VARIETIES OF ALTERNATIVE UNCONDITIONALS[1]

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1 Introduction

The alternative unconditional (unconditional for short), so named by Zaefferer (1991), is a special construction that relates a set P of antecedent propositions to a consequent proposition q. The unconditional asserts that q holds unconditionally of the question of which one of the members of P is true, where it is presupposed that the members of P exhaust all contextually relevant alternatives. It has also been claimed that the options are presupposed to be mutually exclusive, although the grammatical source of mutual exclusivity and its definition are not fully settled.

The Hebrew sentence in (1) and its English translation are examples of unconditionals. P is the set of two propositions {*beyn im nirce* 'between if we want', *beyn im lo nirce* 'between if we don't want'}. The members of this set are conjoined by *ve-* 'and' before being combined with the consequent. Each conjunct in Hebrew is separately introduced by both the subordinating items *im* 'if/whether' and *beyn* 'between'.[2]

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[2] We use the following abbreviations: CS – Construct State (morphological marking of a possessee head); CS_c – Context Set; F – Feminine; M – Masculine; MB – Modal Base; OS – Ordering Source; PL – Plural; PRON – Pronominal copula; PST – Past. We mark word-stress only in words which deviate from the default final-syllable stress of the language.

(1) beyn im nirce ve- beyn im lo ~~nirce~~,
between if will.want.1PL and between if not ~~will.want.1PL~~

kulanu ovdim bišvil ha-alpiyon ha-elyon
all.1PL work for the-thousandth the-upper

'Whether we want it or not, we all work for the upper thousandth percentile of the population.' (http://www.ynet.co.il/home/1,7340,L-884-5951-31537945,00.html, 6.10.14.)

As exemplified by (1), the antecedent propositions in Hebrew unconditionals are typically conjoined (by *ve-* 'and'). This is different from languages discussed so far in the literature, where these propositions are not conjoined but disjoined (e.g., by *or* in the English translation of (1)).[3]

The disjunctive construction also exists in Hebrew, but is less idiomatic. In such examples, the propositions are disjoined under the scope of a single *beyn* and a single *im*, as in (2):

(2) beyn im nirce o lo ~~nirce~~,
between if will.want.1PL or not ~~will.want.1PL~~

kulanu ovdim bišvil ha-alpiyon ha-elyon
all.1PL work for the-thousandth the-upper

'Whether we want it or not, we all work for the upper thousandth percentile of the population.'

A disjunctive antecedent does not in itself give rise to an unconditional interpretation. The disjunctive construction in (2) loses its unconditional flavor and collapses into an ordinary conditional once *beyn* is elided.[4] In the idiomatic unconditional in (1), on the other hand, ellipsis of *beyn* is allowed, as in (3a), just like ellipsis of *whether* in the corresponding English sentence in (3b):

[3] In English, one finds examples similar to conjunctive unconditionals, for instance (i) below (we thank an anonymous reviewer for this example). However, the construction is absent in large corpora, e.g. COCA, raising questions about its grammaticality.

(i) Quassel no longer works, both if torifying and if not torifying.
http://forums.debian.net/viewtopic.php?t=69886.

[4] This is best illustrated when the disjuncts do not exhaust the space of possibilities. For example, in a context in which it is possible for Maribel to walk, run, or bike, (ii) makes no claim about Maribels's winning if she walks:

(ii) im maribel taruc o tirkav, hi tenacéaħ b-a-taħarut
if M will.run or will.bike she will.win in-the-race
'If Maribel runs or bikes, she will win the race.'

(3) a. im nirce ve- im lo ~~nirce~~, kulanu ovdim bišvil ha-alpiyon
if will.want.1PL and if not ~~will.want.1PL~~, all.1PL work for the-thousandth
ha-elyon
the-upper

b. 'Like it or not, we all work for the upper thousandth percentile of the population.'

In this paper, we concentrate on the syntax and semantics of the idiomatic conjunctive unconditional.

