Is the past tense real or fake in counterfactual structures?
(The case of Makkan Arabic)

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Abstract: This paper investigates semantic environments where the past tense loses its temporal interpretations in counterfactual structures. In such environments, the temporal reference no longer locates the speaker in the past, while eventuality also holds neither in the antecedent nor in the consequent clauses. In the literature on counterfactuals, there have been recent interest and debate among semanticists over whether the past in those structures, as in languages such as Modern Greek and English, should be considered as a "fake" or "real" past. In this paper, I extend the cross-linguistic investigation to empirical data from Makkan Arabic (MA). I observe that the past is not interpreted in particular environments, such as with the auxiliary kaan, the counterfactual complementizer law (if), or with the auxiliary yarait (wishing). For the MA data, I follow the mainstream of thought that captures the intuitions of the past in counterfactual structures via the application of a "back-shifting process" proposed by Ippolito (2013) and revisited by von Prince (2019).

Keywords: Makkan Arabic, past tense, real past, fake past, auxiliary kaan, a counterfactual complementizer law, auxiliary yarait.

هل الزمن الماضي حقيقي أو مزيف في التراكيب غير المتحققة؟ (حالته في اللهجة المكيّة المحكيّة)

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ملخص البحث: يتناول هذا البحث المواضع الدلالية التي يفقد فيها الزمن الماضي دلالته على الحدوث، في التراكيب التي يطلق عليها "counterfactuals" (غير متحققة). ففي هذا التراكيب، لم تعد الإحالة الزمانية للماضي (شكلًا) تموضع المتحدث في الزمن الماضي فعليًا. وأهم هذه المواضع هي الجمل الشرطية التي لا يرتبط فيها الفعل بحدث قد وقع في الماضي، أو يستحيل حدوثه في الحاضر أو المستقبل، والأفعال الماضية – في هذا السياق بالتحديد – تكون منافية لما يحدث في واقع جملة الشرط وجوابه. وفي الأدبيات السابقة حول هذه التراكيب – كما هي في لغات منها على سبيل المثال اللغة الإنجليزية واللغة اليونانية الحديثة – جدل واسعٌ بين متخصصي علم الدلالة حيالَ كون هذا الماضي "حقيقيًا" أو "مزيفًا". وقد وسّعتُ في هذا البحث نطاق النقاش اللساني البينيّ حول هذه الظاهرة ليشمل شواهد من اللهجة المكية المحكية. فتوصلت إلى أن الفعل الماضي في اللهجة المكية المحكية فاقدٌ لدلالته على المضيّ في مواضع معينة، منها: الفعل الماضي الناسخ (كان)، وأداة الشرط (لو)، والحرف الناسخ (ليت). وقد ارتأيت أن أفضل طريقة تتناسب مع طبيعة الزمن الماضي للتعامل معه في هذه المواضع الثلاثة هي معاملة الماضي على أنه ماضٍ "حقيقي" وذلك بتطبيق آلية "العودة إلى الوراء" (Back-shifting) التي اقترحهاIppolito (٢٠١٣) وعاود طرحها ونقاشها von Prince (٢٠١٩).

الكلمات المفتاحية: اللهجة المكية، الزمن الماضي، الماضي الحقيقي، الماضي غير الحقيقي/ المزيف، الفعل الماضي الناسخ (كان)، أداة الشرط (لو)، الحرف الناسخ (ليت).

Is the past tense *real* or *fake* in counterfactual structures?

The case of Makkan Arabic

In the literature of linguistics and philosophy, conditional sentences can be either indicative or subjunctive. The following example, which is widely cited in philosophy and semantics, illustrates the difference between the two moods:

(1) If Oswald didn't kill Kennedy, someone else did.

(2) If Oswald hadn't killed Kennedy, someone else would have.

(Ippolito, 2013, p.2)

The intuitions of example (1) do not contradict what happened in the actual world. The intuitions of example (2), on the other hand, oppose what happened to Kennedy in the real world. The antecedent clause of (1) is true relative to facts when Kennedy was assassinated, whereas the antecedent clause of (2) is false. As a result, conditional sentences like the one in (2) are known as "counterfactuals" (CF) (Kratzer, 2012b).

As we can see from the above-cited examples, the counterfactual conditionals are usually marked with restricted morphology. In English, this morphology is manifested through the use of past tense along with past perfect. The eventuality in (2) did not hold before the utterance time, and the antecedent is false even though the verbs inside the antecedent and the consequent clauses have past morphology. The behavior of the past in counterfactuals raises hotly debated questions among semanticists as to whether to view the past as "fake" or "real."

