

# The semantic contribution of the past tense morpheme *kaan* in Palestinian counterfactuals

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## *Abstract*

*Reasoning along the lines of Iatridou (2000), we argue in this paper that the Palestinian morpheme kaan that is normally used to express semantic past tense actually denotes Non-Actual Veridicality, i.e. including kaan states that the proposition it applies to is true in a different world-time pair than the pair consisting of the actual world and the time of utterance. This means that kaan can be used both as a tense marker (expressing past tense) and as a mood marker (expressing counterfactuality). Given that every clause (with the possible exception of imperative clauses) must be tensed, this entails that kaan, in the absence of any other tense marker, must receive a temporal interpretation; but if the sentence receives its tense interpretation from some other particle, kaan acts as a mood marker. In the remainder of the paper, several consequences of this proposal are discussed.*

*Keywords: Tense, counterfactuality, mood, (non-actual) veridicality, complementizers*

## **1. Introduction**

Palestinian Arabic inflected verbs may come about in two types of forms: one type where the verb exhibits suffixal *phi*-morphology and where the inflected verb can stand on its own (1); and one type where the verb exhibits prefixal *phi*-morphology and where the inflected verb cannot stand on its own, but needs further morphological modification by a temporal-aspectual marker (2)-(5).

Examples of the first type are generally referred to as *perfective* forms, as they always receive a past perfective interpretation. The examples of the second type are referred to as *imperfective* forms, which, depending on the temporal-aspectual morpheme that modifies them, receive a habitual reading (3-4), a future reading (5) or a progressive reading (6).

- (1) *katb-at*  
 write-PFV.3SG.F  
 Past Perfective: ‘She wrote.’
- (2) \**tu-ktub*  
 IMPFV.3SGF-write
- (3) *b-tuktob*  
 B-write.IMPFV.3SG.F  
 Habitual: ‘She (usually) writes.’  
 Future: ‘She will write.’
- (4) *rah-tuktob*  
 FUT-write.IMPFV.3SG.F  
 Future: ‘She will write.’
- (5) *ʕam-tuktob*  
 PROG-write.IMPFV.3SG.F  
 Progressive: ‘She is writing.’

The bare imperfective form may, also, be preceded by the past tense morpheme *kaan*, yielding a past habitual.

- (6) *kaan-at*                      *tu-ktub*  
 KAAAN-3SG.F                      SG.F-write  
 Past Habitual: ‘She used to write.’

Yet, strikingly, modification by this past tense morpheme *kaan* does not always introduce a past tense interpretation, but may also give rise to a series of other readings. For instance, when the sentence in (1) is further modified by *kaan* the reading becomes counterfactual, as shown in (7).

- (7) *kaanat*                      *katb-at*  
 be.KAAN. 3SG.FEM      write-SG.FEM  
 Past counterfactual: ‘She would have written.’

Also, the temporally modified imperfective forms (3-5) may be preceded by *kaan*. Again, the readings at first sight do not seem to follow

straightforwardly. For instance, modifying the habitual/future imperfective (3) by *kaan* results in a non-past counterfactual only:

- (8) *kaanat*            *b-tuktob*            (hala? bukra/ \*mbaareh)  
 be.KAAN. 3SG.F B-write.IMPFV.3SG.F (now / tomorrow / \*yesterday)  
 Present/future counterfactual: ‘She would write.’

Modifying imperfectives preceded by future marker *rah* (4) by *kaan* yields either a past future or a counterfactual future:

- (9) *kaanat*            *rah*    *tuktob*  
 be.KAAN. 3SG.F    FUT    write.IMPFV.3SG.F  
 Past future: ‘She was going to write.’  
 Future counterfactual: ‘It would be the case that she would write.’

Finally, *kaan*-modification of the imperfective modified by the progressive marker *ʕam* only receives a past progressive reading:

- (10) *kaanat*            *ʕam*    *tuktob*  
 be.KAAN. 3SG.F    PROG    write.IMPFV.3SG.F  
 Past progressive: ‘She was writing.’

Base form	Verbal modifier	Reading yielded when <u>not modified</u> by past morpheme <i>kaan</i>	Reading yielded when <u>modified</u> by past morpheme <i>kaan</i>
PFV	-	Perfective	Counterfactual
IMPFV	-	*	Past habitual
	<i>b-</i>	Habitual / Future	Non-past counterfactual
	<i>rah</i>	Future	Past future / Counterfactual future
	<i>ʕam</i>	Progressive	Past Progressive

Table 1: Overview of the perfective and imperfective forms and their modifiers.