(4) *The syntax of unconditionals*

a. **conjunctive** unconditionals (Hebrew)
beyn im … ve-beyn im… 'between if … and-between if…'

b. **disjunctive** unconditionals
'whether … or …' (English: Rawlins 2008, 2013; Yucatec Maya: AnderBois 2014; European languages: Haspelmath and König 1998)

Semantically, both conjunctive and disjunctive uncondionals are **conjunctive**, i.e. both (1) and (2) have the interpretation in (5):

(5) If we want it, we work for the upper thousandth percentile **and** if we don't want it, we work for the upper thousandth percentile.

In a sense, the syntax of conjunctive Hebrew unconditionals transparently reflects the conjunctive semantics of unconditionals. However, more needs to be said regarding the contribution of conjunction in the construction. At least for material implication, a conjunction of conditionals with the same consequent (e.g., (5)) is truth-conditionally equivalent to a conditional with a **disjunction** of the antecedents. Therefore, assuming compositionality, we actually expect the **English** syntax. But crucially, even in English, the semantics of the unconditional actually does not reflect the disjunctive syntax.

As shown by Alonso-Ovalle (2006, 2009), if one assumes the Lewis-Kratzer-Heim approach to conditionals, a disjunctive antecedent is not equivalent to a conjunction of conditionals, since the truth of the disjunctive conditional may formally depend on a single disjunct. Consider (6) below, a variation on an example by Nute (1975) that is discussed by Alonso-Ovalle:

(6) If we had had good weather this summer or the sun had grown cold, we would have had a bumper crop.

Intuitively, this sentence is false because, in the unlikely circumstances that the sun grows cold, we do not have a good crop at all. For the same reason, the corresponding conjunction of counterfactual conditionals is false (*If we had had good weather we would have had a bumper crop and if the sun had grown cold we would have had a bumper crop*). However, since on the Lewis-Kratzer-Heim approach we only consider worlds within the antecedent proposition that are most similar to the actual world, and therefore worlds where we have good weather, the disjunctive conditional in (6) comes out true in a semantics that constructs Boolean disjunction of the antecedents.

To avoid this problem, Alonso-Ovalle (2006, 2009) and, specifically for unconditionals, Rawlins (2008, 2013), propose a non-Boolean analysis of disjunctive conditionals (see section 4) that results in a conjunction of conditionals in their semantics. In the present paper we argue, building on the syntax of Hebrew, that the same truth conditions may arise for unconditionals through a very different mechanism.

2 Properties of Unconditionals

Rawlins (2008, 2013) identifies four semantic properties of unconditionals in English. We begin with the two at-issue meaning components and the exhaustivity presupposition. We illustrate them here in English, noting that they are also characteristic of Hebrew unconditionals.

I. *Relational indifference* (at issue)

The truth of the main clause is independent of the resolution of the issue in the antecedent. This is part of the truth conditional semantics of unconditionals. For example, the indifference can be negated, as shown in (7b):

(7) a. Whether Maribel walks or runs, she will win the race.

b. It's not true that whether Maribel walks or runs, she will win the race. It makes a difference whether she walks or runs.

II. *Entailment of the main clause* (at issue)

The truth of the main clause is entailed by the unconditional. This too is part of the truth conditional semantics of unconditionals:

(8) Whether the party is at John's or at Mary's, we will have a good time.
⇒
We will have a good time.

III. *Exhaustivity* (presupposition)

Within a given context, the antecedent propositions exhaust all the alternatives. This cannot be negated:

(9) Payment for work, whether high or low, is taxable. # But average pay is not taxable.

The fourth property Rawlins attributes to unconditionals is *mutual exclusivity*, the implication (a presupposition according to his analysis) that the alternatives mentioned are mutually exclusive. In (10), for example, it is implied that the options being considered are that the daughter come without the wife or the wife come without the daughter, but not that they both come (in that case there might not be enough room in the car).

(10) Whether he brings along his wife or his daughter, we have enough room in the car.

