



Doubling unconditionals and relative sluicing

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Abstract

Doubling unconditionals are exemplified by the Spanish example *Venga quien venga, estaré contento* ‘Whoever comes, I’ll be happy’ (lit. ‘Comes who comes, I’ll be happy’). This curious and little studied construction is attested in various forms in a number of Romance and Slavic languages. In this paper, I provide a basic description of these constructions, focusing especially on Spanish, Czech, and Slovenian, and argue that they can be brought in line with analyses of run-of-the-mill unconditionals (of the English type) if one recognizes (1) that the *wh*-structure within the unconditional antecedent (*quien venga* ‘who comes’) is a free relative and (2) that the free relative is focused. The focused free relative introduces alternatives and thus gives rise to the denotation proposed by Rawlins (Nat Lang Semant 40(2):111–178, 2013) for English unconditionals. In the last part of the paper, I hypothesize that at least some non-doubling unconditionals could in fact have a doubling underlying structure, which is disguised by relative sluicing—clausal ellipsis with a relative pronoun remnant.

Keywords Unconditionals · Free relatives · Focus · Relative sluicing · Imperative · Subjunctive

In memory of Luis Vicente †2018.

1 Introduction

Unconditionals are conditional-like structures expressing that the consequent holds independently of the particular value of the antecedent. The sentence in (1a) below, for instance, expresses that for all times *t* such that you wake up at *t*, it holds that you’ll hear a robin sing. That is, if you get up at 5, you’ll hear a robin; if you get up 6, you’ll hear a robin; if you wake up at 7, you’ll hear a robin; etc. The non-constant value

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of the antecedent is a constitutive property of unconditionals. The locus of variation is often represented by a *wh*-word or *wh*-phrase—as in (1a) (*when* \rightsquigarrow variation in the time of waking up), (1d) (*what* \rightsquigarrow variation in the contents of speech reports), or (1e) (*whichever lawyer* \rightsquigarrow variation in the lawyer you ask)—but not necessarily so: in (1c), variation is conveyed by the disjunction and (1b) entails variation in the hearer’s opinion by embedding *your opinion* under *regardless of*. Antecedents can be HEADED, by expressions such as *no matter* (1a) or *regardless of* (1b), or HEADLESS, as in (1c) through (1e). The *wh*-phrase in the antecedent can (but need not) be resumed by a pronominal in the consequent. An example of this is the *which lawyer–she* couple in (1e).

- (1) a. No matter when you wake up, you’ll hear a robin sing.
 b. Regardless of your opinion, I will go to Belarus.
 c. A nut or an earthworm, a boar will eat anything it comes across.
 d. Whatever the others say, the muscovy duck is the most beautiful bird.
 e. Whichever lawyer you ask, she will discourage you from filing a lawsuit.

This paper is about an understudied type of headless *wh*-based unconditionals, which I will call DOUBLING UNCONDITIONALS. These are *wh*-based structures in which the verb appears to be doubled. Consider the examples in (2), where the verb *entre/vier/přijde* ‘enter/come’ appears twice—once before and once after the *wh*-word.¹

- (2) a. *Spanish* (Quer 1998, 243)
 Entre quien entre, lo ataré.
 enter.SBJV.3SG who enter.SBJV.3SG him attack.FUT.1SG
 ‘Whoever comes in, I’ll attack him.’
- b. *Brazilian Portuguese* (Quer and Vicente 2009, 12)
 Venha quem vier, eu vou embora.
 comes.SBJV.PRS who comes.SBJV.FUT I go away
 ‘No matter who comes, I’m still leaving.’
- c. *Czech*
 At’ přijde kdo přijde, zaútočím na něj.
 AT comes who comes attack at him
 ‘Whoever comes in, I’ll attack him.’

Doubling unconditionals seem to be crosslinguistically rare, but are arguably related to the more common type exemplified in (3), where there is no genuine verb doubling but still an occurrence of two verbs: a lexical one (*come/komme/přijde*) and a modal one (*may/wolle* ‘want’ / *chce* ‘want’). The two constructions are also similar due to the crosslinguistic tendency to use subjunctive morphology.

¹ All Czech data are based on my own intuitions. Interlinear glossing follows the Leipzig glossing rules (Bickel et al. 2015), whenever possible. In addition, the following abbreviations/glosses are used in the paper: AT Czech imperative particle *at’*, EVER particle/affix corresponding to English *ever*, INTER interrogative, NAJ Slovenian imperative particle *naj*, NCI negative concord item, PRT particle, UZ Czech discourse particle *už*, ZE Slovenian discourse particle *že*.

- (3) a. Come what may, I'll stay with you.
 b. *German* (Quer and Vicente 2009, 12)
 Komme wer da wolle, die Party wird ein Erfolg
 come.SBJV.3SG who.NOM PRT want.SBJV.3SG the party will a success
 werden.
 become
 'Whoever comes, the party will be a success.'
 c. *Czech*
 At' přijde kdo chce, oslava se bude konat.
 AT comes who wants party REFL will take.place
 'Whoever comes, the party will take place.'

This paper focuses on the type illustrated in (2), leaving a comparison between (2) and (3) for another occasion, and is mainly based on evidence from selected Slavic and Romance languages in which doubling unconditionals are productive. I will argue that they can be brought in line with Rawlins's (2013) analysis of unconditionals in the following way (cf. the logical form (4), which corresponds to (2a)): Doubling unconditionals involve *wh-in-situ*, where the *wh-in-situ* element is not just a *wh*-phrase, but in a fact a full-blown free relative (*quien entre*). This free relative—semantically a definite description—is focused and as such introduces entity-level alternatives (encoded as $\{e\}$), which propagate to the propositional level, giving rise to a set of propositions at the level of the unconditional antecedent CP_A (*entre quien entre*; $\{\langle s, t \rangle\}$ encodes a set of propositions). From that point on, the analysis is identical to the one proposed by Rawlins (2013). Each of the propositions in the set denoted by CP_A functions as a conditional antecedent for the consequent CP_C (*lo atacaré*). The conditional (modal) operator OP "generates" the conditional semantics, producing a set of conditionals of the form 'If x comes in, I'll attack x ', x being the person who comes in. Finally, this set is turned into a single proposition by the Hamblin operator $[\forall]$, by conjoining all the members in its argument, yielding the equivalent of 'For all x , x is the person who comes in, I'll attack x '.²

- (4) $[\langle s, t \rangle [\forall] [_{\{\langle s, t \rangle\}} \text{OP} [_{CP_A : \{\langle s, t \rangle\}} \text{Entre} [_{FR : \{e\}} \text{quien entre}]_{\text{FOC}}]] [_{CP_C : \langle s, t \rangle} \text{lo atacaré}]$

The rest of the paper is organized as follows. I will first go through some basic properties of doubling unconditionals in Romance and Slavic (Sect. 2). Then I turn to the proposed analysis (Sect. 3) and the evidence in its favor (Sect. 4). An extension of the analysis to some cases of non-doubling *wh*-based unconditionals, relying on the possibility of relative sluicing, is presented in Sect. 5. The paper is concluded in Sect. 6.

