

The propositional nature of non-interrogative *wh*-clauses and their *wh*-words

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APPENDIX

Extending the proposal to further non-interrogative *wh*-clauses

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In this Appendix, I introduce three more varieties of non-interrogative *wh*-clauses whose meaning is not propositional and sketch how the analysis in the paper can be extended to account for them as well. Section A.1 deals with restrictive headed relative clauses, Section A.2 presents two related but distinct varieties of free relative clauses, and Section A.3 concludes with Rudin clauses. The Appendix ends with revised versions of the two tables in the paper that have been updated to include the data from the varieties of non-interrogative *wh*-clauses introduced in this Appendix. Overall, the empirical and theoretical picture that emerges from this Appendix is fully compatible with and further strengthens the proposal and the conclusions in the paper.

A.1. Restrictive headed relative clauses (*wHR*s) and their semantic analysis

The *wh*-clause in (1)a is called a ‘**restrictive headed relative clause**’ (*wHR*).¹ It’s identical to the INT in (1)c, but semantically acts as a nominal modifier or set restrictor, similarly to the bracketed adjective in (1)b (Quine 1960; Montague 1970).

¹ The acronym “*wHR*” refers to all and only restrictive relative clauses that are realized by means of *wh*-clauses with a *wh*-word. It is well-known that restrictive relative clauses do not need to be *wh*-clauses, across languages and within the same language (e.g., *Luca met the new colleagues [that is from Italy]* or *Luca met the new colleague [Andrea likes]*).

- 1) a. Josh met the colleague [_{wHR} who is from Italy].
 b. Josh met the [_{Adjective} Italian] colleague.
 c. Josh asked [_{INT} who is from Italy].

Following the approach in the paper, the semantic derivation of a *wHR* starts from the syntax/semantic core characterizing all *wh*-clauses: the CP denoting a relation between entities and propositions. For instance, the CP of both the *wHR* in (1)a and the INT in (1)c denotes the relation in (2)a. This relation can be represented as the set of ordered pairs ⟨object₁, ‘object₁ is from Italy’⟩ in (2)b, if we assume a toy model in which Andrea, Paolo, Josh, pizza, and ketchup are the only objects.

- 2) a. $CP_{wH\text{-clause}} \rightsquigarrow \lambda x_1 \lambda p [p = \lambda w.\text{from-Italy}(w)(x_1)]$
 b.

⟨Andrea, ‘Andrea is from Italy’⟩ ⟨Paolo, ‘Paolo is from Italy’⟩
 ⟨Josh, ‘Josh is from Italy’⟩
 ⟨pizza, ‘Pizza is from Italy’⟩ ⟨ketchup, ‘Ketchup is from Italy’⟩

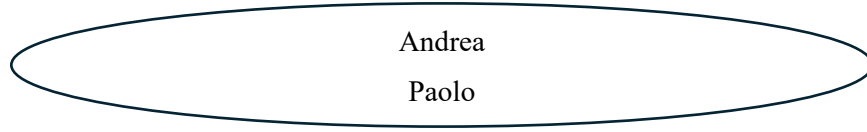
The next step in the semantic derivation is where *wHR*s and INTs diverge, due to the different semantic contribution of their *wh*-phrases. The *wh*-phrase *who* [_{INT}] in the INT in (1)c existentially closes the variable over entities (with the extra requirement of them being humans in the world of evaluation w_0) and returns the set of the propositions denoted by the logical translation in (3)a and exemplified in (3)b with the usual toy model.

- 3) a. $CP_{INT} \rightsquigarrow \lambda q \exists x [HU(w_0)(x_1) \wedge q = \lambda w.\text{cooked}(w)(l)(x_1)]$
 b.

‘Andrea is from Italy’
 ‘Paolo is from Italy’
 ‘Josh is from Italy’

The parallel step in the semantic derivation of a *wHR* shows the related and complementary logical contribution of its *wh*-phrase with respect to the one in an INT, given that both apply to the same relation between entities and propositions. The *wh*-phrase *who* [_{wRH}] in the *wHR* in (1)a existentially closes the variable over propositions and returns the set of entities (with the extra requirement that they be human), as stated in (4)a and exemplified in (4)b, assuming that Andrea and Paolo but not Josh are from Italy in the world of evaluation w_0 .

