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Foreword

This monograph contains a number of the talks given at the 41st Annual Meeting of the Berkeley Linguistics Society, held in Berkeley, California, February 7-8, 2015. The conference included a General Session and the Special Session *Fieldwork Methodology*. The 41st Annual Meeting was planned and run by the second-year graduate students of the Department of Linguistics at the University of California, Berkeley: Kenny Baclawski, Anna Jurgensen, Spencer Lamoureux, Hannah Sande, and Alison Zerbe.

The original submissions of the papers in this volume were reviewed for style by Anna Jurgensen and Hannah Sande. Resubmitted papers were edited as necessary by Anna Jurgensen and Kenny Baclawski, and then compiled into the final monograph by Anna Jurgensen. The final monograph was reviewed by Spencer Lamoureux. The endeavor was supported by Alison Zerbe's management of the Berkeley Linguistic Society's funds for publications.

The BLS 41 Executive Committee
July 2015

Reference to situation content in Uyghur auxiliary *bolmaq*

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This paper introduces the Uyghur auxiliary *bolmaq* (or *bol-*), and offers an account for its meaning by which it links the situation that it describes to certain propositional content in the discourse. In essence, the auxiliary is used when the described event satisfies some of that content, thus providing a role for content outside of attitude contexts. We explore and test our account using targeted elicitation, and are able to pinpoint very subtle effects that previous accounts overlooked.

1 Observations

We begin by introducing the auxiliary *bol-* and the pertinet facts concerning it and the Uyghur language.

1.1 Uyghur auxiliaries

Uyghur is a minority language of China, in the Turkic family. It has an extensive set of auxiliaries that have been impressed from lexical verbs. These auxiliaries follow the verb, which is marked with an *-İp* suffix.

(1) Subj Obj V-Suffix **Aux**-TAM-Agr

(2) *Alim nan-ni ye-p* ***baq**-ti-∅*
Alim bread-ACC eat-*İp* **look at**-PAST-3S
'Alim tried to eat the bread'

Often, the auxiliary's lexical meaning has been completely bleached. For instance, the lexical verb *baq*, 'look at' is used in (2) as an auxiliary meaning 'try to'. Table 1 presents a list of 5 of the 20 auxiliaries that follow this pattern.

verb root	lexical use	auxiliary use
baq	look at	try to V
két	go	unexpectedly V
tur	stand	keep V'ing
chiq	go up	not thoroughly V
al	take	take the chance to V

Table 1: Subset of Uyghur auxiliaries

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The auxiliary form bears a strong surface resemblance to converbial forms, because both employ *-İp* marking on the verb. However, their meanings are quite distinct. In (3), the first two uses of converb *-İp* adds a new event and pushes the narration forward. The use of *-İp* with *oqu-p* does not, because it has an auxiliary (*bol-*, which itself bears a converbial *-İp*). The last use, on *qayt* 'return', is a converbial use that links two verbs under a single event description.

(3) *men mektep-ke bér-**ip**, ders oqu-p bol-**up**, qayt-**ip** kel-di-m*
I school-DAT go-IP class read-IP AUX-IP return-IP come-PAST-1S
'I went to school, took the class, and went back.'

1.2 Auxiliary *bol-* and what it doesn't mean

Out of these nearly two dozen auxiliaries, this paper focuses solely on *bol-*. As a lexical verb it means 'become'.

(4) *Alim er **bol**-di-∅*
Alim man **become**-PAST-3S
'Alim became a man'

As an auxiliary, though, its meaning is rather more subtle. (Tömür 2003: 425) describes it as indicating that the described event was "carried out in full." Later, (Bridges 2008: 37) describes it as showing that "the action definitely happened and was completed". This kind of meaning can be characterized as 'completive', and it was based on cases like (5), where the *bol*-marked event is complete.

(5) *kél-idighan-lar-ning hämmi-si kél-ip **bol**-di-∅, majlis-ni*
come-IMPF-PL-GEN everyone-3S.POSS come-IP **bol**-PAST-3 meeting-ACC
bashla-yli
begin-1P.OPT
'All who are coming have arrived, so let's begin the meeting.'

However, event completion cannot form a definitive component of the meaning of auxiliary *bol-*, since it can be used with events that failed to culminate (6), or with events that have yet to culminate (7).

(6) *bu kitab-ni oqu-p **bol**-mi-di-m*
this book-ACC read-IP **bol**-NEG-PAST-1S
'I haven't read this book / I didn't read this book'

(7) *Ete bu kitab-ni oqu-p **bol**-imen*
tomorrow this book-ACC read-IP **bol**–FUT.1S.COP
'Tomorrow, I will finish this book'

If completion is not the crucial factor, what is? One might suspect volition— the event is caused willingly by the agent. That suspicion cannot account for context where you don't know there even was an agent, yet *bol-* is felicitous.

