wh*- EXCL such as (i) acceptable:
(i) **Ce fată delicată cu ce mitocan** s-a măritat!
what girl delicate with what jerk REFL-has married
The reviewer seems to share our judgment on (60), making it possible they have a difference between simple and complex *wh*-phrases. Our consultants do not share the reviewer's intuition. This contrast calls for further investigation.

(60) *__Ce cum__ scrie Maria!
what how writes Maria

(61) __Ce frumos__ (scrie Maria) __şi ce corect__ scrie Maria!
what beautifully writes Maria and what correctly writes Maria
'How nicely and how correctly Maria writes!'

Table 8 summarizes the behavior of EXCL with respect to the four main properties listed in Section 2 as characterizing and distinguishing different *wh*-constructions in Romanian.

Table 8. Main features of EXCL in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- matrix only	N/A	- some - no multiple	- sets of propositions (with an obligatory scalar interpretation)

3.8. Rudin Constructions

In this last section, we turn our attention to a *wh*-construction that has received much less attention in the literature and to which we will refer as the *Rudin Construction* (*RUDIN*).[19] Its main properties in Romanian are the following:

(62) *Properties characterizing RUDIN:*
a. **Biclausal**. The RUDIN involves two fully tensed clauses.
b. **Multiple *wh*-**. The RUDIN involves more than one *wh*-expression.
c. **Biclausal linkage for *wh*-**. Each *wh*-expression is linked to a missing constituent in each of the two clauses in the RUDIN.

The sentences in (63)–(66) provide examples of the RUDIN:

(63) Mănâncă [__cine ce__ vrea].
eats who what wants
'Let everyone eat whatever they want.'

(64) A atacat [__cine pe cine__ a găsit].
has attacked who DOM who has found
'Everyone attacked whoever they found.'

(65) Fac [__ce cum__ îmi place].
do.1SG what how CL.1SG.DAT like.3SG
'I do whatever I like however I like it.'

[19] We use the label "Rudin Construction" since, to the best of our knowledge, Catherine Rudin was the first scholar to mention it and describe it, mainly in Bulgarian, although she also makes reference to other Balkan languages (Rudin 1986, 2007, 2008). To our knowledge, the RUDIN in Romanian has been largely neglected since, with the exception of Caponigro & Fălăuș (2020, 2022) and Nicolae (2020).

(66) Gustă [**cine ce când** termină de preparat].
tastes who what when finishes of prepared
'Everyone tastes what they are done preparing when they are done preparing it.'

Let us take a closer look at the example of the RUDIN in (67) to illustrate how the properties in (62a–c) are instantiated.

(67) Diseară la petrecere _ mănâncă _ [**cine$_1$ ce mâncare$_2$** **__$_1$** aduce **__$_2$**].
tonight at party eats who what food brings
'Tonight at the party each person will eat the food (s)he brings.'

The sentence in (67) is made of two fully tensed clauses, each with a fully inflected transitive verb ('eat', 'bring'). This satisfies the property in (62a). Both predicates are missing their subject and object arguments—highlighted with underscores. This satisfies the property in (62c). Finally, the bracketed clause (Clause$_2$) is introduced by two (bolded) *wh*-expressions that are linked to the missing subject and object in Clause$_2$—highlighted with the shared subscripts "1" and "2". The other clause (Clause$_1$) does not have any overt clause-internal marker correlating with its missing subject or object—highlighted with plain underscores without subscripts. Crucially, if either argument in Clause$_1$ is realized, the whole sentence becomes fully unacceptable, as shown by the unacceptability of the examples in (68).