The central question that arises, thus, is this: what are the syntactic and semantic properties of each verbal form such that the readings listed in Table 1 can be explained? In this paper, we aim at formulating an answer to this question. In particular, we focus on the question as to why the combination *kaan* plus perfective morphology only yields a counterfactual reading; whereas the contribution of *kaan* plus the imperfective form is sometimes counterfactual and sometimes plainly temporal.

This paper is set up as follows. In section 2, we zoom in on the notion of counterfactuality and sketch an analysis that accounts for all the semantic effects listed in table 1. In section 3, we show that the proposed analysis predicts that different types of counterfactuals with respect to their counterfactual strength should be distinguished and we show that this prediction is correct. Furthermore, we introduce two types of conditional complementizers and show how our analysis predicts when conditional clauses that are introduced by these complementizers receive a counterfactual interpretation. Section 4 concludes.

## 2. The syntax and semantics of counterfactuality in Palestinian

The semantics of the verbal paradigm in Palestinian follows from three syntactic and semantic assumptions: (i) the clausal spine has the structure in (11); (ii) the head of TP must be overtly filled by a tense morpheme; (iii) past tense morphemes like *kaan* have a Non-Actual Veridicality presupposition that is linked to world-time pairs, as represented in (12). Once these three assumptions are adopted, the distinction between the temporal and counterfactual in the verbal paradigm follows transparently.

(11) MoodP > TP > AspP > vP

Basing ourselves on Iatridou's (2000) idea that past tense morphology denotes exclusion of the actual world/time, and building on the idea that the semantic effects of past tense morphology are presuppositional in nature (Ippolito 2003, Sauerland 2009, a.o.), we argue that past tense morphology presupposes Non-Actual Veridicality (NAV), which we define as follows:<sup>1</sup>

(12)  $||\text{NAV}|| P(w,t)$  presupposes that  $\exists w,t.[\langle w,t \rangle \neq \langle w^\circ, t^\circ \rangle \ \& \ P(w,t)]$ ,  
where  $t^\circ$  denotes the time of utterance and  $w^\circ$  the actual world

Informally, (12) states that NAV presupposes that its complement holds in some world-time pair, distinct from the pair consisting of the actual world and the time of utterance. In other words, for the NAV presupposition to hold, it is sufficient that only one of the variables  $w$  and  $t$  is distinct from either  $w^\circ$  or  $t^\circ$ . This means that, when speaking about the actual world (i.e. when the world variable is fixed to  $w^\circ$ ), *kaan* must refer to a time that is distinct from the time of utterance; whereas when the time variable is fixed to  $t^\circ$  then *kaan* must quantify over worlds that are not identical to  $w^\circ$ , hence yielding a counterfactual interpretation.

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<sup>1</sup> For a discussion around the notion of (non-)veridicality, see Giannakidou (1998) *et seq.*

The assumptions above are important in that they enable us to predict the distribution of temporal-aspectual elements in Palestinian and the readings that follow from their combinations. Two questions follow naturally, (i) when does the NAV feature of past morpheme, such as *kaan*, bring in real past tense readings and when can it refer to other worlds? And (ii) why is it that sentences containing *kaan* do not seem to give rise to a future reading even though its semantics does not come along with a restriction that states that the time variable must precede the time of utterance (NAV basically requires that if  $w = w^\circ$ ,  $t$  is different from  $t^\circ$ )?

### 2.1 Temporal and counterfactual interpretations of NAV-constructions

In addressing the first question, one has to keep in mind that we assume that every sentence is obligatorily tensed. If this assumption holds, then we predict that *kaan* introduces counterfactuality iff TP already hosts some other tense morpheme, in which case *kaan* is located in MoodP and yields a counterfactual interpretation.

This assumption also enables us to explain the distribution of the temporal-aspectual elements and why, for example, bare imperfectives are ruled out when they occur without modification but perfectives are not.