Context:
You and a friend enter a room you haven't been in. You look and see a window with a hole in it.

(8) *derize buz-ul-up* ***bol****-di-∅*
window break-PASS-IP **bol**-PAST-3s
'The window's broken.'

It also cannot account for cases where *bol-* is infelicitous even with clear agent intent.

(9) *# dëngiz-gha besh minut qara-p* ***bol****-du-m*
sea-DAT five minute look at-IP **bol**-PAST-1s
'I looked at the ocean for five minutes'

The failure of (9) suggests at first a role for telicity in the distribution of *bol-*. However, the auxiliary is often infelicitous despite clear lexical telicity, *e.g.*, the semelfactive in (10) and the achievement in (11).

(10) *# yötel-ip* ***bol****-du-m*
cough-IP **bol**-PAST-1s
'I coughed'

(11) *# put-um-ni sun-dur-up* ***bol****-du-m*
leg-1s-ACC break-CAUS-IP **bol**-PAST-1s
'I broke my leg'

These examples reinforce the point that completion is not a crucial factor for *bol-*, for *contra* the characterization of Bridges (see above), these actions definitely happened and were completed, yet *bol-* is infelicitous.

1.3 Context-dependency and methodology

These facts let us rule out a number of possible meanings for *bol-*, but while they narrow our domain of inquiry, the central question remains unresolved. A crucial step in the right direction emerges from observations demonstrating that the use of *bol-* depends on the context, not selection by the predicate. The same sentence is infelicitous given the context of (12), but fine with the context of (13).

Context:
You were in a meeting and you coughed, causing some embarrassment.

(12) *# yötel-ip* ***bol****-du-m*
cough-IP **bol**-PAST-1s
'I coughed'

Context:
You got an annual physical, and the doctor asked you to cough.

(13) ✓ *yötel-ip* ***bol****-du-m*
cough-IP **bol**-PAST-1s
'I coughed'

Since the context makes such a distinct difference in felicity of *bol-*, our investigation will rely on semantic fieldwork techniques focused on targeted, context-based elicitation (Matthewson 2004; Bochnak and Matthewson 2015). This will allow us to narrow down our truth-conditions and elucidate a meaning.

Our elicitations were carried out over the fall of 2014, at the University of Kansas. The tasks involved were judgment, production, or translation. In our testing, each sentence involved recounting things that had happened in the context provided, as if the speaker were telling a friend about it the next day. Exceptions to this method are noted. The context below exemplifies this technique for English, with a judgment task. The aim of this example is to test the truth-conditions of existential quantifiers, to gain negative evidence. The context thus sets up a scenario where the hypothesized truth-conditions aren't met, so sentences asserting that they are met should be rejected by any native speaker, while those that meet the conditions will be accepted. That is, we predict (14a) to be infelicitous and (14b) to be felicitous, and that is precisely the result we get.

Context:
You entered the coffeeshop carrying nothing.

(14) a. *# I carried a box into the coffeeshop.*
b. ✓ *I went in to the coffeeshop empty-handed.*

Applying this method, we quickly found that *bol-* is felicitous for other infelicitous examples we've seen, depending on the context. Events of breaking one's leg can be described with *bol-* if they're on purpose (16), but not if they're on accident (15). The sentences are identical, but their judgments are not.

Context:
You tripped and broke your leg yesterday.

(15) *# put-um-ni sun-dur-up* ***bol****-du-m*
leg-1s-ACC break-CAUS-IP **bol**-PAST-1s
'I broke my leg'

Context:
You are trying to avoid army service, and realized that being hurt would get you out of having to do it. So you decided to break your leg, and succeeded.

(16) ✓ *put-um-ni sun-dur-up* ***bol****-du-m*
leg-1s-ACC break-CAUS-IP **bol**-PAST-1s
'I broke my leg'

As pointed out, though, volition does not suffice, as it does not license *bol-* in (17). If it is satisfying doctor's orders, though, *bol-* is accepted.

Context:
You were walking along the beach and turned to look at the ocean a bit.

(17) # *déngiz-gha besh minut qara-p* ***bol****-du-m*
ocean-DAT five minute look at-IP **bol**-PAST-1S
'I looked at the ocean for five minutes'

Context:
Your doctor included in your treatment plan that you should look at the ocean for five minutes every day.

(18) # *déngiz-gha besh minut qara-p* ***bol****-du-m*
ocean-DAT five minute look at-IP **bol**-PAST-1S
'I looked at the ocean for five minutes'

1.4 A generalization

Given these different contexts, we can draw up a generalization over the felicitous ones. What brings these together?