- 4) a. $CP_{wHR} \rightsquigarrow \lambda x_1 \exists q [HU(w_0)(x_1) \wedge q = \lambda w. \text{cooked}(w)(l)(x_1) \wedge q(w_0)]$
 b.



The general denotation schema for any *wh*-phrase in *wHRs* is given in (5): a function that applies to a relation between entities *e* and propositions *p* and returns the set of all and only those entities, each of which satisfies the WH restriction and saturates at least one propositional abstract by making it true in the world of evaluation *w*₀.

- 5) *Preliminary semantic contribution of a wh-phrase in a wHR:*

$$wh_{[wHR]} \rightsquigarrow \lambda S_{\langle e, \langle st, t \rangle \rangle} \lambda x \exists q [WH(w_0)(x) \wedge S(x)(q) \wedge q(w_0)]$$

I'm now going to slightly revise the logical shape of the *wh*-phrase in *wHRs*, replacing (5) with the new denotation in (6), which enriches (5) with an extra requirement: the set of entities denoted by an *wHR* has to satisfy also the property *P*—the semantic contribution of its nominal head.

- 6) *Final semantic contribution of a wh-phrase in a wHR:*

$$wh_{[wHR]} \rightsquigarrow \lambda S_{\langle e, \langle st, t \rangle \rangle} \lambda P_{\langle s, et \rangle} \lambda x \exists q [WH(w_0)(x) \wedge S(x)(q) \wedge q(w_0) \wedge P(w_0)(x)]^2$$

(6) is simply lexicalizes in the meaning of the *wh*-phrase the semantic rule of intersection that is usually assumed to combine a *wHR* with its nominal head. This option offers at least two advantages. First, while other nominal modifiers such as adjectives can also occur as predicates, *wHRs* cannot, as shown by the contrast in (7).

- 7) a. Josh likes {Italian food} / {food which is originally from Italy}.
 b. Josh's food is {Italian} / *{which is originally from Italy}.

Second, the denotation in (5) is identical to the denotation for *wh*-words in \exists -FRs in § 4.2.3 in the paper. It's preferable to keep the denotations of *wh*-words in these two varieties of *wh*-clauses related but separate, since *wHRs* and \exists -FRs can make use of different subsets of *wh*-words across languages, in addition to their distributional and meaning differences (paper: § 2, Generalization 2, Table 2). I conclude this section with a few general remarks.

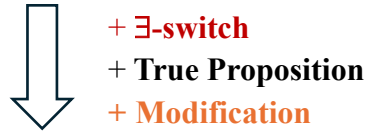
Modification. The meaning change that characterizes *wh*-phrases in *wHRs* *Modification*: it adds a new set-denoting argument to the relation—the semantic contribution of the nominal head that a *wHR* modifies, as summarized in (8).

² The careful reader may have noticed that this denotation for the *wh*-phrase of a *wHR* doesn't allow for recursive stacking of *wHRs*, since it takes a property ($\langle s, et \rangle$) and outputs a set of entities ($\langle et \rangle$). It would suffice to intensionalize the output, as in (i):

(i) $wh_{[wHR]} \rightsquigarrow \lambda S_{\langle e, \langle st, t \rangle \rangle} \lambda P_{\langle s, et \rangle} \lambda w \lambda x \exists q [WH(w)(x) \wedge S(x)(q) \wedge q(w) \wedge P(w)(x)]$

8) *Changes in the meaning of wh-phrases from INTs to wHRs:*

$$wh_{[INT]} \rightsquigarrow \lambda S \lambda q \exists x [WH(w_0)(x) \wedge S(x)(q)]$$



$$wh_{[wHR]} \rightsquigarrow \lambda S \lambda P_{\langle s, set \rangle} \lambda x \exists q [WH(w_0)(x) \wedge S(x)(q) \wedge q(w_0) \wedge P(w_0)(x)]$$

Modification requires the property denoted by the nominal head to hold together with all the others, in order for an entity to be part of the set denoted by a *wHR*. Modification is often assumed as a combinatory rule applying to two set-denoting expressions. I'm just assuming that *wh*-phrases in *wHRs* lexicalize it as part of their denotation for the reason I've discussed above. The other two meaning changes have already been introduced and discussed in the paper for other meaning changes.

