Future reference and covert modality in Khalkha Mongolian[1]

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1 Introduction

This talk is concerned with the semantics of future reference in **Khalkha Mongolian** sentences like (1), where verbs are inflected with the morpheme **-n**.

(1) a. Tselmeg shüleg **unsh-in**
Tselmeg poem **read-n**

'Tselmeg *reads/will read a poem.'

b. Bat minii nuuts-iig **med-n**
Bat 1SG.POSS secret-ACC **know-n**

'Bat knows/will know my secret.'

Previous descriptions of Khalkha Mongolian describe *-n* as a non-past tense marker (e.g., Svantesson, 1991; Song, 1997; Binnick, 2011).

However, (1) demonstrates that the nature of its temporal reference is not straightforwardly non-past and is dependent on the Aktionsart:

- The eventive verb in (1a) can only be interpreted as future.

- The stative verb in (1b) can be interpreted as either present or future.

I propose that the future interpretation in (1) stems not from *-n* itself, but from the combination of two other morphemes (e.g., Mucha, 2016):

- A covert modal, which is overtly realized under negation.

- A covert prospective aspect.

My argument for this analysis consists of **the following four components**:

i) The morpheme *-n* is a present tense marker, rather than a non-past tense.

ii) Verbs that lack overt aspectual morphology are interpreted as perfective.

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iii) The future reading for sentences like (1) stems from the interaction between the present tense and the perfective aspect.

iv) Under negation, the verbs in (1) are inflected with the affix *-x*, which I analyze as a modal.

This work contributes to the broader literature on the semantics of temporal reference by expanding our existing typology of future marking (Mucha, 2016; Matthewson et al., 2022; Tonhauser, 2011; Pancheva & Zubizarreta, 2023).

Preliminary assumptions:

- Throughout this analysis, I will presuppose a Neo-Reichenbachian framework for tense and aspect (Reichenbach, 1947; Klein, 1994), as well as a Kratzerian approach to modality (e.g., Kratzer, 1981).

- For the purposes of illustration, I will be using a quantificational semantics for tense throughout this presentation (see Ogihara & Kusumoto, 2020 for an overview).

  – However, the following proposal is also compatible with a pronominal theory of tense (e.g., Partee, 1984).

Roadmap:
§2 Future reference with *-n* in Khalkha Mongolian
§3 Covert modality and *-x*
§4 Analysis
§5 Conclusion

2 Future reference with *-n* in Khalkha Mongolian

2.1 Aktionsart and *-n*

The interpretation of *-n* interacts with the Aktionsart in that the temporal reference of *-n* depends on whether the verb it attaches to is **eventive** or **stative**:

- Eventive: always future-oriented (2a-b).

- Stative: present- or future-oriented (2c-d).

(2) a. #Xulan odoo urgaml-iig **ucal-n**
Xulan now plant-ACC **water-n**

Intended: 'Xulan waters the plants now.'

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b. Xulan (margaash) urgaml-iig **ucal-n**
Xulan tomorrow plant-ACC **water-*n***
'Xulan will water the plants (tomorrow).'

c. Xöshöö odoo uul-in oroi-d **bairla-n**
statue now mountain-GEN top-DAT **be.placed-*n***
'The statue is placed at the top of the mountain now.'

d. Xöshöö margaash uul-in oroi-d **bairla-n**
statue tomorrow mountain-GEN top-DAT **be.placed-*n***
'The statue will be placed at the top of the mountain tomorrow.'

2.2 Aspect and *-n*

2.2.1 The perfective aspect in Khalkha Mongolian

To discuss the interactions between the interpretation of *-n* and aspect, it is first necessary to identify the aspectual nature of sentences marked with *-n* like (1-2).

I propose that sentences like those in (1-2), which possess no overt aspectual marking, are interpreted as **perfective**.

This can be shown by the diagnostic in (3), where a punctual RT is explicitly provided by a *when*-clause (Wurmbrand, 2014).

(3) a. Tuya tsetsleg-t xüree-nd ochi-x üye-d, Xulan urgamal **ucal-n**
Tuya garden-LOC park-DAT arrive-MOD time-DAT Xulan plant **water-*n***
'When Tuya arrives at the garden, Xulan will water the plants.' (Inchoative only)
≠ 'When Tuya arrives at the garden, Xulan will be watering the plants.'

b. Tuya tsetsleg-t xüree-nd ochi-x üye-d, Xulan urgamal **ucal-j**
Tuya garden-LOC park-DAT arrive-MOD time-DAT Xulan plant **water-CVB**
bai-x bol-n
AUX-MOD become-*n*
'When Tuya arrives at the garden, Xulan will be watering the plants.'