(19) **Generalization**

- Part of a checklist (physical exam)
- Part of a self-made scheme (get out of the army)
- Part of an imposed regimen (doctor's orders)

In each case, the event is contributing to the completion of some intended outcome or some list that must be completed. Perhaps, then, *bol-* is referring to this outcome or list.

Before drawing up an actual hypothesis, we make one additional observation. The listener must be aware of the outcome or list that the speaker is referring to. Otherwise, *bol-* is infelicitous.

Context:
You plan to get hurt to get out of army service, and you keep it a secret. You break your leg, and the next day, your friend sees you in a cast and asks what happened.

(20) # *put-um-ni sun-dur-up* ***bol****-du-m*
leg-1S-ACC break-CAUS-IP **bol**-PAST-1S
'I broke my leg'

One audience member at BLS 41 inquired whether the causative in the leg-break examples was playing a role in the felicity of *bol-*. However, the distinction in judgments between (16) and (20) demonstrate that direct causation is not the crucial factor. Instead, contextual factors beyond the event itself are what matter.

2 Analysis

Our analysis will employ the following heuristic: Given a proper framework and testing method, we should be able to derive all the uses and functions of *bol-* from its denotation and structure (McKenzie 2014). We will propose the following claim:

(21) **Basic claim:**
The Uyghur auxiliary *bol-* can be used only if the described event satisfies the content of an anaphoric situation.

We discussed our testing method in section 1.3, so we will now lay out our framework.

2.1 Framework: Situation semantics

We employ a possibilistic situations semantics (Kratzer 1989, 2007), which is much like the now-standard semantic framework from Heim and Kratzer, supplemented by a class of objects known as situations. A situation is defined as a part of a possible world. Situations thus include events, individuals, locations, and worlds. For this paper, we will focus on event-like situations.

Table 2: Ontology

S	= the set of situations
W	= the set of all possible worlds ($W \subseteq S$)
$\wp(S)$	= the set of propositions (the power set of situations)
$\wp(W)$	= the set of world-based propositions (the power set of worlds)

Situations are represented in syntactic structures by silent pronouns (Stanley and Szabó 2000; Percus 2000), and can be anaphoric or bound. Propositions are defined as properties of situations (not just of worlds):

(22) $[\![\textit{It's raining}]\!]$ = λs. it's raining in s

Assertions involve Functional Application of a proposition to a situation (the part of the world the assertion is made about). This use of situations is known as a topic situation, paralleling Klein's (1994) topic time. In (23), the identity of the situation s_1 restricts the assertion to whatever part of the world is at issue. Facts about any situation besides s_1 are irrelevant for the computation of truth-conditions of (23).

(23) $[\![s_1\ \textit{It's raining}]\!]$ = [λs. it's raining in s](s_1) = it's raining in s_1

The process is the same as that which occurs when one asserts that Garfield loves lasagna— The DP meaning $[\![\textit{Garfield}]\!]$ restricts the assertion to facts about Garfield. Facts about other individuals are irrelevant.

2.2 A first attempt at an analysis

For our first attempted analysis, we begin with the observations in (19), that each felicitous use of *bol-* involves a part of some other situation: The cough situation is part of a check-up situation, and so forth. The first proposal is that *bol-* denotes a part-of relation between an event situation (s_E) and an outcome situation (s_O).[1]

(24) **(Not final) definition of *bol-***
$[\![bol\text{-}]\!] = \lambda s_E \lambda s_O .\ s_E \leq s_O$

If the plan is complete, (24) is suitable as a meaning for *bol-*. However, when the plan is not complete, defining *bol-* with a simple part-of relation runs afoul of our observations. Notably, it cannot apply to scenarios where the event situation is part of a plan that has not come to fruition. For instance, in our leg-break scenario (16), if the leg-break is complete, but the rest of the plan is not, the use of *bol-* is still felicitous.

The reason this is problematic has to do with the nature of situations. Defined as they are, as parts of a possible world, no situation can be part of more than one possible world. Likewise, no situation can be part of a situation that is not a part of its world. Applied to our example, it renders (24) untenable. If the event situation has happened, it is in the actual world. If the plan is not complete, then the complete plan situation is not (yet) in the actual world. Therefore, the event situation cannot be part of the complete plan situation. We cannot save this by proposing that the event situation is in the actual situation corresponding to the incomplete part of the plan situation, since we only shift the problem— the actual incomplete part cannot be a part of the non-actual plan situation.

Although the event marked with *bol-* can be generalized descriptively as describing part of a larger event, formally, an event situation cannot be part of an unrealized plan situation.