We argue, following Benmamoun's (2000) analysis of other Arabic dialects, that the perfective is a tense operator in Palestinian, but the imperfective is not. Hence bare perfective verbs occupy  $T^\circ$ , but bare imperfectives do not. Under the assumption that all finite clauses need to be tensed, i.e. they require the head of TP to be filled (with the possible exception of imperatives), this explains why bare imperfectives are ruled out. Since the head of TP in (13)b is unfilled, the sentence is ruled out.

- (13) a. [<sub>TP</sub> katb<sub>PFV</sub>-at<sub>i</sub> [<sub>VP</sub> t<sub>i</sub>]]  
 b. \*[<sub>TP</sub> [<sub>ASP/VP</sub> tu-ktub<sub>IMPFV</sub> ]]

On the other hand, when the imperfective is embedded under *kaan*, *kaan* must occupy TP and therefore *kaan* must be interpreted temporarily since no other tense morpheme applies to vP; further, as no other operator inducing counterfactual mood is included, then, by default, the interpretation of this sentence is taken to be about the actual world, as in (14).

- (14) kaanat                      tuktub  
 be.KAAN.3SG.F    write-IMPFV.3SG.F  
 Past Habitual 'She used to write.'<sup>2</sup>

<sup>2</sup> For some speakers, a Past Progressive reading is available as well. Yet, this is generally blocked due to the absence of the dedicated progressive marker *šam*. Thanks to Angeliek van Hout (p.c.) for bringing this up.

By contrast, in (15), the perfective is a tense operator, located in TP: following standard assumptions, we take the perfective to presuppose that the entire event is completed (ensuring that the event took place at a time distinct from  $t^\circ$ , as is evident by the incompatibility of present tense interpretation with perfective aspect, and attested crosslinguistically). This guarantees that bare perfectives are ruled in. Furthermore, if a perfective is modified by *kaan*, *kaan* must occupy MoodP, since TP is occupied. The semantic contribution of *kaan* is then that the completion of the event at  $t^\circ$  does not take place in the actual world, but in a world distinct from  $w^\circ$  – hence, the counterfactual reading.

- (15) *kaanat*                      *katb-at*  
 be.KAAN. 3SG.F    write-PFV.SG.F  
 (Past) Counterfactual: ‘She would have written.’  
 $\exists w, t. [\langle w, t \rangle \neq \langle w^\circ, t^\circ \rangle \ \& \ \text{write}(\text{she}) \text{ in } w \text{ is completed at } t^\circ]$

Thus, the (un)grammaticality of the examples in (1-2) and (7) is explained. But our proposal also applies to the other examples presented in section 1. For example, the future/habitual morpheme *b-*, we take it to be a tense marker yielding a semantic non-past, thereby presupposing that (subparts of) the event do(es) not take place prior to the time of utterance. Since we take it to be a temporal element, this marker *b-* thus also heads  $T^\circ$ , which grants its grammaticality and allows for its future and habitual readings, as shown in (16). Once an imperfective modified by *b-* is further embedded by *kaan*, we predict that the contribution of *kaan* then is that the non-pastness of the event must take place in a world different from the actual world, as is indeed the attested reading (17).

- (16) *b-tuktob*  
 B-write.IMPFV.3SG.F  
 Habitual: ‘She (usually) writes.’  
 Future: ‘She (will) write.’
- (17) *kaanat*                      *b-tuktob*  
 be.KAAN. 3SG.F    B-write.IMPFV.3SG.F  
 Non-past Counterfactual: ‘She would write.’  
 $\exists w, t. [\langle w, t \rangle \neq \langle w^\circ, t^\circ \rangle \ \& \ \text{write}(\text{she}) \text{ in } w \text{ not before } t]$

The future tense marker *rah* presupposes that the event takes place later than some time-interval  $t$ . Syntactically, however it is ambiguous between an absolute tense and a relative tense. As a relative-tense marker, it does not exclude co-occurrence with another tense marker. In this case, when it co-occurs with *kaan* it yields a future time reading relative to the past, and *kaan*

is interpreted temporally. On the other hand, as an absolute tense marker, co-occurrence with *kaan* forces *kaan* to receive a counterfactual interpretation.