In (3a), Xulan's watering of the plants cannot be interpreted as happening at the same time as Tuya's arrival.

The only available reading is one in which these events are sequenced (i.e., an inchoative reading), which is characteristic of the perfective aspect.

In (3b), which is imperfective, the events are instead interpreted as simultaneous.

With the same logic, the perfectivity of these examples can also be demonstrated by (4), where a punctual RT is specified by an adverbial in a question context (Mucha, 2016).

(4) *Speaker A: Can I visit Oyuun tomorrow at 5:00pm sharp?*

a. Ügüi, Oyuun Ulaanbaatar luu **ayal-aj bai-x bol-n**
No, Oyuun Ulaanbaatar towards **travel-CVB AUX-MOD become-PRS**
'No, Oyuun will be traveling to Ulaanbaatar.'

b. #Ügüi, Oyuun Ulaanbaatar luu **ayal-an**
No, Oyuun Ulaanbaatar towards **travel-PRS**
Intended: 'No, Oyuun will travel to Ulaanbaatar.'

Based on these diagnostics, I conclude that when the verb is aspectually bare, it is interpreted as perfective[2].

This treatment of (1-2) leads to the following generalization for *-n*:

- Future readings arise for eventive verbs with no overt aspectual morphology (i.e., perfective).
- Both future and present readings arise for stative verbs with no overt aspectual morphology.

2.2.2 The interpretation of *-n* with other aspects

Unlike the aforementioned perfective sentences, *-n* can only result in present temporal reference for other aspects.

For example, an ambiguity between present and future reference does not arise for the **perfect** aspect (5).

The perfect in Khalkha Mongolian is formed via the auxiliary *baix* 'to be'. This auxiliary appears in a position above a past participle, and it is inflected for tense.

When this auxiliary is marked with *-n* (5), only present readings are possible.

(5) a. Tselmeg (#margaash) shüleg unsh-saŋ **bai-n**
Tselmeg (tomorrow) poem read-*sAŋ* **AUX-*n***

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[2]The same diagnostics hold for past-oriented sentences that lack aspectual morphology, shown in the Appendix.

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'Tselmeg has read a poem (#tomorrow).'
≠ 'Tselmeg will have read a poem tomorrow.'

    b.   Bat (#margaash) minii   nuuts-iig   med-seŋ   **bai-<u>n</u>**
      Bat (tomorrow)   1SG.POSS secret-ACC know-*sAŋ* **AUX-*n***

      'Bat has known my secret (#tomorrow).'
      ≠ 'Bat will have known my secret tomorrow.'

This generalization holds regardless of whether the verb is eventive (5a) or stative (5b).

The same is true of the **imperfective** examples in (6), for both eventive and stative verbs.

(6)   a.   Tselmeg (#margaash) shüleg unsh-ij   **bai-<u>n</u>**
       Tselmeg (tomorrow)   poem   read-CVB **AUX-*n***

       'Tselmeg is reading a poem (#tomorrow).'
       ≠ 'Tselmeg will be reading a poem (tomorrow).'

    b.   Bat (#margaash) minii   nuuts-iig   med-ej   **bai-<u>n</u>**
      Bat (tomorrow)   1SG.POSS secret-ACC med-CVB **AUX-*n***

      Lit.: 'Bat is knowing my secret (#tomorrow).'
      ≠ 'Bat will be knowing my secret (tomorrow).'

Summarizing the findings from §2.1-2.2:

- The temporal reference of *-n* depends on whether the verb it attaches to is eventive or stative.

    – Eventive: always future-oriented
    – Stative: present- or future-oriented.

- Future readings of *-n* only obtain for the perfective aspect.

    – Perfective: present- or future-oriented.
    – Otherwise: always present-oriented.

2.2.3   The present perfective paradox in Khalkha Mongolian

I argue that the data in **§2.1-2.2** indicate that *-n* should be treated as a present tense marker.

This is because if *-n* is a present tense, its behavior can then be readily explained by the cross-linguistic incompatibility between the perfective and present tense (e.g., Bennett & Partee, 1972; De Wit, 2016).