2.3 Content situations & satisfaction

The generalization in (19) is that each event is part of a plan situation, which the listener is aware of, but which might not yet be completed. One interesting fact we observe about this is that the outcomes of these plans might not be real, but the formulations of the plans are. We will thus be able to link the event situation to the plan via its formulation.

We will forge this link between event situations and plan formulation situations via the content of the latter. The formulation (or acceptance) of a plan or a list is a situation that has propositional content; the content is the plan or list itself. We build the notion of situations with content upon observations that individuals have content as well (Kratzer 2006; Moulton 2009).

(25) *The **rumor** that the governor will resign*
content : The governor will resign

(26) *The **claim** that the mayor will replace her*
content : The mayor will replace her

[1] Strictly speaking, this definition does not specify the type of situations involved; the description as 'event situation' and 'outcome situation' are mnemonic names to summarize the idea at hand.

Situations can have content as well, and that content consists of a set of propositions. In the case of a formulation situation, the content is the plan or list itself.[2] We will need to show how to get from a situation to its content. Kratzer's idea is to sever the modality of attitudes from the attitude predicates, instead placing it in the complementizer. The sense of content here is of a single proposition, which serves as the argument to the complementizer, which equates the worlds the proposition holds in with the set of worlds compatible with the content-bearing individual (or situation).

This approach serves well when the content is reduced to one proposition, and when compatibility is required. But with *bol-*, we propose contents that consist of a set of propositions. Let us define a function CONT from situations to some particular set of propositions.

(27) **Situation content:**
For any situation with content s_c,
$\textsc{cont}(s_c)$ = the set of propositions serving as the content of s_c.

The membership of $\textsc{cont}(s_c)$ depends on the nature of s_c. If our formulation situation creates the leg-break plan, the content (i.e. the plan) would be the smallest set of propositions that must hold for the intended outcome of the scheme to take place. An example of this is in (28).

(28) a. s_c = the formulation of the scheme

b. $\textsc{cont}(s_c) = \left\{ \begin{array}{l} \{ s \mid \text{I leave home in } s \}, \\ \{ s \mid \text{I have a broken leg in } s \}, \\ \{ s \mid \text{I check in with the army in } s \}, \\ \{ s \mid \text{I get an exemption in } s \} \end{array} \right\}$

Another distinction between this approach to content and that of Kratzer and Moulton is that we do not need full compatibility. In a modal sentence where the prejacent is the intended outcome of s_c, the worlds where the outcome obtains will be all those compatible with $\textsc{cont}(s_c)$. For instance, the content would serve as the modal base for a sentence like *I will break my leg*. Speakers of a language expect the entirety of a modal base to hold when making modal suppositions. But with *bol-*, one can't guarantee that the entire content holds— *e.g.*, breaking your leg does not entail the success of the rest of the scheme. Instead, only *some* propositions in $\textsc{cont}(s_s)$ hold, so our meaning cannot rely on modality, or even compatibility. We need to relate the proposition to the content in a different way.

We propose the relation of **content satisfaction** instead:

(29) **Content Satisfaction**
A situation s satisifies the content of a situation s_c if and only if $s \in \cup\textsc{cont}(s_c)$

Note that this is a relation between situations. If a situation exemplifies or holds of a proposition, it satisfies the content of any situation whose content contains that proposition. For instance, realizing any single part of the plan in (28b) will satisfy the content of the formulation situation in (28a). Our account of *bol-* will rely on this relation.

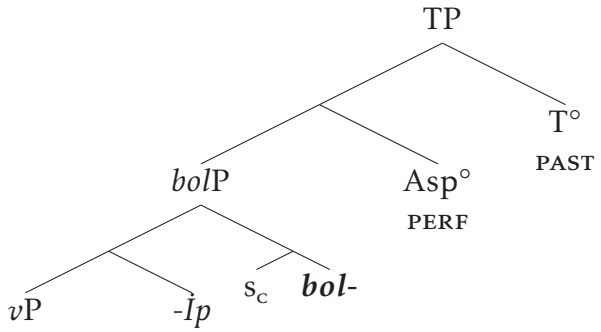
[2]It may end up being more accurate to say that the formulation situation produces an individual that contains content, rather than to say that the situation itself contains content.

2.4 The denotation of *bol-*

Before we provide an ultimate denotation for *bol-*, we will need to situate it in the syntactic structure. The structure in (29a) lays this out, based on (16). The verb phrase is the complement of *-İp*, which we analyze as a simple conjunction of propositions.[3] The first argument of *bol-* will be the content situation, then *bol-* (whose category we leave undefined) will merge with the *-İp*-marked *v*P, below the inflectional projections.