***Wh*-words in *wHRs* across languages.** The subset of *wh*-words in *wHRs* is the smallest among *wh*-clauses, at least in English, Italian, and Romanian, although the gaps in the paradigm vary from language to language. This is shown in Table A.2 at the end of this Appendix. This aligns with Šimík's (2026), based on a larger data set. Still, this doesn't imply that the *wh*-words occurring in *wHRs* are necessarily a subset of those appearing in other non-interrogative *wh*-clauses. For instance, *who* in English is highly productive in *wHRs* but degraded in R-FRs;³ *which* is allowed in *wHRs* but unacceptable in R-FRs. Some *wh*-words also undergo syntactic and semantic changes in *wHRs*: for example, *which* in *wHRs* doesn't trigger D-linking effects, doesn't take an NP complement, and introduces a restriction to non-human entities, none of which characterizes *which* in INTs.

Languages may also use strategies other than *wh*-words to relativize certain syntactic positions. Italian, for instance, requires the declarative complementizer *che* 'that' to relativize subjects and direct objects, while a separate class of relativizers (the *cui* series) is used for all other constituents. These forms derive historically from Latin *wh*-words, but cannot form INTs or any other non-interrogative *wh*-clause in contemporary Italian. Overall, *wHRs* tend to employ specialized and/or silent relative markers and/or complementizers rather than extending the use of *wh*-words. Finally, no language appears to have *wHRs* with multiple *wh*-phrases—likely connected to the absence of *wHRs* with two heads.

Non-propositional headed relative clauses. The motivation for the propositional analysis of *wHRs* is the morphosyntactic identity between INTs and *wHRs*, including the productive use of a subset of *wh*-words occurring in INTs. Yet many languages do not use *wh*-words or *wh*-clauses to form headed relative clauses at all: Tigrinya was mentioned earlier, German is an example within the European language group, and Abaza lacks *wh*-words entirely and therefore cannot form *wh*-

³ See related remarks and references in the paper, right below Table 2.

clauses of any kind at all (see fn. 3 in the paper). English also exhibits “reduced” headed relative clauses, such as the bracketed strings (with heads underlined) in *I don't have a place [to hide from the storm]*, *I can't stand people [arriving late all the time]*, and *I've tried to repair at least some of the windows [damaged by last week's violent hail storm]*. These need not receive a propositional analysis.

It's entirely conceivable that languages may employ clauses—or smaller structures—that function as nominal modifiers and ultimately denote sets of individuals (or functions from sets of individuals to subsets) without ever passing through a propositional stage. e.g., via operator-trace configurations and simple λ -abstraction over individuals, as in Montague (1970). A language may even employ both strategies: English may do so, if *w*HRs are propositional while reduced relative clauses are not.

Finally, when *wh*-words in *w*HRs show substantial semantic or morphosyntactic divergence from their counterparts in INTs, this may signal reanalysis—changing a formerly propositional *w*HR into a non-propositional headed relative clause. Further research is needed to determine whether English *which* in *w*HRs or Italian *cui*-relative clauses should be analyzed in this way.

A.2. *-ever* free relative clauses and their semantic analysis

The *wh*-clause in (9)a is known as an ‘*-ever* free relative clause’ (*everFR*). It's identical to the INT in (9)b and the R-FR in (9)c, except for the suffix *-ever* on its *wh*-word. It occurs in the same argument position (direct object) as the other two *wh*-clauses, but semantically acts like neither of them.

- 9) a. Luca tasted [*everFR* whatever Andrea cooked].
 b. Luca knows [*INT* what Andrea cooked].
 c. Luca tasted [*R-FR* what Andrea cooked].

The first and best-known semantic analysis of *everFR*s is by Dayal (1997), further developed by von Stechow (2000). The core idea is that an *everFR* denotes the same as the corresponding R-FR—a maximal individual. In addition, it triggers a modalized presupposition requiring this maximal individual to vary across worlds. For instance, the *everFR*s in (9)a denotes the same as the R-FR in (21) in the paper: the maximal individual of the set of things that Andrea cooked in the world of evaluation, as shown in (9).

