AUXILIARY VERBS IN UYGHUR

BY

Michelle Bridges

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Committee members:

Date Defended:
The Thesis Committee for Michelle Bridges certifies that this is the approved version of the following thesis:

AUXILIARY VERBS IN UYGHUR

Committee:

___________________________
Chairperson

___________________________

Date Approved: __________________________
Abstract

One of the most salient areas of Uyghur syntax is the intricate system of complex verb constructions. There are three types of complex verb structures in Uyghur. One involves a set of verbs that are identical in form to lexical verbs, but convey functional information. These functional uses, termed auxiliaries, have been studied to some extent in terms of meaning for individual verbs, but general categories of meaning and their related structure are relatively undocumented.

The present study utilizes published data and original fieldwork to develop categories and subcategories for 13 Uyghur auxiliaries (and two relevant non-auxiliaries). The two semantic categories are aspectual and agentive; subcategories are explained and motivated. The second (agentive) category is shown to have significant overlap with another attested category: light verbs. A biclausal structure with two locations for AUX is proposed. These verbs are then contrasted with lexical verbs often considered to be auxiliaries.
Acknowledgements

This thesis is a product of the patience and effort of many people.

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My thanks also go to the Uyghur speakers who endured my bizarre questions and my awkward English ears. Special thanks go to Mahire Yakup, my Uyghur teacher and main language consultant. She is now a good friend, despite the number of times she said I made her brain, as they say in Uyghur, “turn to yogurt.” On the non-academic side of this project, my family and friends (who are my other family) kept my own brain from turning to yogurt.

Thank you.
Notes on Orthography

In this study the Uyghur data is given in Turkish national orthography. Most of the letters of the Uyghur alphabet correspond to conventional phonetic symbols. The differences are given below:

<table>
<thead>
<tr>
<th>Uyghur</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ç</td>
<td>ʧ</td>
</tr>
<tr>
<td>ş</td>
<td>ʃ</td>
</tr>
<tr>
<td>gh</td>
<td>ɣ</td>
</tr>
<tr>
<td>ƙ</td>
<td>q</td>
</tr>
<tr>
<td>ü</td>
<td>ø</td>
</tr>
<tr>
<td>ö</td>
<td>æ</td>
</tr>
</tbody>
</table>

There is considerable harmony in Uyghur, both in consonants (voicing, front/back) and vowels (front/back, rounding). Many suffixes alternate in form based on harmony requirements. Where this is the case, capital letters are used to represent the varying phonemes. A complete list of suffix forms and grammatical abbreviations is given in Appendix A.
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Uyghur Auxiliary Verbs

0 Introduction

This thesis outlines the meaning and structure of auxiliary verbs in Uyghur (UIG; Turkic; spoken predominantly in Xinjiang Uyghur Autonomous Region, Western China). Uyghur is in the Eastern Turkic branch of the Altaic family, most closely related to Uzbek. This thesis is based on the Central dialect, as is spoken in Urumçi, China. In the following examples, the auxiliaries are the sentence-final verbs:\

(1) Auxiliary verbs\(^2\)

\[\begin{align*}
&\text{a. } \mathrm{u}\text{-ning dost-lir-i u-ni } \text{yökli-ap } \text{tur-id-u}. \\
&\quad \text{3-GEN friend-PL-POS 3ACC visit-NFT tur-NPST-3} \\
&\quad \text{‘His friends will keep visiting him.’}
\end{align*}\]

\[\begin{align*}
&\text{b. } \mathrm{män } \text{tamaň-ni } \text{yä-p } \text{bäk-t-im}. \\
&\quad \text{1SG food-ACC eat-NFT bäk-DRPST-1SG} \\
&\quad \text{‘I tasted a little bit of the food / I tried to eat some of the food.’}
\end{align*}\]

\[\begin{align*}
&\text{c. } \text{Osman } \text{küllüp tašlık-d-i}. \\
&\quad \text{Osman laugh-NFT tašlık-DRPST-3} \\
&\quad \text{‘Osman laughed suddenly.’}
\end{align*}\]

---

\(^{1}\) When these verbs are used as auxiliaries, the main verb meaning is generally irrelevant and the auxiliary meanings may be inconsistent. Therefore, when a verb is functioning as an auxiliary, I gloss it simply as the verb itself, without an English gloss. The meaning is clear from the English translation. Explanations for meanings of individual auxiliaries are discussed in section 2.


\(^{3}\) Where not otherwise noted, the source for all data is my fieldwork. Fieldwork was done with Uyghur speakers both in Lawrence, Kansas (Sept. 2006-May 2007) and in Urumchi, China (June-July 2007). Methodology included elicitation, grammaticality judgments (in both verbal and written survey form), and consented observation of natural speech. It should be noted that although the former two methods enable targeted study of constructions which provide crucial syntactic information, they may produce acceptable or marginal judgments for constructions that are highly unlikely in normal speech (Matthewson 2004, Schütze 1996). Therefore, whenever possible, sentences in grammaticality judgment tasks were presented within a context to minimize the effects of such an artificial task. In addition, there may be naturally occurring forms of auxiliaries that are not accounted for here. Many thanks to Mahire Yakup, Erkin Kadır, Mahsut Selim, and others at Xinjiang Normal University, and to Gulnar Eziz for this Uyghur data.
The sentence-final verbs in (1) may also be used as main verbs. Compare the sentences above to the following, where the same verbs are used, but with their main verb meaning:

(2) Non-auxiliary verbs

a. Mān  u-ning  öy-i-dā   \textbf{tur-\textit{d-im}}  \\
1SG  3-GEN  house-POS-LOC  \textbf{stay-DRPST-1SG}  \\
‘I \textbf{stayed} at his house.’

b. mān  üç  bali-ni  \textbf{ba\c{k}-i-mān}  \\
1SG  three  child-ACC  \textbf{look\textit{.after}-NPST-1SG}  \\
‘I am \textbf{raising} three children.’

c.  u  kona  kiyim-lar-ni  \textbf{ta\textit{şli-d-i}}.  \\
3SG  old  clothes-PL-ACC  \textbf{throw-DRPST-3}  \\
‘S/he \textbf{threw away} old clothes.’

The meanings of the sentence-final auxiliaries in (1) are clearly not equivalent to their meanings as main verbs in (2). What are these sentence-final verb forms? Exactly what semantic information do they convey? Auxiliaries are not at all uncommon cross-linguistically (Anderson 2006), usually conveying tense/aspect/mood, but Standard Uyghur has an unusually large number of them (19-23\textsuperscript{4}), and they reflect both aspect and other, more agent-related facets of meaning. How do the Uyghur auxiliaries compare to the function of auxiliaries function across languages? Are they aspectual, and if so, how? Are they lexical or functional, and do they create mono- or bi-clausal structures? Are there any sub-categories, either semantically or syntactically?

\textsuperscript{4} Hahn (1991), Engaseth (2002), and Tömür (2003) have slightly different lists of auxiliaries, ranging from 19 to 23.
Overall, this thesis is a discussion of auxiliary verbs in Uyghur. More specifically, it argues for dividing them into two main semantic categories (with subcategories of each), shows how they differ structurally from main verbs, and investigates if/how semantic modification is reflected in structure. In section one, I introduce Uyghur sentence structure, discuss three types of complex verb constructions in Uyghur, and show how auxiliary constructions differ from the others. Section two focuses on semantics. I discuss the notion of auxiliary verbs and their standard semantic functions. Then, taking 15 of the most frequently used auxiliaries, I outline two semantic categories of Uyghur auxiliaries (aspect and agent modification), and divisions within each of these. This section also includes meaning/usage of each auxiliary, as illustrated with examples from the literature and fieldwork. In section three, I discuss the syntax of Uyghur auxiliaries: their functional nature, how they differ from main verbs, and how they interact with other lexical and functional elements of a sentence. I propose a bi-clausal structure with a two-tiered system of auxiliaries, in which the semantic categories outlined in section two are reinforced with syntactic evidence. I propose that the agent modification subset may more accurately be labeled as light verbs, and discuss the arguments surrounding such a classification. Section four investigates a small set of non-auxiliaries with meanings commonly associated with auxiliary verb constructions. Reasons for non-auxiliary status are explained in terms of semantics and structure, according to the findings of the previous two sections.
1. Uyghur Complex Verb Constructions

This section establishes a framework for the semantic and syntactic description and analysis in the rest of the thesis. I will discuss the general structure of Uyghur as a head-final language, and give an overview of three types of complex verb constructions. I then present an introduction to auxiliaries and their semantic and syntactic properties.

1.1 General sentence structure

Auxiliaries appear sentence-finally because Uyghur is a uniformly head-final language. This is seen at all levels: in VPs, NPs, and PPs (suffixed case endings).

(3) VP is V-final
   a. (män) u-ni kör-i-män
      (1SG) 3.SG-ACC see-NPST.1SG
      ‘I see him’
   b. bu aptobus şopur-lir-i koçi-lar-ni bil-id-u.
      this bus driver-PL-POS street-PL-ACC know-NPST-3
      ‘These bus drivers know the streets.’

(4) NP is N-final (No definite/indefinite determiners)
   üç yeşil öy
   three green house
   ‘three green houses’

(5) PP is P-final/ P is a suffixed case ending
   a. şähär-dä
      city-LOC
      ‘at/in the city’

5 The term “auxiliary” is used throughout this thesis to refer to the set of sentence-final verbs introduced above. In later sections I discuss the possibility that a large subset of them are actually light verbs. For the sake of consistency, with the exception of the light verb discussions, I will use the term “auxiliary” to refer to all of these verbs.
The overall head-final nature of Uyghur (and all Turkic languages (Kornfilt 2005))

means that a simple sentence has a structure like the following:

\begin{align*}
\text{(6) a. } & \text{ män } \text{ üç bali-ni } \text{ baĸ-i-man} \\
& 1\text{SG three child-ACC look.after-NPST-1SG} \\
& \text{‘I am raising three children.’}
\end{align*}

Tense and person/number agreement appear as suffixes on the sentence-final verb.

This will be true regardless of the number of verbs, as is seen in all complex verb constructions.

1.2 Three types of complex verb constructions

In Uyghur, verb constructions may be made up of one verb or of multiple verbs.

As shown above, in simple (single) verb structures, tense, agreement, etc. is suffixed onto the main lexical verb:
In complex verb constructions (clauses with two or more verbs), there is only one subject, but there are two (or sometimes more) verbs. Complex verbs are very common in Uyghur. Ibrahim (1995) observes that they may be more common than single verb structures, therefore constituting a crucial component to Uyghur syntax.

(8)-(10) give examples of three types of complex verb constructions: Serial, Directional, and Auxiliary.

(8) Serial

Osman  kül-üp  taşli-d-i.
‘Osman laughed suddenly.’

(9) Directional

Osman  yügr-äp  kät-t-i.
‘Osman ran away.’

(10) Auxiliary

Osman  kül-d-i
‘Osman laughed’

Like simple verb constructions, it is still the sentence-final verb that shows tense
and agreement. In all cases, the non-final verb is in a non-finite form\(^7\), which is expressed with the -(I)p suffix\(^8\). In (8), a serial verb construction, there are several verbs corresponding to several events, but they all share a subject. In (9), a directional modification construction, there are again two verbs, but the meaning is compositional. The type exemplified in (10) is surprising at first glance. There are two verbs with the same form as in (9) (non-finite –(I)p form followed by inflected verb), but the meaning is non-compositional; the literal meaning of the last verb seems irrelevant to the meaning of the phrase. These verbs are auxiliaries, and it is this category of complex verb construction that this thesis explores. All three types have a few features in common, but they differ in terms of selectional properties and semantic transparency.

1.2.1 Serial Verbs

The term ‘serial verb’ has been used with many very different syntactic contexts. In Baker (1989) the verbs share an object\(^9\); in Butt (2003) they are said to be confused with light verbs; in Lord (1993) they are sometimes adverbial modification of a single event and sometimes a chain of separate events. Here, I follow Lord (1993) by using this term to apply to consecutive events.

\(^7\) Uyghur has two non-finite forms; -iş, which can be nominal, and –(I)p, which is used for chain linking and complex verb constructions. Neither can carry tense or person agreement.

\(^8\) The negative form of the non-finite verb has a –mAy ending. This is discussed further in section 1.3; due to considerable vowel harmony, this suffix may take the form of –ip, -p, -up, -üp, ap, or äp.