² For an earlier attempt at analyzing doubling unconditionals in terms of Rawlins's (2008) analysis see Quer and Vicente (2009). Even though the present paper was inspired by this work, it differs from it in important details.

2 Basic properties of doubling conditionals

Let me first introduce some basic *ad hoc* terminology that will make it easier for us to make reference to the subparts of the doubling unconditional construction. I will refer to the basic two clauses in the construction as an (UNCONDITIONAL) ANTECEDENT and an (UNCONDITIONAL) CONSEQUENT—reflecting the assumption that conditional syntax and semantics are involved. MAIN PREDICATION will be the label used to refer to the part preceding the *wh*-word. Finally, the term WH-STRUCTURE is my choice for the rest of the antecedent—the *wh*-word and all that follows.

- (5)
$$\begin{array}{c} \text{(UNCONDITIONAL) ANTECEDENT} \quad \text{(UNCONDITIONAL) CONSEQUENT} \\ \underbrace{\text{Entre}}_{\text{MAIN PREDICATION}} \quad \underbrace{\text{quien entre,}}_{\text{WH-STRUCTURE}} \quad \underbrace{\text{lo ataré.}} \end{array}$$

Romance doubling conditionals (particularly Catalan and Spanish) are characterized by the obligatory use of subjunctive mood—both in the main predication and in the *wh*-structure. As illustrated in (6), the use of indicative mood leads to ungrammaticality.

- (6) *Catalan* (Quer 1998, 237/240)
- a. { Truqui / *Truca } qui { truqui / *truca }, no
 call.SBJV.3SG ~.IND.3SG who call.SBJV.3SG ~.IND.3SG NEG
 diguis el teu nom.
 tell.IMP.SG the your name
 (Intended:) ‘Whoever might call, don’t tell your name.’
- b. { Diguin / *Diuen } el que { diguin / *diuen },
 say.SBJV.3PL ~.IND.3PL the that say.SBJV.3PL ~.IND.3PL
 continuarem amb la nostra protesta.
 go.on.FUT.1PL with the our protest
 (Intended:) ‘Whatever they say, we will go on with our protest.’

Even though Slavic languages (particularly Czech and Slovenian) possess subjunctive mood (sometimes called “conditional” mood) and it is obligatory in some contexts (although generally less frequently so than in Romance), doubling conditionals are free in the choice of grammatical mood. What is obligatory, however, is a clause-initial particle—*at’* in Czech and *naj* in Slovenian. This is illustrated in (7) (the asterisk applies to the bracket only).

- (7) a. *Czech*
 *(At’) (už) přijde kdo přijde, budu spokojen.
 AT UZ come.3SG who come.3SG will.be.1SG satisfied
 ‘Whoever comes, I’ll be satisfied.’
- b. *Slovenian* (Adrian Stegovec, p.c.)
 *(Naj) pride kdor (že) pride, bom zadovoljen.
 NAJ come.3SG who.REL ZE come.3SG will.be.1SG satisfied
 ‘Whoever comes, I’ll be satisfied.’

In both Czech and Slovenian, the particle is diachronically related to the imperative form of the verb ‘let’ and is used in a number of other contexts, the most salient of which is non-2nd person imperatives. (There is no such person constraint in the unconditionals.) Other occurrences include the use as a modal necessity operator (in Slovenian; see e.g. Roeder and Hansen 2006) or as a complementizer alternating with a subjunctive complementizer (in Czech).³

The examples in (7) illustrate another phenomenon: the presence of the optional particle *už* in Czech (part of the main predication) and *že* in Slovenian (part of the *wh*-structure). In both languages, the canonical meaning of this particle corresponds to the one of English *already*. When used in unconditionals, however, this meaning gets lost and its semantic contribution is unclear.

It is likely that the subjunctive in Romance and the particles in Slavic play an important role in the licensing of (doubling) unconditionals. I will show below that the issue is empirically complex and will only offer some speculations about what role these expression might play. An explicit analysis is left for future research.

Both Romance and Slavic languages are free to use essentially any tense and aspect in unconditionals, as illustrated in (8) for Spanish and (9) for Czech (future is not represented for Spanish due to the lack of productive future subjunctive). Notice that what gets doubled is always the whole verbal complex, including aspect- and tense-related auxiliaries. It should also be mentioned that the doubling must be perfect—no partial mismatches (e.g. in aspect) are allowed.⁴

(8) *Spanish* (Josep Quer, p.c.)

a. PRESENT PERFECT

Haya venido quien haya venido, ya no le recibiremos.
have.SBJV come who have.SBJV come already NEG him receive.1PL
‘Whoever might have come, we won’t receive him anymore.’

b. PLUPERFECT

Hubiese venido quien hubiese venido, ya no le recibíamos.
have.PST.SBJV come who have.PST.SBJV come already NEG him
received.1PL
‘Whoever would have come, we wouldn’t have received him anymore.’

c. PAST IMPERFECTIVE

Viniese quien viniese él siempre estaba contento.
come.IPFV.PST.SBJV who come.IPFV.PST.SBJV he always was happy
‘Whoever came [habitual], he was always happy.’

³ Slovenian *naj*, esp. in its imperative function, is discussed in detail in Stegovec (2019). Stegovec considers *naj* to be a subjunctive morpheme.

⁴ The strictness of the identity requirement is illustrated by the fact that not even synonyms are allowed:

(i) *Czech*

At’ snědl co {snědl / *požil}, je mu špatně.
AT ate what ate ate is him bad
(Intended:) ‘Whatever he ate, he feels sick.’