(16) *putumni sundurup boldum* 'I broke my leg'

a.



b. $[\![v\text{P}]\!] = \lambda s.\ \text{break(leg)(I)(s)} : \langle s, t\rangle$

c. $[\![\text{-İp}]\!] = \lambda p \lambda q \lambda s.\ \text{p(s) \& q(s)} : \langle\langle st\rangle, \langle st, st\rangle\rangle$

Given this structure, let us define a content satisfaction relation SAC that takes two situations, s and s_c, where s_c has content, and asserts that s satisfies the content of s_c.

(30) $[\![\text{SAC}]\!] = \lambda s_c \lambda s.\ s \in \cup\text{CONT}(s_c)$. Only defined if s_c has content.

With this function and structure, we can now define *bol-* as expressing that the event situation satisfies the content of an anaphoric content situation.

(31) **The denotation of the auxiliary *bol-***

$[\![\textit{bol-}]\!] = \lambda s_c \lambda s.\ \text{SAC}(s_c)(s) : \langle s, \langle s, t\rangle\rangle$
Only defined if s_c has content.

The composition proceeds as follows:

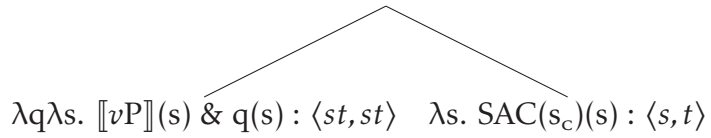
1. The first argument of *bol-* is a pronoun referring to the anaphoric content situation s_c.

(32) $\lambda s.\ \text{SAC}(s_c)(s) : \langle s, t\rangle$

s_c $[\![\textit{bol-}]\!]$

[3]Recall that propositions in a situation semantics are simply properties of situations; these include constituents much smaller than sentences, like verb phrases and adverbials.

2. Then, $[\![bol]\!](s_C)$ is plugged into the *-İp*-marked clause, creating an event description that is linked to the content situation.

(33)


The following examples exemplify this step for some of the examples we've seen so far.

(34) Cough as part of medical checkup (ex. (13))
   a. $[\![s_L]\!]$ = acceptance of physical list
   b. CONT(s_L) = the checklist for the physical
   c. $[\![bol\text{P}]\!]$ = λs. cough(I)(s) & SAC(s_L)(s)

(35) Leg-break scheme (ex. (16))
   a. $[\![s_S]\!]$ = adoption of scheme to get out of the army
   b. CONT(s_S) = the scheme
   c. $[\![bol\text{P}]\!]$ =λs. break(leg)(I)(s) & SAC(s_S)(s)

(36) Ocean-looking (ex. (18))
   a. $[\![s_D]\!]$ = delivery of doctor's orders
   b. CONT(s_D) = the doctor's orders
   c. $[\![bol\text{P}]\!]$ = λs. looked-at(ocean)(I)(s) & SAC(s_D)(s)

3. After that, the rest of the extended verbal projection takes place normally. The content situation's runtime is independent of the event runtime or the topic time. (37) is an example with past tense, while (38) has a (simplified) modal future.

(37) *put-um-ni sun-dur-up* ***bol**-du-m*
leg-1S-ACC break-CAUS-IP **bol**-PAST-1S
'I broke my leg'
   a. $[\![bol\text{P}]\!]$ = λs. break(leg)(I)(s) & SAC(s_C)(s) : ⟨s, t⟩
   b. $[\![(37)]\!]$ = λs. $s \prec s_U$ & ∃s′[$s' \leq s$ & $[\![bol\text{P}]\!](s')$]

(38) *Ete bu kitab-ni oqu-p* ***bol**-imen*
tomorrow this book-ACC read-IP **bol**–PROG-1S.COP
'Tomorrow, I will finish this book'
   a. $[\![bol\text{P}]\!]$ = λs. finish(this book)(s) & SAC(s_C)(s) : ⟨s, t⟩
   b. $[\![(38)]\!]$ = λs. ∀w[future(s)(w) → ∃s′[$s' \leq w$ & $[\![bol\text{P}]\!](s')$]]

2.5 Listener awareness

As we saw in (20), felicitous use of *bol-* requires that the listener be aware of the content. This is derived by the presupposition on the satisfaction relation. Since SAC is defined only if s_c has content, use of *bol-* brings about a presupposition failure when either there is not content, or the content is not known to all speech act participants.

2.6 Negation

As we would expect, the preupposition of *bol-* is not affected by negating the event situation, nor is the anaphoric nature of the content situation. For example, (39) presupposes some content, and asserts that there is no event of me reading this book which satisifes that content.

