Doubling unconditionals in Arabic

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Abstract: We discuss wh-based unconditionals in Arabic ('wherever she went, she was followed by photographers'), with special attention paid to the so-called doubling unconditionals in whose antecedents the predicate/clause is reduplicated (lit. 'wher(ever) she went she went, she was followed by photographers'). We propose that the doubling unconditionals can be treated on a par with canonical unconditionals once one recognizes that the the wh-introduced structure within the antecedent ('wher(ever) she went') is a focused free relative. We discuss the benefits, problems, and various open issues of this analysis. The paper constitutes the first in-depth discussion of the syntax and semantics of wh-based unconditionals in Arabic, drawing evidence primarily from Syrian Arabic.

Keywords
Unconditionals – Clause doubling – Wh-clauses – Free relatives – Focus – Alternatives

1. Introduction

We provide a description and syntactico-semantic analysis of the construction exemplified in (1). Following Šimík (2020) we call this construction the doubling unconditional. It belongs to a broader family of unconditional constructions, which convey that the consequent ('Rahaf will pay') is true regardless of the particular semantic value of the antecedent ('Youssef eats at x (for any x)').[1]

> (1)   Syrian Arabic
>   *Wēn   ma raḥ y-ākul*   *Yūsif   y-ākul*
>   where MA FUT 3.SG.M-eat.IPF   Yūsif 3.SG.M-eat.IPF
>   *Rahaf raḥ tə-dfaʿ.*
>   Rahaf FUT 3.SG.F-eat.IPF
>   'Wherever Youssef will eat, Rahaf will pay.'

Doubling unconditionals, which turn out to be quite productive across Arabic varieties, are a subtype of wh-based unconditionals and are characterized by predicate or – as we will see – clause doubling within the antecedent. In our analysis, we will concentrate on Syrian Arabic doubling unconditionals and will explore to what extent their antecedents are amenable to the analysis proposed in Šimík (2020), in which the wh-word introduces a *focused free relative clause* with a predicate identical to the embedding predicate. We will see that the analysis makes some non-trivial correct predictions, but also leaves some questions open.

The rest of the paper is organized as follows. Section 2 provides some background information on unconditionals and demonstrates that wh-based unconditionals – including those of the doubling type – are productive in Arabic varieties. Section 3 contains our analysis. We start by the gist of Rawlins' (2013) analysis of wh-based unconditionals and then show how it can be applied to Arabic doubling unconditionals, following Šimík (2020). In Section 4 we provide the crucial evidence supporting the proposed analysis. In Section 5 we discuss unresolved problems and various open issues raised by the analysis and Section 6 concludes the paper.

2.   Background on unconditionals

UNCONDITIONALS are conditional-like structures conveying that the consequent is true regardless of the value of the antecedent (Zaefferer 1990; Rawlins 2013). In (2) the proposition that Sue was followed by photographers is true regardless of where she went to – if Sue went to a café, she was followed by photographers; if Sue went to the movies, she was followed by photographers; etc. We will call the first clause (*wherever Sue went*) the (UNCONDITIONAL) ANTECEDENT and the second clause (*she was followed by photographers*) the (UNCONDITIONAL) CONSEQUENT.

(2)   *Wherever Sue went, she was followed by photographers.*

The type of unconditional illustrated by (2) is called a CLAUSAL HEADLESS WH-BASED unconditional: the unconditional antencedent is expressed by a (finite) clause, which is not headed by any overt expression (cf. below), and the locus of the semantic variation (the various possible places Sue went to) is the wh-expression (*wherever*). Unconditional antecedents can also be headed (3a/c) (rather than headless), nominal (3c) (rather than clausal), or disjunctive (3b) (rather than wh-based). In other words, what defines unconditionals is their meaning much more than their form.

(3)   a. *No matter where Sue went, she was followed…*
          b. *Whether Sue went to a café or to the movies, …*
          c. *Regardless of the restaurant's design, the food is fantastic.*

The present contribution is about so-called DOUBLING UNCONDITIONALS – a type of clausal headless wh-based unconditional in which the predicate – or even the whole clause – is doubled. Doubling unconditionals come in two types – either the wh-expression is antecedent-initial (4a) or antecedent-medial (4b).

(4)   a. Italian (Gullì 2013, p. 17)
           Come la giri   giri,   è sempre la stessa cosa.
           how   it turn.2.SG turn.2.SG is always the same thing
           'However you look at it, it's always the same thing.'
          b. Spanish (Quer 1998, p. 243)
           Entre   quien entre,   lo   atacare.
           enter.SBJV.3.SG who enter.SBJV.3.SG him attack.1.SG.FUT
           'Whoever comes in, I'll attack him.'