(9) *Czech*

a. IMPERFECTIVE/PERFECTIVE PAST

At' {chrápal / chrápnul} kdo {chrápal / chrápnul}, probudilo mě
 AT snored.IPFV ~.PFV who snored.IPFV ~.PFV woke.up me
 to.
 it

'Whoever snored / snored once, it woke me up.'

b. FUTURE (IMPERFECTIVE)

At' bude chrápat kdo bude chrápat, bude mě to budít.
 AT will.3SG snore who will.3SG snore will.3SG me it wake.up

'Whoever will snore, it will wake me up.'

Doubling in doubling unconditionals is not limited to the verb or verbal complex. What gets doubled is in fact the whole finite clause—not just including auxiliaries, as we have just seen, but also including all obligatory arguments, albeit preferably in the form of clitics or weak pronouns, as illustrated in (10) and (11). This shows that the construction does not exhibit some version of information structure-related verb (phrase) doubling (clefting, focalization, topicalization; see e.g. Abels 2001; Landau 2006; Collins and Essizewa 2007; Kandybowicz 2008; Aboh and Dyakonova 2009), but is likely to involve a different doubling mechanism.

(10) *Spanish* (Josep Quer, p.c.)

a. Se lo des cuando se lo des, lo perderá.
 him it give.SBJV.2SG when him it give.SBJV.2SG it lose.FUT.3SG
 'Whenever you give it to him, he will lose it.'

b. Te laves con lo que te laves, no se
 you.ACC wash.SBJV.2SG with the COMP you.ACC wash.SBJV.2SG NEG REFL
 irá.
 leave.FUT.3SG
 'Whatever you wash it with, it won't go away.'

(11) *Czech*

a. At' jsi ten telefon našel kde jsi {ho / ten
 AT be.AUX.2SG the phone.ACC found where be.AUX.2SG it.ACC the
 telefon} našel, je můj.
 phone.ACC found is mine
 'Wherever you found the phone, it's mine.'

b. At' ten telefon Marii dal kdo jí ho dal, má problém.
 AT the phone.ACC Marie.DAT gave who her.DAT it.ACC gave has problem
 'Whoever gave the phone to Mary, s/he has a problem.'

Let me finish this section by pointing out that doubling is usually not (and possibly never) the only strategy that a language uses to build unconditionals. Consider the series of examples in (12) below, all of which have a very similar if not identical meaning (see Quer (1998) for a subset of these patterns in Spanish; the Slovenian situation, aspects of which will be discussed in Sect. 5, is very similar to the Czech one, as reported

to me by Adrian Stegovec, p.c.). The pattern in (12a) replicates the English one in that it involves a *wh-ever* expression in an ex-situ position and lacks any introductory particle. The rest combines the particle with *wh-in-situ*: (12b) uses *wh-ever*, where the *ever*-morpheme is obligatory; (12c) combines the *wh*-word with ‘want’; and (12d) is our doubling unconditional. In the last two cases, the *ever*-morpheme is optional, but is in fact dispreferred and is felt to be superfluous. An obvious question is how all these headless *wh*-unconditional types—within or across languages—are related to one another. I provide some tentative answers to this question in Sect. 5; a deeper comparison is left for future research.

(12) *Czech*

- a. Kam *(-koliv) mě pozvou, budu spokojený.
 where -EVER me invite.3PL will.be.1SG satisfied
- b. At' mě pozvou kam *(-koliv), budu spokojený.
 AT me invite.3PL where -EVER will.be.1SG satisfied
- c. At' mě pozvou kam (-koliv) chtějí, budu spokojený.
 AT me invite.3PL where -EVER want.3PL will.be.1SG satisfied
- d. At' mě pozvou kam (-koliv) mě pozvou, budu spokojený.
 AT me invite.3PL where -EVER me invite.3PL will.be.1SG satisfied
 ‘Wherever they invite me, I’ll be satisfied.’

3 Proposal

Consider the Czech example (13) and the associated tree in Fig. 1, which provides an informal illustration of the semantic composition.

- (13) At' ten zpěvák_i zazpívá [_{FR} *co* *zazpívá*]_{FOC}, budeš žasnout.
 AT the singer sings.PFV what sings.PFV will.2SG marvel
 ‘Whatever the singer sings, you’ll be amazed.’

The proposal is that the *wh*-structure *co zazpívá* ‘what sings.PFV’ is a free relative and as such denotes a definite description (Jacobson 1995). On top of that, it is focused and therefore generates alternative denotations—alternative things that the singer sings (Rooth 1992). The focus semantic value of the free relative is provided under node DP_{FOC} in Fig. 1; assuming a particular contextual restriction, the value is the set $\{A, B, C\}$, each member of that set being a song. The focus semantic value propagates in a pointwise fashion to the propositional level, such that the unconditional antecedent (CP_A) denotes a set of propositions of the form ‘the singer sings x ’, x being a song.⁵ From this point, the account is no different from the one of Rawlins (2013). Each one of the propositions is used as a restrictor (in a pointwise fashion) of *OP*—a modal

⁵ For the sake of simplicity, I am assuming Hagstrom’s (1998, 142) FLEXIBLE FUNCTION APPLICATION, which allows composition of ordinary denotations with alternative denotations.