\(^9\) Baker (1989) discusses a type of “serial verbs” where two verbs share both a subject and an object, and proposes that the two verbs co-head a V’P. The Uyghur serial verbs generally do not share objects, although I cannot exclude that possibility at this point.
The Uyghur constructions in this section depict a series of events described using more than one verb, with only one subject, all grammatically linked in one sentence:

\[(11) \]

a. **Biz on bir-giçä u-ning öy-i-dä** yä-p, iç-ip
   1P ten one-until 3-GEN house-POS-LOC eat-NFT, drink-NFT
   **paranlış-ip oltur-d-uk.**
   chat-NFT sit-DRPST-1PL
   ‘At his house we sat eating, drinking, and talking until 11 pm.’
   (Engasaeth 2002:171)

b. **män tünügün bazar-gha ber-ip, alma el-ip, öy-gä**
   1SG yesterday market-DAT go-NFT apple buy-NFT house-DAT
   **ḳayt-t-im.**
   return-DRPST-1SG
   ‘Yesterday I went to the market, bought apples, and returned to the house.’

Unlike English, where sentences parallel to these examples would include separate tensed verbs (i.e., *I cleaned* the apples and *chopped* the carrots), the Uyghur verbs share tense under one TP. Again, this is consistent across all of these complex verbal constructions, where only the last verb is finite, carrying tense, person and number.

### 1.2.2 Directional Modification Construction

A directional modification construction includes two or more verbs in a clause with compositional meaning. Within this type, the second of two verbs provides information about direction of an action, as in (12)\(^{10}\):

\[10\] Many of the examples given here use the sentence-final verb, *kät-* . This verb may also be used as an auxiliary verb. See section 2.2.2 for more discussion on this verb as an auxiliary. Tömür (2003:418)
(12) Directional modification verbs

a. Osman yügr-äp kät-t-i.
   Osman run-NFT leave-3DRPST
   ‘Osman ran away.’

b. U öy-gä kir-ip kät-t-i
   He house-DAT enter-NFT leave-DRPST-3
   ‘He left (them) and went inside,’ or ‘Going in the house, he left.’
   (Engasaeth 2002:172)

c. u baş-inçä kät-wät-kä çık-ip çüš-t-i
   3SG 5-ORD floor-DAT go.up-NFT go.down-DRPST-3
   ‘He went up to the 5th floor and came back down.’
   Or, ‘he went-up-and-down to the 3rd floor.’
   (Engasaeth 2002:172)

d. köç-üp kät-mäk
   move-NFT leave-INF
   ‘to move somewhere; to change residence’

e. u-ning doppi-si şamal-da uç-up kät-t-i.
   3-GEN hat-POS wind-LOC fall-NFT leave-DRPST-3
   ‘His hat fell off in the wind.’

Sentences such as those in (12) may be interpreted as one event with a stated
direction of action (i.e., Osman ran, in the direction of away, in (6a)), or as two
closely related sub-events regarding directed action (i.e., he went up the stairs and
came down the stairs, in (6c)). In the latter case it is difficult to tease apart whether
the sub-events are considered separate events or simply sub-parts of one event, but in
all of these cases there is only one subject, and the meaning is compositional.

This type of construction is not very productive. Even within verbs of
movement, there is a limited set of verbs which are usually used in this way

and others) includes the directional meaning given here with his list of how the auxiliary kät- is used. I keep them in separate categories for the reasons explained in this section.
(Engasaeth 2002). Not surprisingly, since the set of verbs used for these constructions is so limited, directional modification verb pairs are often lexicalized or idiomized, so that certain pairs of verbs very often appear together. They are sometimes even taught as phrases to second language learners.

Verbs of directional modification are similar to serial verbs in that in both cases, the meaning of the final verb is transparent, identical to the meaning that the same verb would have as the only verb in a clause. That is, the verb \textit{kät}- means ‘leave,’ as either a main verb or as a verb of directional modification. However, their structure is different in that the final verb may not be separated from the main verb by any lexical material and still retain the directional interpretation of a single event.

There is another approach to directional modification constructions. Anderson (2006) proposes that they are a type of auxiliary, and that the first verb in the sentence is a complement to the final verb. This approach may be syntactically viable, but due to several important differences (semantic transparency, lack of aspectual or agent modification semantics; see section 1.1.3), I categorize them separately.

1.2.3 Auxiliary constructions

Auxiliary constructions include two (or more) verbs in one clause, the first of which is a lexical (main) verb, and the last is an auxiliary. This last verb has been bleached, at least partially, of its lexical meaning, and grammatically encodes one of several types of modification of the main verb. The auxiliaries are productive,
recombining with many other verbs in similar constructions, resulting in other meanings.

Unlike serial and directional modification verbs, in auxiliary verb constructions, the meaning of the predicate is non-compositional. Consider the following examples in (13)-(16), where in each case the same verb is used lexically in (a) and as an auxiliary in (b):

(13) a. Män u-ning öy-i-dä tur-d-im
   1SG 3-GEN house-POS-LOC stay-NPST-1SG
   ‘I stayed at his house.’

   b. u-ning dost-lir-i u-ni yoğl-ap tur-id-u.
   3-GEN friend-PL-POS 3ACC visit-NFT tur-NPST-3
   ‘His friends will keep visiting him.’
   (Engasaeth 2002:188)

The verb tur- means ‘to stand, to stay,’ as shown in (13)a. However, in (b), it indicates that the action of the main verb, yoğl- ‘visit,’ continues over time.

(14) a. män üç bali-ni bak-i-män
   1SG three child-ACC look-after-NPST-1SG
   ‘I am raising three children.’

   b. män tamaḵ-ni yā-p bak-t-im.
   1SG food-ACC eat-NFT look-after-NPST-1SG
   ‘I tasted a little bit of the food / I tried to eat some of the food.’

As a main verb, bak- means ‘to watch, look after,’ but in (b), it has a completely different meaning, namely, that the event happened ‘a little,’ or was attempted but not carried out completely or thoroughly.

(15) a. nemä bol-d-i?
    what exist-NPST-3
    ‘What happened?’
The verb bol- means ‘to be, exist’ as a main verb, but in (b), it indicates that the event was completed.

(16) a. u kona kiyim-lar-ni taşli-d-i.
    3SG old clothes-PL-ACC throw-DRPST-3
    ‘S/he threw away old clothes.’

b. hämmi-miz u-ning gep-i-gä kül-üp taşli-d-uk
    all-1PL 3SG-GEN word-POS-DAT laugh-NFT taşla-DRPST-3
    ‘Osman laughed suddenly.’

(Engasaeth 2002:191)

Taşla- means ‘to throw or throw away’ in (a). The meaning in (b) is quite different. In this case, it indicates that the event happened suddenly and uncontrollably, that the action was not intentional.

These (b) examples show the variety of semantic contexts in which auxiliary verb constructions are found. The meanings of the sentence-final verbs, tur-, bağ-, bol-, and taşla- all seem unrelated to the meaning of the sentence.

Unlike other complex verb constructions, auxiliaries allow a negative form of the non-finite main verb (–mAy):

(17) män tamaḵ-ni ye-mây baḵ-t-im
    1.SG.NOM food-acc eat-NFT.NEG baḵ-DRPST-1SG
    ‘I tried to not eat food.’

In this example, the auxiliary baḵ- shows that the action was attempted, but the main verb is in a negative non-finite form. Section 3.2 includes extensive discussion of the scope of negation in auxiliary constructions, but this example introduces the variant of form in auxiliary constructions.
To summarize, complex verbs in Uyghur can be broken down into three types, the characteristics of which are reviewed in the following table:

(18) **TABLE 1**

<table>
<thead>
<tr>
<th>Construction Type</th>
<th>Form of non-final verb</th>
<th>Tense</th>
<th>Independent subject</th>
<th>Selectional properties</th>
<th>Semantic transparency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial verbs</td>
<td>-Ip</td>
<td>final verb only</td>
<td>No</td>
<td>may take NP complement</td>
<td>yes</td>
</tr>
<tr>
<td>Directionals</td>
<td>-Ip</td>
<td>no</td>
<td>No</td>
<td>do not take their own NP complement</td>
<td></td>
</tr>
<tr>
<td>Auxiliaries</td>
<td>-Ip (negative, -mAy(^{11}))</td>
<td>no</td>
<td>No</td>
<td>do not take their own NP complement</td>
<td>no</td>
</tr>
</tbody>
</table>

\(^{11}\) Because of vowel harmony in Uyghur, the non-finite suffix may appear as –ip, -up, or –üp, and the negative form as either –may or -mäy
1.2.4 A note on –(I)p

Since little syntactic analysis has been done on these complex verb forms in Uyghur, the function of –(I)p has not been made clear. All complex verb construction types (serial, directional, auxiliary) select a verb in the –(I)p form. Lord (1993) notes that a construction of this type often evolves from a chain linking type to a more grammaticalized type. This is the case with Uyghur, where the three types are probably representative of three places along the continuum from linking consecutive events, to semantically modifying an event, to giving syntactic information about an event.

Uyghur differs from a language like Lhasa (also SOV with complex verb constructions superficially similar to those in Uyghur). There are two complex verb constructions in Lhasa, the difference between them being an ending on the non-final verb. When the ending is present, the interpretation is serial; where the ending is absent, the interpretation is more adverbial (Lord 1993). In this case, morphology determines interpretation.

In Uyghur, the –(I)p ending on the non-final verb is not optional for any of the complex verb constructions. The differences in interpretation (serial vs. directional modification vs. auxiliary) are due to the specific verbs used and phonological cues (pauses to indicate different focus), not just the presence/absence of this –(I)p morpheme. In other words, the presence of -(I)p is in no way indicative of how the verbs in the sentence is interpreted. Rather, it is the head of a tenseless phrase which is at the smallest, a VP, and at the largest, up to a CP.
1.3 Focusing on auxiliaries

1.3.1 Description of structure; explanation of terms

In the literature, various terms are used for the two verbs involved in auxiliary constructions. In (16)b above (given here as (19)), there are again two verbs in the construction:

\[(19)\] män \ tamağ-ni \ tyä-p \ baği-t-im. \\
1SG \ food-ACC \ eat-NFT \ look.after-DRPST-1SG

‘I tasted a little bit of the food / I tried to eat some of the food.’

The first verb (here, tayp-) is often called the “converb.” The term “converb” is generally used in the literature for non-finite verb forms, usually either a complement of a tensed verb, or else coordinated to a main verb (Haspelmath 1995, Johanson 1995; for Uyghur: Ibrahim 1995). Anderson (2006) calls non-final (and therefore non-finite) verbs in Turkic languages ‘participials.’ However, since in Uyghur auxiliary constructions, the non-final verb is the verb carrying the main lexical meaning, I simply refer to them as ‘main verbs.’ The Uyghur main verb is always non-finite, never inflected for person or number. It takes the form of root + a non-finite suffix, -(I)p (or its negative counterpart, -mAy), and assigns theta roles and case to arguments.

Various terms have been used to discuss the second verb in this sequence as well. Zakir (1999) calls them “descriptor verbs,” Tömür (2003) calls them all “aspectual stem forms,” and Schamiloglu (1988) uses the term “auxiliary verbs.”

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12 Others have written on these verbs in Uyghur, and unfortunately most of these non-English sources were not used in this study. The literature reviewed here is entirely written in or translated into English.
am using the term auxiliary. The auxiliary (final verb) carries all tense, mood, and
person/number inflection. In 2.1, I justify my choice of this term.

A summary of word/morpheme order and terms is as follows:

(20) $NP_{Subj}$ (NP$_{Obj}$) $\text{MAIN.VERB-}(I)p/mAy$ $AUX\text{-TENSE-SUBJAGRM}$

1.3.2 Semantics of auxiliaries

The semantics of Uyghur auxiliaries, and auxiliaries in Turkic in general, are
notoriously problematic (Ibrahim 1995, Zakir 1999). Uyghur seems to be a
particularly tough case, since auxiliaries can give slightly inconsistent types of
modification with different main verbs. For example, Tömür (2003:418-419) outlines
five different meanings of the “aspect auxiliary” $kät$-.

Meanings and examples include:

(21) a. The subject moves away from the place of speech or reference point.$^{13}$

\begin{verbatim}
$3Pl$ far-LOC this place-ABL move-NFT $kät$-NPST-3
\end{verbatim}

‘They will soon move away from here.’

b. The result is the entrance into a state of having been suddenly and

\begin{verbatim}
Quiet speech do-IMP $2Pl$ child wake-NFT $kät$-NPST-3
\end{verbatim}

‘Please speak quietly or the child will wake up.’

c. An intensification of an intransitive action “with respect to degree,

\begin{verbatim}
An intensification of an intransitive action “with respect to degree,
number of times, duration, and other related aspects.”