10) *Meaning of everFR in (9)a:*

denotation: $\iota x. \exists q \forall y ([\text{TH}(w_0)(x) \wedge q = \lambda w. \text{cooked}(w)(y)(a) \wedge q(w_0)] \rightarrow y \leq x)$

presupposition:

$\exists w', w'' \in F [\iota x \exists q \forall y ([\text{TH}(w')(x) \wedge q = \lambda w. \text{cooked}(w)(y)(a) \wedge q(w')] \rightarrow y \leq x)$

\neq

$\iota x \exists q \forall y ([\text{TH}(w'')(x) \wedge q = \lambda w. \text{cooked}(w)(y)(a) \wedge q(w'')] \rightarrow y \leq x)]$

Unlike the corresponding R-FR, the *ever*FR in (9)a also triggers the presupposition content in (10). Despite its lengthy formal rendering, the intuition behind the presupposition in (10) is simple: the *ever*FR is felicitous only if there are at least two worlds in the set F of the speaker's epistemically accessible worlds in which the *ever*FR refers to two different individuals, i.e., there are at least two worlds among those compatible with the speaker's knowledge in which the maximal individual that Andrea cooked is different. In other words, the speaker cannot identify precisely what Andrea cooked.

Within the approach developed in the paper, both the denotational and the presuppositional content would be lexicalized as the contribution of the *wh*-word. The denotational content would be the same as that of a *wh*-word in an R-FR (see (18) in the paper), while the presuppositional content would be triggered by the suffix *-ever*. Overall, an *ever-wh*-word would have an entry like the one in (11), with the presuppositional content in boldface and between periods.

11) *Semantic contribution of a wh-word in an everFR:*

$$\begin{aligned} wh_{[everFR]} \rightsquigarrow & \lambda S_{\langle e, \langle st, t \rangle \rangle} \lambda x. [\exists w', w'' \in F [\iota x \exists q \forall y ([WH(w')(y) \wedge S(y)(q) \wedge q(w')] \rightarrow y \leq x) \neq \\ & \iota x \exists q \forall y ([WH(w'')(y) \wedge S(y)(q) \wedge q(w'')] \rightarrow y \leq x)]. \\ & \exists q \forall y ([TH \wedge q = \lambda w. \text{cooked}(w)(y)(a) \wedge q(w_0)] \rightarrow y \leq x) \end{aligned}$$

What I have just discussed is the so called “ignorance” reading of *ever*FRs. Von Stechow also discusses and accounts for the so called “indifference” reading, which affects only the presuppositional content. My approach could be extended to capture this reading as well by appropriately modifying the boldfaced portion of (11).

Caponigro and Fălăuș (2018) show that the *wh*-clauses in Italian and Romanian that are morphosyntactic equivalents of English *ever*FRs exhibit semantic properties closer to those of nominals headed by free-choice *any* in English (e.g., *Luca tasted [anything Andrea cooked]*). They therefore label these *wh*-clauses ‘**free choice free relative clauses**’ (FC-FRs). Their analysis, building on Chierchia’s (2013) analysis for free choice *any*, treats FC-FRs as existentially quantified expressions that obligatorily generate alternatives whose exhaustification yields a universal flavor. I refer the reader to that work for additional details. My proposal can account for FC-FRs by assuming a lexical entry for *wh*-words in FC-FRs such as the one in (12).

12) *Semantic contribution of a wh-word in an FC-FR:*

$$wh_{[FC-FR]} \rightsquigarrow \lambda Q \exists x \in D \exists q [HU(w_0)(x) \wedge q = \lambda w. \text{cooked}(w)(x)(a) \wedge q(w_0) \wedge Q(w_0)(x)]$$

Wh-clauses that look identical to *ever*FRs and FC-FRs differ in distribution and interpretation across languages. For instance, although the *wh*-clause in (13) looks identical to the *ever*FR in (9)a, the two *wh*-clauses should be kept distinct given the many differences discussed in Rawlins (2013: § 3.1) and his conclusion *ever*FRs do not denote propositional content, whereas the *wh*-clause in (13)—which he labels ‘**Unconditional**’—is propositional.