The above-briefed behavior of the past tense does not follow "feature checking" known in feature theory (Adger, 2003). What happens is that the morphosyntactic feature [past] is not fully interpreted in a syntactic derivation of a counterfactual sentence. In consequence of this checking failure, the past tense does not receive semantic interpretations in counterfactuals.

Considering this interesting observation, this paper explores semantic environments where the temporal feature of the past tense is not interpreted in the syntactic derivation relative to empirical motivation from Makkan Arabic (MA), which is a colloquial urban Arabic spoken in Makkah City, in western Saudi Arabia. In such semantic environments, the temporal reference of the past morphology does not locate the speaker before the utterance time. This interesting phenomenon has been discussed in the literature of counterfactual statements in many languages, such as Modern Greek (MG) (Iatridou, 2000), Englsih (Arregui,

2005; Ippolito, 2002, 2003, 2004; Schulz, 2017; von Fintel & Iatridou, 2023; von Prince, 2019), and Palestinian Arabic (PA) (Karawani, 2014). The following are some examples from Iatridou (2000) on MG:

(3) An $i\chi_1$e. pari to siropi θa $i\chi_1$e $\gamma_1$ini kala
If had taken the syrup. FUT had become better
'If he had taken the syrup, he would have gotten better.'

(Iatridou, 2000, p.233)

In (3), Iatridou explains that the speaker has a strong belief that the patient has not taken the syrup at some time in the past, which resulted in the patient not getting better in the past. Note that past perfect is used in the antecedent *p*-clause, while *would have* with past participle is used in the consequent *q*-clause. A counterfactual interpretation results and is understood to have a "past orientation", unlike the following example in (4):

(4) An pari   afro to siropi θa $\gamma_1$ini   kala
If   take/NPST/PRF   this   syrup   FUT become/PST/PRF. well
'IF he takes the syrup, he will get better.'

(Iatridou, 2000, p.234)

In (4), the speaker is giving an instruction to a caregiver at the moment of the utterance. The patient will get better in the future if he takes the medication. Note that the simple present should be used in the antecedent *p*-clause, whereas the simple future occurs in the consequent *q*-clause. Example (4) is understood to have a "present orientation."

On the other hand, Iatridou notes that the following example (5) shows impossible actions in the future. If we zoom in on the morphology of the antecedent *p*-clause, we find that the past tense is used. Even though the past is used in (5), the sentence invokes counterfactuality with a "future orientation."

(5) An eprene   afto to siropi θa $\gamma_1$inotan   kala
If   take/PST/IMP.   this.   syrup   FUT become/PST/IMP well
'If he took this syrup, he would get better.'

(Iatridou, 2000, p.234)

In (5), the past tense is also used in the antecedent if the event is less likely to take place at the moment of utterance and, therefore, less likely to occur in the future. If the event of taking the medication is less likely to occur at the moment of utterance, then the patient will be less likely to get better in the future. Iatridou categorizes future orientation counterfactuals into: "Future Neutral Vivid (FNV)" (p. 234), as in (4), and "Future Less Vivid (FLV)" (p.234), as in (5).

For the FLV, the simple past is used in the antecedent *p*-clause, and this simple past is claimed

to be "fake" (see Iatridou (2000) for further details on this topic).

While investigating this phenomenon, I tested Iatridou's examples and translated them into MA. The aim of this translation is to see if MA allows the use of past morphology in counterfactual sentences, and here are MA examples:

(6)law kaan   ?axað   ?a-dawa, kaan
law kaan.3.SG.M.PST. take.PRFV.3SG.M. the-syrup, kaan.3.SG.M.PST.
?atħssan
get.better.PRFV.3.SG.M.
'If he had taken the syrup, he would have gotten better.'
(MA, CF: Past Orientation)

(7)law yaxuð   ?a-dawaa, yitħassan
law   take.IMPRF.3.SG.M.   the-syrup, get.betterIMPRF.3.SGM.
'If he takes the syrup, he will get better.'
(MA, CF: Present Orientation)

(8)law ?axað   ?a-dawaa, kaan   yitħassan
law   take.PRFV.3.SG.M.   the syrup, kaan.3.SG.M.PST. get.better.IMPRF.3.SG.M.
'If he took the syrup, he would have gotten better.'
(MA, CF: Future Orientation)

Note that the appearance of an auxiliary *kaan* with either the perfective, as shown in (6), or the imperfective, as shown in (8), constitutes MA perfect inside the consequent clauses. For lack of space, the reader may refer to Alotaibi (2014) and Abusulaiman (2019) for more detailed discussions on the existence of perfect aspect within the aspectual system of some Saudi dialects.