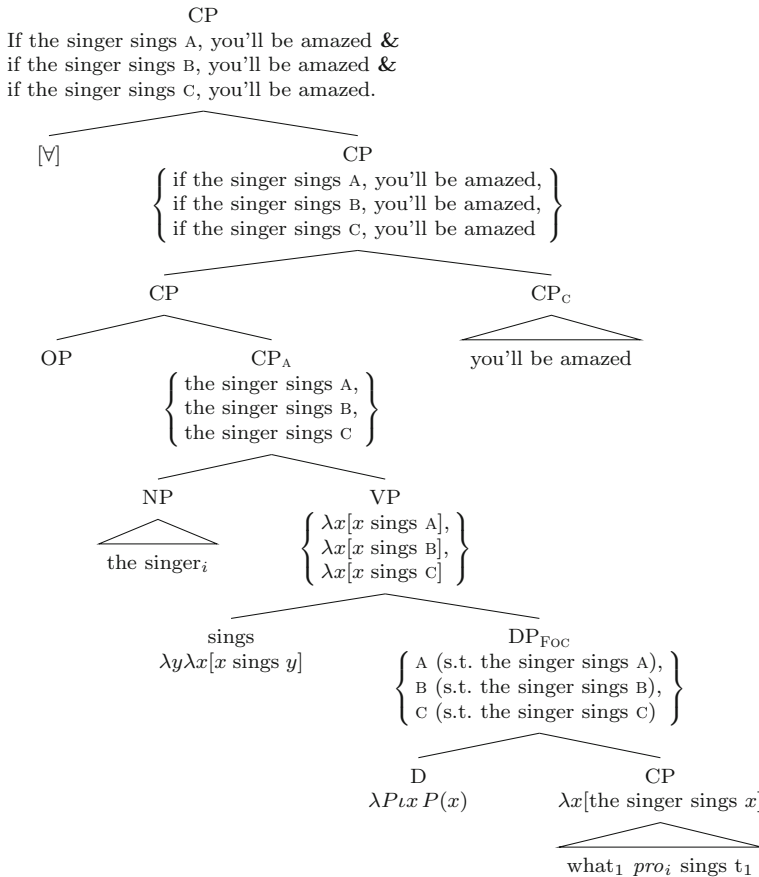


Fig. 1 Composition of doubling unconditionals

operator that generates the conditional semantics.⁶ After the unconditional consequent is fed into the second argument slot of OP, we arrive at a set of conditionals, which gets turned into a single proposition by the alternative-sensitive operator [V] (à la Kratzer and Shimoyama 2002). The resulting proposition is true iff each member of the set of conditionals is true.

This proposal works well only if we assume that the alternatives introduced by the focus contribute to the assertion rather than to some not-at-issue level of meaning.⁷ This assumption, however, does not follow from Rooth's (1992) focus semantics. In the absence of any morphological marking, the focus semantic value feeds inferences that are not at issue, such as the inference about the identity of the question (explicit or implicit) that the utterance answers or the inference that the utterance maps to the

⁶ I leave the semantics of OP implicit for the sake of readability. However, the proposal implicitly builds on the classical account of Kratzer (1979, 2012). See Rawlins (2013) for an application to unconditionals compatible with the present proposal.

⁷ For a discussion of at-issueness, see Simons et al. (2011).

strongest answer to that question. These not-at-issue inferences are derived from the focus semantic value either by covert operators (such as Rooth's 1992 "squiggle") and/or by pragmatic reasoning.

There are multiple technical ways of making the assumed focus semantic value do what is required, in order to arrive at the intuitive truth conditions of doubling conditionals. It is not my ambition in this short paper to decide which one is correct, so let me just lay out some possibilities.⁸

In Rawlins's (2013) seminal analysis, the alternatives that feed the unconditional semantics are so-called Hamblin alternatives (Hamblin 1973; Ramchand 1997; Hagstrom 1998; Kratzer and Shimoyama 2002), which feed at-issue semantics (via so-called Hamblin operators). Hamblin alternatives are introduced by indeterminate pronouns, such as *wh*-pronouns (*where*) or pronouns derived from them (*somewhere*, *wherever*). Focus is not required to generate Hamblin alternatives (although the issue is controversial in the case of interrogative *wh*-pronouns, which are sometimes considered to contribute alternatives by means of focus; cf. Beck 2006; Eckardt 2007; Truckenbrodt 2012); by assumption, it is a lexical property of *wh*-(based-)words, rather than the context-dependent property of being focused that brings about their Hamblin denotation. It cannot be *a priori* ruled out that doubling conditionals contribute Hamblin alternatives. After all, they do make use of *wh*-words. Yet, in my analysis, it is not the *wh*-word that contributes alternatives; it is the whole *wh*-structure (free relative), which the *wh*-word is just a part of. Even if the *wh*-word were capable of introducing alternatives itself, there is little reason to think that the alternatives would be able to propagate beyond the relative clause itself and thus contribute to the unconditional semantics.⁹ The assumption that focus is a property of the whole *wh*-structure (free relative) and not just of the *wh*-word in it will be backed by evidence in Sect. 4.2.

The second possibility, one that might turn out to be more consistent with the available evidence, is that the alternatives are introduced by means of focus (as in Rooth 1992) and that they become at-issue with the help of certain operators. Let us consider example (14). Suppose that the salient alternative to Gershwin is Chopin and the corresponding propositional alternatives are therefore {Dave played Gershwin, Dave played Chopin}. Sentence (14a) states that Dave played Gershwin, which in turn implies that he didn't play Chopin. This implication is made explicit in the continuation (14a-i). Yet the implication is a mere conversational implicature and can be canceled, as demonstrated by the continuation in (14a-ii). This is in line with the assumption that, by default, focus alternatives contribute to not-at-issue meanings. In (14b), the focus is associated with the focus-sensitive adverb *only*. The sentence also implies the negation of the alternative, as made explicit by (14b-i). Yet this time, the implication is part of the at-issue meaning, i.e., it is part of the assertion. For this reason, its negation leads to a contradiction, as indicated by (14b-ii). This is a classical example of how a

⁸ The following discussion owes to the comments of an anonymous reviewer. However, the ideas as well as their caveats are my own.

⁹ See Erlewine and Kotek (2015) and Kotek and Erlewine (2016) for an analysis of English appositive relatives, in which *wh*-words contribute Hamblin alternatives. Yet these alternatives cannot interact with operators beyond the relative clause.

focus semantic value can contribute to the at-issue meaning dimension, a process that is typically supported by overt morphological devices such as the particle *only*.

- (14) a. Dave played [Gershwin]_{FOC}...
 (i) ...he didn't play Chopin.
 (ii) ...in fact, he played Chopin, too.
 b. Dave only played [Gershwin]_{FOC}...
 (i) ...he didn't play Chopin.
 (ii) #...in fact, he played Chopin, too.