13) [Whatever Andrea cooked], I’ll continue fasting.

I add one more argument to Rawlins' from Italian, which I haven't seen discussed before. Italian has both FC-FRs and Unconditionals. They look identical and share the same *wh*-words, with one exception: *comunque* 'however' (*come* 'how' + *unque* '-ever') can introduce an Unconditional, but cannot introduce an FC-FRs, as shown by (14)a vs (14)b. By contrast, the R-FR introduced by the plain *wh*-word *come* 'how' is fully acceptable, as shown in (14)c.

- 14) a. *Comunque* *ti* *vesti*, *sei* *sempre* *bello*.
 however CL.RFLX.2SG dress.PRES.2SG, be.PRES.2SG always handsome
 'However you dress, you are always handsome.'
- b. **Mi* *vesto* [*comunque* *ti* *vesti*].
 CL.RFLX.1SG dress.PRES.1SG however CL.RFLX.2SG dress.PRES.2SG
 (Intended: 'I dress however you dress.')
- c. *Mi* *vesto* [*come* *ti* *vesti*].
 CL.RFLX.1SG dress.PRES.1SG how CL.RFLX.2SG dress.PRES.2SG
 'I dress how you dress.'

The acceptability of (14)a versus the unacceptability of (14)b, together with the acceptability of its English translation with *however* and the acceptability of the plain R-FR in (14)c, shows that there's no general or principled reason for the contrast. Rather, it must follow from a difference in the denotation of the homophonous *wh*-words *comunque* in Unconditionals and in the FC-FRs. Therefore, the *wh*-words in Unconditionals cannot be identified with those in FC-FRs, a fact that further supports Rawlins' conclusion that neither *wh*-clause variety can be reduced to the other, *pace* Šimík (2026).

A.3. Semantic analysis of Rudin clauses (RUDs)

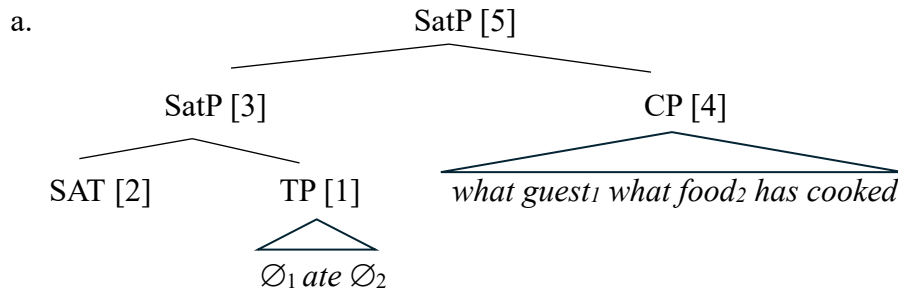
The *wh*-clause in (15)a is not attested in English nor Italian, but is attested in Romanian. I label it a '**Rudin *wh*-clause**' (RUD), because it's part of the whole sentence type labelled the '**Rudin construction**' by Caponigro and Fălăuş (2022) in honor of Catherine Rudin, who first described and discussed this kind of sentence in Balkan languages like Romanian, Bulgarian, and Macedonian (Rudin 1986, 2007, 2008). The RUD in (15)a is morphosyntactically identical to the INT in (15)b, but it must occur right-dislocated and requires multiple preposed *wh*-phrases that are semantically linked to obligatorily empty constituents in the matrix clause—both subject and object of the matrix predicate in (15)a, indicated by indexed empty-set symbols.

- 15) a. \emptyset_1 *A* *mâncat* \emptyset_2 [*ce* *invitat*]₁ [*ce* *mancare*]₂ *a* *gătit*.
 has eaten what guest what food has cooked
 'Every guest ate the food they cooked.'
- b. *Maria* *se* *întreabă* [*ce* *invitat* *ce* *mancare* *a* *gătit*].
 Maria REFL wonders what guest what food has cooked
 'Maria wonders what guest cooked what food.'