\end{verbatim}

\footnote{As discussed in 1.2.2, I consider this usage a directional, not a true auxiliary.}
The weather has really become hot.

Just as we were about to set out, it started to rain.

He’s a very courageous person; he was able to endure such great hardships.

Given this extremely diverse set of meanings for just one auxiliary, it is clear that an exhaustive study of all of the semantic possibilities contained in these auxiliaries is beyond the scope of this thesis. However, most of the auxiliaries are not quite as broad in their range of meanings. Most have only one meaning, and for those with several meanings, one often emerges as the most common. This study will focus on these more central uses of auxiliaries, both their meanings and the syntax of the sentences in which they are found.

For an overview of how auxiliaries may affect the meaning of a sentence, recall the examples from (13)-(16), given again here as (22), now with AUX meaning highlighted:

(22) a. u-ning dost-lir-i u-ni yokl-ap tur-id-u. continued  
His friends will keep visiting him.

b. d. The action begins suddenly and then continues.

Mangayli döp tursaç, yamghur yeğhip kätti.

Just as we were about to set out, it started to rain.

e. The subject is able to do the action.

Ghäyätlik adäm ikän, şunça eghir narsi-ni brave person be.Indef.NPST, so.that heavy thing-ACC

kötür-üp kätt-i.

endure-NFT kät-DEFDrPST-3

‘He’s a very courageous person; he was able to endure such great hardships.'
b. u kitap-ni oğu-p bol-d-i completion
   3.NOM book-ACC read-NFT exist-DRPST-3
   ‘She **finished** reading the book.’

c. män tamaḵ-ni yä-p baḵ-t-im. tried/began
   1SG food-ACC eat-NFT look.after-DRPST-1SG
   ‘I **tasted** a little bit of the food / I **tried** to eat some of the food.’

d. Osman kül-üp tašli-d-i. accidentally,
   Osman laugh-NFT throw-DRPST-3 uncontrollably
   ‘Osman laughed **suddenly**.’

These examples represent four semantic categories, in which these and almost all of
the other auxiliaries fall. An overview is as follows:

(23) Representative examples of auxiliaries and semantics

<table>
<thead>
<tr>
<th>Auxiliary</th>
<th>Description of modification</th>
<th>AUX category</th>
</tr>
</thead>
<tbody>
<tr>
<td>tur-</td>
<td>continued; ongoing</td>
<td>Aspect: duration</td>
</tr>
<tr>
<td>bol-</td>
<td>completed</td>
<td>Aspect: completion</td>
</tr>
<tr>
<td>baḵ-</td>
<td>done “just a little;”</td>
<td>Agentive: initiated attempted but not completed</td>
</tr>
<tr>
<td>tašla-</td>
<td>unintentional</td>
<td>Agentive: unintentional</td>
</tr>
</tbody>
</table>

This set of examples introduces some of the types of modification that auxiliaries
may make to a predicate. There is quite a wide variety of semantics; the auxiliaries
vary in meaning from “completion” to “unintentional.” Some work has referred to
the modification as ‘adverbial’ because many auxiliaries comment on the ‘how’ of the
predicate, including modification of the agent’s motive or initiation of the event (i.e,
**sal-** accidental), which would equal a high-level adverb (i.e., above vP). Other work
refers to them all as “aspect,” because many auxiliaries comment on duration,
completion, or other ‘aspect-like’ facets of the predicate (i.e., *tur-* continuing; *bol-* completed) (Tömür 2003).

The most surprising issue here is not that a sentence can indicate that a subject did something unintentionally, or that there are so many auxiliaries, but that Uyghur allows content which usually surfaces as an adverb to be grammaticalized into auxiliaries. If these auxiliaries can be grouped into a few semantic categories, are there any structural differences that parallel the distinction? If so, what are those categories, and where do they fall in the hierarchy of the sentence structure? In what follows, I establish a foundation of semantic categories and then offer a syntactic approach to these questions.

2 Describing Uyghur Auxiliaries: Semantics

Others have examined Uyghur (and/or Turkic) auxiliaries with the intention of explicating the usage of specific verbs (Nasilov 1978, Ibrahim 1995, Schamiloglu 1996, Tömür 2006, Zakir 1999), and have done so much more thoroughly than the present discussion. My goal here is not to exhaustively explain any one auxiliary, but to explain the most common meanings well enough to capture what is semantically possible with these auxiliaries.

Two general categories of meaning can be identified: that of aspect, and of agentivity. The agent-related auxiliaries have some significant parallels with another attested category: light verbs. Cross-linguistically, light verbs are semi-functional
verbs that are only somewhat predicational, and typically focus on agentivity (more in section 2.1).

I then feed this information into structural analysis, in order to see if separating these semantic categories has any empirical reality in structure. Section 3 will deal more specifically with structural analysis. In this chapter I compare and contrast Uyghur auxiliaries with standard descriptions of auxiliaries and light verbs, and give at least a basic idea of how each in a list of 15 auxiliaries is generally used.

### 2.1 Background and overview: auxiliaries vs. light verbs

#### 2.1.1 Auxiliaries: cross-linguistic properties and Uyghur

Cross-linguistically, auxiliary verbs are grammaticalized forms of main verbs that encode various non-lexical information in a predicate (usually tense, aspect, mood). Below is given a list of common features of auxiliary verb constructions (Anderson 2006, Heine 1993, Kutera 2001):

(24) Auxiliary verb construction properties

a. **Semantic bleaching** of auxiliary (at least to some extent)

b. **Incorporation**

   Sometimes become morphologically incorporated into main verb, diachronically

c. **Pattern of diachronic semantic evolution**

   Often evolved from main verbs of a specific semantic sub-set
d. **Headedness**  May be headed by either auxiliary or lexical verb, most commonly by auxiliary

e. **Mono-clausal construction**

The Uyghur auxiliary verbs generally meet these benchmarks.

**a. Semantic Bleaching**

Data given up to this point have shown that Uyghur auxiliaries show semantic bleaching to varying degrees. Table 2 compares the main (lexical) verb meanings with the meanings when the same forms are used as auxiliaries.
### Table 2: Main verb vs. AUX (non-main) verb meanings

<table>
<thead>
<tr>
<th>Verb</th>
<th>Main verb meaning</th>
<th>Non-main verb meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tur-</td>
<td>stay, stand</td>
<td>durative, continuing</td>
</tr>
<tr>
<td>yür-</td>
<td>walk, go on foot, roam around,</td>
<td>durative, continuing</td>
</tr>
<tr>
<td></td>
<td>associate with</td>
<td></td>
</tr>
<tr>
<td>(*)bar-</td>
<td>go</td>
<td>durative, uninterrupted</td>
</tr>
<tr>
<td>bol-</td>
<td>become</td>
<td>completed</td>
</tr>
<tr>
<td>çik-</td>
<td>emerge, go up, get on</td>
<td>completed; thoroughly</td>
</tr>
<tr>
<td>kät-</td>
<td>leave, depart</td>
<td>become; change into</td>
</tr>
<tr>
<td>bak-</td>
<td>watch, observe, take care of, raise</td>
<td>begin, do a little, try</td>
</tr>
<tr>
<td>kör-</td>
<td>see</td>
<td>begin, do a little, try</td>
</tr>
<tr>
<td>kal-</td>
<td>remain, be left over</td>
<td>unexpected event or result; complete</td>
</tr>
<tr>
<td>sal-</td>
<td>put/place something</td>
<td>unintentionally</td>
</tr>
<tr>
<td>tayla-</td>
<td>throw, throw away</td>
<td>suddenly, uncontrollably</td>
</tr>
<tr>
<td>al-*</td>
<td>take, get, buy</td>
<td>take an opportunity</td>
</tr>
<tr>
<td>koy-</td>
<td>place</td>
<td>done without effort or intention</td>
</tr>
<tr>
<td>oltur-</td>
<td>sit down</td>
<td></td>
</tr>
</tbody>
</table>

("*" indicates that the auxiliary is incorporated as a suffix into the main verb)

### b. Incorporation

At least three auxiliaries have been incorporated\(^{14}\) into the main verb; bar-, al-, and –

(i)wAt:

1. (25) a. yä-(p)-wer-ing
   eat-(NFT)-bar-IMP.2SG
   ‘keep on eating’

2. tep-iw-al-d-im.
   find-NFT-al-DrPST-1SG
   ‘I found it (and it’s not mine; I took advantage of the chance)’

3. män kel-iwat-imän
   1.SG come-NFT-wAt-NPST.1SG
   “I’m coming.”

---

\(^{14}\) "Incorporated" in the sense that the auxiliary is conventionally written as a suffix instead of as a separate word, and/or it is pronounced together, and the p of the \(-(I)p\) ending is voiced and pronounced as w, as in (25).
c. Diachronic semantic evolution

All Uyghur auxiliaries are identical in form to a lexical verb. The meanings of these lexical verbs overlap significantly with crosslinguistic patterns. Bybee, Perkins, and Pagliuca (1994) includes a very diverse sample of languages in their study of the evolution grammaticalized elements; verbs with certain meanings often become grammaticalized.

Among the verbs listed as a source for progressive meaning, Bybee et. al. give the following: be, sit, stay, reside, stand, rest, stop, continue, be located. The Uyghur auxiliary verbs with progressive meaning come from lexical verbs including stay/stand (tur-), walk, roam around (yür-), and go (bar-). In the category of anterior/perfective/completive meaning, Bybee et. al. list the following: come, go, throw away, pass by, have, exist, be, finish, put into. Uyghur auxiliary verbs with perfect/completive meaning came from source verbs become (-bol), emerge, go up (çık-). In both completive and progressive categories, the Uyghur auxiliaries have meanings similar to source verbs of other languages.

d. Headedness

Uyghur auxiliary/light verb constructions are all clearly headed by the non-final, non-lexical verb; in (26), only the auxiliary taşla- raises/agrees to get tense and agreement suffixes.

(26) Osman kül-üp tašli-d-i.
Osman laugh-NFNT tašli-DRPST-3
‘Osman laughed suddenly.’
Where “Auxiliary” does not fit

Despite being consistent with many cross-linguistic patterns of auxiliary verbs, the *semantic* properties of some of the Uyghur auxiliaries listed above do not fall in typical auxiliary semantics\(^\text{15}\). Auxiliaries deal with tense, aspect, and mood (TAM; Bybee et. al. 1994, Anderson 2006, Heine 1993, Kutera 2001), but many of the verbs listed above do not fall into those categories. For example, an event being unintentional (*sal-*, *köy-*), unexpected (*kal-*), self-benefitting (*al-*), or uncontrollable (*taşla-*) does not line up with TAM semantics, but they are consistently considered auxiliary verbs. A major contribution of this thesis is the proposal that a large subset of Uyghur “auxiliaries” would be better categorized as light verbs\(^\text{16}\).

2.1.2 Light verbs: An alternative

The term ‘light verb’ originated with Jesperson (1965) as a term for English constructions such as *have a rest*, where the verb *have* is the structural verb, but most of the semantics comes from another element, in this case the noun *rest*. Light verbs are called as such because unlike auxiliaries, they retain much of their semantics, but they do not act as a full predicate. The diagnostics used to differentiate between light verbs and auxiliaries vary cross-linguistically, making it difficult to make

\(^{15}\) There are additional ways in which some of the Uyghur “auxiliaries” are not auxiliary-like; there are more of them (19-24, depending on the analysis) than a typical auxiliary inventory, and in this type of complex verb construction, either the first or last verb can take negation/causation; see section 3.2.