Rawlins (2013) proposes that mutual exclusivity is contributed by *wh*-words in English unconditional structures (e.g., *whether* in the example above).[5] He formalizes mutual exclusivity as a presupposition of non-overlap of the disjuncts relative to the *context set* (cs_c below), the set of worlds that are compatible with the shared public commitments in the conversation (Stalnaker 1978):

(11) $\forall p, p' \in [[\alpha]]^c. (p \neq p') \rightarrow \neg\exists w \in cs_c (p(w) \,\&\, p'(w))$,
Where α is a question denotation. (Rawlins 2013:138)

In the case of disjunctive unconditionals, (11) imposes the requirement that at most one of the disjuncts is true in any given conversationally accessible world, so an unconditional is predicted to suffer from presupposition failure if both disjuncts are true in some such world. This seems incorrect. The definition in (11) rules out perfectly felicitous unconditionals likes those in (12), which do not seem to presuppose non-overlap of the options.[6] (12) is a natural thing to say in a typical kind of situation in which one grows fat from just eating or just drinking, but also (or even more so) from doing both things. Similarly, (12) is not infelicitous (suffering from presupposition failure) in a context in which it is assumed that the party will also be fun if Barry and Helen both come.

(12) a. Whether you eat or drink, you (still) get fat.

b. Whether Barry or Helen come to the party, it will be fun.

But there is another sense of *mutual exclusivity* whereby unconditionals do have this property after all. The disjuncts in (12) are mutually exclusive in the sense that only situations in which one is true to the exclusion of the other matter for the truth of the unconditional. In (12), for example, what matters is whether just eating and just drinking are sufficient for one to grow fat. Situations in which one both eats and drinks are irrelevant (although in them, too, the consequent is true). Similarly, the truth of (10) is determined by situations in which only the daughter or only the wife come along. Situations in which they both come (in these, the consequent is false) are not taken into consideration.

Hebrew unconditionals behave similarly. (13) like (12), is felicitous (and true) in a context in which it is assumed that if either invitee comes, the party will be great, and likewise if both come. Only when the conjuncts in the antecedent are clefts, as in (13), does there seems to be infelicity in a context in which both may come. This aspect of the exclusive interpretation is arguably contributed by the cleft, not by the unconditional.

[5] Rawlins argues that all unconditional adjuncts in English are interrogatives (including *wh-ever* adjuncts of constituent unconditionals). He then implements Hamblin's question-answer semantics for the analysis of unconditionals.

[6] (12) is an example from Gawron (2001).

(13) a. beyn im yosi yavo ve- beyn im rina tavo,
between if Yossi will.come and between if Rina will.come

ha-mesiba tihye me`ula.
the-party will.be excellent

'Whether Yossi or Rina come, the party will be great.'

b. beyn im ze yosi še-yavo ve- beyn im
between if it.M Yossi that-will.come and between if

zo rina še-tavo, ha-mesiba tihye me`ula.
it.F Rina that-will.come the-party will.be excellent

'Whether it is Yossi or Rina that come, the party will be great.'

These data suggest that unconditionals do not require the set of antecedent propositions to be mutually exclusive "globally", i.e. in the context set, but "locally", when each of these propositions is interpreted.

A further point on which we depart from Rawlins's proposal is the source of the exclusive interpretation. Note that an assumption of exclusivity is necessary not just to make (10) true, but also to make its paraphrase with a conjunction of ordinary conditionals in (14) true. In other words, the worlds in which the daughter and the wife both come are excluded from consideration regardless of the presence or absence of *whether*.

(14) If he brings his daughter along we have enough room in the car, and if he brings his wife we (also) have enough room.

Since the analysis of mutual exclusivity is not the main focus of our discussion, we will not explore alternative formulations of it in detail. We merely point out that worlds in which the antecedent propositions overlap seem to be irrelevant for the truth of unconditionals, and that arguably the source of this exclusive interpretation does not reside in the unconditional per se, but arises from general properties of the grammar that are at work in interpreting unconditionals. Exclusive interpretation has been argued to be a characteristic of constructions involving alternatives more generally (see, e.g., Menédnez-Benito 2006, 2010 on universal free choice; Chierchia et al. 2008 on the exclusive particle *only* and its covert counterparts).

3 Analysis

In light of the preceding discussion, we propose a compositional analysis of Hebrew unconditionals with the following principal components:

- Conjunction of explicitly marked *im* 'if' conditionals, interpreted in accordance with the Lewis-Kratzer-Heim modal restriction approach.
- Boolean conjunctive analysis of *ve-* 'and'.
- Presupposition of exhaustivity introduced by the preposition *beyn* 'between'.