Headless wh-based unconditionals – the type of primary interest here – are also attested in Arabic varieties, as exemplified in (5).[2]

(5)   a. Standard Arabic (Haspelmath 1997, p. 137)
           Wa-ḥayṯu-mā daxal-tum   bayt-an
           and-where-MA enter.PF-2.PL.M house-ACC
           fa-ʔaqīm-ū   fī-hi   ʔilā ʔan   ta-rḥal-ū.
           so-remain.IMP-2.PL in-3.SG.M until COMPL 2-depart.IPF-PL
           'In what place soever ye enter into a house, there abide till ye depart from that place.'
          b. Egyptian Arabic (Soltan 2019, p. 319)
           {Fēn ma / maṭraḥ   ma}   t-rūḥ
           where MA / place   MA   2-go.IPF.SG.M
           ha-n-rūḥ   maʕā-k.
           FUT-1.PL-go.IPF with-2.SG.M
           'Wherever you go, we'll go with you.'
          c. Libyan Arabic (from Mariam Srire's fieldwork)
           Kīf   ma Yūsuf ṣallaḥ   as-sayyāra
           how MA Yūsuf repair.PF.3.SG.M DEF-car
           Fātima šayf-it-hu   y-sūg.
           Fātima   see.PF-3.SG.F-OBJ.3.SG.M 3.SG.M-drive.IPF
           'However Youssef repaired the car, Fatima saw him driving.'

    d. Syrian Arabic (our fieldwork)
Wēn   ma ʿāš   Yūsuf
where MA live.PF.3.SG.M Yūsuf
Rahaf raḥ ət-ḍall   əb   Berlīn.
Rahaf FUT 3.SG.F-remain.IPF   in   Berlin
'Wherever Yūsuf lives Rahaf will stay in Berlin.'

    e. Palestinian Arabic (our fieldwork)
Wēn   ma b-yə-skun   Yūsuf
where MA PRES-3.SG.M.live.IPF Yūsuf
Rahaf raḥ ət-ḍall   bi Berlīn.
Rahaf FUT 3.SG.F-remain.IPF in Berlin
'Wherever Yūsuf lives Rahaf will stay in Berlin.'

    f. Algerian Arabic (our fieldwork)
mahma   škun   ža
MAHMA who   come.PF.3.SG.M
Rahaf raḥ tə-bqa   tə-ḫdəm.
Rahaf   FUT 3.SG-F-remain.IPF 3.SG-F-work.IPF
'Whoever came, Rahaf will keep on working.'

Most dialects we have investigated also possess doubling unconditionals, as shown in (6). These are mostly of the wh-medial type; for Syrian Arabic, we have found both and illustrate the wh-initial type in (6f).

(6)   a. Algerian Arabic (our fieldwork)
y-ʿawwəl   ʿala wəš y-ʿawwəl   Yūsuf
3.SG.M-rely.IPF on   what 3.SG.M-rely.IPF Yūsuf
Rahaf raḥ tə-bqa   tə-ḫdəm.
Rahaf FUT 3.SG.F-remain.IPF 3.SG.F-work.IPF
'Whatever Youssef relies on, Rahaf will keep on working.'

    b. Libyan Arabic (Mariam Srire's fieldwork)
Yūsuf yə-ḫdim   wēn   b-yə-ḫdim
Yūsuf 3.SG.M-work.IPF where FUT-3SG.M-work.IPF
Rahaf bə-t-stannā-h.
Rahaf FUT-3.SG.F-wait.IPF-OBJ.3SG.M
'Wherever Youssef works, Rahaf will wait for him.'

    c. Egyptian Arabic (our fieldwork)
Yūsuf yu-skun   makān ma   yu-skun
Yūsuf 3.SG.M-live.IPF place MA   3SG.M-live.IPF
Rahaf ha-tu-ʾʿud   fi Berlīn.
Rahaf FUT-3.SG.F-sit.IPF in Berlin
'Wherever Youssef lives, Rahaf will stay in Berlin.'

      d. Iraqi Arabic
         ḫalli   *Yūsuf yu-štuġul*   *wēn*   *ma*
         let.2.SG.IMP Yūsuf 3.SG.M-work.IPF where MA
         yu-štuġul   *Rahaf ha-tu-ntuẓr-ah.*
         3.SG.M-work.IPF Rahaf FUT-3.SG.F-wait.IPF-OBJ.3.SG.M
         'Wherever Youssef works, Rahaf will wait for him.'
      e. Palestinian Arabic
         law Yūsuf yə-štəġil   *wēn*   *ma yə-štəġil*
         if   Yūsuf 3.SG.M-work.IPF where MA 3.SG.M-work.IPF
         Rahaf bi-tə-stannā-h.
         Rahaf FUT-3.SG.F-wait.IPF-OBJ.3.SG.M
         'Wherever Youssef works, Rahaf will wait for him.'
      f. Syrian Arabic
         šu   *ma bədd-u*   *yākul*   *Yūsuf yākul*
         what MA want-3.SG.M 3.SG.M-eat.IPF Yūsuf 3.SG.M-eat.IPF
         Rahaf raḥ tə-dfaʕ.
         Rahaf FUT 3.SG-F-pay.IPF
         'Whatever Youssef eats, Rahaf will pay.'

In order to simplify the reference to the above types of unconditionals, we will call the type in (5) CANONICAL UNCONDITIONALS and the type in (6) DOUBLING UNCONDITIONALS.

3. Analysis

We start with Rawlins' (2013) influential proposal about the syntax-semantics of canonical unconditionals. According to Rawlins, the unconditional antecedent is a high adjunct with essentially Hamblin's (1973) interrogative semantics. The LF syntax is provided in (7): the CP antecedent is adjoined to the TP consequent;[3] the whole structure is then selected by the propositional operator [∀], which is crucial for deriving the observed truth conditions (see below). Without going into technical details, we assume that [∀] enters a licensing (Agree) relation with a dedicated element within the unconditional antecedent – in this case the ever-morpheme on the wh-expression. In this respect we follow a line of analysis in which expressions (here: *ever*) are not necessarily interpreted themselves, but rather indicate a relation to a covert LF element which delivers the interpretation – typically a quantificational operator over propositional alternatives (see Kratzer & Shimoyama 2002, Butler 2004, Zeijlstra 2004, Yanovich 2005, Aloni 2007, Chierchia 2013, or Fălăuş & Nicolae 2022 for applications to a variety of empirical phenomena and for different technical implementation).