As shown in Sect. 2, doubling unconditionals are accompanied by obligatory morphological devices—the particles *at'* in Czech, *naj* in Slovenian, and the obligatory subjunctive mood in Spanish and Catalan. It immediately suggests itself that these morphological devices could be playing a role in interpreting the focus semantic value of the doubling unconditional. It is possible, for instance, that their denotation is a specialized focus-sensitive version of Kratzer and Shimoyama's (2002) Hamblin operator [V] (assumed above for simplicity). This operator would take the focus semantic value of its complement as input and return the conjunction of all its members as the ordinary semantic value.^{10,11}

The reason why I do not adopt this kind of analysis here is that, while technically plausible, it potentially misses an important generalization. The morphological devices whose denotation we are considering here are not specialized for doubling unconditionals. They have various other uses in the grammars of the languages under discussion (see Sect. 2). Finding a common denominator and potentially a unified semantics of these morphemes is a task that goes well beyond the scope of this paper; yet what seems clear, at least *prima facie*, is that the morphemes do not have focus-sensitive uses outside of doubling unconditionals. They are more likely related to the semantics of conditionals than focus semantics. Concerning the Romance subjunctive, conditional antecedents, analyzed here as modal restrictors, require intensional treatment, and subjunctive mood is arguably related to intensionality (Quer 1998). Concerning the Slavic imperative, the connection to conditionals might be less clear, but is potentially materialized in particular instances of a construction called 'imperative-and-declarative' (a term coined by Schwager 2005), such as *Screw up the tortillas and I'll kill you*, which seems truth-conditionally equivalent to the conditional *If you screw up the tortillas, I'll kill you*.¹²

In summary, I have put forth a proposal in which doubling unconditionals are brought in line with Rawlins's (2013) analysis of unconditionals. An issue that remains

¹⁰ Alternatively, and as suggested by an anonymous reviewer, there could be an additional operator that would turn the focus semantic value into the ordinary semantic value and thus effectively turn focus alternatives into Hamblin alternatives. An operator like this (called Q operator) was proposed by Beck (2006) and Beck and Kim (2006).

¹¹ A question that remains is what happens with the ordinary semantic value of the doubling unconditional. In order for the semantics to work as intended, it would essentially have to be ignored by the focus-sensitive version of [V]. This is unlikely to cause any harm because the ordinary semantic value, being a member of the focus semantic value (Rooth 1992), is always entailed by the resulting universal meaning.

¹² See Keshet (2013), von Stechow and Iatridou (2017), and Starr (2018) for recent discussions of these and closely related constructions.

open to further scrutiny is how exactly propositional alternatives are introduced and operated on in doubling conditionals. I have assumed (and will support by evidence) that the alternatives are not of the Hamblin kind, but rather are triggered by focus. This introduces a small and potentially just technical departure from Rawlins's (2013) proposal, which is based on Hamblin alternatives. I have discussed some options of how the issue could be resolved. Yet the matter is complex and requires further research, building on solid background knowledge of a range of phenomena, including conditionals, imperatives, and the subjunctive mood.

4 Evidence

Two kinds of evidence can be used to support the proposal. I will show that the *wh*-structure is a free relative (Sect. 4.1) and that it is focused (Sect. 4.2).

4.1 The *wh*-structure is a free relative

As already discussed in Sect. 2, what gets doubled in doubling conditionals are fully inflected finite clauses rather than just verbs or (infinitival) verb phrases. In this respect, the *wh*-structure in doubling conditionals, (15a), patterns with free relatives, (15b), and differs from doubled topicalized V(P)s, (15c), which are necessarily infinitival.

(15) *Czech*

- a. At' jsem uvařil [FR CO {jsem uvařil / *uvařit}], Karel to nejedl.
AT be.1SG cooked what be.1SG cooked cook.INF Karel it NEG.ate
'Whatever he cooked, Karel didn't eat it.'
- b. Karel nejedl [FR CO {jsem uvařil / *uvařit}].
Karel NEG.ate what be.1SG cooked cook.INF
'Karel didn't eat what I cooked.' (finite) /
Intended: 'Karel didn't eat what one could/should cook.' (infinitival)
- c. [V(P) Uvařit (to) / *uvařil jsem (to)] jsem to neuvařil.
cook.INF it cooked be.1SG it be.1SG it NEG.cooked
'As for cooking it, I didn't cook it.'

Further evidence comes from *wh*-morphology. A language with two sets of *wh*-words—interrogative and relative—will use the relative kind in doubling conditionals. In examples (16) below, Catalan uses *el que* 'what.REL' (lit. 'the what/that') rather than *què* 'what.INTER' and Slovenian uses *kjer* 'where.REL' rather than *kje* 'where.INTER'. This is predicted by the free relative analysis.

- (16) a. *Catalan* (Quer 1998, 237; Josep Quer, p.c.)
Diguin [FR {el que / *què} diguin], continuarem amb la
say.SBJV.3SG the that what say.SBJV.3PL go.on.FUT.1PL with the
nostra protesta.
our protest
'Whatever they say, we will go on with our protest.'

- b. *Slovenian* (Adrian Stegovec, p.c.)
 Naj živi [FR {kjer / *kje} živi], ne bom ga obiskal.
 NAJ lives where.REL where.INTER lives NEG will.1SG him visit
 ‘Wherever he lives, I won’t visit him.’

The last piece of evidence I offer, already touched upon in (12), is that the *wh*-word in doubling unconditionals can be modified by the *ever*-morpheme typical of so-called ‘*-ever* free relatives’. The result is felt to be semantically redundant but grammatical, an intuition expressed in Quer and Vicente (2009) for Spanish and one that I can confirm for Czech; see (17).

- (17) a. *Spanish* (Quer 1998, 243)
 Entre [FR quien (-quiera que) entre], sigue trabajando.
 enter.SBJV.3SG who -EVER that enter.SBJV.3SG keep.IMP working
 ‘Whoever comes in, I’ll attack him.’
- b. *Czech*
 At’ viděl [FR co (-koliv) viděl], nesmí to nikomu říct.
 AT saw what -EVER saw NEG.may it nobody.NCI tell
 ‘Whatever he saw, he can’t tell it anybody.’

4.2 The *wh*-structure is focused

As it turns out, the *wh*-structure is not just *in situ*, it must be focused. This follows from the proposal, where focussing the free relative is necessary to generate the required alternative denotations. In a language like Czech, focused phrases are typically placed in clause-final position and are virtually impossible to scramble (see Šimík and Wierzbica 2017 for experimental support).¹³ Therefore, the fact that the *wh*-structure in Czech doubling unconditionals must occupy the clause-final position, illustrated by the contrast in (18), supports the idea that it is focused.