Given the MA examples laid out above, I observe that the past tense does not refer to an event that occurred before the utterance time, as described in the literature of tense (Klein, 1994). This type of past exists in very restricted environments where temporal interpretations of the past are lost. When I explored the semantics of the MA past tense in these environments, I found, to the best of my knowledge, no Arabic syntactic research investigating the past tense in structures other than temporal ones in declarative sentences (Benmamoun, 2000; Bahloul, 2008; Aoun et al., 2010; Fassi Fehri, 2012). However, the phenomenon surrounding the past inside counterfactual structures has been recently studied in semantics. There has been a widespread debate that past tense loses its temporal interpretations in subjunctive conditionals to yield counterfactuality.

Accordingly, semanticists diverged in treating past tense in this case into two approaches. The first approach considers past tense as "fake" (Iatridou, 2000; Karawani, 2014; Schulz, 2017), while the second treats it as "real" (Arregui, 2005; Ippolito, 2002, 2003, 2004, 2005, 2006, 2008, 2013; von Prince 2019).

Observing this semantic behavior of the past in MA counterfactual structures, I raised the following major questions: (1) *What are these environments?* (2) *What are the interpretations obtained once the past tense loses its temporal interpretations?* Based on answers to these two questions, I also raise a third question pertinent to the intuitions of the past tense in these environments: (3) *Is MA past tense "real" or "fake" in these environments*? Thus, this paper will answer these three questions and offer a descriptive view of the past tense in non-temporal structures. Dealing with MA data, I will follow the second view of the past as "real" since it captures the intuitions of the past due to a "back-shifting process" proposed by Ippolito (2013) and revisited by von Prince (2019) (more discussion will be offered at the end of the paper).

This paper will proceed as follows. First, I present novel data that has not been investigated yet. Second, I discuss a recent controversy surrounding what is known as a "fake past" (Iatridou, 2000) versus a "real past" (Ippolito, 2002, 2003, 2004; Arregui, 2005). Finally, I conclude the discussion on the semantic behavior of the past tense in MA.

Empirical data:
In this section, I explore the semantic environments where the past tense is not fully interpreted in MA. My investigation exhibits three environments where this phenomenon occurs: with an auxiliary *kaan*, a counterfactual complementizer *law*, and an auxiliary *yarait*. Let us begin the discussion with the auxiliary *kaan*, and then talk about MA *law* and *yarait*.

The first semantic environment is with the auxiliary *kaan*, which is considered by Arabic syntacticians as a syntactic object that locates the speaker sometimes before the utterance time (Aoun et al., 2010; Bahloul, 2008; Benmamoun, 2000; Fassi Fehri, 2012; Ryding, 2005).This interpretation of the auxiliary *kaan* is widely discussed in the literature of tense and aspect in most varieties of Arabic, such as Lebanese, Moroccan, and PA. MA does not diverge from these varieties of Arabic, where the auxiliary *kaan* functions as a "tense marker" that signals past tense interpretation, as in (9):

(9)ʕomar kaan   mudeer l-madrasa gabil sanateen
Omar kaan.3.SG.M.PST. principal the-school before two.years

'Omar was the principal of the school two years ago.'

(MA: Past perfective)

However, further investigations reveal four other interpretations for the auxiliary *kaan*, such as past habitual, past progressive, past perfect, and counterfactual. First, for the past habitual interpretation, the combination of the auxiliary *kaan* with the present imperfective conveys a "past habitual" interpretation, as shown in (10):

(10) ʕomar kaan yiʒri ʕaʃra kilo
Omar kaan.3.SG.M.PST. run.3.SG.M.IMPRF. ten ki:lo

'Omar used to run ten kilos.'

(MA: Past habits)

Second, the auxiliary *kaan* with present imperfective can yield a "past progressive." This interpretation results when another event takes place at the same time in the past, as illustrated in (11).

(11) ʕomar kaan (bi)-yiʒri lamman ʔatasˤalt
Omar kaan.3.SG.M.PST.(prog.)-run.3.SG.M.IMPRF. when I.call.PST.PRFV.