We present each of these components in turn in the following three subsections. We conclude in section 3.4 with a demonstration of how they combine to derive the correct interpretation of a conjunctive unconditional like (15):

(15) **beyn** im maribel telex ve- **beyn** im hi taruc, hi tenacéaħ b-a-taħarut
between if M will.walk and **between** if she will.run she will.win in-the-race
'Whether Maribel walks or runs, she will win the race.'

3.1 Conjunction of Conditionals

We interpret *im* 'if/whether' as *if* in this construction, and not as the interrogative complementizer *whether*, since each occurrence of *im* in the unconditional construction embeds a single proposition. *Whether*, on the other hand, embeds a disjunction of propositions, as in the English translation of (16). The disjunction can be viewed as a set of propositions (i.e., an alternative question).

(16) maribel tenacéaħ b-a-taħarut **im** hi telex ve- **im** hi taruc
M will.win in-the-race **if** she will.walk and **if** she will.run
'Maribel will win the race **whether** she walks or runs.'

Moreover, *im*, unlike *whether*, can head a conditional:

(17) maribel tenacéaħ b-a-taħarut **im** hi taruc
M will.win in-the-race **if** she will.run
'Maribel will win the race if/*whether she runs.'

Thus, the contribution of *im* 'if' is that of an *if*-clause restrictor to a modal operator (Lewis 1975, Kratzer 1978, 1981, 1991, Heim 1982). The modal operator in the logical form of a conditional is a covert necessity modal, as in the analysis of bare conditionals (Kratzer 1978). It is interpreted with respect to a modal base (MB) and an ordering source (OS), which we assume are both sets of contextually supplied propositions:[7]

(18) $[[\textit{if } p, q]]^{MB,OS} = [[\text{must}(p)(q)]]^{MB,OS} = \forall w\ (w \in \text{Best}_{OS}\ (\cap(MB \cup \{p\})) \rightarrow q(w)))$,
where for any set of worlds X, $\text{Best}_{OS}(X) = \{w \in X: \neg\exists w' \in X$ such that w' is a member of a proper superset of the OS propositions that w is a member of$\}$.

[7] We further assume that the ordering source is always able to select a set of "best" worlds (e.g., those most similar to the evaluation world) among those in the modal base. This assumption is not made by Kratzer.

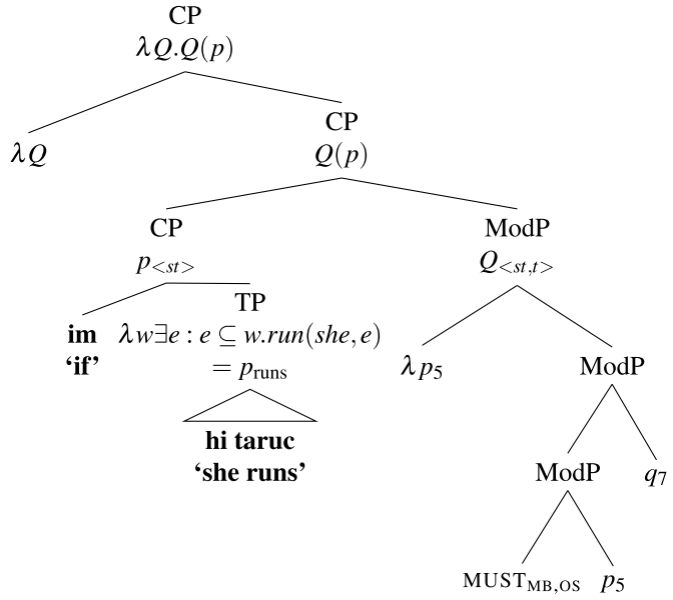
3.2 Boolean Conjunction

The conjunctive meaning of unconditionals is derived using the ordinary meaning of 'and', type-shifted to connect two <st,t>-type arguments.