(68) a. *Diseară la petrecere **Maria** mănâncă _ [cine$_1$ ce mâncare$_2$ _$_1$ aduce _$_2$].
tonight at party Maria eats who what food brings
b. *Diseară la petrecere _ mănâncă **desert** [cine$_1$ ce mâncare$_2$ _$_1$ aduce _$_2$].
tonight at party eats dessert who what food brings

This incompatibility is a reflection of one of the key features of the RUDIN, namely the fact that Clause$_1$ and Clause$_2$ must have at least two missing constituents that have to be of the same number and kind across the two clauses (properties 62b–c). The examples in (68) illustrate cases where Clause$_1$ has only one missing argument, whereas Clause$_2$ has two missing arguments (and corresponding *wh*-expressions). In (69), we provide an example of the opposite pattern: Clause$_1$ has only one missing argument—the subject of its intransitive predicate, while Clause$_2$ has both arguments of its transitive predicate missing. The result is once again ungrammatical.

(69) * __ A venit [**cine$_1$ ce$_2$** **__$_1$** a adus **__$_2$**].
has come who what has brought

The two clauses in the RUDIN also need to match in terms of the kind of missing arguments, not just their number. In (70) for example, both predicates require a subject and an object, but crucially the predicate in Clause$_1$ requires a direct object, while the predicate in Clause$_2$ an indirect object. The combination of the two results in unacceptability:

(70) * __ A atacat __ [**cine$_1$ cui$_2$** __$_1$ îi place __$_2$].
has attacked who who.DAT CL.3SG.DAT likes

The RUDIN can be introduced by all *wh*-expressions that introduce an INTERR, provided that there are two or more *wh*-expressions (62b) (with the same obligatory fronting and ordering restrictions). The two clauses involved in the RUDIN do not have the same status. In particular, Clause$_1$, which always occurs first (leftmost), seems to act as the main clause, determining the semantic and pragmatic features of the whole construction. If Clause$_1$ is declarative, then the whole construction is declarative, as in all the examples above. If Clause$_1$ is interrogative, as in (71), or imperative (72), then the whole construction will be interrogative or imperative, respectively. The *wh*-clause—Clause$_2$—always occurs to the right and acts like an adjunct clause, but its syntactic position is still a matter of investigation.

(71) A: **Unde** va mânca [**cine ce mâncare** aduce]? B: La petrecere.
where will eat who what food brings at party
'Where will everyone eat the food they bring?' 'At the party.'

(72) Mănâncă [**ce când** pregătesc]!
eat.IMP.2SG what when prepare.1SG
'Eat whatever I prepare whenever I prepare it!'

Turning now to semantics properties, the RUDIN disallow single-pair, unique interpretations observed in the other multiple *wh*-constructions attested in Romanian. Caponigro & Fălăuș (2022) develop a compositional analysis of the RUDIN, arguing that they denote identity between the extensions of two relations (i.e., sets of ordered pairs). For instance, the sentence in (67) is interpreted as asserting that each eater at the party tonight eats only the food that (s)he brings. In other words, the sentence asserts the identity between the set of ordered pairs of <food-eater, eaten-food> associated with the first clause and the set of ordered pairs <food-bringer, brought-food> associated with the second clause. Given the variable number and nature of missing constituents within the RUDIN, the notion of identity and the type of relation involved need to be flexible. Identity can be established between relations of variable *n*-ary and variable nature (i.e., semantic type), as long as they are the same across the two relations associated with the two clauses involved in the RUDIN.[20]

Table 9 summarizes the behavior of RUDIN with respect to the four main properties listed in Section 2 as characterizing and distinguishing different *wh*-constructions in Romanian.

[20] Predicates facilitating ellipsis, such as modal verbs or predicates like 'want' or 'like', make this identity relation easier to retrieve. E.g., the sentence in (63) can easily be parsed as *Everyone eats what they want to eat*. Since the main predicate in Clause$_1$ and the main predicate in Clause$_2$ are identical, the two relevant relations and identity between them can be more easily determined. We thank an anonymous reviewer for encouraging us to clarify this point.

Table 9. Main features of RUDIN in Romanian based on the properties in Sec. 2.

Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
- embedded only	- adjunct only	- all - only multiple	- set of *n*-tuples (*n*-place relation)

4. Broader issues and conclusions

Combining all our findings so far, the rich and diverse landscape of *wh*-constructions in Romanian looks as in Table 10.