- (18) *kaanat*                      *rah*      *tuktob*  
 be.KAAN.3SG.F    FUT    write.IMPFV.3SG.F  
 Past future: ‘She was going to write.’  
 Counterfactual future: ‘It would be the case that she would write.’  
 $\exists w, t. [\langle w, t \rangle \neq \langle w^{\circ}, t^{\circ} \rangle \ \& \ \text{write}(\text{she}) \text{ in } w \text{ after } t]$

Finally, the progressive marker  $\zeta am$  is not a tense operator, but purely aspectual in nature (therefore hosted in AspP/vP). Consequently, *kaan* must be hosted in TP and the sentence is about the actual world. *Kaan* receives a temporal interpretation only and the sentence lacks a counterfactual reading.

- (19) *kaanat*                       $\zeta am$       *tuktob*  
 be.KAAN.3SG.F    PROG              rite.IMPFV.3SG.F  
 Past progressive: ‘She was writing.’

To conclude, the semantics proposed for *kaan* as introducing non-actual veridicality and the semantics provided for the aspectual markers nicely predict all available readings for the constructions listed in (6-11).

## 2.2 Past for a future

The discussion above shows that *kaan* quantifies over world-time pairs and that additional morphology determines whether it receives a temporal or a modal interpretation. However, the definition in (12) states, in principle, that the time variable is distinct from  $t^{\circ}$ , not that it precedes it. Therefore, *kaan* does not only allow for a past tense interpretation, but for a future tense interpretation as well.

At first sight, this might appear to be an unwelcome result. However, rather than trying to principally rule out future reference by past tense morphology, we introduce some facts here that show that past tense morphology, in general, is not excluded from receiving a future tense interpretation. In order to illustrate this, we consider the following examples. (20) and (21) are taken from Palestinian Arabic (one with *kaan* and one with perfective morphology, since the Palestinian Arabic perfective is taken to be a past tense morpheme). (22) and (23) are taken from Dutch.

- (20) *wen*                      *kunna*                      *bukra, fi il-bet?*  
 where                      be.KAAN.1st.pl      tomorrow, in the-home?  
 ‘Where were we tomorrow, at home? (Meaning: Where are we going to be?)’

- (21) mʃiina ?  
 leave.PFV.1.PL  
 ‘Have we left?’ (Meaning: shall we leave?)
- (22) Aten jullie morgen mee?  
 Eat.PST you tomorrow along  
 ‘Were you joining us for dinner tomorrow?’
- (23) We kwamen bij jou vanavond, \*(niet waar)?  
 We come. PST at yours tonight, not true?  
 ‘Were we meeting at your place, won’t we?’

The interpretation of the past tense morphology in the examples above is not past, but future: in (22), for example, the speaker wants to make sure that the addressees will join them for dinner the next day. Also in (23), the speaker makes a claim about the future, but wants to finally verify that claim. In all these cases, the speaker produces an uncertain claim about the future. In this sense, (20)-(23) deviate from regular future expressions, which in Dutch can be uttered by either using present tense or a future auxiliary, as in (24) and (25) as alternatives for (23).

- (24) a. We komen bij jou vanavond  
 we come at yours tonight  
 ‘We are coming to your place tonight.’
- b. nihna b-inkuun fi il-bet bukra  
 we B-be.IMPV.1PL in the-home tomorrow  
 ‘We are going to be at home tomorrow.’
- (25) a. We zullen bij jou komen vanavond  
 we will at yours come tonight  
 ‘We’ll come to your place tonight.’
- b. nihna rah nkuun fi il-bet bukra  
 we FUT be.IMPV.1PL in the-home tomorrow  
 ‘We will be at home tomorrow.’

Both (24) and (25) lack the uncertainty requirement that the past tense sentences in (22) and (23) exhibit. Note that past tense sentences without some indication of uncertainty, cannot refer to the future, as in (26).

- (26) a. Ik kwam bij jou  
 I came at yours  
 \*‘I’ll come to your place.’



- b. kunna            fi il-bet (\*bukra)  
    KAAN.1PL    in the-home

Hence, these data show that, in principle, past tense morphology may refer to the future, but that future interpretation of past tense morphology seems to be dependent on speaker uncertainty. This means that, talking about the real world, future tense morphology refers to the future, but past tense morphology may refer to any non-present tense. However, only in cases of speaker-uncertainty, a future interpretation can be attested; in all other cases it appears to be blocked. We argue that this is the result of the fact that pairs of sentences minimally differing in exhibiting past tense morphology and future tense stand in an asymmetric entailment relation: sentences with future tense morphology thus entail sentences with past tense morphology, but not the other way round.