'Omar was running when I called.'

(MA: Past progressive)

Third, when the auxiliary *kaan* is followed by a participle form of the verb, such as ʕaayʃ, as in (12):

(12) ʕomar kaan ʕaayʃ fi Ottawa min 2005
Omar kaan.3.SG.M.PST. live.3.SG.M.PST.participle in Ottawa since 2005

'Omar had lived in Ottawa since 2005.'

(MA: Past perfect)

The existence of the past perfect within the MA aspectual system was observed in Moroccan Arabic (Fassi Fehri, 2003), Syrian Arabic (Boneh, 2010), and Taif dialect (Alotaibi, 2014). Previously, I claimed that the past perfect is lexically encoded in MA by various auxiliaries that convey multiple reading of the past perfect (Abusulaiman, 2019).

Fourth, the auxiliary *kaan* can also combine with the past perfective to form the MA past perfect. The result of this combination is a "counterfactual interpretation" with past orientation, as shown in (13):

(13) kaan sakan fi Ottawa
kaan.3.SG.M.PST. live.3SG.M.PST.PERFV. in Ottawa

'He would have lived in Ottawa.'

(MA, CF: Past Orientation)

In (13), the auxiliary *kaan* functions as a "mood marker" that signals counterfactuality with past orientation. In (13), the auxiliary is treated as a mood marker that signifies counterfactuality with past orientation. When the auxiliary is treated as a mood marker, it signals subjunctive interpretations "irrealis", contra to indicative ones "realis." The irrealis interpretation places the reader in possible worlds where eventuality did not hold. Inside the irrealis proposition, its eventuality contradicts what happened in realis an "actual world" (for more details on "mood", the reader may refer to Palmer, 2001 and Portner, 2018).

The same example, but using *raħ* "will", might also express a "future orientation", as shown in (14):

(14) kaan raħ yiskun fi Ottawa
kaan.3.SG.M.PST. Fut. Live.3.SG.M.PRST.IMPRF. in Ottawa

'It would be the case that he would live in Ottawa.'

(MA,CF: Future Orientation)

Finally, the auxiliary *kaan* can be followed by a "root modal" *gdr*, or an "epistemic modal" *lzm*. Both the root modal *yigdar* in the present imperfective, as shown in (15), and its participle form *gaadir*, as shown in (16), have to follow the auxiliary *kaan*.

(15) kaan yigdar yisaafir Dubai, bus ma
kaan.3.SG.M.PST. able.to.3.SG.M.IMPRF. travel.3.SG.M.IMORF. Dubai, but not
saafar
travel.3.SG.M.PRFV.

'He was able to travel to Dubai, but he didn't.'

(MA, CF: Past Orientation)

(16) kaan gaadir yisaafir Dubai, bus ma
kaan.3.SG.M.PST. able.to.3.SG.M.Nom. travel.3.SG.M.IMPRF. Dubai, but not
saafar
travel.3.SG.M.PRFV.

'He was able to travel to Dubai, but he didn't.'

(MA, CF: Past Orientation)

Imagine a scenario where Omar is financially able to travel to Dubai, but for some reason, changed his mind in (15) and (16). The event of travelling to Dubai did not happen in the past; therefore, actuality entailments are blocked in (15) and (16). The structures presented in (15) and (16) give rise to counterfactual interpretations. With the epistemic modal *lzm,* the sentence will be formed as illustrated in (17). Again, a counterfactual interpretation is obtained with past orientation.

(17) kaan laazim tiʃudi ħaylek fi l-ʔixtibaar
kaan.3.SG.M.PST. laazim you.work.2.F.IMPRF. hard.you.2.F. in the-exam

'You must have worked hard for the exam.'

(MA, CF: Past Orientation)

The phenomenon surrounding the counterfactual interpretation of *kaan* were previously analyzed by Karawani and Zeijlstra (2013), Karawani (2014),

and Alxatib (2016) in PA. The common property between MA and PA is the interpretation that eventuality did not take place before the utterance time. As a result, counterfactual interpretation always results as in the above-illustrated examples with the auxiliary *kaan.*

The second semantic environment of MA past tense appears inside a counterfactual statement with the complementizer *law*, as in (18) and (19):

(18) law kaan   ʔaxað   ʔa-dawaa, kaan
    law kaan.3.SG.M.PST.   take.PRFV.3.SG.M.
the-syrup, kaan.3.SG.M.PST.
    ʔatħassan
    get.better.PRFV.3.SG.M.
'If he had taken the syrup, he would have gotten better.'
    (MA, CF: Past Orientation)