(7) Syntax (LF):
[∀] [$_{TP}$ [$_{CP}$ wher**ever** Sue went] [$_{TP}$ she felt good]]

Agree

The compositional semantics is provided in (8).[4] The antecedent *wherever Sue went* denotes a question in Hamblin's (1973) sense – the set of propositions that constitute its possible answers; see (8b). We assume that the set semantics stems from the lexical semantics of the wh-word: wh-words denote sets of entities restricted by the sortal description of the wh-word; see (8a). When the antecedent is composed with the consequent (by the so-called flexible or pointwise function application; see Hagstrom 1998; Kratzer & Shimoyama 2002), the result denotes the set of if-conditionals which one gets after combining each proposition in the set (8b) with the consequent (which remains constant); see (8c).[5] The final step, provided in (8d), is universal quantification over the set of conditionals. The unconditional construction is thus true if all the propositions in the set (or, equivalently, their conjunction), are true.

(8) a. ⟦wher(ever)⟧ = $\{x \mid x$ is a place$\}$

b. ⟦wherever Sue went⟧

= $\{$Sue went to $x \mid x$ is a place$\}$

= $\left\{ \begin{array}{l} \text{Sue went to a café,} \\ \text{Sue went to the movies,} \\ \text{Sue went to a museum} \end{array} \right\}$

c. ⟦wherever Sue went, she felt good⟧

= $\{$Sue went to $x \rightarrow$ Sue felt good $\mid x$ is a place$\}$

= $\left\{ \begin{array}{l} \text{if Sue went to a café, she felt good;} \\ \text{if Sue went to the movies, she felt good;} \\ \text{if Sue went to a museum, she felt good} \end{array} \right\}$

d. ⟦[[∀] wherever Sue went, she felt good⟧

= $\forall p \in \{$Sue went to $x \rightarrow$ Sue felt good $\mid x$ is a place$\}$
$\rightarrow p$ is true (in an evaluation world)

= if Sue went to a café, she felt good &
if Sue went to the movies, she felt good &
if Sue went to a museum, she felt good

Šimík (2020) argued that doubling unconditionals can be analyzed in an analogous way, once certain empirically motivated assumptions are made. In particular, what is expressed by the wh-word (*wherever*) in canonical unconditionals is expressed by a *focused free relative clause* in doubling unconditionals. Below we apply this analysis to Arabic doubling unconditionals.

Consider the minimal pair in (9). The part *mīn ma katab ər-risāle* 'whoever wrote the letter' in (9b) – what Šimík considers a free relative – corresponds to the wh-expression *mīn ma* 'whoever' in (9a). While the ever-morpheme *ma* is retained in the doubling unconditional in (9b) (which seems obligatory with *mīn* 'who'), its presence is not necessary in doubling unconditionals in general (sometimes it can be omitted, e.g. with 'what'; an example is provided below – see (22)). The burden of expressing agreement with the universal operator is borne by the restricted TAM-marking on the main predicate in the antecedent: despite the perfect (past) interpretation of the antecedent, the main predicate – *yə-ktub-a* in (9b) – must be in the imperfect.

(9)   Syrian Arabic
    a. *mīn ma katab*   *ər-risāle*
         who MA write.PF.3.SG.M DEF-letter
         il-mudīr   *maʾarā-ha.*
         DEF-headmaster   NEG read.PF.3.SG.M-3.SG.F.OBJ
    b. [FR *mīn ma katab*   *ər-risāle*]
           who MA write.PF.3SG.M DEF-letter
         yə-ktub-a
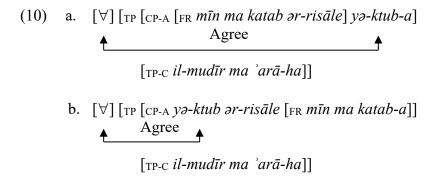   3.SG.M-write.IPF-3SG.F.OBJ
         il-mudīr   *ma*   *ʾarā-ha.*
         DEF-headmaster NEG read.PF.3SG.M-3SG.F.OBJ
         'Whoever wrote the letter, the headmaster didn't read it.'

In (10) we elaborate on (9b) and provide a structural description for the two types of doubling unconditionals attested in Arabic (and elsewhere). For better orientation we refer to the antecedent as CP-A, to the consequent as TP-C, and to the whole unconditional construction – selected by the covert operator [∀] – simply as TP. What we can see is that the free relative can either be antecedent-initial (as the corresponding wh-word in canonical unconditionals), see (10a), or antecedent-final (unlike the wh-word in canonical unconditionals), see (10b). Following Šimík (2020), we propose that these positions represent two ways of placing the free relative into the contrastive focus within the antecedent – a property necessary for deriving the intended unconditional semantics; see section X for more discussion. In both cases, it is the main predicate which obligatorily takes the bare imperfect form, which we take to be indicative of the licensing Agree relation with the universal operator. By hypothesis, a direct agreement link between [∀] and the ever-morpheme *ma* within the free relative is ruled out for locality reasons (such as Chomsky's 2000 Phase Impenetrability Condition). We thus take the *ma* occurrence within the FR to be licensed by an agreement link between the main predicate and the wh-word within the FR. As is evident from (10a)

vs. (10b), the two types can further differ with respect to which material is realized in the FR and in the main clause (of the antecedent). The generalization seems to be that whichever of the two comes first will realize the obligatory constituents overtly (*ər-risāle* in FR in (10a) vs. in the main predication in (10b)), while the linearly following clause will only make use of pronouns (the object suffix *-a* on the main predicate in (10a) vs. on the FR predicate in (10b)).