(19) [[and^{if}]](λQ.Q(p'))(λQ.Q(p'')) = λQ.Q(p') & Q(p'')

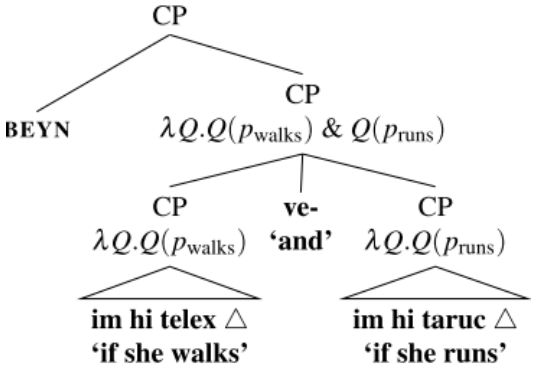
In the derivation of the Hebrew unconditional, the arguments conjoined by and^{if} are two conditionals with the structure shown in (20), conditionals that have the same consequent (q_7 in the tree) but different antecedents (the locally bound p_5). As can be seen in the denotations decorating the tree, *im* 'if' itself is analyzed as being semantically inert.

(20)



Two CPs of this type are conjoined by *ve-* 'and'. We assume that the preposition *beyn* 'between' is interpreted in the position immediately c-commanding the conjunction (see section 3.3 below).

(21)



Finally, we assume that a constituent corresponding to the core conditional structure (the highest ModP in the tree in (20)) moves via across-the-board movement out of the two conjuncts in (21), landing above the position of *ve-* 'and' and the preposition *beyn* 'between'. This is shown in more detail in section 3.4.

3.3 Presuppositions of *beyn*

The role of the preposition (P) *beyn* 'between' is to introduce the presupposition that the alternatives in its scope exhaust the contextually relevant possibilities. This is a property of *beyn* independently of unconditionals. We illustrate it by demonstrating how adding *beyn* to a comparative clause results in exhaustivity. In Hebrew, the basic form of the adjective, without additional morphology, can also be interpreted as comparative or superlative, depending on the context. The preposition *mi-* 'than' introduces the comparison class, which typically results in a comparative interpretation, as in (22). The introduction of *beyn* in (22) implies that the comparison class exhausts the relevant alternatives. Hence, the subject of comparison must be included among the alternatives. This yields a superlative interpretation:

(22) a. hizkarnu medina ha- ašira **mi**-medinot eropa
mention.PST.1PL nation.F which.is- rich.F **than**-nations.CS Europe
'We mentioned a nation which is richer than the European nations.'

b. hizkarnu medina ha- ašira **mi-beyn** medinot eropa
mention.PST.1PL nation.F which.is- rich.F **than-between** nations.CS Europe
'We mentioned a nation which is richest among the European nations.'

It is also a general property of *beyn* that it either precedes a phrase denoting a plurality of individuals (23), or marks each member of the plurality separately in a conjunction (23):

(23) a. beyn-enu
between-us
b. beyn-i ve- beyn-xa
between-me and-between-you
Both: 'between us'

We propose that the preposition *beyn* is only interpreted where it has access to a plurality. Thus, in cases like (23) as well as in unconditionals with conjunctive antecedents, *beyn* is interpreted immediately above the conjunction;[8] we mark its interpretation as the operator BEYN.

What is important is that, semantically, BEYN has access to a set of alternatives. In NP conjunctions like (23), the plurality denoted by the conjunction is represented as a set of entities (in this case {[[me]], [[you]]}, i.e. as a member of $D_{(e,t)}$; Landman 1989, Winter 1996, a.o.). BEYN operates on this set. In conjunctive unconditionals, BEYN is given an incompatible type of

[8] We remain agnostic as to whether it gets there by across-the-board movement out of each conjunct, or by other morphosyntactic means.

input, namely an <<st,t>,t>-type function (λQ.Q([[she walks]]) & Q([[she runs]]), the denotation of CP_4 in the tree below. We assume that this type mismatch is resolved by applying the *Minimum Sort* operation (Winter 1996), *min* for short, which extracts minimal sets from the conjunction:

(24) For each type τ, *min* is an operation of type <τt, τt> defined as follows:
min = $\lambda X_{\tau t} \lambda Y_{\tau}$. X(Y) ∧∀Z ⊑ Y (X(Z) → Z=Y) (Winter 1996: 351)