The RUD in (15)a is identical to the COR in (45)a in the paper, the only differences being that (i) the RUD must occur on the right of its matrix clause, rather than on the left, and (ii) the matrix clause of the RUD never allows any over constituents (demonstratives, pronouns, etc.) to realize the arguments that are linked to the *wh*-phrases in the RUD. Despite these differences, the whole sentence with a RUD in (15)a is interpreted identically to the COR in (44)a in the paper.

I now sketch how my approach can be extended to capture the main properties of RUDs. This part of analysis is even more tentative than the others, since RUDs require further morphosyntactic and semantic investigation within and across languages. Following Caponigro and Fălăuș (2022), I assume a RUD to be generated where it surfaces—as an adjunct to the right of its matrix clause with no movement involved. I also assume that a RUD semantically combines with its matrix clause via Saturation in SatP. Its semantic composition is the same as that of the corresponding COR with multiple *wh*-phrases. Likewise the semantic composition of the matrix clause of a RUD is the same as that of the matrix clause of the corresponding COR, under the assumption that the missing constituents in the matrix clause of a RUD license the same variables as the demonstratives in the matrix clause of the corresponding COR.

16) *Syntactic structure and semantic derivation of (15)a*



- b. [1]: TP \rightsquigarrow $\text{ate}(w_0)(x_2)(x_1) \rightsquigarrow \lambda x_1 \lambda x_2. \text{ate}(w_0)(x_2)(x_1)$
 [2]: SAT \rightsquigarrow $\lambda R \lambda f \forall x [x \in D(f) \rightarrow R(f(x))(x)]$
 [3]: SatP \rightsquigarrow $\lambda f \forall x [x \in D(f) \rightarrow \text{ate}(w_0)(f(x))(x)]$
 [4]: CP \rightsquigarrow $\text{t}f \exists q \exists x [q = \cap \lambda p [\text{guest}(w_0)(x) \wedge p = \lambda w. \text{cooked}(w)(f_{\text{FOOD}}(x))(x)] \wedge q(w_0) \wedge \text{MAX}(f)]$ *in short* **fCOR**
 [5]: SatP \rightsquigarrow $\forall x [x \in D(f) \rightarrow \text{ate}(w_0)(\text{fCOR}(x))(x)]$

Although it remains an open issue why there are no RUDs with a single *wh*-phrase, I offer a possible explanation that follows directly from the analysis I have proposed. A RUD with only one *wh*-phrase would have to undergo the same semantic derivation as one of the other *wh*-clauses with a single *wh*-phrase examined in the paper, since no alternative derivation would be permitted without additional stipulations. None of those derivations yields a denotation compatible with the structural position of a RUD. An INT-type denotation wouldn't work, since a set of propositions

cannot combine with the set of entities denoted by the matrix clause of a RUD (16)b.[1]. An R-FR-type denotation—an entity of a kind— wouldn’t work either, since RUDs do not occur in argument positions and therefore cannot semantically behave semantically like entity-denoting arguments. A new semantic rule would have to be introduced to combine a set of entities (the denotation of the matrix clause) with an entity-denoting adjunct clause on the right. An \exists -FR-type denotation—a set of entities—would be equally problematic, since combining two sets of entities to obtain a truth value would require a new compositional mechanism. The only potentially viable option would be to assign a RUD with one *wh*-phrase the same semantic derivation as a COR with one *wh*-phrase. That derivation would output a generalized quantifier that would combine with the denotation of its matrix clause as a topic with its comment. However, there is no independent evidence that right dislocation is a topic position in Romanian.