(39) *bu kitab-ni oqu-p* ***bol****-mi-di-m*
this book-ACC read-IP **bol**-NEG-PAST-1S
'I haven't read this book / I didn't read this book'
a. $[\![bol\text{P}]\!] = \lambda s.\ \text{read(this book)(s)} \ \&\ \text{SAC}(s_c)(s) : \langle s, t\rangle$
b. $[\![\text{NegP}]\!] = \lambda s.\ \neg\exists \mathbf{s}'[\ s' \leq s\ \&\ [\![bol\text{P}]\!](s')\ ]$

One fact does at first appear to present a problem to our account: The satisfaction condition cannot be negated at all, despite being in a conjunction in the scope of negation. Speaker reports indicate that (39) does not mean that you read the book, but not to satisfy some content. Another example demonstrates the point:

Context:
You're talking to your friend about Tömür's Uyghur Grammar. He tells you that he read it for a class. You read it, too, but not for any particular purpose, just for fun. So you reply:

(40) # *bu kitab-ni oqu-p* ***bol****-mi-di-m*
this book-ACC read-IP **bol**-NEG-PAST-1S
'I read that book (but not to satisfy any particular content)'

However, this observation falls out from the denotation of *bol-* in (31). In (40), there is no particular content the speaker has in mind. In that case, there is no particular content situation generating that content. Consequently, there is no argument for *bol-*, which leaves it unsaturated. That fact makes it uninterpretable.

2.7 Summary of the analysis

In this section, we have offered a novel analysis of the Uyghur auxiliary *bol-*, employing context-based elicitation to narrow down the truth-conditions, and a theoretical framework to shape its composition. The auxiliary indicates a relation between content situations and event situations, such that the event satisfies the content of the content situation. Consequently, the use of *bol-* does not depend on the nature of the event description itself, but rather on the link to some anaphoric content situation.

This account explains the distribution of *bol-* that we've seen. It makes a set of predictions as well— these will be detailed in the next section. We can use context-based elicitation to test those predictions.

3 Testing predictions

Our account of *bol-* provides a clear hypothesis that makes a number of predictions about particular types of contexts that determine the felicity of *bol-*. We can test these by building contexts exemplifying these types.

3.1 Content need not be specifically satisfied

The definition of content satisfaction relies on a proposition holding of a situation. This predicts that the event situation might not specifically exemplify the content proposition, but could still satisfy it.[4] For instance, if the content proposition is vague, like 'something bad will happen to you,' then any particular situation making that proposition true will satisfy the content.

In (41), a prediction involves bad things happening. If something happens, even completely by accident, that makes the prediction true, and you can describe it with *bol-*. Essentially, the leg-break event (s_E) satisfies the content of the prophesy.

Context:
A soothsayer tells you and your friend that three bad things will happen to you tomorrow. You both laugh it off, but the next day, you trip and break your leg.

(41) *put-um-ni sun-dur-up* ***bol****-du-m*
leg-1s-ACC break-CAUS-IP **bol**-PAST-1s
'I broke my leg'

a. s_P = the prophesy

b. $\textsc{cont}(s_P) = \left\{ \begin{array}{l} \{ s \mid \text{one bad thing happens to you in } s \}, \\ \{ s \mid \text{a second bad thing happens to you in } s \}, \\ \{ s \mid \text{a third bad thing to you happens in } s \} \end{array} \right\}$

c. $\text{SAC}(s_P)(s_E) = 1$

The satisfaction of vague propositions is a predicted effect of our analysis of *bol-*, and the prediction is confirmed.

3.2 Itinerary effects

Another prediction concerns itineraries. Events satisfying the completion of an itinerary are predicted to allow *bol-*, and that is what we find.

[4]Technical clarification: The event situation need not exemplify the proposition in the sense of Kratzer (2007), or be a minimal situation in the sense of Heim (1990).

Imagine you are taking a trip across Xinjiang province, from Hoten to Ürümchi, the capital. You take the following itinerary, from left to right.