We argue that this asymmetric entailment relation between past tense and future tense morphology is what underlies the blocking of future readings in most usages of past tense morphology and is thus responsible for the difference between (22) and (23) on the one hand and (26) on the other.

Take Heim's principle of Maximize Presupposition, (27), which states that assertion of some weaker scalar proposition suggests that the speaker is not committed to the truth of the stronger one.

(27) *Maximize Presupposition*: If  $\psi$  and  $\phi$  are in an asymmetric entailment relationship where  $\psi$  entails  $\phi$ , but  $\phi$  does not entail  $\psi$ , then  $\psi$  and  $\phi$  are not equivalent, but are scalar alternatives. Assertion of  $\phi$  (the weaker alternative) communicates that the speaker doesn't believe  $\psi$  (the stronger alternative) to be supported by the common ground (cf. (Heim 1991), see also (Ippolito 2003 and Sauerland 2006)).

Now following *Maximize Presupposition*, (22) and (23) can only be felicitously uttered if the speaker does not believe the stronger alternative, (24) and (25), to be true – for instance, if there is reason for the speaker to have doubts that the future event holds. This requirement is indeed satisfied in (22) and (23), and the form with the weaker semantics, i.e. the past tense, may therefore receive a future tense interpretation.

As these observations are not particular to Palestinian Arabic but also extend to other languages, we conclude that the fact that our analysis of past tense morphology in terms of NAV allows a future tense interpretation for past tense morphology as well is a welcome result which speaks in favor of NAV.

### 3. Strategies of Counterfactual Expression in Conditionals

The counterfactual constructions we have discussed thus far typically appear in the consequent of counterfactual conditionals. Counterfactual conditionals in Palestinian are generally introduced by antecedents carrying counterfactual morphology, as well. In this section, we discuss the various morphemes that both the antecedent and the consequent of a counterfactual conditional may take, as well as the semantic differences among them.

Palestinian Arabic has two, mood-sensitive, conditional complementizers: *iza* and *law*. *iza* generally introduces indicative clauses while *law* introduces counterfactual clauses. For a conditional to be counterfactual when it is headed by *iza*, the antecedent must also contain a past tense marker such as *kaan* or the perfective form. If, by contrast, *law* heads the conditional, the past tense morpheme is optional. As has been partly discussed, the consequent of a counterfactual always contains the past tense marker *kaan*, followed by either a perfective or an imperfective preceded by the tense marker *-b*. This is illustrated in table 2 and further discussed and exemplified in (28) and (29).

Complementizer	Antecedent	Consequent
<i>IZA</i>	(i) <i>kaan</i> + V or V <sub>PFV</sub>	(iii) <i>kaan</i> + PFV (iv) <i>kaan</i> + <i>b-</i> + IMPFV
<i>LAW</i>	(ii) ( <i>kaan</i> +) V or V <sub>PFV</sub>	(iii) <i>kaan</i> + PFV (iv) <i>kaan</i> + <i>b-</i> + IMPFV

Table 2

In the next two subsections, we discuss the semantic differences that result from the different combinations modulo temporal readings and/or the strength of the counterfactual inference. We discuss counterfactual antecedents in section 3.1; and we turn to counterfactual consequents in 3.2.

#### 3.1 Counterfactual Antecedents

Take (28). The contrast between (28)a-b and (28)c-d shows that the conditional with *iza* + *kaan* or with *iza* and a perfective receives a past tense non-counterfactual interpretation or is interpreted as a present tense counterfactual. A counterfactual reading does not obtain when *iza* + *kaan* or *iza* + the perfective occurs in a clause with a past tense reference (28)a-b.<sup>3</sup> A

<sup>3</sup> A question that arises is why one instance of past tense morphology may not give rise to an interpretation where both the world and the time variable differ from  $w^\circ$  and  $t^\circ$  and thus yield a past tense counterfactual. We leave it open for further research whether the absence of the past tense counterfactual reading is due to

counterfactual reading is only yielded in that configuration with a non-past interpretation (28)c-d. In the latter, *kaan* occupies the Mood° position, whereas, in the former, *kaan* is hosted in T°. For a counterfactual reading with a past tense reference, an extra past tense morpheme is needed, as indicated in (28)e.