(19) law ʔaxað   ʔa-dawaa, kaan   yitħassan
    law take.PRFV.3.SG.M.   the   syrup.,
kaan.3.SG.M.PST. get.betterIMPRF.3.SGM.
    'If he took the syrup, he would have gotten better.'
    (MA, CF: Future Orientation)

Given the above-presented examples with the auxiliary *kaan*, it seems that *kaan* sometimes functions as a "mood marker" to invoke counterfactual interpretations either with past or future orientation. Keep in mind that the eventuality in the antecedent *p*-clause did not hold in the past.

The third kind of semantic environment of the past is with an auxiliary *yarait* followed by past perfective eventuality with past orientation. The MA *yarait* is known for expressing wishes whose realization is impossible in the past, present, or future. In Standard Arabic, the word *lait* is used for the same purpose (Al-Kuwari, 2011). More research is needed to explore and analyze MA *yarait*. In MA fast speech, MA native speakers use *yarait*, which has the same semantic interpretation and syntactic use that *lait* has.

(20) Yarait ʕomar saafar   maʕana fi sˤ-sˤayf
    Yarait   Omar   travel.3.SG.M.PST.PRFV.
with.us in the-summer
    'I wish Omar would have travelled with us in the summer.'
    (MA, Wish: Past Orientation)

Example (20) presents a phenomenon that has not received attention in the literature of Arabic counterfactual structures. The word *yarait* is commonly used among MA native speakers to talk about eventuality that could not happen or did not in the past. Again, the use of MA *yarait* and the past perfective invoke counterfactual interpretations. Remember that the past perfective event inside *yarait* statement has not taken place in the past.

In this section, I have explored all semantic environments where the past tense is not fully interpreted. Based on the MA data illustrated above, I found three significant environments: 1) with the auxiliary *kaan* and past perfective, 2) with the counterfactual complementizer *law*, and 3) with the auxiliary *yarait*. In the next section, I discuss the semantic behavior of the past in these environments.

Is the past tense *fake* or *real*?
In this section, I discuss a recent semantic debate surrounding the past tense in counterfactuals. As touched upon earlier, this debate is comprised of two views regarding the semantic of the past inside counterfactual statements. Afterwards, I present my own perspective on the past relative to the MA empirical data.

In the history of counterfactuality, philosophers and semanticists did not study temporal properties inside counterfactual structures (Anderson, 1951; Stalnaker, 1968; Lewis, 1973; Kratzer, 2012a). Iatridou (2000) is considered a pioneer semanticist in *The Grammatical Ingredients of CFs* for investigating the phenomenon surrounding past tense in MG counterfactuals.

Subsequently, other semanticists have built upon Iatridou's observation and offered various approaches to account for the loss of temporal interpretations in counterfactuals (Ippolito, 2002, 2003, 2004, 2006, 2008, 2013; Arregui, 2005; Karawani & Zeijlstra, 2013; Karawani, 2014; Schulz, 2017; von Prince, 2019; von Fintel & Iatridou, 2023).

Let us see how these views treat the past tense in counterfactual structures. The first view treats the past tense as "fake"- a view lead by Iatridou (2000), Karawani and Zeijlstra (2013), Karawani (2014), and Schulz (2017). The second view, on the other hand, treats the past tense as "real", as advocated by Ippolito (2002, 2004, 2006, 2008, 2013), Arregui (2005), and von Prince (2019).

In this paper, I follow the second view where the past tense is understood as real. As stated earlier, the discussion is restricted to exploring the structures where the past tense does not refer to a past event, rather than offering a formal account for the past tense in counterfactual structures in MA. In what follows, I begin the discussion with Iatridou's account and then explain the view that sees the past tense as "real" in these contexts.

For the fake past view, Iatridou (2000) observes that MG *if*-conditionals have various interpretations due to tense morphology in the antecedent and consequent clauses. Iatridou claims that the past is uninterpreted in the antecedent clause, and that

"perfect" is used in both the antecedent and consequent clauses. In such constructions, Iatridou observes that even though the past is used in the antecedent, it does not license any inferences that the eventuality referred to take place in the past.