\(^{16}\) This possibility was suggested to me by Sara Rosen.
generalizations. Some of the benchmarks of light verbs do seem perfectly aligned with Uyghur verbs of initiation, unintention, and intention:

(71) Typical qualities of light verbs (Butt and Geuder 2001, Butt 2003):

a. Identical in form to a main verb
b. Hard-to-define semantics; may exhibit different nuances in different contexts
c. Picky selectional restrictions (more likely than auxiliaries not to be able to combine with all main verbs)
d. Associated semantics have included volition, benefaction, forcefulness, surprise, suddenness
e. Not incorporated into the verb (unlike some auxiliaries, over time)
f. Denote agent-related notions, since $v$ is thought to license the agent

The last of these characteristics is especially interesting for the current purposes, but all of them seem very apt for what I have titled, up to this point, agentive auxiliaries in Uyghur. The following table compares characteristics of auxiliaries and light verbs.
(72) Table 3

<table>
<thead>
<tr>
<th></th>
<th>Auxiliaries</th>
<th>Uyghur Aspect Aux</th>
<th>Light Verbs</th>
<th>Uyghur Agent Aux/Light verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form is identical to a main verb</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sometimes incorporated into main verb</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes&lt;sup&gt;17&lt;/sup&gt;</td>
</tr>
<tr>
<td>Carries tense/agr</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Semantic bleaching</td>
<td>Yes</td>
<td>Yes</td>
<td>Some</td>
<td>Some</td>
</tr>
<tr>
<td>TAM semantics</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Agent-related semantics</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Introduces θ roles</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No&lt;sup&gt;18&lt;/sup&gt;</td>
</tr>
<tr>
<td>Highly productive</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Somewhat</td>
</tr>
</tbody>
</table>

At this time, the main motivation for separating light verbs from Uyghur auxiliaries is semantic. There is currently no convincing set of syntactic tests to validate the difference for Uyghur, I return to the question of light verbs in section (2), but I leave the establishing of syntactic tests for light verbs to future work.<sup>19</sup>

**Overview of Uyghur categories**

<sup>17</sup>The one agent auxiliary that has been incorporated is *al-*, which I have categorized as agent intentional. This is, admittedly, the least convincing of the agentive set, as others have called it some kind of reflexive or benefactive for the sake of the subject. None of the other agent-related auxiliaries have been incorporated.

<sup>18</sup>None of these verbs directly introduces an additional theta role. If these are truly light verbs, and in the v position, then this is where an agent is introduced, but this is a functional, not lexical licensing.

<sup>19</sup>Butt’s (2003) and Butt and Geuder’s (2001) reviews of tests for Northern Australian languages (Jamninjung and Bardi), Mandarin Chinese, and Urdu may provide some guidance. Tests may include adverbial placement and ordering restriction differences between light verbs and aspectual auxiliaries. Butt’s data for Mandarin include examples that are similar to Uyghur directional modification predicates; if tests are found for Uyghur light verbs, it would be worthwhile to apply them to the directional modification constructions as well.
The Uyghur auxiliaries can be divided into four categories. The categories are given below in (27) along with the members of each.

(27) Semantic sub-categories of modification by auxiliaries

a. Aspect: Duration, habitual, atelic (tur-, yür-, bar-)

b. Aspect: Completion / telicity (bol-, çık-, kät-, kal-)

c. Aspect: Initiation (bak-, kör-)

d. Agentive: Unintentionality (kal-, sal-, taşla-)

e. Agentive: Intentionality (al-)

f. Others (köy-, oltur-, ät-, yat-, öt-, käl-)

2.2 Aspectual auxiliaries

2.2.1 Duration/habitual auxiliaries (tur-, yür-, bar-)

As an aspectual category, duration concerns the continuation of an event over time. The action may be either one steadily continuing activity, or one activity repeated over time. An example of each is given in (28)-(30):

(28) dawamlıḵ bu yār-gā kel-ip tur-idu.
    Often this place-DAT come-NFT tur-NPST.3
    ‘He keeps on coming here often.’

(Engasaeth 2002:188)

(29) da’im haraḵ iç-ip yür-id-u.
    Always alcohol drink-NFT roam-NPST.3
    ‘He goes on and on drinking alcohol (everyday).’

(Engasaeth 2002:192)
The first of these, *tur-* is by far the most common of the three, at least in this multiple verb form. According to Erkin Khadir (personal communication), *yür-* is currently hardly used at all as a durative auxiliary, although both Engasaeth (2002) and Hahn (1991) include *yür-* in their lists of auxiliaries.

**More on bar-***

Engasaeth’s example in (30) is not typical because the auxiliary rarely appears as a separate, unincorporated verb form, and it is not clear that *bar-* is an auxiliary at all here instead of simply a main verb as part of a serial sequence (the meaning of *bar-* is ‘go’). Far more typical, from my fieldwork, is an incorporated (suffix) version of this auxiliary, as is given here:

(31) yä-(p)-wer-ing
eat-(NFT)-*bar*-IMP.2SG
‘keep on eating’

(32) işlit-i(p)-wer-ing
use-NFT-*bar*-IMP.2SG
‘(go ahead and) keep using it’

---

20 Many uses are in the imperative form when a speaker encourages a person to continue doing something. For example, if a person walks into a house and everyone is eating dinner, saying the sentence in (31) would encourage those in the room who are already eating to continue eating, and not be disrupted by the speaker’s entrance.
There is not complete agreement as to whether this suffix/auxiliary actually comes from the verb *bar-*\(^{21}\), but for two reasons, I propose that it is in fact the same verb. The first reason is that the phonological form of these examples is exactly what we would expect if the suffix came from the verb *bar*-. As shown in (31)-(32), the usual –*ip* nonfinite ending of the root verb is not clearly seen, and neither is the initial ‘b’ of the *bar*- suffix. However, the *w* in the -*wer*- form that occurs above is consistent with intervocalic voicing patterns in Uyghur. Consider a similar case of another incorporated auxiliary (al-; see section 2.4) in the following:

(33) buni   set-\textit{iw}-al-d-im.  
\begin{tabular}{l}
this-ACC & buy-NFT-al-DRPST-1SG  \\
\end{tabular}

‘I (went ahead and) bought it.’

Here in (33), the infinitival –*ip* ending in the verb also changes to *w*. It is very reasonable to assume then that the *p* of the –*ip* ending and the *b* of *bar*- together become the voiced labiovelar approximant *w* in both of these two cases of incorporation.

A second argument in favor of this suffix being *bar*- is the fact that the continuative meaning of the incorporated suffix/auxiliary is so semantically relevant to the main verb meaning of *bar*- (recall that *bar*- is ‘go’ in Uyghur). Cross-linguistically, it is not at all uncommon for a progressive/durative auxiliary to have originated as a lexical verb with a meaning similar to ‘go’ (Anderson 2006).

\(^{21}\)Although the reason is not clear from his explanation, Erkin Khadir (p.c.) does not think this is the verb *bar*-. Engæseth’s textbook lists –*wer/wär*- as an ‘aspectual infix’ but does not speculate about its origins. Tömür (2003) lists –*wär* as the “unrestricted aspectual stem form,” but states that it comes from “the auxiliary *bär*-”, which is \textit{not} the same as the auxiliary –*bar*. I am unsure whether he is just citing the form of –*bar* as it would appear after vowel reduction, \((bär-)\), or if he really intends it as the auxiliary *bär*-, which I call a benefactive, and discuss in section 4.1.
Although semantic resemblance to a non-auxiliary meaning is by no means necessary, when it does occur, it strongly suggests a relationship with that main verb. For these reasons, I argue that this continuative suffix is actually an incorporated form of the auxiliary \textit{bar-}.

### 2.2.2 Completion auxiliaries (\textit{bol-}, \textit{çık-}, \textit{kät-}, \textit{kal-})

Completion auxiliaries assert that an action has been carried through in its entirety. In (34)-(36) are representative examples:

(34) \textsc{u bu kitap-ni üç kün-dä ooku-p çıкт-i.}  
\quad \text{3SG this book-ACC three day-LOC read-NFT çıкт-DRPST-3}  
\quad \text{‘He (completely) read the book in three days.’ Engaseth}

(35) \textsc{bahasi ös-üp kät-t-i}  
\quad \text{price-POS.3SG fall-NFT kät-DRPST-3}  
\quad \text{‘The price rose.’}

(36) \textsc{u-ni el-ip kel-iş-ni unt-up kal-ip}  
\quad \text{it-ACC take-INF-ACC come-ACC forget-NFT kal-INDIRPST.3}  
\quad \text{‘(S/he) apparently forgot to bring it.’}

\textit{Bol-}

\textit{Bol-} has the least complicated meaning in the “completion auxiliary” set. It simply means that the action definitely happened and was completed.

(37) \textsc{äpändim yuyunup bolup, başklilirdin köpräk hakk tölap, çıkip ketiptu.}  
\quad \text{‘The Effendi \textbf{finished} washing himself, paid more than the others, and went out.’}

\textsuperscript{22} The indirect 3\textsuperscript{rd} person form of the past tense is often shortened. In this case, the final verb would most likely be pronounced \textit{kaptu}, dropping part of the root.  
\textsuperscript{23} From ‘Anecdotes of Näsirdin Effendi, c.f. Tömür 2003:425.
‘All who are coming have arrived, so let’s begin the meeting.’

As an auxiliary, çik- indicates that an action was “performed conscientiously and thoroughly, from beginning to end” (Hahn 1988:614). The activity must be carried through to completion both ‘until it was done’ as well as ‘to the furthest extent possible,’ in a sense of thoroughness. In (39)a, it is used to describe the activity of drinking many kinds of tea. However, in (39)(1)b it may not be used to say that although many kinds of tea were tried, there was one left untasted.

(39) a. jungo-ning çay-lir-i-ni asasan iç-ip çik-t-im.
   China-GEN tea-pl-POS-ACC basically drink-NFT çik-D-DRPST-1SG
   ‘I drank all kinds of tea in China.’

   b. *Jungoning çaylarini asasan içip çiktım, lekin bir xil içip bakmadım.
   ‘I drank all kinds of tea in China, but there’s one kind I didn’t try.’

It also often indicates a level of intention on behalf of the agent, such as this example from Hahn (1991:614):

(40) sestira kesäl-gä çar-ap çik-t-i.
   nurse patient-DAT care.for-NFT leave-DRPST-3
   ‘The nurse took good care of the patient.’

Kät-

Kät- is extremely common in daily speech, and its various subtle shades of meaning make it very difficult to center on one chief semantic use. Tömür (2006) gives a short list of semantic uses. I provide his categories here, with several

---

24 Tömür 2003:426
examples each. However, I suggest that his categorizations could very naturally all fall into one category; that of a change of state which has been achieved, and which continues. Engasaeth (2002) explains it as the ‘sudden occurrence of an action and its going into a sustained state in that manner’ (ms). In (41)-(52), examples are given with Tömür’s subcategorization in order to show the patterns, although I think the more general ‘change of state’ category includes the entire set.

**Intensification**

(41) açık-im kel-ip kät-t-i.
anger-GEN.1SG come-NFT kät-DRPST-3
‘I’m really angry,’ lit. ‘my anger came.’

(42) man kiynil-ip kät-t-im
1.SG suffer-NFT kät-DRPST-1SG
‘It’s really annoying for me.’

**Thorough change of state**

(43) bu-ni alim bil-ip, hapa bol-up kät-t-i.
this-ACC Alim know-NFT angry exist-NFT kät-DRPST-3
‘Knowing this, Alim got angry.’

(44) tol-up kät-mäk
be.full-NFT kät-INF
‘to fill’

(45) baha-si ös-üp kät-t-i
price-POS increase-NFT kät-DRPST-3
‘The price rose’

---

25 I do not include one of his uses; that of kät- as a directional indication. I covered this in section 1.2.2.

26 As stated previously, kät- actually encompasses multiple meanings as an auxiliary. In this section, I focus on the most common (at least in speech). See Tömür (2003) for more discussion of the various meanings of kal-.
(46) her-ip kät-mäk
be.tired-NFT kät-INF
'to fall asleep'

(47) kön-üp kät-mäk
be.accustomed.to-NFT kät-INF
'to get used to'

(48) därya ķur-up kät-t-i.
river be.dry- NFT kät-DRPST-3
'The river has dried up.'

(49) tüg-äp kät-mäk
finish-NFT kät-INF
1- to be out of something
2- to die

(50) ajir-iş-ip kät-t-i
separate-RECIP-NFT kät-DRPST-3
'they got divorced'

_Begins suddenly, continues_

(51) mu’allim aghr-ip ķaptu (ḵaliptu)
teacher be.sick-NFT ķal-IndPst-3
'Apparently the teacher is sick.'

_Ability_

When the –al ability suffix follows the auxiliary root, the interpretation is that of ability regarding the main verb:

(52) çoğum öginip ket-älä-ydu.
clearly learn-NFT kät-abil-NPST.3
'of course they will be able to learn (it)._'

_Ḳal_

This auxiliary is listed in this section for a secondary ‘completion’ meaning, but its most important meaning is that of unintentionality. It is covered in 2.3.2.
2.3 Agent modification auxiliaries / light verbs

2.3.1 Agent: Initiation; beginning, attempt or ‘do a little’ (bakç-, kör-)

These auxiliaries indicate that the event was started or attempted, or that the action was done ‘just a little.’ Tömür names it the “experimental aspectual stem form of the verb” (2003:410). This category is on the edge of the aspectual/agentive line.