- (28) a. *iza kann (mbaareh) fi l-bet, ...*  
 IF be.KAAN. 3SG.M yesterday at the-home  
 Non-counterfactual Past Interpretation ‘If he was home, ...’
- b. *iza 2axad id-dawa (mbaareh), ...*  
 IF take.PFV.3.SG the-medicine yesterday, ...  
 Non-counterfactual Past Interpretation: ‘If he took the medicine, ...’
- c. *iza kann (hala2 / bukra) fi l-bet, ...*  
 IF be.KAAN. 3SG.M (now / tomorrow) at the-home,  
 Present/Future Counterfactual ‘If he were home, ...’
- d. *iza 2axad dawa , ...*  
 IF take.PFV.3.SG medicine , ...  
 Present/Future Counterfactual: ‘If he took medicine, ...’
- e. *iza kann-o kann (mbaareh) fi l-bet, ...*  
 IF past.3SG.M-he be.KAAN. 3SG.M yesterday at the-home  
 ‘If he were home, ...’

With *law*, on the other hand, as it is a counterfactual complementizer, a counterfactual reading readily obtains, thus rendering the past tense morpheme unnecessary to introduce counterfactuality (29a). Therefore, in a counterfactual clause introduced by *law*, the inclusion of *kaan* functions either to introduce past tense, as in (29)b, yielding a past counterfactual reading, or to strengthen the present counterfactual reading, as in (29)c, through an emphatic effect that is generally known to arise when redundant markers may be optionally included.

- (29) a. *law (halla?) huwwe fi l-bet, ...*  
 IF<sub>CF</sub> (now) he at the-home,  
 Present Counterfactual: ‘If he were home, ...’
- b. *law kann (mbaareh) fi l-bet, ...*  
 IF<sub>CF</sub> be.KAAN. 3SG.M (yesterday) at the-home,  
 Past Counterfactual: ‘If he had been home, ...’
- c. *law kann hala? fi l-bet, ...*  
 IF<sub>CF</sub> be.KAAN. 3SG.M (now) at the-home,  
 Emphatic Present Counterfactual: ‘Were he home, ...’

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some pragmatic blocking effect or whether it follows from something else. Thanks to Chris Kennedy (p.c.) for bringing this up.

Note that this brings along the expectation that examples of the form *law kaan kaan* should be able to arise as well, where one *kaan* receives a temporal interpretation and the other one strengthens the counterfactual reading of *law*. However, such instances are hardly attested, though not felt to be completely out.<sup>4</sup> Instead, the construction *law ?inno kaan* is used, where the subjunctive marker *?inno* yields the emphatic effect, as shown in (30).

- (30) *law inno/?kaan kaan mbaareh*  
 IF<sub>IRR</sub> SBJNCTV3SG.M/ be.KAAN. 3SG.M be.KAAN. 3SG.M (yesterday)  
 fi l-bet, ...  
 at the-home,  
 Emphatic Past Counterfactual: ‘Had he been at home,...’

So, when *kaan* is generated above TP, its NAV operator functions in Mood<sup>0</sup> to create a counterfactual complex together with the indicative complementizer *iza*, or to strengthen the counterfactual feature of *law*. This, in principle, guarantees that the semantic contribution of an antecedent containing *iza + kaan* is equivalent to that of an antecedent containing *law* with respect to their ability to introduce a counterfactual clause.<sup>5</sup> Nevertheless, the different forms of conditionals differ in the strength of the counterfactual inference. Antecedents introduced by *iza+ kaan* are felt to have a weaker non-actuality effect than those headed by *law*. That the conditional introduced by *law* (as a dedicated counterfactual marker) has a stronger counterfactual flavor than one that is introduced by *iza + kaan* (a default marker in combination with past tense) is not uncommon and is cross—linguistically more often attested (Nevins 2002, Ippolito 2004). We have shown, further, that the combination of *law + kaan* is, again, stronger than *law* due to the redundant inclusion of the past marker in the counterfactual clause.

### 3.2 Counterfactual consequents

The consequent of a counterfactual conditional varies as well: it must contain *kaan* in addition to either the perfective form or the imperfective form preceded by the modal *b*, as we have seen in (7) and (8).

Whereas a counterfactual construction with *kaan + b-imperfective* can have only a non-past reference, as in (31), a counterfactual construction including a perfective verbal form can have either a past or a non-past

<sup>4</sup> An anonymous reviewer suggests that the ruling out of *kaan kaan* in the antecedent might be due to a hapology constraint, blocking the occurrence of a string of two homophonous elements. However, because this string *kaan kaan* may appear in the consequent an account in terms of hapology does not work.