- (18) *Czech*
- a. At’ dali tu knížku [FR komu ji dali], ztratila se.
 AT gave.PL the book.ACC who.DAT it.ACC gave.PL lost REFL
 ‘Whoever they gave the book to, it got lost.’
- b.??At’ dali [FR komu (ji) dali] tu knížku, ztratila se.
 AT gave.PL who.DAT it.ACC gave.PL the book.ACC lost REFL
 Intended: ‘Whoever they gave the book to, it got lost.’

Prosodic evidence further corroborates the analysis: sentence stress within the antecedent obligatorily falls on the *wh*-word, as illustrated in (19). Provided that the whole free relative is focused (and not just the *wh*-word) and that the default stress in prosodic and intonation phrases falls on the rightmost element, the attested stress pattern follows from the ban on stressing given constituents in Czech (see Šimík and

¹³ In this respect, Czech is like German; see Lenerz (1977). Note also that I use the term ‘scrambling’ pretheoretically—a scrambled phrase is to be understood as one that does not appear clause-finally, and no implications should be drawn as to whether the phrase has moved or been base-generated.

Wierzba 2015, 2017). Since the *wh*-word is the only non-given expression in the free relative, it is the only one to be able to realize focus-related stress on the free relative.

- (19) *Czech*
 At' to dal [FR KOMU to dal], ztratilo se to.
 AT it gave.SG.M who.DAT it gave.SG.M lost REFL it
 'Whoever he gave it to, it got lost.'

The situation in Spanish, albeit different, also supports the analysis. Sentence stress in Spanish doubling unconditional antecedents is placed on the predicate in the *wh*-structure, as illustrated in (20). It is, therefore, placed within the free relative, supporting its focused nature. The reason why there is no stress shift to the *wh*-word is that given material in Spanish, in contrast to Czech, does not get deaccented; see Cruttenden (1993).

- (20) *Spanish* (Josep Quer, p.c.)
 Venga [FR quien VENGA], estaré contento.
 come.SBJV.3SG who come.SBJV.3SG be.FUT.1SG satisfied
 'Whoever comes, I'll be happy.'

5 Extending the analysis: sluicing-based conditionals

There are reasons to believe that doubling conditionals are overt exponents of what happens covertly in some other types of headless *wh*-based conditionals. There are three parameters to consider: (i) whether the *wh*-structure is a free relative or simply a subclausal *wh*-phrase (FR vs. *wh*-phrase, for short); (ii) whether the *wh*-structure is in situ or ex situ; and (iii) in case the *wh*-structure is a FR, whether there is sluicing in the free relative or not.¹⁴ This generates the six types of headless *wh*-based conditionals (or, more precisely, unconditional antecedents) schematized in (21a) through (21f). Note that the sluicing-based unconditional antecedents, schematized in (21c) and (21d), are string-identical to the *wh*-phrase-based ones, schematized in (21e) and (21f). I show below that it is indeed not always easy to tell these two apart.¹⁵

- (21) a. I give him [FR what(ever)₁ I give him t₁], ...
 FR IN SITU, DOUBLING
 b. [FR what(ever)₁ I give him t₁]₂ I give him t₂, ...
 FR EX SITU, DOUBLING
 c. I give him [FR whatever₁ I give him t₁], ...
 FR IN SITU, SLUICING
 d. [FR whatever₁ I give him t₁]₂ I give him t₂, ...
 FR EX SITU, SLUICING

¹⁴ I presuppose basic knowledge of sluicing and understand it in terms of clausal ellipsis. For a recent survey of sluicing and its subtypes, see Vicente (2019).

¹⁵ To be clear, the examples in (21) are not English; they are just structural schemas using English words. English will be briefly discussed below.

- e. I give him [_{DP} whatever], ... WH-PHRASE IN SITU
 f. [_{DP} whatever]₂ I give him t₂, ... WH-PHRASE EX SITU

Let us go through these types one by one. Type (21a) is the doubling unconditional discussed up till now. Type (21b) is arguably attested in Italian. Gulli (2003) (here via Quer and Vicente 2009) reports data from Calabrian and Standard Italian apparently exemplifying the predicted pattern, i.e., what appears to be a free relative fronted to the left periphery. Given the productivity of focus fronting in Italian and Italian dialects (see Rizzi 1997; Cruschina 2011; among many others), it is in fact a prediction of the present analysis that the wh-structure in Italian doubling unconditionals should be fronted.¹⁶

- (22) a. *Calabrian* (Quer and Vicente 2009, 3; my analysis)
 [_{FR} Aundi vaju]₁ vaju t₁, u viju.
 where goes goes him see
 ‘Wherever he goes, I see him.’
 b. *Standard Italian* (Quer and Vicente 2009, 3; my analysis)
 [_{FR} Come la giri]₁ giri t₁, è sempre la stessa cosa.
 how it turn.2SG turn.2SG is always the same thing
 ‘However you look at it, it’s always the same.’

Let us now turn to the hypothesized sluicing-based unconditionals.¹⁷ Their existence is supported by Slovenian facts. Compare the doubling unconditional (23a), repeated from above, with (23b).¹⁸

- (23) *Slovenian* (Adrian Stegovec, p.c.)
 a. Naj pride kdor (že) pride, bom zadovoljen.
 NAJ come.3SG who.REL ZE come.3SG will.be.1SG satisfied
 ‘Whoever comes, I’ll be happy.’
 b. Naj pride kdorkoli (že), bom zadovoljen.
 NAJ come.3SG who.REL.EVER ZE will.be.1SG satisfied
 ‘Whoever comes, I’ll be happy.’

¹⁶ Silvestri (2019), which contains a detailed discussion of doubling unconditionals in Romance and especially Italian dialects, has a different analysis. It seems to me that Silvestri’s data largely align with the present predictions; I leave a proper comparison for another occasion.

¹⁷ If the reader is convinced that relative pronouns cannot be sluicing remnants (in line with the generalizations stated in Lobeck 1995 or Merchant 2001), I would like to ask them to bear with me for a moment. The issue will be discussed shortly.

¹⁸ An anonymous reviewer remarks that the hypothesized sluicing-based unconditional is a sort of inverse of what Hirsch (2016) has proposed for *-ever* free relatives: in the present take on sluicing-based unconditionals, the unconditional antecedent gets spelled out and much of the free relative remains silent; in Hirsch’s (2016) analysis of *-ever* free relatives, it is the free relative that gets spelled out and the unconditional remains silent. I agree that the connection is intriguing and merits further investigation. However, there are also differences that render this simplified view problematic. For example, in sluicing-based unconditionals, the mostly silent free relative is properly contained in the unconditional *antecedent*, whereas in Hirsch’s (2016) analysis of *-ever* free relatives, the free relative is properly contained in the *consequent* of the silent unconditional antecedent.