Most aspectual categories relate to internal aspect, i.e., the compositional telicity or duration of an event, often including the presence or absence of an internal argument. The modification of these two auxiliaries, although related to the structure of the situation, is outside of the event itself. It may be most closely categorized as inceptive or inchoative, but inceptive aspect is only occasionally included in lists of aspectual categories, and does not appear in many standard discussions of aspect (Comrie 1976, Tenny 1994, Verkuyl 1993). In addition, it is not truly inceptive aspect, because it does not strictly denote the beginning of an event, because it also includes an element of volition; a verb with more typical inceptive meaning would be başla-, ‘begin.’

Therefore this set is included in the Agentive category, having noted that it is marginally related to aspect as well.

Difference in meaning between the two auxiliaries in this category is very subtle, if any.

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27 I argue in 4.2 that başla- is not a true auxiliary; a better categorization is probably that of a light verb.
2.3.2 Agentive: Unintentionality (kal-, sal-, taşla-)

These auxiliaries indicate a lack of intention or control by the subject. Among these three, I informally observed that kal- is the most commonly used in speech. The other two are less frequently used, but express a similar meaning.

Kal-

This auxiliary shows that the action was unintentional, but like kät- (as shown in 2.2.2), its semantics are quite complex. Tömür (2003) also lists several meanings for this auxiliary. When combined with different forms of the stem (simple stem, stem with ability, stem with negation), he finds a total of nine different nuances of meaning\(^{28}\). Again, to undertake the full range of meanings is beyond what can be done here. In observations from fieldwork however, one of these shades of meaning

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\(^{28}\) Some of Tömür’s other listed meanings include: Speaker thinks that the event will only happen once; nearly/ soon to be completed, but currently not complete; focus on completion/the state of having been completed; action has become frequent/ has become a continuing event.
was by far the most common, that being the *unintentional* nature of the event. Below is a selection of examples with this usage:

(56) angl-ap kal-d-im
    hear-NFT kal-DRPST-1SG
    ‘I (accidentally) heard (maybe was not supposed to know)’

(57) her-ip kal-maƙ
    be.tired-NFT kal-INF
    ‘to fall asleep’

(58) kön-up kal-maƙ
    spend.night-NFT kal-INF
    ‘to ‘crash’ at someone’s house for the night’

(59) öl-üp kal-maƙ
    be.used.to-NFT kal-INF
    ‘to get used to’ (also used with kät)

(60) apla, u-ni unk-up kal-d-im.
    oops it-ACC forget-NFT kal-DRPST-1SG
    ‘Oh no, I (accidentally) forgot it.’

As mentioned in the Completed Aspect section (2.2.2), *kal-* also includes an element of completion. Even if the action is accidental, it is understood to be completed. Engasaeth reflects this by stating that there is a change of state that is not directly caused, and a change of state must by definition be complete. But as shown in (58) (‘crashing’ at someone’s house for the night) and (61) (forgetting something), the action may be an event other than a change of state. Regardless, it is accurate to say that *kal-* falls into both the aspectual and the agentive categories of auxiliaries.
According to Engasaeth (2002), sal- shows a lack of intention on the part of the subject; that something happened inadvertently (62). Taşla- has very similar unintentional meaning (63).

(62) bu jumli-ni oğu-p kül-üp sal-d-im.
     this sentence-ACC read-NFT laugh-NFT sal-DRPST-1SG
     ‘I read this sentence and just couldn’t help laughing’
     (Engasaeth 2002:191)

(63) hämmimiz u-ning gep-ing-ğä kül-üp taşli-d-uŋ.
     all.1PL 3SG-GEN words-POS-DAT laugh-NFT taşli-DRPST-1PL
     ‘We all burst out laughing at what he said.’
     (Engasaeth 2002:191)

2.3.3 Agentive: Intentionality (-al-)

This commonly used auxiliary has been described as ‘reflexive’ because it shows that the action benefits the speaker in some way, such as in (64)²⁹.

(64) ular bu yil ikki eghiz öy sel-iw-al-d-i.
     3Pl this year two opening house build-NFT-al-DRPST-3
     ‘This year they built themselves a two-roomed house.’
     (Tömür 2003: 423)

I argue that it could also be categorized as a highly intentional act on the part of the agent. The verb al- as a main verb means ‘take, get, buy,’ and its auxiliary meaning retains a sense of the main verb meaning in that the subject is ‘taking advantage’ of an opportunity³⁰. For example, (65)-(66) are examples where a

²⁹ Tümür lists five uses for this auxiliary, two of which are similar to a reflexive meaning, but offers no overall generalization for the meaning of al-. Hahn (1988:612) describes it this way: “the action expressed by the preceding verb is reflexive, resulting in the subject’s own benefit or own suffering.”

³⁰ One lexicalized usage of -al- is also worth noting. In 0, the root verb bak-, ‘care for,’ takes the auxiliary –al- to form the word for adoption: balini beţiwalmaŋ, ‘to adopt a child’
reflexive meaning is not at all clear, but both would involve an agent doing something on purpose, often when he/she was not supposed to do the action:

(65) kör-iw-al-d-im\textsuperscript{31}
\textit{see-NFT-al-DrPST-1SG}
‘I saw it (but perhaps wasn’t supposed to)

(66) bu-ni set-iw-al-d-im.
\textit{this-ACC sell-NFT-al-DrPST-1SG}
‘I (went ahead and) bought it.’

(67) u pul-ni xašli-w-al-d-i
\textit{3SG money-ACC spend-NFT-al-DrPST-3}
‘he spent the money (and maybe the money is not really his)

(68) tep-iw-al-d-im.
\textit{find-NFT-al-DrPST-1SG}
‘I found it (and it’s not mine; I took advantage of the chance)’

It often takes the form of an imperative, usually in a context where a speaker encourages someone to take advantage of an opportunity that will not last long:

(69) yā-w-el-ing
\textit{eat-NFT-al-2SG.IMP}
‘eat (while you can)’

(70) oğu-w-el-ing
\textit{read-NFT-al-2SG.IMP}
‘read it (while you can).’

(71) kāl-giçä uxli-w-el-ing
\textit{come-until sleep-NFT-al-2SG.IMP}
‘sleep until (they) come.’

There is a homophonous suffix, -(i)l, which is a more traditional reflexive, in that the action is done to the subject itself:

\textsuperscript{31} As explained in section 2.2.1, the p in the usual –ip non-finite ending may be replaced by w intervocalicly.
Unlike the auxiliary, the reflexive suffix never appears after a non-finite suffix.

Perhaps the auxiliary *al*- has been categorized or translated as a reflexive due to the homophonous forms, but there are certainly two separate grammatical functions. The *al*- auxiliary always follows the non-finite suffix –*Ip*, and never adds a theta role\(^ {32} \).

The subject may benefit in some way, but there is no additional participant in the case of AUX *al*- . In a causative construction, where there is no doubt an extra theta role, the additional NP (the causee) is dative, but with this *al*- auxiliary, there is not such additional theta role given or allowed.

**Agent modification summary**

The five auxiliaries included in the ‘agent modification’ category reflect initiation, lack of intention, or intention on the part of the agent. This category is part of what makes Uyghur auxiliaries unusual, at least according to classification in the literature up to this point; the non-aspectual meanings are atypical of auxiliaries cross-linguistically. Their forms, however, are completely in line with the more expected aspectual auxiliaries.

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\(^{32}\) Engasaeth (2002) gives another related meaning to this auxiliary; that of ‘managing to do something, or getting to do something.’ This meaning is similar to yet another suffix. There is an abilitative suffix, *-al*, which attaches to verbal stems, not non-finite forms with *-Ip*. This creates a phonologically and semantically dense set of suffixes/auxiliaries, which may explain some of the overlapping meanings in usage over time.
2.4 Other auxiliaries

Uyghur includes a very large number of verbs used as auxiliaries. Others not in this study include ät-, yat-, öt-, and käl-. This study focuses on those I found to be most common in fieldwork, as well as those which were less common in fieldwork but are generally placed in categories similar to the ones I found to be very common. The purpose was to find the most accurate categories for types of aspect/modification encoded in auxiliaries. There are several that do not fit into these categories. Although the structure is not covered in any depth, below are examples from a few of the other auxiliaries.

**Koy**

*Koy*- can be used with two distinct auxiliary meanings. It is very commonly used as a deferential marker, indicating that the speaker wants to be polite or slightly formal. It is often used in a request, an apology, or an invitation.

(73) kör-süt-üp  koy-ung-çu?
See-CAUS-NFT  koy-IMP.2SG-also
‘Won’t you show me too, please?’

(Engasaeth 2002:191)

(74) uning-ghi  hāwār-ni  yet-ip  koy-ung.
3SG-DAT  news-ACC  tell-NFT  koy-IMP.2SG
‘Please tell him the news.’

(75) kāçüring,  uzaļ  sačli-t-ip  koy-d-um.
sorry  long  wait-CAUS-NFT  koy-DRPST-1SG
‘Sorry I made you wait so long.’

(76) wačt-ingiz-ni  el-ip  koy-d-uk
time-GEN.2SG-ACC  take-NFT  koy-DRPST-1PL
‘(Sorry; unfortunately) we took up your time.’
(77) u biz-ni yäksänbä kuni öy-i-gä çäkir-ip
     3SG 1PL-ACC Sunday day house-GEN-DAT invite-NFT
     koy-d-i.
     koy-DRPST-3
     ‘She invited us to come to her house on Sunday.’

The second meaning, used less in spoken language, is that the speaker is doing
the action half-heartedly, usually only one time, and not a continued or repetitive
action, as in (78). Interestingly, this usage is usually transitive:

(78) ak(a)-ingiz-ni ränji-t-ip koy-d-uçi.

Older.brother-2SG.POS-ACC be.upset-CAUS-NFT koy-DRPST-1PL
‘(Now) we have upset your older brother.’

(Engasaeth 2002:191)

Some usages do not fit as well within these two usages of koy-. Consider (79):

(79) bil-dur-up koy-ay!33
know-CAUS-NFT koy-IMP
‘I’ll show you!’

Oltur-

The auxiliary oltur- (main verb meaning, ‘sit, stay’) is difficult to explain in terms
of the benchmarks discussed so far. It indicates that the event is of short duration,
and that there is a lack of depth of involvement of participants, as exemplified in (80):

(80) bu iş oğrisida köp sözl-äp oltur-may-miz.
     This thing about much talk-NFT oltur-NFT.NEG-NPST.1PL
     ‘We’ll not dwell long on (say much about) this matter.’

(Engasaeth 2002:192)

33 This example includes a causative morpheme in the main verb. I give a more thorough discussion of
the interaction of causatives and negatives with main and auxiliary verbs in section 0.
2.5 Summary of Chapter 2

Below is an expanded version of the table given in 2.1, now including AUX categories as I have given in this chapter. It demonstrates the clear differences in meaning between these verbs’ main verb and auxiliary meanings. It also outlines the categories and sub-categories I have proposed for the majority of the Uyghur auxiliaries. The two main categories are aspect- and agent- related auxiliaries. Within each, there are a few sub-categories. The table gives a brief description of the meanings associated with each individual auxiliary. Some auxiliaries from both sets have been incorporated into the verb, over time. This large set of auxiliaries expands what is commonly thought regarding the semantics of auxiliaries, which typically deal with tense, aspect, and mood.
<table>
<thead>
<tr>
<th>Verb</th>
<th>Main verb meaning</th>
<th>General auxiliary verb meaning</th>
<th>Functional category</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tüş-</td>
<td>stay, stand</td>
<td>durative, continuing</td>
<td>Aspect: durative, habitual</td>
</tr>
<tr>
<td>*yür-</td>
<td>walk, roam around, associate with</td>
<td>durative, continuing</td>
<td></td>
</tr>
<tr>
<td>(*bar-</td>
<td>go</td>
<td>durative, uninterrupted</td>
<td></td>
</tr>
<tr>
<td>*at-</td>
<td>throw, shoot</td>
<td>durative</td>
<td></td>
</tr>
<tr>
<td>*bol-</td>
<td>exist</td>
<td>completed</td>
<td>Aspect: completive</td>
</tr>
<tr>
<td>*çik-</td>
<td>go up, get on</td>
<td>completed; thoroughly</td>
<td></td>
</tr>
<tr>
<td>*kât-</td>
<td>leave, depart</td>
<td>become; change into</td>
<td></td>
</tr>
<tr>
<td>*başkâl-</td>
<td>remain, be left over</td>
<td>unexpected event or result; complete</td>
<td></td>
</tr>
<tr>
<td>*baḵ-</td>
<td>watch, take care of; raise</td>
<td>begin, do a little, try</td>
<td>Agent: initiation / light verbs</td>
</tr>
<tr>
<td>*kör-</td>
<td>see</td>
<td>begin, do a little, try</td>
<td></td>
</tr>
<tr>
<td>*kal-</td>
<td>remain, be left over</td>
<td>unexpected event or result; complete</td>
<td>Agent: unintentional / light verbs</td>
</tr>
<tr>
<td>*sal-</td>
<td>put/place something</td>
<td>unintentionally</td>
<td></td>
</tr>
<tr>
<td>*taşla-</td>
<td>throw</td>
<td>suddenly, uncontrollably</td>
<td></td>
</tr>
<tr>
<td>*kaḵ-</td>
<td>place</td>
<td>done without effort or intention</td>
<td></td>
</tr>
<tr>
<td><em>al-</em></td>
<td>take, get, buy</td>
<td>take an opportunity</td>
<td>Agent: intentional / light verb</td>
</tr>
</tbody>
</table>

34 Auxiliaries/light verbs included here do not represent all of the verbs used in this type of construction. Only the most commonly found (in my field work) and those representing the main categories of this study are included. There are a few more, such as oltur-, åt-, yat-, ön-, and kal-.