(10) a. [∀] [TP [CP-A [FR *mīn ma katab ər-risāle*] *yə-ktub-a*]

Agree

[TP-C *il-mudīr ma ʾarā-ha*]]

b. [∀] [TP [CP-A *yə-ktub ər-risāle* [FR *mīn ma katab-a*]]

Agree

[TP-C *il-mudīr ma ʾarā-ha*]]

We use (10b) to show how the compositional semantics works in doubling unconditionals. We start with the meaning of the free relative *mīn ma katab-a* 'whoever wrote it (= the letter)'. Researchers have converged on the idea that free relatives correspond to definite descriptions – they denote the maximal entity satisfying the nominal/clausal description (Jacobson 1995, Šimík 2021). Our free relative thus denotes the maximal human entity (whether plural or singular) that wrote the letter; see (11a). This denotation does not yet correspond to the denotation of the wh-word in the canonical unconditional, which, as we have seen, denotes a set of entities, rather than just a single entity. This mismatch is fixed by contrastively focusing the free relative. Contrastive focus generates alternative denotations of the same semantic type which are further restricted to contextually relevant alternatives (Rooth 1985, 1992). In our case, those will be entities satisfying the description provided by the free relative, i.e., maximal entities that wrote the letter. While there cannot be multiple distinct maximal entities that wrote the letter in actuality (in a single situation), these distinct entities can occupy different possible worlds or different parts of one world (situations with different spatiotemporal properties). So, while A may have written the letter in world w_1, B may have done so in w_2, C in w_3, etc. (where w_1, w_2, and w_3 all belong to some relevant set of worlds W, such as the speaker's epistemic state).[6] The alternatives contributed by the focused free relative propagate to the antecedent level – see (11c) – and eventually to the level of the whole unconditional – see (11d). The result, provided in (11e), is no different from the one we saw for canonical unconditionals, which is a desirable result, as there is no

detectable truth-conditional difference between canonical and doubling unconditionals.

(11) a. $[[_{FR}$ *mīn ma katab-a*$]]$
        = σx x wrote the letter
        = the maximal entity that wrote the letter

   b. $[[_{FR}$ *mīn ma katab-a*$]_F]]$
        = {$y : y$ = σx x wrote the letter in w | $w ∈ W$}
        = {A, B, C}

   c. $[[_{CP-A}$ *yi-ktub ər-risāle* $[_{FR}$ *mīn ma katab-a*$]_F]]]$
        $=$ $\left\{\begin{array}{l} \text{A wrote the letter,} \\ \text{B wrote the letter,} \\ \text{C wrote the letter} \end{array}\right.$

   d. $[[CP-A [_{TP-C}$ *il-mudīr ma ʾarā-ha*$]]]]$
        $=$ $\left\{\begin{array}{l} \text{if A wrote the letter the director didn't read it,} \\ \text{if B wrote the letter the director didn't read it,} \\ \text{if C wrote the letter the director didn't read it} \end{array}\right.$

   e. $[[∀] [CP-A [_{TP-C}$ *il-mudīr ma ʾarā-ha*$]]]]$
        if A wrote the letter, the director didn't read it &
        $=$ if B wrote the letter, the director didn't read it &
        if C wrote the letter, the director didn't read it

4. Supporting evidence

The analysis proposed above rests on some non-trivial assumptions which need to be supported empirically. These are (i) the idea that Arabic varieties possess free relatives of the kind attested in languages of the European region, (ii) that the free relative in the doubling unconditional antecedent is focused, and (iii) that there is an agreement relation between the covert universal operator and some element in the unconditional antecedent. We discuss these issues in turn.

Free relatives in Arabic

Our analysis crucially relies on the assumption that the Arabic grammars have wh-based free relatives at their disposal, as they constitute a key building block within the doubling unconditional construction. This is not a trivial issue – while wh-based free relatives are common in the languages of the broader European region (largely corresponding to Indo-European and Finno-Ugric/Uralic; called "Standard Average European" by Comrie 1998), most languages of the world do not use wh-words in free relatives or do not have free relatives at all (for early discussion, see Lehmann 1984).

    In our own fieldwork, we have discovered wh-based free relatives in all of the Arabic varieties we looked at (thus corroborating the detailed

investigation of Maltese by Sadler & Camilleri 2018) – albeit productive to different degrees, as is evident from the impossibility of some wh-words to act in free relatives (see Section 5 for some examples). Below we provide some examples of wh-based free relatives from a number of varieties, using a number of different wh-words. As is evident the wh-words are sometimes, but not always accompanied by the *ma*-morpheme, which might be considered a complementizer. There is some degree of optionality in the use of the morpheme in some varieties (in which case the *ma*-morpheme may encode the ever-meaning), but mostly it is obligatory, making the free relatives underspecified for their plain vs. ever nature.