Table 10: *Wh*-constructions in Romanian based on the properties in Sec. 2

	Main/Embedded	Distribution (if embedded)	*Wh*-expressions	Meaning
INTERR	- either	- argument only	- all - multiple	- question (sets of propositions)
HR	- embedded only	- adjunct only	- some - no multiple	- set of individuals (property)
MAX-FR	- embedded only	- argument/adjunct	- all but 'which'+NP - multiple with restrictions	- referential (individual)
MEC	- embedded only	- argument only (of an existential predicate)	- all but 'which'+NP - multiple	- set of individuals
FC-FR	- embedded only	- argument/adjunct	- all but 'why' - no multiple	- generalized quantifier (existential)
CORR	- embedded only	- adjunct only (left-dislocated)	- all - multiple	- referential/ quantificational (universal)
EXCL	- matrix only	N/A	- some - no multiple	- sets of propositions (with scalar interpretation)
RUDIN	- embedded only	- adjunct only	- all - only multiple	- set of *n*-tuples (*n*-place relation)

The picture that emerges from our survey of *wh*-constructions in Romanian is rich and insightful. All these clauses are built out of the same set of *wh*-expressions and exhibit strong morphosyntactic similarities, including fronting and ordering of *wh*-expressions. Nevertheless, the specific *wh*-expressions that can introduce these constructions and the interpretation of each *wh*-construction are different enough that we cannot see any principled way to reduce on any of the *wh*-constructions to any of the others.

To make these general remarks as concrete and precise as possible, let us briefly consider INTERR and MAX-FRs, whose overall meanings and detailed semantic derivations have received most attention in the literature. According to a standard analysis for INTERR like Karttunen (1977), an INTERR denotes a set of propositions and its *wh*-expression semantically behaves like an existential generalized quantifier. For instance, $what_{INT}$ denotes exactly the same logical object—the same generalized quantifier—as *something*, as shown in in (73a–b).

(73) a. *something* ~> λQ∃x[non-human(x) ∧ Q(x)]
b. *what*$_{\text{INT}}$ ~> λQ∃x[non-human(x) ∧ Q(x)]

The crucial difference lies in the semantic contribution of the remainder of the interrogative clause (i.e., the clause without the fronted *wh*-expressions) vs. the semantic contribution of the remainder of the non-interrogative clause (i.e., the clause without the raised indefinite due to quantifier raising) and in the semantic rule that combines *something* with the remainder of its clause vs. the semantic rule that combines *what* with the remainder of its clause.

On the other hand, a well-established semantic approach to MAX-FRs (see references in fn. 10) argues that they are referential—denoting individuals of various sorts. Their *wh*-expressions semantically behave like set restrictors: they apply to a set (of individuals) to return its non-human subset, as shown in (74) for *what*.

(74) *what*$_{\text{FR}}$ ~> λQλx[non-human(x) ∧ Q(x)]

The two meanings in (73b) and (74) are different and there is no straightforward way to derive one from the other in a compositional way. Nevertheless, the relation must be systematic and principled, given the regularity with which *wh*-expressions introduce both types of constructions across languages. Accordingly, it is conceivable that a systematic meaning change at the lexical level has to happen for *wh*-expressions in INTERR to occur in MAX-FRs, e.g., a change from existential quantification to λ-abstraction/set-formation (see Caponigro & Fălăuș 2023b for further discussion). Similar considerations apply to the other *wh*-constructions discussed in this article.