The *min* operator was motivated by Winter (1996) for the solution of a very different problem, as part of his account of collective predication of simple NP conjunctions (as in *John and Mary met*). Winter argues that in order for collective predication to apply successfully, the denotation of the conjoined NP is lifted from its standard generalized quantifier type <et,t> to type <<et,t>,t>. This allows it to combine with the collective predicate, e.g., [[meet]], which is of type <et,t>. Part of the lifting operation involves applying *min* to the generalized quantifier denoted by the conjunction. Its output can be thought of in Barwise & Cooper's (1981) terms as the generator of the principal filter denoted by the conjunction. For example, in a model where the domain of entities is a set of four individuals, {m,j,s,b}, and [[Mary and John]] = {{m,j}, {m,j,s}, {m,j,b}, {m,j,s,b}}, then *min*([[Mary and John]]) is the singleton set {{m,j}} (Winter 1996:354).

Returning to unconditionals, consider again our example (15), repeated here:

(25) **beyn** im maribel telex ve- **beyn** im hi taruc, hi tenacéaħ b-a-taħarut
between if M will.walk and **between** if she will.run she will.win in-the-race
'Whether Maribel walks or runs, she will win the race.'

Under our analysis, the conjunction in the antecedent denotes the function λQ.Q([[M. walks]]) & Q([[M. runs]]). Let's assume that, in set notation, it contains the following sets of propositions: the set {[[M. walks]], [[M. runs]]} (things that if Maribel does them, she wins the race) and the set {[[M. walks]], [[M. runs]], [[M. bikes]]} (things that Maribel dreams about doing). *Min* retrieves {{[[M. walks]], [[M. runs]]}} as the only minimal set in this case. This is almost what we want. We still need to gain access to the sole member of this set of sets, i.e., {[[M. walks]], [[M. runs]]}, which contains the relevant alternatives that BEYN operates on. This is done in (26) below.

We propose that BEYN places a requirement of exhaustivity on its input, be it a set given to it directly (in cases like (23)) or a set derived indirectly, by applying *min* to a conjunction (as in (15)). It does so by requiring that the given set of alternatives *exhaust* a contextually-determined domain: either the contextually-determined set of individuals $C_c(D_e)$ in (26a) below, or the contextually-determined set of worlds $C_c(W)$ in (26b), which can be thought of as consisting of the context set, as in Rawlins' account. The preposition *beyn* is otherwise semantically inert; it passes along its argument unmodified for further composition.