(12)   a.   Syrian Arabic
            raḥ nilti ʾi   maʿa mīn ma   iža.
            FUT 1.PL-meet.IPF with who MA   come.PF.3.SG.M
            'We will meet whoever comes/came.'

       b.   Egyptian Arabic
            Rahaf raḥ t-ṣallaḥ   ʿarabīyat-ha   zayy-ma
            Rahaf FUT 3.SG.F-repair.IPF car-3.SG.F.POSS how-MA
            Yūsef ṣallaḥ   ʿarabīyat-u
            Yūsef repair.PF.3.SG.M car-3.SG.M.POSS
            'Rahaf will repair her car how Youssef repaired his.'

       c.   Algerian Arabic
            Rahaf ma-mess-et-š   weš kla
            Rahaf NEG1-touch.PF.3.SG.F-NEG2 what eat.PF.3.SG.M
            Yūsef
            Yūsef
            'Rahaf didn't touch what Yūsef ate.'

       d.   Iraqi Arabic (from Balsam Al-Shiekhli's fieldwork)
            Fāṭme   ət-ʿīš
            Fatima   3.SG.F-live.IPF
            wēn   bībīt-ha   ʿāš-at
            where   grandma-3.SG.F.POSS.   live.PF-3.SG.F
            'Fatima lives where her grandma lived.'

Contrastive focus on the free relative

Our analysis requires that the free relative be contrastively focused.[7] Without that, the set denotation would not arise and eventually the expected truth-conditions would not be derived. We saw that doubling unconditionals come in two basic versions – wh-initial and wh-medial – which in turn corresponds to the position of the whole free relative in our analysis – either the free relative is fronted (ex-situ) or not (in-situ/clause-final). Šimík (2020) showed that this difference correlates with the default

position of contrastive focus in a given language: while Czech or Slovenian (Slavic) place their contrastive focus in-situ (or, more precisely, clause-finally), Italian and its dialects places it ex-situ. And, correspondingly, doubling unconditionals are wh-medial in Slavic and wh-intial in Italian.

The expectations for Arabic are the same: if the primary strategy for expressing contrastive focus is its syntactic fronting, we expect the same to happen to the free relative in the doubling unconditional antecedent. Focus fronting in Arabic – particularly Standard Arabic – was first discussed in Ouhalla (1994, 1997). But similarly, as in many other languages, focus fronting is optional, as illustrated by the examples below. Alazzawie (2019) models the optionality by utilizing two focus phrases – a peripheral one and a TP-internal one.

(13)   Standard Arabic (Alazzawie 2019; Al-Horais 2017)
    a. *Riwāyat-an ʾallaf-at Zaynab-u (lā qaṣīdat-an).*
       novel-ACC   write.pf-3.SG.F Zaynab-NOM   not poem-ACC
       'It was a novel that Zaynab wrote (not a poem).'
    b. *Ta-takallam-u Hind-un al-ʾinglīzīyat-a*
       3.SG.F-speak.IPF.-INDIC Hind-NOM DEF-English-ACC
       wa laysa l-faransīyat-a.
       and   NEG   DEF-French-ACC
       'Hind speaks English, but not French.'

We observe the same optionality in Syrian Arabic, where a contrastively focused object can either be fronted, (14a), or situated in situ (or ex situ TP-internally, in case we follow Alazzawie), (14b).

(14)   Syrian Arabic
    a. *riwāye katab Zēn mū qaṣīde.*
       novel   write.PF.3.SG.M Zēn not poem
       'It was a novel that Zēn wrote, not a poem.'
    b. *Zēn katab riwāye mū qaṣīde.*
       Zēn write.PF.3.SG.M novel   not poem
       'Zēn wrote a novel, not a poem.'

The behavior of the free relative within the unconditional antecedent is analogous, as shown in (15), even though the wh-initial (ex-situ) variant is considered more natural for Author.

(15)   Syrian Arabic
    a. [FR *Šu ma katab Zēn*] *yə-ktub …*
          what MA write.PF.3.SG.M Zēn 3.SG.M-write.IPF

b. *Yə-ktub*   *Zēn* [FR *šu*   *ma katab*]...
3SG.M-write.IPF Zēn   what MA write.PF.3.SG.M
'Whatever Zēn wrote…'
... Rahaf ma qara-t-u
   Rahaf NEG read-3.SG.F.-3.SG.M.OBJ
'…Rahaf didn't read it.'

Evidence from focused subjects is also in line with our analysis. In Syrian Arabic (and across varieties; see Fassi Fehri 1993, Suleman 2016) the basic order is often considered to be VSO. Nevertheless, when focused, the subject can be clause-initial as well as clause-final, as shown in (16); see also Hewitt (2006) for discussion.

(16)   Syrian Arabic
     a. *Zēn katab*   *ir-riwāye mū Farīd.*
       Zēn write.PF.3.SG.M DEF-novel not Farīd
     b. *Katab*   *ir-riwāye Zēn mū Farīd.*
       write.PF.3.SG.M DEF-novel Zēn not Farīd
       'Zēn wrote the novel, not Farīd.'

Once again, we see the same positions replicated for the free relative in unconditional antecedents.

(17)   Syrian Arabic
     a. [FR *Mīn ma katab*   *ər-riwāye*]
         who MA write.PF.3.SG.M DEF-novel
       yə-ktub-a…
       3.SG.M-write.IPF-OBJ.3.SG.F
     b. *Yə-ktub*   *ər-riwāye*
       3.SG.M-write.IPF DEF-novel
       [FR *mīn*   *ma*   *katab-a*]...
         who MA write.PF.3.SG.M-OBJ.3.SG.F
       'Whoever wrote the novel...'
              ... Rahaf ma   *qari-t-a*
              Rahaf NEG   read-3.SG.F.-3.SG.F.OBJ
              '…Rahaf didn't read it.'