This conclusion is further supported by typological facts. In particular, it is by now well-established that across languages MAX-FRs are always introduced by a subset of the *wh*-expressions introducing INTERR, never the other way round (see Caponigro 2003 and Caponigro *et al* 2021 for typological evidence). This subset may vary from language to language. For instance, in Italian only the *wh*-expressions *chi* 'who', *dove* 'where', *quando* 'when', *come* 'how' and *quanto* 'how much' can occur in MAX-FRs. Variation is also attested across *wh*-constructions within the same language, as shown in our Table 1 for Romanian. Italian exhibits the same variation as well, allowing *chi* 'who', *dove* 'where', *che* 'what' to occur in MECs, a subset of the *wh*-expressions occurring in INTERR, but not a subset nor a superset of those occurring in MAX-FRs. On top of that, Italian doesn't have CORR nor RUDIN. On the other hand, Italian has a construction that does not seem to be found in Romanian[21] and has not yet been investigated, to the best of our knowledge. It consists of two apparently coordinated finite *wh*-clauses that must be introduced by the same *wh*-expression, out of a set of three (*chi* 'who', *dove* 'where', *quando* 'when'). Each clause is interpreted as some kind of existential assertion with a generic flavor; the whole construction asserts some kind of contrast between the content of one clause and the content of the other, as highlighted by the translation of the examples in (75a–c). The two clauses

[21] Some speakers seem to accept the Romanian equivalents of (75b,c), but the use of a coordinator is completely ruled out. In traditional grammars of Romanian, the *wh*-element is considered to have the status of a conjunction in these constructions, which may explain the ban on the coordinator. We are grateful to an anonymous reviewer for pointing this out.

can be optionally conjoined by the coordinator *e* 'and'. Neither *wh*-clause can occur on its own as an independent clause, as shown in (76).

(75) a. [**Chi** parla troppo] (e) [**chi** parla troppo poco].
who speaks too-much (and) who speaks too little
'There are people who speak too much and people who speak too little.'
b. [**Quando** piove sempre] (e) [**quando** non piove mai].
when rains always (and) when not rain never
'Sometimes it rains all the time and sometimes it never rains.'
c. [**Dove** c'è sempre il sole] (e) [**dove** è sempre nuvolo].
where there's always the sun (and) where is always cloudy
'There are places that are always sunny and places that are always cloudy.'

(76) ***Chi** parla troppo.[22]
who speaks too-much

Further investigation is needed to better understand this construction. We quickly touched on it to make a more general point about our goals with this article. Our focus on Romanian is not because we believe that Romanian is the language that exemplifies all possible uses of *wh*-expressions in Romance, but rather because it is a language that we find particularly valuable to study *wh*-expressions and *wh*-clauses, and highlight the puzzles they raise for the syntax-semantics interface. Romanian has been less studied than other Romance varieties and has a rich and systematic use of *wh*-expressions to form *wh*-clauses other than INTERR. For instance, multiple *wh*-constructions are well-attested across languages, but the existing literature has mostly focused on multiple *wh*- INTERR and to a lesser extent on multiple *wh*- CORR or multiple *wh*- MECs. Instead, the existence of multiple *wh*- MAX-FRs has only recently been recognized (Caponigro & Fălăuș 2020) and the status of RUDIN in this typology as obligatorily multiple *wh*- clauses is yet to be determined. Consequently, Romanian brings new data and insights to a much needed systematic and detailed crosslinguistic investigation of *wh*-expressions—one of the core logical building blocks of human languages, one of the most flexible ones within and across languages, but also one of the less studied as a logical building block.

Our article also aims to show that it is not enough to investigate a subset of a language family (Indo-European) or even a language group (Romance) to be able to grasp the behavior of all the languages in that family or group, at least as far as the use of *wh*-expressions and the formation of *wh*-constructions are concerned. We also want to bring further support to the methodological approach that demands the systematic investigation of all *wh*-expressions that are possible in each *wh*-construction in order to fully understand similarities and differences across constructions and address the broader issue of whether a given *wh*-construction can be reduced to another or needs to be treated as a separate type. We hope that the tests, distinctions, and examples provided in this article will encourage others to pursue a similar enterprise beyond Romanian and Romance. The pervasiveness of *wh*-expressions, as well as the wide

[22] This string is completely unacceptable if uttered with a matrix declarative sentence intonation, even if one could imagine a possible meaning being 'There are people who speak too much.' The string becomes fully acceptable if uttered with a content question intonation, analyzed as an INTERR and interpreted as conveying a question meaning.

range of variation observed in their use across constructions and languages, makes them an excellent area to distinguish what is idiosyncratic from what is systematic and in need of a principled explanation.

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