35 *kal- is listed twice here in order to show that it belongs in two categories.

36 *koy- has several disparate meanings, only one of which has an aspect of unintentionality.
3 Describing Uyghur Auxiliaries: Structure

This chapter turns away from the meaning of auxiliaries and focuses on syntactic properties. I propose a biclausal structure with two layers of AUX functional heads; an aspect layer over an agentive modification layer. The reasoning is as follows: selectional restrictions, theta role assignment, and interactions with other functional heads (causation, negation, and instances where multiple functional auxiliaries may occur in one sentence) all support an analysis where Uyghur auxiliaries are functional heads within a multi-layered and monoclausal structure. Where interactions are word-internal, I depend on Baker’s (1985, 1988) Mirror Principle to justify the proposed hierarchies. Where interactions are across words, I rely on word order and co-occurrence restrictions to support the hierarchies. The final analysis is in line with Cinque’s (1999, 2001) rigid order of functional projections, in which restructuring and the location of adverbials adjunction support the idea of a universal functional structure.

Baker (1985)

Baker (1985) argues that morphology and syntax are two reflections of a single process. The result of this assumption is that for any language, the relationships among morphemes ought to reflect the syntactic processes that required or generated each morpheme. In the most simple example, if a verb has to agree with both a subject and an object, the morpheme agreeing with the entity which is more closely related to the verb in syntax (the object) should surface closer to the verb than the subject, which originates further from the verb.
Baker’s analysis takes into account various processes affecting both syntax and morphology, including causation, passivization, reciprocals, and reflexives. Relevant to the current discussion, Baker shows that the order of morphemes can be depended on as indications of syntactic processes and order. I will use this as a foundation in sections 3.2 and 3.3, where the order of morphemes is used to determine the structure.

3.1 Syntactic differences between auxiliaries and main verbs

3.1.1 Selectional restrictions of Aux and the –Ip ending

Selectional restrictions of Uyghur auxiliary constructions differ from those of main (lexical) verb constructions in two ways: the form of the complement, and the placement of the complement.

The complement of an auxiliary must be a functional head in the form of a non-finite (–Ip) form of a verb. Lexical verbs cannot take a true verbal complement in any form, so any verb must be nominalized if it is to be the complement of a lexical verb. Possible nominalizing endings include –liK (a nominal ending) or –iş (an infinitival ending with nominal qualities). Both of these two endings create a nominal stem that can receive case, as in (81) and (82):

(81) män u-ning käl-gän-liɡ-i-ni bil-may-män.
    1SG 3SG-POS come-GRD-N-POS-ACC know-NEG-NPST.1SG
    ‘I don’t know if he is coming.’

(82) män kitap-ni oḵu-ş-ka başli-d-im
    1SG book-ACC read-INF-DAT begin-DRPST-1SG
    ‘I started reading the book.’

These main verbs do not allow an –ip form of the complement verb:
Auxiliaries are the exact opposite. As shown, they allow the complement verb to have the \(-Ip\) ending, and they cannot combine with a nominalized form of the verb:

\begin{itemize}
  \item \textit{a.} un-\textit{ning dost-lir-i u-ni yokļ-ap tur-id-u.}
    
    \begin{tabular}{l}
      \textsc{3-gen friend-\textit{pl-pos} visit-\textit{nft tur-\textit{npst-3}}}
    \end{tabular}
    
    ‘His friends will \textbf{keep visiting} him.’
  \item \textit{b.} *uning dostliri uni yokļ-\textit{iš-\textit{ka} turidu.}
  \item \textit{c.} *u-\textit{ning dostliri uni yokļ-\textit{ighan-\textit{ligh-i-ni turidu.}}
\end{itemize}

The category of these non-finite verbal complements is an issue I cannot definitively settle here. The auxiliaries in (85)a and (86)a select the \(-(I)p\) ending, but the category of this suffix is not completely clear. It may be a CP, in which case \(-(I)p\) is some kind of null tense. It may simply be a complete VP, with \(-(I)p\) functioning as a phonologically necessary ending with little or no syntactic meaning aside from retaining the verbal status (as opposed to nominal, which is indicated with the endings \(-l\text{i}K\) and \(-(i)\text{s}\)). This issue is an interesting one and is worth pursuing, although I cannot conclude it here. For the purposes of this paper, I will use the CP analysis, yielding a bi-clausal structure, because it gives
the -(I)p suffix a more clear identity as T under C, but I do not hold tightly to this conclusion.

Regarding placement of the complement, the complement of a main verb (a DP) may scramble, whereas the complement of an auxiliary (VP) does not. Object NPs normally immediately precede the verb. In this position, the NP may remain caseless if it is indefinite. However, the object may be scrambled to a pre-subject or pre-adjunct position, provided that it is case-marked with the accusative –ni case ending:

(87) a. biz bini-lar-(ni) kör-d-uğ  
    1PL building-PL-(ACC) see-DRPST-1PL  
    ‘We saw (the) buildings.’

    b. binilarni biz körduğ  
    ‘We saw the buildings.’

This is true even for a nominalized verbal complement. In (88), the NP uning kälgänligini, ‘his coming,’ is scrambled to a position before the subject:

(88) uning käl-gän-lig-i-ni män bil-may-män.  
    3.POS come-GRD-NOM-POS-ACC 1SG know-NEG-1SG  
    ‘I don’t know if he is coming,’ lit. ‘I don’t know his coming.’

There is no scrambling, however, of the main verb complement of the auxiliary.

The main verb and auxiliary may not be separated by any lexical material. A violation results in either ungrammaticality, as shown in (89)b, or if both verbs could be alternately interpreted as main verbs in the specific context, then the construction can be interpreted as a serial verb construction, as in (90)b:

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37 Non-final main verbs may allow the suffixation of a number of functional projections, such as causation, negation, and in some cases, ability. Section 0 deals with these interactions. If these morphemes are functional heads with a rigid order in the structure, then it follows that they will not be able to scramble, and therefore the attached V will not scramble either. Nouns will not be associated with the same functional heads, and will therefore not be as restricted.
The only way for auxiliaries to be interpreted with their auxiliary meaning is if they immediately follow a main verb, which appears in the non-finite –Ip form. This difference between V and Aux in terms of both selection and scrambling licensing is consistent with auxiliaries as non-lexical verbs.

3.1.2 **Auxiliaries add a level of structure, but no theta role**

All main (lexical) verbs introduce theta roles into a sentence. All of the auxiliaries in this study can be used as main verbs, and when they are, they introduce theta roles. However, when the same verbs are used as auxiliaries, they never introduce any theta roles in addition to what the main verb requires. In (91)-(93), there are comparisons of the same main verb used with and without an auxiliary verb. The argument structure remains the same in all of the (a) and (b) forms because there is never an additional subject, object, or adjunct which is licensed by an auxiliary.

(89) a. a’ilisidikilär kün-dä tamaş aper-ip tur-id-u.
    family day-LOC food bring-NFT tur-DRPST-3SG
    ‘(His) family continued bringing him food daily.’
    (Engasaeth 2002:188)

    b. *a’ilisidikilär kündä aper-ip tamaş turi-d-u.

(90) a. män u-ni yerim sa’ät sakl-ap tur-d-um.
    1SG 3SG-ACC half hour wait-NFT tur-DRPST-1SG
    ‘I kept waiting for him for half an hour.’
    (Engasaeth 2002:188)

    b. män u-ni sakl-ap yerim saät tur-d-um.
    1SG 3SG-ACC wait-NFT half hour stay-DRPST-1SG
    ‘I waited for him and stayed half an hour.’

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(91) a. Osman kül-d-i.
   Osman laugh-DRPST-3
   ‘Osman laughed.’

   b. Osman kül-üp taşli-d-i.
   Osman laugh-NFT taşli-DRPST-3
   ‘Osman laughed suddenly.’

(92) a. u-ning dost-lir-i u-ni yokli-du.
    3-GEN friend-PL-POS 3-ACC visit-3NPST
    ‘His friends visit/will visit him.’

   b. u-ning dost-lir-i u-ni yökl-ap tur-idu.
    3-GEN friend-PL-POS 3-ACC visit-NFT tur-3NPST
    ‘His friends will keep visiting him.’

(93) a. män makal-ni oku-d-um
    1SG story-ACC read-DRPST-1SG
    ‘I read the article.’

   b. män makal-ni oku-p çik-t-im.
    1SG story-ACC read-NFT çik-DRPST-1SG
    ‘I completely read through the article.’

Recall the serial type of verbal construction from 1.2.1, as repeated here in (94):

(94) män tünügün bazar-ğa ber-ip, almı-lar-ni el-ip,
    1SG yesterday market-DAT go-NFT apple-PL-ACC buy-NFT
    öy-gä kat-t-im
    house-DAT return-DRPST-1SG
    ‘Yesterday I went to the market, bought apples, and returned to the house.’

Here the additional verbs may add additional theta roles; there are two dative NPs and one accusative NP. This is not possible in auxiliary verb constructions.
3.2 Structure of auxiliary verb constructions: Interactions with other functional heads

While there has been a fair amount of work done to explain the meanings of Uyghur auxiliaries, very little syntactic analysis has been done to understand the structure of these constructions. Remember the head-final nature of Uyghur structure, as repeated in the simple sentence tree in (95):

(95) Structure diagram for män üç bali-ni baḵımän, ‘I am raising three children’:

```
TP
  T'
    NP  v'
      v
    VP
      wi-imän
    NPST.1SG
        män
    1SG
      män
    VP
      wi
    NP
      NPST.3SG
        üç bali-ni
    ACC
      watch
```

The presence of an auxiliary verb will add a layer of structure to the above tree. The question is where to put it.

This discussion falls in the shadow of Cinque’s (1999) proposal of a universal functional hierarchy. By studying the placement of the relative order of

---

38 As referenced in Chapter 3, Hahn (1988), Zakir (1999), Tömür (2003), Schamiloglu (1988), and Engasaeth’s textbook (2002) have discussed the semantics of Uyghur and/or Turkic complex verb constructions, but they do not discuss their syntactic properties. Zakir notes the lack of thorough work outside of semantics: “Although some studies of their semantics exist, a proper morphological description and classification of these forms is still a matter of further studies” (1999:181). While the present study is not a complete morphological classification, it may help to place auxiliaries in syntactic categories, and therefore better understand the function of the various auxiliary words/morphemes.
functional morphemes along with the adverbs associated with those functions, he
determined a set of projections which is presumably true for all languages.
Naturally no language will have all of them, but whatever set does exist is said to
fall in a prescribed order. The projections are as follows:

\[
\begin{align*}
(96) \quad & \text{MoodP}_{\text{speech act}} \succ \text{MoodP}_{\text{evaluative}} \succ \text{MoodP}_{\text{evidential}} \succ \text{ModP}_{\text{epistemic}} > \\
& \text{TP}_{\text{past}} \succ \text{TP}_{\text{future}} \succ \text{MoodP}_{\text{irrealis}} \succ \text{TP}_{\text{anterior}} \succ \text{ModP}_{\text{alethic}} \succ \text{AspP}_{\text{habitual}} > \\
& \text{AspP}_{\text{repetitive(I)}} \succ \text{AspP}_{\text{frequentative(I)}} \succ \text{ModP}_{\text{volition}} \succ \text{AspP}_{\text{celerative(I)}} > \\
& \text{AspP}_{\text{terminative}} \succ \text{AspP}_{\text{continulative}} \succ \text{AspP}_{\text{perfect}} \succ \text{AspP}_{\text{retrospective}} > \\
& \text{AspP}_{\text{prospective}} \succ \text{AspP}_{\text{inceptive(I)}} \succ \text{ModP}_{\text{obligation}} \succ \text{ModP}_{\text{ability}} > \\
& \text{AspP}_{\text{frustrative/success}} \succ \text{ModP}_{\text{permission}} \succ \text{AspP}_{\text{conative}} \succ \text{AspP}_{\text{completive(I)}} > \\
& \text{VoiceP} \succ \text{AspP}_{\text{repetitive(II)}} \succ \text{AspP}_{\text{frequentative(II)}} \succ \text{AspP}_{\text{celerative(II)}} > \\
& \text{AspP}_{\text{inceptive(II)}} \succ \text{AspP}_{\text{completive}} \succ \text{V} \\
\end{align*}
\]