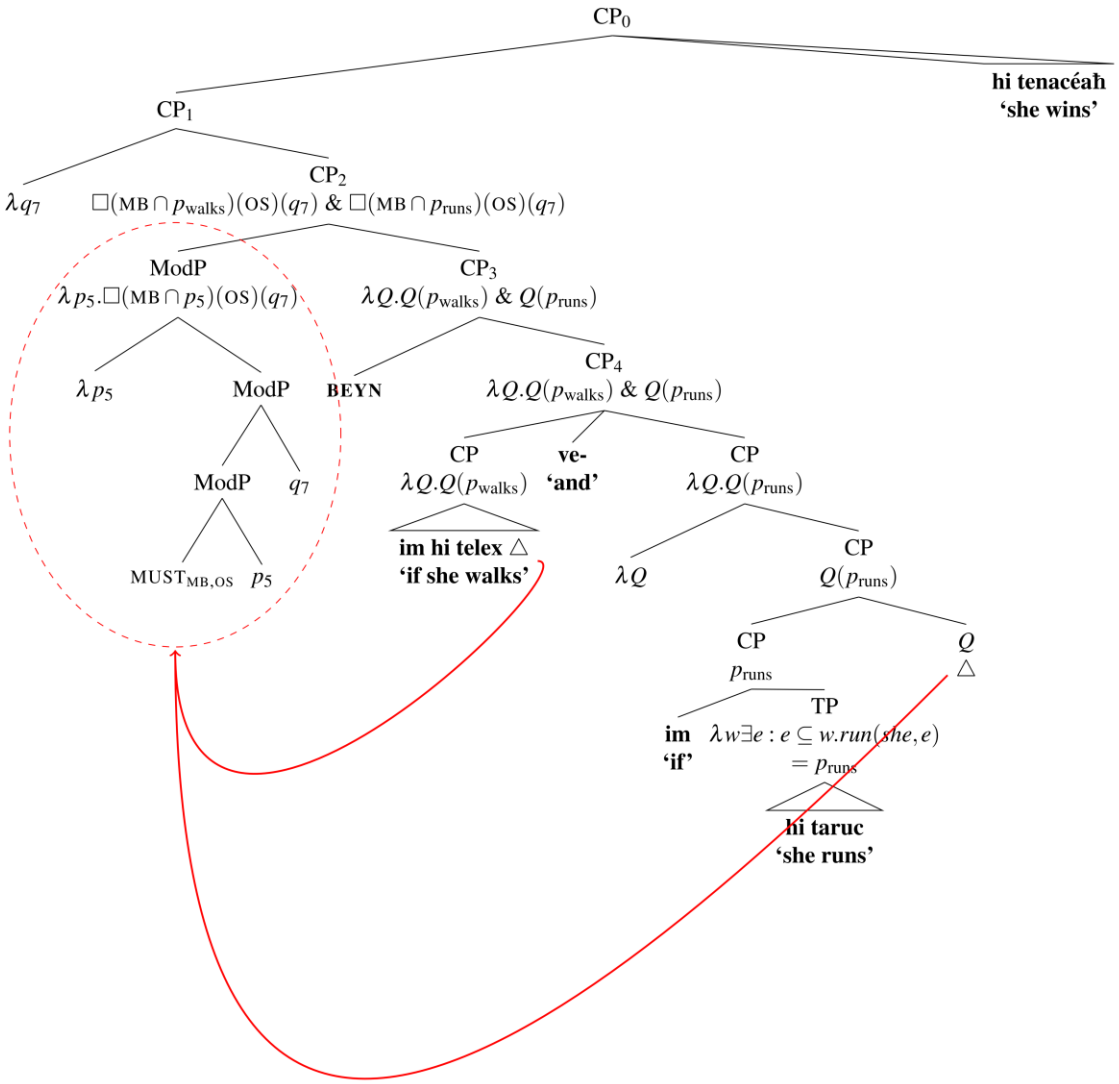
(26) $[[\text{BEYN } \alpha]]^{w,c} = [[\alpha]]^{w,c}$
Only defined for w,α and a domain restriction function C_c if:

(a) $\forall z \in C_c(D_e).\ z \in \alpha$ in case $\alpha \in D_{(e,t)}$

(b) $\forall w \in C_c(W).\exists p \in \iota X.\mathit{min}([[\alpha]]^{w,c})(X).\ w \in p$ in case $\alpha \in D_{(((st)t)t)}$

3.4 Sample Derivation

We present a sample derivation for our example (15).



(27) a. $[[\text{if M. walks/runs Q}]]^{MB,OS} = [[Q]]^{MB,OS}([[\text{M. walks/runs}]])$
where $Q_{<st,t>}$ is a variable left by the movement of a conditional structure ($\lambda p.must(p)(q)$)

b. λ-abstraction: $\lambda Q.Q([[\text{M. walks/runs Q}]])$

c. $[[\text{if M. walks and}^{if} \text{ if M. runs}]] = \lambda Q.Q([[\text{M. walks}]]) \& Q([[\text{M. runs}]])$

d. $[[CP_2]] = [\ \lambda Q.Q([[\text{M. walks}]]) \& Q([[\text{M. runs}]])\ ](\ \lambda p_5.must(p_5)(q_7)\ )$
$= must(([[\text{M. walks}]])(q_7) \& must(([[\text{M. runs}]])(q_7)$

e. $[[CP_1]] = \lambda q_7.must(([[\text{M. walks}]])(q_7) \& must(([[\text{M. runs}]])(q_7)$

f. $[[(25)]] = [[CP_1]]([[\text{M. wins}]])$
$= [\ \lambda q_7.must(([[\text{M. walks}]])(q_7) \& must(([[\text{M. runs}]])(q_7)\ ]([[\text{M. wins}]])$
$= must(([[\text{M. walks}]])([[\text{M. wins}]]) \& must(([[\text{M. runs}]])([[\text{M. wins}]])$

4 Comparison to Other Accounts of Unconditionals

The antecedent in the English version of our example (15), given in (28), has typically been interpreted as a question headed by the interrogative complementizer *whether* (Gawron 2001, Rawlins 2013):

(28) Whether Maribel walks or runs, she will win the race.