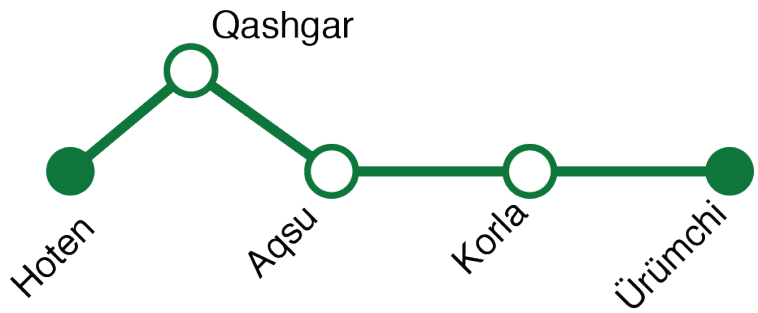


Figure 1: Itinerary from Hoten to Ürümchi

The formulation of this itinerary would be a particular situation; let's call it s_I. Its content would be the following set of propositions:

(42) $\textsc{cont}(s_I) = \left\{ \begin{array}{l} \{ s \mid \text{we leave from Hoten} \}, \\ \{ s \mid \text{we travel to Qashgar} \}, \\ \{ s \mid \text{we travel to Aqsu} \}, \\ \{ s \mid \text{we travel to Korla} \}, \\ \{ s \mid \text{we travel to Ürümchi} \} \end{array} \right\}$

Steps in a succesful voyage along this itinerary can be described with *bol-*.

Context:
You are traveling from Hoten to Ürümchi through these cities. Along the way, you reach Aqsu, after passing through Qashgar. At that point, you call home, and while explaining your journey so far, you say:

(43) *Qashgar-gha bér-ip* ***bol****-du-q*
Kashgar-DAT go-IP **bol**-PAST-1P
'We went to Kashgar' $\quad \textsc{sac}(s_I)(s_E) = 1$

On the other hand, we predict that *bol-* cannot be used to describe unexpected situations arising that don't satisfy the content of the itinerary. This is the case:

Context:
You were planning to take the shortcut from Hoten to Aqsu, but it was blocked. So instead, you had to go through Kashgar instead (Figure 2). You're telling your friend, who thought you were taking the shortcut:

(44) # *Qashgar-gha bér-ip* ***bol****-du-q*
Kashgar-DAT go-IP **bol**-PAST-1P
'We went to Kashgar' $\quad \textsc{sac}(s_I)(s_E) = 0$

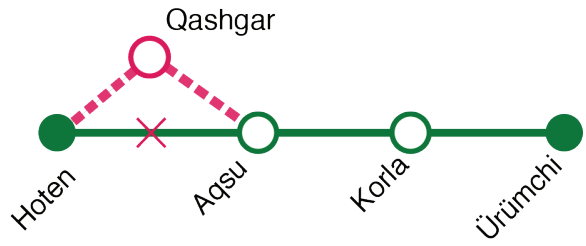


Figure 2: Detour itinerary

3.3 Serendipitous Accidents

The examples we've discussed where *bol-* is felicitous all involve volition. However, our denotation does not specify for it. Consequently, an accidental situation is predicted to be able to satisfy the content if it is relevant. This prediction holds.

In (45), you plan to wreck your car on purpose (Let's call the plan's formulation s_P). But before you could, an accident wrecked it for you. The wreck event can be described with *bol-*.[5]

Context:
You have a plan to wreck your car to get a new one with the insurance money. You told your friend two days ago that you'd do it in a week. But yesterday, someone hit your car.

(45) *mashina-m soq-ul-up* ***bol****-di-∅*
car-1s smash-PASS-IP **bol**-PAST-3s
'I got in a wreck' (*lit.* 'my car got smashed') $\text{SAC}(s_P)(s_E) = 1$

Another instance of this involves our leg-break scheme again. If an accident does the job for you, *bol-* can be felicitous.

Context:
You have a plan to get out of army service. You told your friend two days ago that you'd break your leg in a week. But yesterday, a car hit you.

(46) *put-um-ni sun-dur-up* ***bol****-du-m*
leg-1s-ACC break-CAUS-IP **bol**-PAST-1s
'I broke my leg' $\text{SAC}(s_S)(s_E) = 1$

(47) a. s_S = scheme

b. $\text{CONT}(s_S) = \left\{ \begin{array}{l} \{ s \mid \text{I leave home in } s \}, \\ \{ s \mid \text{I have a broken leg in } s \}, \\ \{ s \mid \text{I check in with the army in } s \}, \\ \{ s \mid \text{I get an exemption in } s \} \end{array} \right\}$

[5]Nothing rules out having content that specifies that the actions be conducted on purpose; in those cases, *bol-* should be infelicitous with accidents.

3.4 Apparent counterexamples

Some examples we discovered seemed at first to violate the predictions made by our denotation in (31). For instance, if you planned to go through Korla on the way to Ürümchi, and had to cancel your plan, but still went to Korla, *bol-* is infelicitous, despite accidentally satisfying the content.