Example (23b) is reminiscent of the Czech example (12b), but has two additional properties, which can be considered arguments for the sluicing-based analysis in (21c). First, the wh-word *kdorkoli* ‘whoever’ contains the morpheme *-r*, which is used to derive relative wh-words from interrogative ones (see also the discussion around (16)). This morpheme arguably spells out a relative complementizer (see Rudin 2014 and Franks and Rudin 2015 for that kind of analysis of an analogous morpheme in Bulgarian and Macedonian), suggesting that even in the absence of an overt relative clause, the wh-word occupies the left periphery of one. Second, the optional morpheme *že*, which can also appear in doubling unconditionals, is another indication that (23b) is derived by sluicing. The reason is that the very same particle can “survive sluicing” in wh-questions too, as illustrated in (24) (see Marušič et al. 2018 for discussion).

- (24) *Slovenian* (adapted from Marušič et al. 2018, 195)
 Vid je srečal nekoga. Koga že (je srečal)?
 Vid be.3SG met somebody who ZE be.3SG met
 ‘Vid met somebody. Remind me, who (did he meet)?’

Even though the semantic/pragmatic import of *že* in doubling unconditionals and in questions is probably not identical, the fact that they are both discourse particles and that they can appear both in full and in what appears to be sluiced versions of the respective clauses lends support to the view that unconditionals like (23b) are sluicing-based.

Given the above discussion, example (25a), reminiscent of the Czech example (12a), might well be a representative of type (21d), derived by wh-movement of the free relative, followed by sluicing. If this view is adopted, however, it raises the problem of why the corresponding non-sluiced structure, exemplified in (25b), is ungrammatical (cf. (22)).

- (25) *Slovenian* (Adrian Stegovec, p.c.)
 a. Kdorkoli (že) pride, bom zadovoljen.
 who.REL.EVER ZE come.3SG will.be.1SG satisfied
 ‘Whoever comes, I’ll be happy.’
 b. *Kdor (že) pride pride, bom zadovoljen.
 who.REL ZE come.3SG come.3SG will.be.1SG satisfied
 Intended: ‘Whoever comes, I’ll be happy.’

If sluicing is involved in Slovenian unconditionals like (23b) or (25a), one cannot a priori rule out the possibility that it also underlies unconditionals in languages like English, for which the structure in (21f) has been assumed (see e.g. Rawlins 2013: 154). The problem is that there is no evidence clearly distinguishing (21f) from (21d): English has no specialized relative pronouns and employs no particles that could be argued to be sluicing remnants.¹⁹ The same, in fact, holds of Czech, for whose non-

¹⁹ Some authors have noticed that English unconditionals can involve *the hell*, as in *Whoever the hell came, they must have talked to Alfonso* (Rawlins 2008, 109). Yet, *the hell* can hardly be taken to be a sluicing remnant originating in the hypothesized free relative. Although *-ever* free relatives in English allow for *the hell* (*Alfonso talked to whoever the hell came*; *ibid.* p. 109), *the hell* cannot be (part of) a sluicing remnant (Sprouse 2006). It is therefore likely that even if sluicing underlay English unconditionals,

doubling unconditionals it is equally difficult to decide between the classical analysis (21e)/(21f) and the sluicing-based one (21c)/(21d) (for relevant evidence, see (12)).

It is likely that the dilemma between the classical and the sluicing-based analysis cannot be decided in the same way for all languages. While the evidence from Slovenian points to the sluicing-based analysis, Hungarian clearly requires the classical account. Hungarian is like Slovenian in that it distinguishes between interrogative and relative *wh*-words. This is demonstrated by the minimal pair in (26), where the interrogative form is *mi* ‘what.INTER’ and the corresponding relative form is *ami* ‘REL.what’. As in Slovenian, this contrast replicates through the whole *wh*-paradigm (e.g. *ki* ‘who.INTER’ vs. *aki* ‘REL.who’; *hol* ‘where.INTER’ vs. *ahol* ‘REL.where’).

(26) *Hungarian* (Anikó Lipták, p.c.)

- a. Megkérdeztem, (hogy) mit készített Mari.
 PFV.asked.1SG COMP what.INTER.ACC prepared.3SG Mari
 ‘I asked what Mari prepared.’
- b. Megettem amit Mari készített.
 PFV.ate.1SG REL.what.ACC Mari prepared.3SG
 ‘I ate what Mari prepared.’

Crucially, Hungarian unconditionals make use of the interrogative form (see Szabolcsi 2019 for the most recent semantic analysis of Hungarian unconditionals). The expression *akárki* ‘whoever’ is morphologically composed of the morpheme *akár* ‘ever’ and *ki* ‘who.INTER’; cf. the ungrammatical **akáraki*, which is based on the relative *wh*-word.²⁰

(27) *Hungarian* (Szabolcsi 2019; adapted)

- {Akárki / *Akáraki} telefonált, elbeszélgettünk.
 EVER.who.INTER EVER.REL.who called chatted.1PL
 ‘Whoever called, we chatted.’

The fact that Hungarian also has doubling unconditionals, exemplified in (28) below, in which it uses standard free relatives, including the relative *wh*-paradigm, further suggests that doubling and non-doubling unconditionals need not be derivationally related even within a single language. Notice, by the way, that also Hungarian doubling unconditionals are obligatorily accompanied by a licensing device, namely subjunctive morphology combined with verb fronting (notice the postposition of the aspectual “preverb” *meg*), which together give rise to the imperative (glossed below by IMP). Hungarian thus exhibits a property of both Slavic (which relies on the imperative) and Romance (which uses the subjunctive).²¹

Footnote 19 continued

the hell, if present, would be located in the unconditional antecedent rather than the free relative. Notice that the particle *už*, which optionally accompanies Czech (doubling) unconditionals, is clearly located in such a position; see (7a).

²⁰ The morpheme *akár* can alternate with *bár*; see Halm (2016) for discussion.