TAM-restrictions in doubling unconditionals

In our Syrian Arabic data, the form of the main predicate in doubling unconditionals is limited to the bare imperfect form (which mostly functions as a subjunctive/optative), for the 1st/3rd person, and its functional equivalent – the imperative – for the 2nd person:

(18)   Syrian Arabic
  a. *šu   ma simʕ-ət   ʔə-smaʕ...*   1.SG
      what MA hear.PF-1.SG 1.SG-hear.IPF
      'Whatever I heard, ...'
  b. *šu   ma simʕ-ət   smaʕ...*   2.SG.M
      what MA hear.PF-2.SG.M hear.IMP.2.SG.M
      'Whatever you heard (masc.), ...'
  c. *šu   ma smiʕ-ti   smaʕ-i...*   2.SG.F
      what MA hear.PF-2.SG.F hear.IMP.2.SG.F
      'Whatever you heard (fem.), ...'
  d. *šu   ma simiʕ   yə-smaʕ...*   3.SG.M
      what MA hear.PF-3.SG.M 3.SG.M-hear.IPF
      'Whatever he heard, ...'
  e. *šu   ma simʕ-it   tə-smaʕ...*   3.SG.F
      what MA hear.PF-3.SG.M 3.SG.F-hear.IPF
      'Whatever she heard, ...'
  f. *šu   ma smiʕ-na   nə-smaʕ...*   1.PL
      what MA hear.PF-1.PL 1.PL-hear.IPF
      'Whatever we heard, ...'
  g. *šu   ma smiʕ-tu   smaʕ-u...*   2.SG
      what MA hear.PF-2.PL hear.IMP-2.PL
      'Whatever you guys heard, ...'
  h. *šu   ma simʕ-u   yə-smaʕ-u...*   3.PL
      what MA hear.PF-3.PL 3-hear.IPF-PL
      'Whatever they heard, ...'
      ... ma raḥ ḫabbir   ḥada.
         NEG FUT 1.SG.inform.IPF anybody
      '... I won't tell anybody.'

This is consistent with our analysis, where the TAM morphology on the main predicate encodes the agreement with the unconditional universal operator. TAM-restrictions as an alternative expression of the ever-morpheme are not unseen. An example of this is Bulgarian, which lacks the ever-morphology and instead opts for the obligatory use of the subjunctive in ever-free relatives and unconditionals (Pancheva Izvorski 2000). It is also relevant is Spanish, which makes both strategies available: the ever-morpheme is either expressed morphologically – by the wh-word affix *quiera* – or by the subjunctive. In Spanish doubling unconditionals, the subjunctive is required (see Šimík 2020 and Quer 1998 for discussion).

In contrast with the main predicate, the form of the free relative predicate is unconstrained, as illustrated in (19) below.

(19)   a.   *min   wēn   ma štara   s-sayyāra*
           from where MA buy.PF.3.SG.M DEF-car
           yə-štirī-a   ma kān   mafrūḍ
           3.SG.M-buy.IPF-3.SG.F.OBJ NEG be.PF.3.SG.M supposed
           yə-sūʾ-a   bədūn ruḥṣa.
           3.SG.M.drive.IPF-3.SG.F.OBJ without permit
           'Wherever he bought the car, he shouldn't have driven it
           without the permit.'

       b.   *min   wēn   ma b-yə-štiri   s-sayyāra*
           from where MA PRES-3SG.M-buy.IPF DEF-car
           yə-štirī-ha   ma   mafrūḍ
           3.SG.M-buy.IPF-3.SG.F.OBJ NEG supposed
           yə-sūʾ-a   bədūn ruḥṣa.
           3.SG.M.drive.IPF-3.SG.F.OBJ without permit
           'Wherever he buys the car, he shouldn't drive it without the
           permit.'

       c.   *min   wēn   ma raḥ yə-štiri   s-sayyāra*
           from where MA FUT 3.SG.M-buy.IPF DEF-car
           yə-štirī-ha   ma   mafrūḍ
           3.SG.M-buy.IPF-3.SG.F.OBJ NEG supposed
           yə-sūʾ-a   bdūn   ruḥṣa.
           3.SG.M.drive.IPF-3SG.F.OBJ without permit
           'Wherever he will buy the car, he shouldn't drive it without
           the permit.'

5.   Problems and open issues

We have shown above that wh-based free relatives – important building
blocks in the formation of doubling unconditionals – are generally
productive in Syrian Arabic and other Arabic varieties. However, a more
detailed analysis reveals that there is by no means a one-to-one
relationship between free relatives in doubling unconditionals and their
kin outside of this syntactic environment. Let us provide two kinds of
examples. First, besides wh-based free relatives, Syrian Arabic also has
complementizer-based free relatives (called super-free relatives by
Caponigro 2021; cf. Sadler & Camilleri 2018); see (20), where the wh-
word *šu* 'what' can be replaced by the complementizer *illi* combined with
a resumptive pronoun.

(20)   *ma raḥ   t-ākul*
          NEG FUT   3.SG.F-eat.IPF
          {šu   ṭabaḥ   /   illi   ṭabaḥ-u }
          {what cook.PF.3.SG.M   /   COMP cook.PF.3.SG.M-OBJ.3.SG.M}
           'She won't eat what he cooked.'

However, complementizer-based FRs cannot be used in doubling unconditionals at all; see (21).