One way to approach this question in Uyghur is to look at how main verbs
and auxiliaries interact with other heads. Non-final main verbs never show tense
or agreement, but there are some other functional heads that do interact with
them. If it is possible to have functional morphology on the main verb, then the
position of the auxiliary must be high enough to accommodate these functional
heads below AUX. If no additional morphology is allowed on the main verb, then
the auxiliary must immediately dominate the verbal complement with no room for
other functional projections. For example, if causative morphology can appear on
the main verb, then the auxiliary verb must be higher in the structure than the
node where causative appears. This would give the word/morpheme order in
(97):
(97)  CAUS on main verb only

a. Word order
   \[ NP_{\text{Subj}} \quad (NP_{\text{Obj}}) \quad \text{MAIN.VERB-CAUS-}Ip \quad \text{AUX-TENSE-SAGR} \]

b. Tree structure

\[
\begin{array}{c}
\text{TP} \\
\text{T'} \\
\text{AUXP} \quad \text{T} \\
\text{CP} \quad \text{AUX} \\
\text{TP} \quad \text{C} \\
\text{vP} \quad -(I)p \\
\text{VP} \quad \text{CAUS} \\
\text{O} \quad \text{V}
\end{array}
\]

If causative morphology cannot suffix onto the main verb, but only on the auxiliary, then the auxiliary must always be lower in the structure than the causative and perhaps other functional layers. In this case, the word/morpheme order would be such as in (98):

(98)  CAUS on AUX only

a. Word order
   \[ NP_{\text{Subj}} \ (NP_{\text{Obj}}) \quad \text{MAIN.VERB-}Ip \quad \text{AUX-CAUS-TENSE-SAGR} \]
Since \textit{CAUS} is often considered to be in the \( vP \) (Kratzer 1996), the location of this morpheme in relation to \textit{AUX} will show the structural position of auxiliaries.

In this section, I will show that main verbs can take a causative or negative morpheme, and in some cases, an ability morpheme. Auxiliaries may also take these morphemes. Causatives and negatives on the lower main verb are interpreted differently, in terms of scope, than higher-level causation or negation on the auxiliary. This is not completely surprising, but it helps explain how high in the structure the auxiliary must be. The complexity of structure inside of the non-final verbs will point to the correct position of Aux.

\textbf{Causation}

Uyghur has several forms of morphological causatives, all appearing as suffixes on the verb, the main forms being \textit{–dur/tur} and \textit{–t}, with several other
forms such as –GUz. A predicate may include one or multiple causatives. The
position of the causative morpheme determines the scope of causation. In the
following examples, causative morphology can appear on the auxiliary alone, on
the main verb alone, or, marginally, on both. Following each sentence is a
representation of the scope of the causative.

(99) a. main verb aux (no caus)
    män tamak-ni yä-p tur-d-um
    1SG food-ACC eat-NFT tur-DRPST-1SG
    ‘I kept eating the food.’

    b. main verb aux-CAUS
    män-gä tamak-ni yä-p tur-guz-d-I
    1SG-DAT food-ACC eat-CAUS-NFT tur-CAUS-DRPST-3
    ‘He made me keep eating’
    He CAUS [continue [I [eat food]]]

    c. main verb-CAUS aux
    manga tamak-ni yeg-up tur-d-i
    1SG-DAT food-ACC eat-CAUS-NFT tur-DRPST-3
    ‘He continued feeding me (i.e., causing me to eat)’
    He continue [CAUS [I [eat food]]]

    d. main verb-CAUS aux-CAUS
    'man.ga tamak-ni yeg-up tur-guz-d-i
    1SG-DAT food-ACC eat-CAUS-NFT tur-CAUS-DRPST-3
    ‘he kept making (someone) feed me/make me eat’
    He CAUS1 [(someone) [continue [CAUS2 [I [eat food]]]]]

(100) a. main verb aux (no caus)
    män tamak-ni yä-p bol-d-i
    1SG food-ACC eat-NFT exit-DRPST-3
    ‘I finished eating my food.’

    b. main verb aux-CAUS
    man.ga tamak-ni yä-p bol-guz-d-i
    1SG-DAT food-ACC eat-CAUS-NFT exist-CAUS-DRPST-3
    ‘he made me finish eating’
    He CAUS [finish [I [eat food]]]
c. main verb-CAUS aux
   manga tamaḵ-ni ye-guz-up bol-d-i
1SG.DAT food-ACC eat-CAUS-NFT exist-DRPst-3
‘he finished feeding me’
He finish [CAUS [I [eat food]]]

d. main verb-CAUS aux-CAUS
   ?manga tamaḵ-ni ye-guz-up bol-ghuz-d-i
1SG.DAT food-ACC eat-CAUS-NFT exist- CAUS-DRPst-3
‘he made (someone) finish feeding me’
He CAUS [(someone) [finish [CAUS [I [eat food]]]]

Where the causative morpheme appears only on the auxiliary, as in (99)b and (100)b, the caused event includes the modification of the auxiliary. Where causation appears only on the main verb, as in (99)c and (100)c, the caused event includes only the main verb.39 These data show that the auxiliary must be in a structural position high enough to allow a causative layer below it, and at the same time it allows a causative level higher than the auxiliary.

This presents two options. Either the location of AUX is fixed, or AUX actually has two possible locations. Either way, CAUS may optionally appear above or below the CP headed by –(I)p. The trees that follow represent the two options.

39 Another significant observation from the causative data is that a theta role is added. This is typical for causatives, but it is significant because it means that although the auxiliary itself does not add a theta role, there must be room both above and below the auxiliary for theta-adding structure. How can a theta role be added this high? I do not know the answer at this point.
Structure with two locations for CAUS and one for AUX:

(101)
I argue that the second is correct; there should be a potential of two AUX layers. Either AUXP or vP may select the CP headed by -(I)p. There are two reasons. The first is the fact that it is possible to have two CAUS in one sentence, as shown in (99)d and (100)d above. The second reason comes from the interpretation of the embedded subjects.

Fukuda (2007) examined the location of aspectual verbs from a similar angle, namely that of passivization. His cross-linguistic study (including argumentation from German, Japanese, Romance, and Basque) argued that interpretive ambiguity in passivized raising and control sentences with aspectual verbs is due to two potential locations for the aspectual verbs (he includes verbs of inception, continuation, and termination). Aspectual verbs interpreted as
unbounded events were found above vP (outside the control of the external argument, yielding the raising interpretation), and aspectual verbs interpreted as bounded events were found below vP (under the control of the external argument, giving the control interpretation).

The German section draws on Wurmbrand (2001), and argues for two places for aspectual verbs: AuxP and V; control interpretations are from low aspectual verbs (in V), and raising interpretations stem from high aspectual verbs.

In the case of Japanese aspectual verbs, different verbs allow different passives; some allow matrix passive, some embedded passive, some either. Only control verbs have external arguments, and since passives involve acting on the external argument, this explains why raising (high) aspectual verbs to not allow passivization. In (103), passive is allowed only on the main verb, but not on the high raising aspectual verb. (104) is the opposite, where only long-distance passive is allowed.

(103) Embedded passive, raising verb, (Fukuda: 2007:176)

a. *Kekka-ga [t_i] hyojishi owar]-are-ta
   result-NOM [t_i] indicate {finish}_2]-PASS-PERF
   ‘The results finished being posted.’

b. ’Kekka-ga [t_i] hyojis-rare] owar-ta
   result-NOM [t_i] indicate-PASS finish_i]-PERF
   ‘The results finished being posted.’

(104) Long-distance passive, control verb, (Fukuda: 2007:176)

a. Sono-shoosestu-ga [t_i] kaki oe]-rare-ta
   that-novel-NOM [t_i] write {finish}_2]-PASS-PERF
   ‘That novel was finished to be written.’

b. *Sono-shoosestu-ga [t_i] kaki-are] oe-ta
   that-novel-NOM [t_i] write-PASS finish_i]-PERF
   ‘That novel finished being written.’
Fukuda represents the contrasting verbs with the following trees:

(105) a. H-AspP
    \[\begin{array}{c}
    \text{H-Asp'} \\
    \text{vP} \\
    \text{v'} \\
    \text{VP (passive)} \\
    \end{array}\]

    -rare

    (DP) V


b. vP
    \[\begin{array}{c}
    \text{L-AspP} \\
    \text{v (passive)} \\
    \text{v'} \\
    \text{VP} \\
    \end{array}\]

    -rare

    (DP) V

Although Fukuda is not specifically discussing auxiliaries, the observations are very useful in terms of understanding the structure of complex predicates.

In addition, Cinque (2003) argues for two positions not just for aspectual verbs in general, but specifically for auxiliaries, one above and one below vP.

Given Fukada’s findings in which auxiliary position fluctuates and the interpretation of the subject is affected (i.e., control vs. raising interpretation), I return to the Uyghur causatives to determine the location(s) of \textit{aux}. The relevant parts of (99) and (100) are given here as (106) and (107), but here more attention is paid to the subjects and traces within the embedded clauses. Notice that in the (a) examples, where \textit{CAUS} is above \textit{aux} in structure, there is raising, but in the (b) examples, there is a control interpretation consistent with the matrix subject:

(106) a. manga tamaṅ-ni yā-p tur-\textit{ghuzz}-d-i
    1SG.DAT food-ACC eat-NFT \textit{tur-CAUS-DRPST-3SG}

    ‘(He) made me keep eating’

    He \textit{CAUS} [\textit{me} \text{CAUS} \{\textit{t}_i \text{CAUS} \{\textit{ti} \text{[eat food]}}\}]

b. manga tamaṅ-ni ye-\textit{guzz}-up tur-d-i
    1SG.DAT food-ACC eat-CAUS-NFT \textit{tur-DRPST-3SG}

    ‘(He) continued feeding me’

    He \textit{CAUS} [\textit{ti} \text{CAUS} \{\textit{ti} \text{[eat food]}}]
(107) a. manga tamaŋ-ŋi yä-p bol-ghuz-d-i
   1SG.DAT food-ACC eat-NFT exist-CAUS-DRPST-3
   ‘(He) made me finish eating’
   He CAUS [me_i finish [t_i [eat food]]]

b. manga tamaŋ-ŋi ye-guz-up bol-d-i
   1SG.DAT food-ACC eat-CAUS-NFT exist-D
   ‘(He) finished feeding me’
   He_i [finish [t_i CAUS [(I) [eat food]]]]

The Uyghur data here show raising to subject and not control, but Fukuda’s
explanation correctly captures the interpretation of subjects for Uyghur complex
verb phrases. Since subjects originate in v, the relationship of vP to aux
determines the scope of the subject. As far as auxiliaries may appear above or
below vP, the second proposed structure above is confirmed. In (108), the
proposed analysis is applied to (106) a and b:

(108) Contrast between two possible AUX locations
   a. u manga tamaŋ-ŋi yä-p tur-ghuz-d-i
      3.SG.NOM 1SG.DAT food-ACC eat-NFT tur-CAUS-DRPST-3
      ‘(He) made me keep eating’
TP

\(u\)

T'

vP

T

-dim (pst)

(u)

v'

AUXP

CAUS

-ghuz

manga

(T.sg.dat)

AUX'

CP

AUX tur (continue)

TP (C)

v'

vP

T

-p (manga)

V

VP

O

tamaķ-ni yä- (eat)

(food-acc)
Negation

The data from negation show a similar pattern as the causative data. Both the main verb and the auxiliary may have a negation suffix (\(-\text{may}\) for the infinitival main verb; \(-\text{mi}\) for the finite auxiliary). The scope of negation works in the same way as well; where the negative morpheme appears only on the
auxiliary, the negated event includes the modification of the auxiliary, as in (109)b. Where negation appears only on the main verb, as in (109)c, the negated event includes only the main verb, and the auxiliary retains an affirmative meaning. When negation appears on both verbs, the meaning is a double negative, which translates into an emphatic positive, as in (109)d.