Although the construction is missing explicit marking of a conditional antecedent (i.e., *if*), it has typically been interpreted in the literature as a conditional. The conjunctive meaning is derived by Rawlins (2013) using pointwise application of the conditional interpretation to each member of the question set of alternatives. This set, in turn, is generated by interpreting the disjunction *or* not as a logical connective, but as a union operator that collects alternatives (Alonso-Ovalle 2004 et seq., Simons 2005). Then a universal quantifier is postulated, effectively to conjoin all the conditionals.

With explicit conjunction and conditional marking, the Hebrew conjunctive unconditional is special and more transparent semantically than its cross-linguistic counterparts. If our analysis is on the right track, it suggests that natural language may arrive at the characteristic meaning of an unconditional in more than one way, one with a normal 'and' and an element that contributes exhaustivity, and one with an alternative-based 'or'. We argue that our analysis is superior to a unified analysis whereby all unconditionals varieties, conjunctive and disjunctive, involve a question antecedent. Such a unified analysis would be *ad hoc* in treating the conjunction *ve-* 'and' (in our (15)) as a set formation operation identical to disjunction, not a propositional connective. Our analysis, in contrast, is faithful to a conjunctive 'and'.

Another alternative account (suggested to us by a reviewer) is that a covert 'even' is present in the unconditional, making it comparable to sentences like *If Maribel runs, and even if she walks, she will win the race.* This does not seem plausible, since, unlike in scalar 'even' sentences, there are no restrictions on the order of the conjuncts in the Hebrew unconditional. In particular, the second conjunct need not be the less expected one, cf. (15), where the order is actually reversed, but is as natural.

We end by noting that although *beyn* is crucial to unconditional semantics, Hebrew has two additional grammatical devices for creating unconditionality in conjunctive conditional adjuncts. The first is a prosodic device: *beyn* can be replaced by appropriate intonation, separate main stress on the two 'if'-clauses:[9]

(29) **im** maribel telex ve- **im** hi taruc, hi tenacéaħ b-a-taħarut
if M will.walk and **if** she will.run she will.win in-the-race
'Whether Maribel walks or runs, she will win the race.'

The second device is syntactic and involves clefting:[10]

(30) Maribel tenacéaħ b-a-taħarut, **im ze** be-halixa ve- **im ze** be-rica
M will.win in-the-race, **if it** in-walking and **if it** in-running
'Maribel will win the race, whether walking or running.'

5 Conclusion

We have proposed a compositional account of Hebrew unconditionals that sheds new light on the exponents of unconditionality cross-linguistically. We argued that Hebrew conjunctive UCs have the same semantic profile as disjunctive UCs despite varying significantly in their syntactic make-up: conjunction instead of disjunction, and two overt conditional markers where the English one can only be stipulated.

Our analysis has highlighted the following ingredients of unconditionality in Hebrew:

- the connective 'and' within the antecedent, which we analyzed as Boolean conjunction (reserving the analysis as a union operator to the disjunction *or*);
- the conditional connective 'if', which we interpreted in accordance with the modal restriction approach;
- the preposition *beyn* 'between', which we analyzed as introducing a presupposition of exhaustivity.

Future work should address a wider variety of Hebrew UCs, in particular those of the disjunctive variety. Is it possible to retain a Boolean analysis of disjunction in these cases, mirroring the analysis of conjunction supported in this paper, or are we led to assume, following previous cross-linguistic literature, that disjunction in UCs is non-Boolean even in Hebrew? This research program raises broader questions concerning the range of meanings of disjunction 'or' and conjunction 'and' in natural language.

[9] Special intonation is not required when the second conjunct is the negation of the first, as in (3) above.
[10] See also discussion of (13) above, an example which contains both clefting and *beyn*.

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