To illustrate this phenomenon, also referred to as the **'present perfective paradox'**, semantic entries for ⟦PRFV⟧ and ⟦PRS⟧ are shown in (7).

(7)   a. $⟦\text{PRFV}⟧^{g,c} = \lambda P.\lambda w.\exists e \; [\; \tau(e) \subseteq t \; \& \; P(e)(w) \;]$

    b. $⟦\text{PRS}⟧^{g,c} = \lambda p.\exists t' \; [\; t' = t_c \; \& \; p(t')(w_c)]$

The semantics of the perfective (7a) states that the duration of the event is contained within a time *t*. This time *t* is contributed by the present tense (7b) and is equivalent to the UT.

However, the UT is an instantaneous, fleeting point in time: for the UT to contain the duration of the event per how we construe perfective events (7a), the event would too need to be instantaneous[3].

- Outside of certain perception verbs (e.g., Dieuleveut, 2023), few verbal predicates are able to meet this condition, leading to the **widespread infelicity of the present perfective**.

Because a present perfective reading is infelicitous, languages vary in what aspectual readings[4] arise for sentences which are morphologically marked as present and perfective (see De Wit, 2016).

One empirical example is Russian (De Wit, 2016), where the present perfective morphology results in a future orientation like in (8).

(8)   On pri-det
     he   at.PRFV-come.PRS.3SG
     'He will come.'   (from De Wit, 2016)

I propose that, like Russian, present perfective sentences in Khalkha Mongolian give rise to future readings. The way these future readings arise will be described formally in §4.

2.3   Summary

- The morpheme *-n* is a present tense marker.

- As a result of the incompatibility between the present tense and perfective aspect, present readings are unavailable for eventive verbs marked with *-n*.

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[3]Ogihara (2007) presents an alternative account of the unavailability of the present perfective. Under this approach, a grammatical rule requires that if an event overlaps with the UT, then it must hold throughout the UT. This rule subsequently rules out the present perfective. The current analysis is compatible with both a Bennett & Partee (1972) and an Ogihara (2007) view of the present perfective paradox.

[4]Typically, other aspectual readings are thought to arise due to the (covert) presence of other aspectual morphemes, like with the habitual in English (e.g., Deo, 2009).

3   Covert modality and *-x*

If *-n* is strictly present tense, then what is contributing the future shifting in sentences like (1)?

To answer this question, I will:

- Overview current approaches to future reference in semantic theory (§3.1).

- Provide evidence from negation to argue for the presence of a covert modal in sentences like (1).

3.1   The semantics of future shifting

A growing body of literature argues that to achieve future shifting, two distinct morphemes are needed: one that is aspectual, and one that is modal (see Bochnak, 2019).

Under this decompositional view, 'future' morphemes like English WOLL (e.g., Abusch, 1997) are modal quantifiers, and are not specified for any reference time (9).

(9) $\llbracket\text{WOLL}\rrbracket = \lambda p.\lambda t.\lambda w.\forall w' \in \text{Acc}(w,t) \, [\, p(t)(w) \,]$

To achieve future reference in English, a modal quantifier like (9) must scope over a covert prospective aspect (10), which contributes the temporal shifting.

(10) $\llbracket\text{PROSP}\rrbracket = \lambda p.\lambda t.\lambda w.\exists t' \, [\, t < t' \,\&\, p(t')(w) \,]$

Based on this approach, Mucha (2016) proposes that languages may be **parameterized** in terms of whether the modal morpheme or the temporal morpheme (or both) surface overtly.

Typology of future marking:

- An **overt** prospective aspect and a **covert** modal: Gitksan (Matthewson et al., 2022), Paraguayan Guaraní (Tonhauser, 2011; Pancheva & Zubizarreta, 2023)

- A **covert** prospective aspect and an **overt** modal: English (e.g., Mucha, 2016; Kratzer, 2012), Medumba (Mucha, 2016)

- Both an **overt** prospective aspect and an **overt** modal: Hausa (Mucha, 2013)

In addition to the above types of future marking, an additional, previously unattested language is predicted: languages with both a **covert** prospective aspect and a **covert** modal.

I propose in this analysis that Khalkha Mongolian exemplifies this pattern.

- In sentences like (1), both morphemes are covert.