To account for this phenomenon, Iatridou claims that the past tense motivates "feature exclusion" that can be interpreted in the domain of times or in the domain of worlds. As a result, we can have one of two possibilities. The first possibility is realized when the feature ranges over time, and is assigned the name "past tense" (Iatridou, 2000). The feature excludes the utterance time and refers to an eventuality that occurred in the past. In this case, we obtain a "past reading" of the event. In other words, the feature of [past] is fully interpreted as it has semantic interpretations. The second possibility emerges where there is reference to worlds that are different from the actual world. In this case, the past tense loses its temporal properties, and a counterfactual interpretation is obtained.

To summarize Iatridou's (2000) proposal, the excluding function can capture two interpretations of the past tense. The first interpretation is associated with an actual state of affairs that holds in the past (prior to the utterance time). This type of interpretation has a temporal flavor. The second interpretation does not yield a temporal effect but rather a counterfactual interpretation where the situation did/does not hold in the actual world.

Returning to MA, I deem Iatridou's analysis as a great contribution to the literature of counterfactuals and the past tense. However, it does not capture the empirical data of MA, as presented earlier. We have seen that the past tense is one ingredient for obtaining counterfactuality among other ingredients, such as the auxiliary *kaan*, the counterfactual complementizer *law,* and the auxiliary *yarait*. Accordingly, I claim that counterfactuality is lexically encoded in MA beyond the use of past morphology and perfect. To account for the MA past in these structures, the second view treats past tense as "real" in counterfactual statements.

Relative to the intuitions of the real past view, we shift our memory to the past as it is triggered by the use of past morphology in counterfactual structures. This backward shift proposal is attributed to Ippolito (2013) and von Prince (2019), and is known as a *back-shifting* process. They claim that the past perfect always triggers a *back-shifting* process. That is, it operates by shifting the speaker's perspective into the past. This process can be understood through the following English example:

(21) He could have won the race.

In (21), imagine a scenario where John participated in a race. He most likely was going to win the race, but he injured his knee a few seconds before reaching the finish line. If he did not have this injury, he could have won the race.

Based on possible worlds semantics, we start comparing these past events that share the same episodic past of the actual event, an event that took place before the utterance time in a real (actual) world. For some reasons, as shown in example (21), these similar historical events failed to occur in the past. There might be some circumstances that did not allow these events to hold in the past, contra to the actual event in the actual world. In other words, the comparison, which is created between the actual event and these past counterfactual events, is based on similar properties of the events, in lights of Stalnaker (1968) and Lewis (1973), and as developed later by Arregui (2005).

Building on the above proposal for the real past, I argue that the presence of past morphology as well as *kaan*, the counterfactual complementizer *law*, or *yarait* activates *back-shifting*. First, the process of *back-shifting* locates the speaker in the past. Second, once we *back-shift* into the past, this process triggers all historical worlds. These historical worlds have episodic pasts similar to the actual event in the evaluation world, in line with Arregui's (2005) notion of "similar worlds." Unfortunately, the events in these similar historical worlds fail to occur, in contrasts to the actual event in the evaluation world. This historical accessibility relation captures the intuitions of the back-shifting process where the speaker compares the actual world with similar accessible counterfactual worlds in the past.

Conclusion:

This paper offers a descriptive overview on the semantic environments where the past loses its temporal interpretations in MA. My investigation shows three different environments that all yield counterfactual interpretations. The first environment occurs with the auxiliary *kaan*. The auxiliary *kaan* can be used as a tense marker or as a mood marker. In this case of mood marker, *kaan* can combine with perfective, imperfective, or participial verb forms. I claim that this structure constitutes the MA perfect.

The second environment appears with the counterfactual complementizer *law*. I have shown that *law* always conveys counterfactual interpretations. The eventuality is not completed before the utterance time neither in the antecedent nor consequent clauses. The third environment arises with *yarait.* As with the counterfactual

complementizer *law*, the eventuality is not completed in the past, present, or future with *yarait*.

Relative to the recent debate among semanticists over the past in counterfactual statements, I conclude that the past tense is "real" even if it is not interpreted in counterfactual statements in MA. This conclusion is based on novel MA data, and intuitions of the past tense. Following Ippolito (213) and von Prince (2019), I assume that *back-shifting* process best captures intuitions about events in counterfactual worlds. These counterfactual worlds are historically similar to the real event in the evaluation world. However, for some circumstances, they fail to occur, unlike the actual event. Future research may focus on the computation of these three semantic environments relative to the past tense in MA. It should also lead to a formal account for the MA past in these counterfactual statements.

Acknowledgement:

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