Table A.1. Kinds of *wh*-clauses across four languages

<table border="1"> <tr> <td style="padding: 5px;"> <table border="1"> <tr> <td style="padding: 5px;">INT</td> <td style="padding: 5px;"><i>w</i>HR</td> <td style="padding: 5px;">R-FR</td> <td style="padding: 5px;"><i>ever</i>FR/FC-FR</td> <td style="padding: 5px;">\exists-FR</td> <td style="padding: 5px;">COR</td> <td style="padding: 5px;">RUD</td> </tr> <tr> <td style="padding: 5px;"><i>Tigrinya</i></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> </td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;"><i>English</i></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;"><i>Italian</i></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;"><i>Romanian</i></td> <td></td> </tr> </table>	<table border="1"> <tr> <td style="padding: 5px;">INT</td> <td style="padding: 5px;"><i>w</i>HR</td> <td style="padding: 5px;">R-FR</td> <td style="padding: 5px;"><i>ever</i>FR/FC-FR</td> <td style="padding: 5px;">\exists-FR</td> <td style="padding: 5px;">COR</td> <td style="padding: 5px;">RUD</td> </tr> <tr> <td style="padding: 5px;"><i>Tigrinya</i></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	INT	<i>w</i> HR	R-FR	<i>ever</i> FR/FC-FR	\exists -FR	COR	RUD	<i>Tigrinya</i>																<i>English</i>								<i>Italian</i>								<i>Romanian</i>							
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Table A.1 extends Table 1 in the paper by adding the three *wh*-clauses discussed in this Appendix: *w*HRs, *ever*FRs/FC-FRs, and RUDs. As in Table 1, the alignment of *wh*-clauses in Table A.1 from left to right is not intended to convey any implicational hierarchy. While every language with non-interrogative *wh*-clauses also has INTs, there are languages that use *wh*-clauses to form R-FRs but do not have *w*HRs (e.g., Yiddish),⁴ and languages that lack R-FRs completely but still have \exists -FRs and FC-FRs (e.g., Pesh).⁵ RUDs have been almost completely ignored, with the exception of those described for Bulgarian, Macedonian and Romanian—languages with FRs and CORs as well. Further empirical investigation is required to draw reliable typological conclusions, especially concerning RUDs.

⁴ See Prince (1989) for Yiddish (Germanic).

⁵ See Chamoreau (2021) for Pesh (Chibchan).

Table A.2. Distribution of *wh*-words across different kinds of non-interrogative *wh*-clauses in three languages

ENGLISH				ITALIAN					ROMANIAN						
INT	wHR	R-FR	everFR -ever	INT	wHR	R-FR	∃-FR	FC-FR -unique	INT	wHR	R-FR	∃-FR	FC-FR ori-	COR	RUD
<i>who</i>	√	√/*	√	<i>chi</i>	*	√	√	√	<i>cine</i>	*	*/√	√	√	√	√
<i>what</i>	*	√	√	<i>che cosa</i>	*	*	*	*	<i>ce</i>	√	√	√	√	√	√
				<i>cosa</i>	*	%	√	*							
				<i>che</i>	*	%	√	*							
				<i>quanto</i>	*	√	*	*							
<i>what + NP</i>	*	√/*	√	<i>che + NP</i>	*	*	*	*	<i>ce + NP</i>	*	√	√	√	√	√
<i>which + NP</i>	*	*	√	<i>quale + NP</i>	*	*	*	√	<i>care + NP</i>	*	*	*	√	√	√
<i>where</i>	√	√	√	<i>dove</i>	√	√	√	√	<i>unde</i>	√	√	√	√	√	√
<i>when</i>	√	√	√	<i>quando</i>	*	√	*	*	<i>când</i>	√	√	√	√	√	√
<i>how</i>	*	√	√	<i>come</i>	*	√	*	*	<i>cum</i>	√	√	√	√	√	√
<i>how much</i>	*	√	√	<i>quanto</i>	?	√	*	*	<i>cât</i>	√	√	√	√	√	√
<i>how much</i>	*	√	√	<i>quanto/a</i>	*	√	*	*	<i>cât/ă</i>	*	√	√	√	√	√
<i>how many</i>				<i>quanti/e</i>					<i>câti/e</i>						
+ NP				+ NP					+ NP						
<i>how + Adj/Adv</i>	*	√	√	<i>quanto +</i>	*	*	*	*	<i>cât</i>	*	√	√	√	√	√
				<i>Adj/Adv</i>					+ <i>Adj/Adv</i>						
<i>why</i>	?	*	*	<i>perché</i>	*	*	*	*	<i>de ce</i>	*	√	*	*	√	√

Table 2.A extends Table 2 in the paper by adding the data about the *wh*-words discussed in this Appendix: wHRs, everFRs/FC-FRs, and RUDs. The gray columns highlight data that were already present in Table 2. The data for wHRs and everFRs/FC-FRs come from Caponigro and Fălăuș (2018).

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