- Only in specific environments, like under negation, is the modal morpheme overtly realized.

3.2   Interactions with negation

In Khalkha Mongolian, tense and aspect interact with negation.

Verbal negation is achieved through the negative operator *-güi*, which is licensed by certain verbal suffixes.

-güi may appear above aspectual morphemes, like the habitual *-dAg* in (11a), but it is ungrammatical directly on a verbal root (11b).

- Thus, the overt presence of a verbal suffix (like *-dAg*) is a requirement for verbal negation to proceed.

(11)   a.   Shinee (ödör bür)   tsonx-oo   **tsewerle-deg**
         Shinee (day   every) window-REFL.POSS **clean-HAB**

         'Shinee cleans his windows (every day).'

     b.   Shinee (ödör bür)   tsonx-oo   **tsewerle-deg-güi**
         Shinee (day   every) window-REFL.POSS **clean-HAB-NEG**

         'Shinee doesn't clean his windows (every day).'

     c.   *Shinee (ödör bür)   tsonx-oo   **tsewerle-güi**
         Shinee   (day   every) window-REFL.POSS **clean-NEG**

         Intended: 'Shinee doesn't clean his windows (every day).'

However, negation is not licensed by all verbal suffixes. Most notably, *-güi* may not appear with tense markers, including *-n* (see 12).

- Negation is lower in the functional spine than tense in Khalkha Mongolian.

- Examples like (12) show that verbal negation cannot host suffixes which appear in a higher position than the negator.

(12)   a.   Margad (margaash) zurag **aw-n**
         Margad (tomorrow) photo **take-*n***

         'Margad will take a photo (tomorrow).'

     b.   *Margad (margaash) zurag **aw-n-güi**
         Margad   (tomorrow) photo **take-*n*-NEG**

         Intended: 'Margad won't take a photo (tomorrow).'

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c. *Margad (margaash) zurag **aw-güi-n**
Margad (tomorrow) photo **take-NEG-*n***

Intended: 'Margad won't take a photo (tomorrow).'

Verbal negation is not available with overt tense marking but still requires an overt verbal suffix to be licensed. Because of this, in order to negate sentences like (12a), -*güi* instead follows a different suffix: -*x*, like in (13).

(13)   Margad (margaash) zurag **aw-ax-güi**
Margad (tomorrow) photo **take-*x*-NEG**

'Margad won't take a photo (tomorrow).'

Despite a morphological asymmetry on the surface, (12a) maintains an interpretive relationship with (13) (i.e., p vs. ¬p).

The -*x* morpheme has been given various descriptive labels in the Mongolic literature, as an irrealis mood (e.g., Song, 1997; Svantesson, 1991) or an infinitival/future (e.g., Binnick, 2011).

Drawing from these past characterizations, I present evidence to suggest that -*x* is a modal quantifier.

3.3   A family resemblance with modals

Outside of negation, -*x* appears in constructions which implicate modality.

One such construction is **counterfactual conditionals**:

- In order for a counterfactual interpretation to obtain, the -*x* morpheme must be present in the consequent.

This is shown by (14). While (14a) is interpreted as a counterfactual, (14b) is interpreted as an indicative conditional.

(14)   a. Uyanga em   uu-saŋ bol ter ilüü **deerde-x** bai-saŋ
Uyanga medicine take-*sAŋ* COND 3.SG more **improve-*x*** AUX-*sAŋ*

'If Uyanga took the medicine, she would've felt better.'

b. Uyanga em   uu-saŋ bol ter ilüü **deerde-seŋ**
Uyanga medicine take-*sAŋ* COND 3.SG more **improve-*sAŋ***

'If Uyanga took the medicine, she felt better.'

The finding in (14) is not unexpected if -*x* is thought to have a similar semantics to WOLL:

- In English, as well as Modern Greek, a counterfactual interpretation is only possible with a WOLL-like morpheme in the consequent (e.g., Iatridou, 2000).

Additionally, **the position of -*x* influences its interpretation**, as with other modal quantifiers:

- When -*x* appears in a high position, it is interpreted as epistemic (15).

(15)   *Context: Every day at noon, Enxjin takes a break from work to go on a walk. Right now, it is noon. Thus, …*

Enxjin alxa-j   bai-Gaa **bai-x**
Enxjin walk-CVB AUX-IPF **AUX-EPIST**

'Enxjin must be walking.'