(21)   *{Šu   ṭabaḫ   / *illi   ṭabaḫ-u }*
       {what cook.PF.3.SG.M / COMP   cook.PF.3.SG.M-OBJ.3.SG.M}
       yə-ṭbuḫ
       3.SG.M-eat.IPF
       ma raḥ   t-ākul
       NEG FUT   3.SG.F-eat.IPF
       'Whatever he cooked, she won't eat.'

The second kind of example concerns adverbial FRs. Adverbial FRs are often introduced not by wh-words, but by their nominal(-like) analogues, obligatorily accompanied by the *ma* morpheme (for formal reasons, i.e., even without the meaning associated with ever FRs).

(22)   Syrian Arabic
       a. *raḥ Ɂa-drus   {mitl ma / *kīf ma} daras-ət.*
           FUT 1.SG-study.IPF {like MA / how MA} study.PF-2.SG
           'I will study like you studied.'

In some cases, there's optionality between the two strategies; as in (22b):

       b. *raḥ a-drus   {maḥall ma / wēn   ma}*
           FUT 1.SG-study.IPF {place   MA / where MA}
           daras-ət.
           study.PF-2.SG
           'I will study where you studied.'

Again, these nominal-based FRs cannot participate in doubling unconditionals; see (23). Moreover, some wh-based free relatives that are grammatical in the environment of doubling unconditionals are ungrammatical outside of it, as witnessed for the wh-word *kīf* 'how' in (23a).

(23)   Syrian Arabic
       a. *{kīf   ma / *mitl ma} daras-ət   drūs*
           {how MA / like MA} study.PF-2.SG study.IMP.2.SG
           Ɂanā ma raḥ Ɂə-tdaḫḫal
           I   NEG FUT 1.SG-intervene.IPF
           'However you study, I will not intervene.'

b. *{wēn   ma / *maḥall ma} daras-ət   drūs*
{where MA / place   MA} study.PF-2.SG study.IMP.2.SG
Ɂanā ma raḥ Ɂi-tdaḥḥal
I   NEG FUT 1.SG-intervene.IPF
'Wherever you study, I will not intervene.'

Thus, there appears to be a much greater affinity towards wh-morphology in the FR in doubling unconditionals than outside of this environment. At present, we do not have a principled solution to this issue.

We have seen above that the main predicate of the doubling unconditional antecedent is TAM-restricted (to the imperfect), while the FR predicate is not, which is in accord with our prediction. Nonetheless, despite not being TAM-restricted, the FR predicate exhibits a preference for a particular TAM-specification, namely the perfect. There is even evidence that the perfect is interpretively underspecified, i.e., it does not necessarily have to be interpreted as perfect or past (for relevant discussion, see Karawani 2014).

(24)   *mīn ma {iža /   b-yi-ži /*
who MA {come.PF.3.SG.M / PRES-3.SG.M-come.IPF /
rah yi-ži}   bukra   yiži
FUT 3.SG.M-come.IPF} tomorrow 3.SG.M-come.IPF
lāzim   t-rahhib   fī-h.
necessary   2.SG.M-welcome.IPF   PREP-3.SG.M
'Whoever comes tomorrow, you have to welcome him.'

(25)   *mīn ma iža   {Ɂimbārəḥ / halla / bukra}*
who MA come.PF.3.SG.M {yesterday / now /   tomorrow}
yiži   lāzim   t-rahhib   fī-h.
3.SG.M-come.IPF necessary 2.SG.M-welcome.IPF PREP-3.SG.M
'Whoever came yesterday / comes now / will come tomorrow, you have to welcome him.'

Moreover, it appears that a similar behavior is evident in canonical unconditionals; see (26).

(26)   *mīn ma iža   {Ɂimbārəḥ / halla / bukra}*
who MA come.PF.3.SG.M {yesterday / now /   tomorrow}
lāzim   t-rahhib   fī-h.
necessary 2.SG.M-welcome.IPF PREP-3.SG.M
'Whoever came yesterday / comes now / will come tomorrow, you have to welcome him.'

Although not ruled out by our analysis, it is unexpected to observe a phenomenon shared between the predicate in canonical unconditionals and the FR in doubling unconditionals. After all, their syntactic nature is quite different. At present, we do not know how to account for this similarity.

Besides the two above-mentioned problems for our analysis, we would like to point out a number of phenomena that call for a deeper analysis. One question that we have not addressed is what motivates the choice between the canonical and the doubling unconditional. While true optionality is not unheard of, it is possible that the two options exhibit some semantic or pragmatic differences. A preliminary investigation reveals that this might indeed be the case: while the doubling unconditional seems to express speaker's ignorance about the identity of the referent denoted by the free relative (as already sketched in our semantic analysis above), the canonical unconditional will more likely be used in a situation where there is a multitude of such referents (each corresponding to a different alternative), which could all be known by the speaker. Without going into further detail, we hypothesize that this difference might have to do with the differing realization of the "ever-morpheme" – *ma* in canonical unconditionals vs. the imperfect in doubling unconditionals. In our analysis, the ever-morpheme interacts with the unconditional universal operator and it might as well be responsible for determining the flavor of the Kratzerian (2012) modal/conditional operator implicated in (un)conditional structures (Rawlins 2013). (We have not explicitly discussed this additional operator in our analysis for the sake of simplicity.) Let us also point out that the cross-constructional interpretive difference that we have observed might be related to a similar cross-linguistic difference in the interpretation of the related ever free relatives, where ever free relatives in some languages allow for ignorance readings (like the doubling unconditional in Syrian Arabic), while in others they do not (like the canonical unconditional in Syrian Arabic). For discussion and empirical evidence, see Šimík (2018, 2021).