Context:
You are near Korla on the way to Urumchi and your kid gets sick. You cancel the rest of your trip. You drive him to the hospital in Korla. You call home, your spouse asks "Are you in Urumchi?" You reply:

(48) # *Yaq, Korla-gha kél-ip* ***bol****-du-q*
No, Korla-DAT come-IP **bol**-PAST-1P
'No, we went to Korla'

The reason that (48) is infelicitous is not the fact that the content is satisfied, but the fact that the content is no longer at issue. That is, the content has been withdrawn, so s_I is not being plugged into a function like CONT or SAC. Lacking that, *bol-* lacks its first argument and is uninterpretable. This solution leads to its own prediction: If you reestablish a new content situation, *bol-* will become felicitous. This prediction holds, as in (49), where an old plan is scrapped and a new one put into place; the listener is aware of the new plan.

Context:
You are near Korla on the way to Urumchi and your kid gets sick. You call home, tell your spouse, who says "Take him to the hospital in Korla." So you do, and the next day you update your spouse:

(49) *Korla-gha kél-ip* ***bol****-du-q*
Korla-DAT come-IP **bol**-PAST-1P
'We went to Korla'

Another apparent exception occurs in instances where *bol-* is felicitous even if the event seems to be related to no apparent content. This is especially the case when there is no purpose involved, or if the event is a surprise.

Context:
You jump out of a plane to skydive. But your parachute doesn't open and you land hard, breaking all your bones.

(50) *Men hemme ustixan-lar-im-ni sun-dur-up* ***bol****-du-m*
I all bone-PL-1S-ACC break-CAUS-IP **bol**-PAST-1S
'I broke every bone in my body!'

Context:
You and a friend are watching a boat approaching, when it suddenly sinks. Once it's fully under the waves, you say:

(51) *Kéme chök-üp* ***bol****-di-∅*
boat sink-IP **bol**-PAST-3S
'The boat (completely) sank.'

Each of the examples we elicited like this involve the entire theme of the event. That observation will be the key to understanding the use of *bol-* in (50) and (51).

If content situations are presupposed, we expect them to be accommodatable, and in these instances, that's what is happening. Accommodation of a content situation is aided if the content is:

- Immediately salient (*i.e.*, the speaker and listener are witnesses)
- Involves an incremental theme (where the content propositions each represent an increment)
- All the propositions in the content are true (the entire theme is involved)

For instance, we can imagine the content of the accommodated content situation in (51) to contain the following propositions.

(52) $\textsc{cont}(s_c) = \left\{ \begin{array}{l} \{ s \mid \text{the bow sinks in } s \}, \\ \{ s \mid \text{the beam sinks in } s \}, \\ \{ s \mid \text{the bridge sinks in } s \}, \\ \{ s \mid \text{the stern sinks in } s \} \end{array} \right\}$

Likewise, if the listener is not a witness, the content situation should be less easily accommodated, to the point that *bol-* becomes infelicitous. This is the case— if you are talking to someone on the phone when the boat sinks before your eyes, *bol-* is infelicitous.

This accommodation may be the source of the 'completive' readings in (Tömür 2003) and (Bridges 2008). Each of their cases involves immediately salient completions of incremental events. What they supposed to be the common case turns out to the be the rare one.

3.5 Summary

This section has explored predictions of the account of *bol-* laid out in section 2. *Bol-* is felicitous if the event situation doesn't exemplify the content propositions, or if the event situation only accidentally satisfies the content. It is infelicitous with unplanned events that do not accidentally satisify the content. And lastly, a content situation can be accommodated under certain circumstances, and this accommodation can license the use of *bol-* when no content situation is in the discourse.

4 Overall Recap and Outlook

This paper has offered an account of the Uyghur auxiliary *bol-*. While the literature describes it as expressing completion, our targeted elicitation has revealed that it actually

indicates content satisfaction. The content is introduced by an anaphoric situation, and linked to an event description conjoined with the ⟦*v*P⟧ (31). This account makes predictions, which further elicitation has confirmed.

Looking forward, the use of content situations demonstrates a role for content outside of attitude contexts, cementing the notion that contents should not be linked to attitude predicates. It also highlights the role of subtle contextual restriction in determining morpheme denotations.

The present inquiry can be expanded in a number of directions. Synchronically, we are expanding the study by sending out a questionnaire to Uyghur speakers in Xinjiang province, to rely on numbers to tease out various effects. We also intend to apply the same methodologies to other Uyghur auxiliaries, and also check cognate auxiliaries in Turkic. For instance, preliminary conversations with Turkish speakers suggest similar effects in that language with the auxiliary *olmak*.

Also, Uyghur provides a rare opportunity to expand this study diachronically. Indeed, team member Gülnar Eziz's dissertation will explore the development of *bol-* and other auxiliaries over the years, focusing on corpora of Uyghur from a century ago and beyond.

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