This positional difference, too, is captured under a modal analysis of -*x*:

- Cross-linguistically, epistemic modals are thought to appear in a high position, scoping over tense, while root modals take scope under tense (e.g., Cinque, 1999; Hacquard, 2009).

Further, negation is unable to scope above -*x* when it is in a high position (16). This is consistent with other epistemic modals cross-linguistically (e.g., Von Fintel & Iatridou, 2003).

(16)   *Context: Enxjin is your coworker who is a bit lazy. You know that every day at noon, Enxjin takes a break from work to take a long nap. Right now, it is noon. Thus, …*

*Enxjin alxa-j   bai-Gaa **bai-x-güi**
Enxjin   walk-CVB AUX-IPF **AUX-EPIST-NEG**

Intended: 'Enxjin must not be walking.'

Additionally, -*x* itself does not enforce future-shifting.

This is demonstrated by the presence of -*x* in the backward counterfactuals in (17):

- Both of these counterfactuals involve **backward temporal shifting**.

- This is made explicit by the inclusion of a present-oriented temporal adverbial in their antecedents and a past-oriented temporal adverbial in their consequents.

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(17) a. Xervee önöödör gazar möstei bai-saŋ bol öchigdör xuitei **bai-x**
  if today ground icy AUX-*sAŋ* COND yesterday cold **AUX-*x***
  bai-saŋ
  AUX-*sAŋ*
  'If there was ice on the ground today, it would have been cold yesterday.'

  b. Xervee önöödör gadaa chiigtei bai-saŋ bol öchigdör boroo **oro-x**
  if today outside wet AUX-*sAŋ* COND yesterday rain **enter-*x***
  bai-saŋ
  AUX-*sAŋ*
  'If it was wet outside today, it would have rained yesterday.'

Thus, I propose that *-x* is not specified for any RT, and, like English WOLL, is a modal quantifier.

- Based on the flexibility of modal flavor for *-x*, I propose that *-x* has an unspecified modal base.

- Its modal base receives specification by virtue of its conversational background, which is contextually supplied (e.g., Kratzer, 1981).

3.4 Summary

- Because tense (i.e., *-n*) cannot appear overtly with negation, the morpheme *-x* surfaces in order to license the verbal negator.

- I argue that *-x* is a modal.

4 Analysis

To achieve future reference with *-n* in Khalkha Mongolian, I propose that both a temporal and modal element are necessary.

In §2, I have argued that *-n* is a present tense marker rather than non-past. The semantics for ⟦PRS⟧ are repeated from (7b) in (18).

(18) ⟦-*n*⟧^{g,c} = ⟦PRS⟧^{g,c} = λp.∃t' [t' = t$_c$ & p(t')(w$_c$)]

In the absence of a non-past tense, I conclude that **a null prospective aspect** morpheme (19) is necessary to introduce a future time interval (repeated from 10).

(19) ⟦PROSP⟧^{g,c} = λp.λt.λw.∃t' [t < t' & p(t')(w)]

Following cross-linguistic work on the future (e.g., Mucha, 2016; Pancheva & Zubizarreta, 2023), I treat the prospective aspect as **high aspect**, thus relating the RT introduced by *-n* to a future temporal interval.

It is necessary that the prospective is high aspect because, as seen in §2, a perfective aspect morpheme is present in the structure.

The semantics for ⟦PRFV⟧ are repeated from (7a) in (20).

(20) ⟦PRFV⟧^{g,c} = λP.λw.∃e [τ(e) ⊆ t & P(e)(w)]

I analyze -x as a modal quantifier (21), which is interpreted as circumstantial in the relevant future-shifting cases[5].

- The overt realization of *-x* under negation provides evidence that a modal component is part of the make-up of the future.

(21) ⟦MOD⟧^{g,c} = λp.λt.λw.∀w' compatible with all the circumstances in w at t [p(t')(w')]

Under this account, both the modal and prospective aspect are covertly present in perfective sentences with *-n*, resulting in a future reading.

A structure depicting this is shown in (22) for (12a, repeated in 22c).

(22a) shows the felicitous structure, which results in future shifting. (22b) shows the infelicitous present perfective structure.