Another issue worth investigating is the prosodic realization of Arabic (doubling) unconditionals. It is a crucial element of our analysis that the free relative within the doubling unconditional antecedent is focused. We only explored the syntax of focus, but Arabic varieties – including Syrian Arabic – are known to encode focus not just syntactically, but also – and perhaps even primarily – prosodically (El Zarka 2013, 2017). As demonstrated in Šimík (2020), not only the syntax, but also the prosody of doubling unconditionals in Czech supports the claim that the free relative in the antecedent is indeed focused. It remains to be seen whether a similar argument can be made for Arabic.

When it comes to cross-Arabic variation, we have only scratched the surface, although it is clear enough that there is much to be discussed and uncovered. One issue of imminent interest is the realization of the element

expressing agreement with the unconditional universal operator. We have concentrated on Syrian Arabic, where the agreement is expressed by the imperfect on the main predicate of the antecedent. But as illustrated in our data in (6), other Arabic varieties might make use of different strategies, including the Palestinian Arabic *law* 'if' and Iraqi Arabic *ḫalli* 'let.2.SG.IMP' (both antecedent-initial). While the former morpheme clearly draws on the syntactic and semantic affinity between unconditionals and conditionals, the latter appears to be an analytic expression of the subjunctive/imperative mood, observed in a synthetic form (in 2nd person) in Syrian Arabic (it is notable, however, that as opposed to the case of Syrian Arabic, the 2nd person morphology on the Iraqi Arabic *ḫalli* is not interpreted; i.e., the subject of the antecedent can also be 3rd person). The Iraqi Arabic pattern is in fact almost identical to what has been observed by Šimík (2020) for Slovenian, which invites further cross-linguistic investigations. We would also like to draw the reader's attention to the Syrian Arabic example (6f), which exhibits the voluntative modal *bədd-u* 'want-3.SG.M' as a part of the free relative predicate. This modal does not appear to be interpreted – or at least not in a canonical way – which prompts the question of what motivates its presence and whether it has any relevant consequences. All in all, it is yet to be seen whether the observed formal variation in the cross-constructional and cross-linguistic expression of doubling unconditionals has any consequences – whether interpretive or otherwise.

6. Conclusion

We have provided the first in-depth analysis of Arabic unconditionals, with a special emphasis of the type called doubling unconditionals. We explored the predictions of Šimík's (2020) proposal devised on the basis of Slavic and Romance data. The gist of Šimík's analysis is that doubling unconditionals make use of focused free relatives in place of the plain wh-words in the corresponding canonical unconditionals. We have seen that the analysis goes quite a long way in explaining the Arabic data, and especially the Syrian Arabic data, which we concentrated on most closely. More particularly, we have seen that the doubling structures can plausibly be considered free relatives (which exist independently of doubling unconditionals in Syrian Arabic and other varieties) and that they appear to be focused. In addition, we saw that the doubling structures have a property unseen in the canonical ones, namely the obligatory imperfect on the main predicate of the antecedent, which steps in in order to function as a cue for the unconditional universal operator, crucial for deriving the intended truth-conditions. At the same time, however, there are facts that remain unaccounted for, such as some unexpected non-trivial similarities between the free relative in the doubling unconditional and the canonical unconditional antecedent or, and more seriously so, the formal mismatches

between the free relatives in doubling unconditionals and those outside of this specific environment. More research is needed to untangle these and other open issues.

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[1] Throughout the examples we gloss the *ma* morpheme idiosyncratically as MA (unless it is the negative morpheme), since we do not intend to take a strong stance on its syntactic and semantic nature. While it might be a relative complementizer in many cases, it also appears to be functionally related to the English *ever*-morpheme (which, arguably, is not a complementizer). The IPF gloss stands for IMPERFECT, which technically refers to the suffixal conjugation, standing in opposition to the PERFECT (glossed as PF), i.e., the prefixal conjugation.

[2] The word *mahma* in the Algerian Arabic example (5f), glossed simply as MAHMA (see endnote 1), is borrowed from Standard Arabic, where it means 'whatever'. In Algerian Arabic it can combine with most wh-words and corresponds to the English *ever*-morpheme.

[3] The precise locus of adjunction is immaterial for our purposes. For extensive discussion see, e.g., Haegeman (2003, 2012).

[4] The compositional semantics is simplified. For presentational reasons, we set aside the question of how exactly the alternative denotations arise (whether by a question operator, or by lexical semantics of the wh-word itself) and we abstract away from the exhaustive nature of unconditionals (modeled by an additional covert operator called EXH). For a more complete version of this analysis, see Rawlins (2013).

[5] In some cases the value of the consequent can covary with the antecedent, as in *Wherever Sue went, she felt good there*, where the value of *there* covaries with the value of *where*.

[6] One reason why a speaker might be raising alternative possible letter-writers is that she does not know who the letter-writer is. In more technical terms, the worlds in the speaker's epistemic state (worlds that she considers to be likely candidates for the actual world) differ in the identity of the letter-writer. This so-called ignorance implication is in fact standard for unconditionals and ever free relatives (see Dayal 1997, von Fintel 2000, and others).

[7] More precisely, there are reasons to believe that it is not just contrastive focus fronting, but in fact exhaustive focus fronting, where exhaustification brings an additional semantic aspect to contrastive focus. For evidence for exhaustive semantics in unconditionals, see Rawlins (2013) (also endnote 4 of this paper); for the consequences for focus fronting, see esp. Horvath (2010).