<sup>5</sup> But see Karawani (in progress) for an analysis where she suggests that although the modality is the same, the first universally quantifies over a set of expectations, while the second universally quantifies over a set of both expectations and beliefs.

reference time, (32). A perfective in a counterfactual consequent with a non-past reference more strongly suggests that the consequent is not true in the here-and-now than those consequents that display *b*-imperfective morphology.

This shows that our analysis for a past tense morpheme such as *kaan* may also extend to other past tense operators, such as the perfective. If that is indeed the case, then the data presented below follow again from our analysis of past tense morphemes as NAV operators. When both *kaan* and the perfective verb occur in a clause there are actually two NAV operators present (*kaan* and the perfective) which therefore may give rise to either a past counterfactual interpretation or a strengthened present tense counterfactual; whereas in *kaan* + *b*-imperfective, only one NAV operator is present in the consequent: *kaan*.

- (31) *kaan*                      *bi-rud*                                      3a t-telifon,      OK hala2  
 be.KAAN. 3SG.M MOD-answer.IMPV. 3SG.M    on the-phone,    OK now  
 / \* mbaareh  
 / \* yesterday  
 Non-past CF: ‘He would answer the phone.’

- (32) *kaan*                      *rad*                                      3a t-telifon,      OK hala2  
 be.KAAN. 3SG.M answer.PFV.3SG.M    on the-phone    OK now  
 / OK mbaareh  
 / \* yesterday  
 CF: ‘He would have answered the phone yesterday’  
 CF emphatic: ‘He would have answered the phone now’

	KAAN + <i>b</i> - + IMPFV	KAAN + PFV
Past interpretation	–	+
Present interpretation	+	+

Table 4: Counterfactual consequents and their temporal interpretation

#### 4. Conclusion

Reasoning along the lines of Iatridou (2000), we argue in this paper that the Palestinian past tense morpheme denotes Non-Actual Veridicality, as defined in (12). This means that this past tense morpheme can be used both as a tense marker (expressing past tense) and as a mood marker (expressing counterfactuality). Given that every clause (with the possible exception of imperative clauses) must be tensed, this entails that *kaan*, in the absence of any other tense marker, must receive a temporal interpretation; but if the sentence receives its tense interpretation from some other particle, *kaan* acts

as a mood marker. Syntactically, its consequence is that *kaan* may either head a TP or a MoodP.

A prediction that follows is that the assumption that *kaan* denotes NAV should enable it to refer to the future as well. Though unlikely at first sight, this prediction appears to be borne out. We present data, not only from Palestinian, but also from Dutch, that show that under certain pragmatic conditions it is not uncommon for past tense morphemes to have a future reference; nevertheless, it appears that past tense clauses may refer to the future only if the speaker is uncertain about the future claim. Moreover, it turns out that, in exactly those cases, real future tense morphology is infelicitous. Therefore we conjecture that past tense morphology (i.e. the morphology generally used to express past tense in a particular language) semantically always refers to any non-present tense, but that in most cases the availability of future tense morphology instead pragmatically blocks a future tense interpretation of the past morpheme. Consequently, only when future tense morphology may not be used, the past may refer to the future. This at least appears to be the case in Palestinian Arabic and Dutch, and it is subject of further study whether this applies more generally.

In section 3, we have shown that Palestinian Arabic has more than one way to express counterfactual conditions. One strategy involves the counterfactual complementizer *law*, the other one involves the indicative complementizer *iza*. In order to express counterfactuality with *iza*, past tense morphology in the antecedent is obligatory; whereas with *law* it is only optional. The two strategies come about with strength differences. Both *iza*-conditionals with past tense morphology and *law*-conditionals yield counterfactuals; *law*-conditionals with a past tense morpheme, however, are stronger. These facts are not surprising given that inclusion of optional, redundant material is known to yield emphatic effects. Similar effects show up in the consequents of counterfactual conditions.

Thus, to conclude, we argue that all interpretations involving past tense morphology in Palestinian Arabic, and possibly more languages, follow transparently, once it is assumed that past tense morphology actually denotes Non-Actual Veridicality.

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