(22) a. [$_{TP}$ [$_{ModP}$ [$_{AspP}$ [$_{AspP}$ [$_{vP}$ Margad take photo] $_{Asp}$ PRFV] $_{Asp}$ PROSP] $_{Mod}$ MOD] $_T$ PRS]

  b. #[$_{TP}$ [$_{AspP}$ [$_{vP}$ Margad take photo] $_{Asp}$ PRFV] $_T$ PRS]

  c. Margad (margaash) zurag **aw-n**
  Margad (tomorrow) photo **take-*n***
  'Margad will take a photo (tomorrow).' (12a, repeated)

The relevant truth conditions for a sentence like (12a) are shown in (23), which yield the expected interpretation.

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[5]For the purposes of illustration, I treat *-x* as having a circumstantial modal flavor in (21). However, as shown by the availability of epistemic readings in (15-16), *-x* itself is unspecified w.r.t. its modal base.

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(23) $[\![(12a)]\!]^{g,c}$ is true iff $\exists t'$ [t' = t$_c$ & $\forall w'$ compatible with all the circumstances in w$_c$ at t$_c$ [$\exists t''$ [$\exists e$ [$\tau(e) \subseteq t''$ & t' < t'' & take(e, Margad, photo, t'', w')]]]]]

Because of the aforementioned morphosyntactic restrictions on what can host a Tense head in Khalkha Mongolian, tense is covert for negated constructions.

This interacts with the need for an overt TAM morpheme to license negation, resulting in the modal -*x* being overtly realized under negation in sentences like (13).

In (24), I show the proposed structure for negated sentences.

(24) a. [$_{TP}$ [$_{NegP}$ [$_{ModP}$ [$_{AspP}$ [$_{AspP}$ [$_{vP}$ Margad take photo] $_{Asp}$ PRFV] $_{Asp}$ PROSP] $_{Mod}$ MOD] $_{Neg}$ NEG] $_T$ PRS]

   b. Margad (margaash) zurag **aw-ax-güi**
      Margad (tomorrow) photo **take-*x*-NEG**

      'Margad won't take a photo (tomorrow).' (13, repeated)

The relevant truth conditions are shown in (25). In (25), -*güi* negates the quantification over times introduced by the prospective aspect[6].

(25) $[\![(13)]\!]^{g,c}$ is true iff $\exists t'$ [t' = t$_c$ & $\forall w'$ compatible with all the circumstances in w$_c$ at t$_c$ [$\neg\exists t''$ [$\exists e$ [$\tau(e) \subseteq t''$ & t' < t'' & take(e, Margad, photo, t'', w')]]]]]

The truth conditions for the negated example in (25) differ only from their affirmative counterpart in (23) via the presence of a negative operator.

Thus, this analysis captures the interpretive relationship between affirmative and negative constructions in Khalkha Mongolian, despite their morphological asymmetry.

5   Conclusion

- This analysis accounts for the distribution of future readings of -*n* in Khalkha Mongolian, while maintaining its status as a tense marker.

  - Future readings are captured as the result of covert morphology present in the structure.

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[6]While verbal negation often scopes over times cross-linguistically, as it does here, I note that other negators are possible: in Bengali, while the negator *ni* behaves similarly to the above, *na* negates quantification over events (Ramchand, 2004).

- The current work add to the cross-linguistic typology of future marking (e.g., Matthewson et al., 2022; Mucha, 2016; Pancheva & Zubizarreta, 2023; Tonhauser, 2011), contributing an example of a language where:

  - The prospective aspect is covert.

  - The modal, though typically covert, can overtly appear in specific environments (i.e., under negation).

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7 Appendix

7.1 Perfective diagnostics with past-orientation

(26) a. Tuya tsetsleg-t   xüree-nd ochi-x   üye-d,   Xulan urgamal
     Tuya garden-LOC park-DAT arrive-MOD time-DAT Xulan plant
     ucal-saŋ
     water-*sAŋ*

   'When Tuya arrived at the garden, Xulan watered the plants.' (Inchoative only)
   ≠ 'When Tuya arrived at the garden, Xulan was watering the plants.'

   b. Tuya tsetsleg-t   xüree-nd ochi-x   üye-d,   Xulan urgamal
     Tuya garden-LOC park-DAT arrive-MOD time-DAT Xulan plant
     ucal-j   bai-saŋ
     water-CVB AUX-*sAŋ*

   'When Tuya arrived at the garden, Xulan was watering the plants.'