²¹ Hungarian doubling unconditionals might not be as productive and as readily accepted by native speakers as in the languages otherwise discussed in this paper (Anikó Lipták, p.c.).

- (28) *Hungarian* (Anna Szabolcsi, p.c.)
 Sértődjön meg, aki megsértődik, megmondom az igazat.
 get.hurt.IMP.3SG PFV REL.who PFV.get.hurt.3SG PFV.tell.1SG the truth
 ‘Whoever may get hurt, I’ll tell the truth.’

I have argued that at least in some cases, particularly in Slovenian, doubling unconditionals underlie ordinary unconditionals. This analysis cannot be *a priori* ruled out even for languages in which there is no overt evidence for such an analysis. An apparently problematic aspect of the analysis is that the sluicing remnant is a relative pronoun rather than an interrogative pronoun and relative pronouns are known to be unacceptable as sluicing remnants; see (29).

- (29) a. Someone wants to talk to Mary, but I don’t know who ~~wants to talk to Mary~~.
 b. *Someone wants to talk to Mary, but the person who ~~wants to talk to Mary~~ is too shy to approach her. (Lobeck 1995, 57)

Lipták (2015) showed that relative pronouns can be sluicing remnants in Hungarian.²² Consider example (30), where the relative pronoun *akivel* ‘REL.who.with’ is a sluicing remnant.

- (30) *Hungarian* (Lipták 2015, 189)
 Ismerőssel eggyel találkozott, mulatságosnak találta, hogy
 acquaintance.with one.with met.3SG funny.DAT found.3SG that
 éppen azzal, [RC akivel találkozott].
 just that.with REL.who.with met.3SG
 ‘Acquaintances, he met only one, and he found it funny that he met whoever he did.’

There are at least two important facts about this construction in Hungarian that can be understood as arguments in favor of the sluicing-based analysis of *wh*-phrases in unconditionals. First, Hungarian relative sluicing occurs in light-headed relatives, free relatives, or comparatives—all of which fall into one broad class of relative clauses (cf. Pancheva Izvorski 2000). Second, the sluicing seems conditioned by the matrix clause containing the sluiced material—just as in unconditionals. This might not be immediately clear from (30), or from many other examples in Lipták (2015), because the matrix clause itself involves ellipsis. But the English translation makes it clear: ‘he met whoever he met’. Anikó Lipták (p.c.) confirms that this is indeed a necessary condition for relative sluicing to be licensed: the sluicing site cannot be licensed discourse anaphorically, as it is common in standard interrogative *wh*-sluicing. In the following, Hungarian interrogative sluicing, (31a), is compared to relative sluicing, (31b); only the former sluicing site can have its antecedent in previous discourse.

²² See also Rodrigues et al. (2009) and Lipták and Aboh (2013) for relative sluicing in Brazilian Portuguese and Gungbe, respectively. I am grateful to Matt Barros (p.c.) for bringing these to my attention. Matt Barros also shares my concern that the cases discussed in these papers are not genuine cases of relative sluicing, the reason being that they only seem to happen under the matrix predicate ‘know’, which in turn potentially affords an embedded question construal (despite the apparently relative syntax).

Example (31c) shows that the relative sluicing site requires its antecedent to be the matrix clause.²³

(31) *Hungarian* (Anikó Lipták, p.c.)

- a. Mari ajánlott nekem pár látnivalót Pesten, de nem
 Mari recommended.3SG me couple sight Budapest.on but not
 emlékszem, mit ajánlott.
 remember.1SG what.INTER.ACC recommended.3SG
 ‘Mari recommended sights to me in Budapest, but I don’t remember what.’
- b. *Mari ajánlott nekem pár látnivalót Pesten. AZT
 Mari recommended.3SG me couple sight Budapest.on that.ACC
 néztem meg, amit ajánlott.
 visited.1SG PFV REL.what.ACC recommended.3SG
 Intended: ‘Mari recommended a couple of sights to me in Budapest. I
 visited what she recommended.’
- c. A: Mit néztél meg Pesten?
 what.INTER.ACC visited.2SG PFV Budapest.on
 ‘What did you visit in Budapest?’
 B: AZT néztem meg, amit megnéztem.
 that.ACC visited.1SG PFV REL.what.ACC PFV.visited.1SG
 ‘I visited whatever I visited.’

For completeness, remember that the antecedent of the hypothesized sluicing site in Slovenian unconditionals is also obligatorily present in the matrix (it corresponds to the main predication in the unconditional antecedent):

(32) *Slovenian* (Adrian Stegovec, p.c.)

- Naj pride kdorkoli (že) pride, bom zadovoljen.
 NAJ come.3SG who.REL.EVER ZE come.3SG will.be.1SG satisfied
 ‘Whoever comes, I’ll be happy.’

This parallelism between Hungarian relative sluicing, as discussed in Lipták (2015), and the case of Slovenian unconditionals, supports the present treatment of the latter in terms of relative sluicing.

Let us take stock. In this section, I proposed a three-way parametrization of the structure of unconditional antecedents, suggesting that what appear to be run-of-the-mill wh-based unconditionals (of the English type) might in fact be doubling unconditionals in disguise, derived by relative sluicing of the kind described by Lipták (2015) for Hungarian. The evidence for the sluicing-based analysis of superficially ordinary wh-based unconditionals is particularly strong for Slovenian. Wh-based unconditionals in languages like English or Czech seem compatible with both the standard analysis, based on wh-phrases, and the sluicing-based analysis, while Hungarian non-doubling unconditionals appear to utilize wh-phrases rather than sluiced free relatives.

²³ Example (31b) is grammatical under the reading ‘I visited whatever I visited.’

6 Conclusion

I argued that the curious type of conditionals called here ‘doubling conditionals’ can be brought in line with run-of-the-mill conditionals if one recognizes that the *wh*-structure is an “in situ” focused free relative. As such, it introduces alternatives and eventually gives rise to the denotation proposed for standard conditionals by Rawlins (2013). I then went on to argue that there are reasons to believe that at least some non-doubling conditionals have an underlying doubling structure and the *wh*-phrases in them are in fact sluicing remnants. The hypothesized process of relative sluicing matches very closely what was recently observed for Hungarian by Lipták (2015). I conclude that doubling conditionals and conditionals in general could have surprising and important implications not just for the interrogative–relative interface of *wh*-clauses, but also for our understanding of sluicing.

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