(109)  

(a) main verb aux-CAUS  
\[
\begin{align*} 
\text{män} & \quad \text{tamaŋ-ni} \quad \text{yā-p} \quad \text{tur-dum} \\
\text{1SG} & \quad \text{food-ACC} \quad \text{eat-NFT} \quad \text{tur-DRPST-1SG} \\
\end{align*}
\]

‘I kept eating the food.’

(b) main verb aux-NEG  
\[
\begin{align*} 
\text{män} & \quad \text{tamaŋ-ni} \quad \text{yā-p} \quad \text{tur-mi-d-im} \\
\text{1SG} & \quad \text{food-ACC} \quad \text{eat-NEG-} \text{tur-NEG-DRPST-1SG} \\
\end{align*}
\]

‘I didn’t keep eating the food.’

I NEG [continue [eat food]]

d. main verb-NEG aux  
\[
\begin{align*} 
\text{män} & \quad \text{tamaŋ-ni} \quad \text{ye-may} \quad \text{tur-d-um} \\
\text{1SG} & \quad \text{food-ACC} \quad \text{eat-NEG} \quad \text{tur-DRPST-1SG} \\
\end{align*}
\]

‘I kept not eating the food.’

I continue [NEG [eat food]]

e. main verb-NEG aux-NEG\footnote{Speaker judgments vary on this double negative construction from “perfectly acceptable” to “not very good.” When it is considered acceptable, it is interpreted with an affirmative meaning.}  
\[
\begin{align*} 
\text{män} & \quad \text{tamaŋ-ni} \quad \text{ye-may} \quad \text{tur-mi-d-im} \\
\text{1SG} & \quad \text{food-ACC} \quad \text{eat-NEG} \quad \text{tur-NEG-DRPST-1SG} \\
\end{align*}
\]

‘I didn’t not keep eating the food, i.e., I definitely kept eating the food.’

I NEG [continue [NEG [eat food]]]
Restrictions on CAUS/NEG with specific auxiliaries

There are exceptions to the patterns given above. In some cases, negation and/or causation cannot appear on a specific auxiliary or main verb. In each case, however, the restriction is semantic and not structural. These exceptions do not interfere with the descriptions of auxiliary structure given here; they just reflect some semantic necessities.

Although negation on the auxiliary bol- is fine, it does not allow for negation on its complement main verb, as seen in c-d:

(110)  

a.  
u  kitap  o-ğ-up  bol-idu.  
   3.SG book  read-NFT  finish-DRPST.3  
   ‘She finished reading the book.’  

b.  
u  kitap  o-ğ-up  bol-may-du.  
   3.SG book  read-NFT  finish-NEG-DRPST.3  
   ‘She didn’t finish reading the book.’

c.  
* u  kitap  o-ğu-may  bol-ifu.

d.  
* u  kitap  o-ğu-may  bol-may-du.

(111)  

a.  
män  tamağ-ni  yâ-p  bol-d-um.  
   1.SG  food-ACC  eat-NFT  bol-DRPST.1SG  
   ‘I finished eating the food.’

b.  
män  tamağ-ni  yâp  bol-mi-dim  
   ‘I didn’t finish eating the food.’

c.  
* män  tamağ-ni  ye-may  bol-dum

d.  
* män  tamağ-ni  ye-may  bol-mi-dim  
This is not unexpected, because it is a completive auxiliary, and it is semantically unlikely to say that someone finished not performing an action, which is what
negation on the main verb would indicate. Therefore it is semantic, not syntactic restrictions that create this exception in the structure of auxiliary verb constructions.

**Other functional heads**

In addition, there is at least one auxiliary that allows a main verb that can also bear a modal suffix. According to Engasaeth, when the auxiliary \textit{kal-} combines with a negated main verb, the main verb also often includes an ability suffix, \textit{-al}. An example is shown in (112):

\begin{verbatim}
(112) Biz tehi öy-gä bar-al-may  kal-d-uğ.
   1PL still house-DAT go-ABIL-NEG remain-DRPST-1PL
   ‘We still haven’t been able to go home.’ (Engasaeth 2002:189)
\end{verbatim}

These data reinforce the need to put the auxiliary in a structural position high enough to allow a functional layer below it, and then still allow functional layers higher than the auxiliary.

**3.3 Rigid order of multiple auxiliaries**

Data from my early fieldwork with one speaker revealed a dialect with an additional set of restrictions on the structure of auxiliaries (specifically,
restrictions on multiple auxiliaries)\textsuperscript{41}. In this section, I present examples such as (113) where two auxiliaries from the different categories (aspectual and agentive) co-occur in one sentence.

(113) män televisor-ni ongš-ap **beğ-ip** tur-d-im.

\[ \begin{array}{llll}
1SG & TV-ACC & repair-NFT & bağ-NFT & tur-PST-1SG \\
\end{array} \]

‘I kept trying to fix the TV.’

By methodically comparing co-occurrence and word order restrictions for various combinations of auxiliaries, I show that there may be a hierarchical system which determines which auxiliaries may co-occur, and in what order. These restrictions support a system with aspectual modification (duration and completion) above agentive modification (unintentionality and initiation). An overview of this hierarchy is given in (114); recall that something higher in structure will appear after the lower auxiliary, as Uyghur is a head-final language.

\textsuperscript{41} Later fieldwork did not corroborate these initial findings, but more work should be done to further explore the ideas presented here. Engasaeth (2002:186) mentions the possibility of multiple auxiliaries on one main verb, but does not give any examples. It should be noted that later fieldwork did not provide counter evidence to the data here, i.e.; other speakers simply rejected all sentences with multiple auxiliaries; they did not accept reverse orders of auxiliaries. This may have been due to the presentation of the grammaticality judgments (insufficient context given), actual ungrammaticality, or other unknown reasons. Therefore conclusions about a hierarchy of auxiliaries could not be supported or refuted with later data.
The general *linear* order is then as follows:\footnote{There is some evidence for a preference of order within each of the two major categories, indicating an even more specific hierarchy. Some data suggest that a more detailed version of the hierarchy would place completion above duration and initiation over unintention. However, these data are less clear. Further work with other speakers who allow multiple auxiliaries would be needed to solidify this claim.}:

\[
(115) \quad \text{main verb} > \text{Aux 1 (agent modification)} > \text{Aux 2 (aspectual modification)} > T
\]

The remainder of this section is given to a systematic investigation of co-occurring auxiliaries from the subcategories of auxiliaries. I begin at the top of the proposed hierarchy, and look at auxiliaries of that category (duration aspectual) co-occurring with auxiliaries of lower categories. I then continue to completive auxiliaries (compared with all others except duration, since this pair is covered under *Duration*), etc.
Sections 3.3.1 to 3.3.3 will look at each subcategory and how it relates to the others by providing examples of auxiliary co-occurrences and word order. Some of the data are clearer than others, but an overall picture of an auxiliary hierarchy for this dialect emerges.

3.3.1 Aspectual auxiliaries: Duration

Duration and completion auxiliaries are in complementary distribution. Since one is telic and one is atelic, the semantics are contradictory. Therefore, co-occurrence of these two auxiliaries results in either re-interpretation of the final verb as a serial verb, or questionable/ungrammatical status. In (117) with *bol-* (completive) and *tur-* (durative), (a) is acceptable only with a non-auxiliary interpretation, and the same auxiliaries in reverse order is ungrammatical. In (118), with *çık-* (completive) and *tur-* (durative), the result is marginal (in (a)) or unacceptable (in (b)):
(117) a. U uning ix-i-ni tugät-ip bol-up tur-d-i.
   3SG 3SG.GEN work-POS.3SG finish-NFT bol-NFT stay-DRPST-3
   ‘He finished his work and then stayed.’
   Not an auxiliary interpretation; tur- has its main verb meaning, ‘stay.’

b. *U uning ixini tugätip turup boldi

(118) a. ?U gezitni okg-up çik-ip tur-d-i.
   3SG newspaper-ACC read-NFT çik-NFT tur-DRPST-3
   ‘He kept completely reading through the paper.’

b. *U gezitni okgup turup çiktı.

Cinque’s hierarchy of functional projections places habitual, repetitive, continuative, durative, and progressive heads all above completive. Therefore, to the extent that (118)a is preferable to (118)b, it supports Cinque’s analysis.

**Duration above initiation**

Both durative and initiation categories are atelic, so the meanings are not contradictory. The aspectual durative auxiliaries must occur after (structurally higher than) initiation auxiliaries like baḵ-.

(119) a. män telewisor-ni ongš-ap beḵ-ip tur-d-im.
   1SG TV-ACC repair-NFT baḵ-NFT tur-DRPST-1SG
   ‘I kept trying to fix the TV.’

b. *män telewisor-ni ongš-ap tur-up baḵ-t-im.

**Duration above unintentionality**

Duration must follow unintentionality auxiliaries like tašla- and sal-, indicating that duration is also structurally higher than unintentionality. This
word order gets a questionable status in (121)a, but it is definitely more acceptable than the opposite order in (121)b.

(120)  a.  U küül-üp  taşla-p  tur-d-i.
       3SG laugh-NFT  taşla-NFT  tur-DRPST-3
       ‘He kept bursting out laughing’

       b.  *U küülüp turup taşlidi.

       3SG answer-ACC  say-inf  sal-inf  tur-nPST-3
       ‘He kept blurting out answers’

       b.  *U jawabni dap turup saldi

Conclusion: Duration must occur after (higher than) completion, initiation, and unintentionality.

3.3.2 Aspectual auxiliaries: Completion

Completion and initiation

These two categories may each take scope over the other, so the order is flexible. The surprising flexibility may be related to Fukuda’s multiple locations for one aspectual verb, so that in each case one is above vP and one is below. The interpretation of çik- is slightly different in each, perhaps a result of slightly different functions of completion when it is above or below vP.

---

43 There is no data for completion and unintentionality; the pair is semantically unlikely (since several of the completion auxiliaries involve an aspect of intention or thoroughness, which is incompatible with an unintentional auxiliary). There may be possible combinations, but I have not found them up to this point.
    1SG paper-ACC read-NFT çık-NFT bak-DPRST-1SG
    ‘I tried to finish (thoroughly) reading the paper.

    1SG paper-ACC read-NFT bek-NFT çıkma-DPRST-1SG
    ‘I really tried to read the paper’

3.3.3 Agentive auxiliaries: Initiation

Initiation and unintentionality

Unlike aspectual auxiliaries, which have contradictory semantics and therefore cannot co-occur, agentive auxiliary semantics do not conflict and they can appear together. The result of this combination is somewhat unclear; my fieldwork yielded unclear judgments and unsure translations for these examples. My prediction is that multiple auxiliaries within the agentive category would have flexible word order, and meaning determined by the scope (sentence-final aux having scope over the first aux). However, more research is needed, preferably with other speakers who also allow for these multiple AUX construction. Below is given one pair of sentences each containing two agentive auxiliaries. In (123)a, bak- or kör- (initiation/attempt of action) follows sal- (sudden, unintentional), but the reverse order in (b) has a marginal status.

(123) a. U jawab-ni dä-p sel-ip bak-/kör-d-i.
    3SG answer-ACC say-NFT sal-NFT bak/kör-DPRST-3
    ‘He tried to blurt out the answer.’

b. ?U jawabni däp bekip/körüp saldi.
    ‘He suddenly tried to say the answer.’
3.4 Summary of Chapter 3

Auxiliary verb constructions are a dynamic and flexible part of Uyghur syntax. They are certainly functional projections, differing from lexical verbs in several important ways (selectional restrictions, theta assignment, and interactions with other functional heads). The fact that functional heads such as causative may interact with either the main verb or the auxiliary shows that the auxiliaries must be able to appear either above or below vP, the location of CAUS; interpretations of embedded raised subjects further support the dual AUX location analysis, based on Fukuda (2007) and Cinque (2003). Interactions within the auxiliaries is an interesting direction although the conclusions reached here are admittedly tentative, based on very limited data. The strongest conclusions that can be reached from this introductory study place durative above inception and unintentionality, and show some flexibility of order within category (within aspectual vs. agent related). Durative being an aspectual category, this suggests that aspectual auxiliaries (durative, completive, inceptive) do belong higher than non-aspectual auxiliaries. Although these results are tentative, they are interesting in light of the current trend toward defining a universal set of hierarchical projections (Cinque 1999, for Turkish, Cinque 2001).

Overall, this section has argued for an analysis with two locations for AUX and a preliminary hierarchy of projections, placing aspectual auxiliaries above non-aspectual (agent-related) auxiliaries. If the light verb analysis is correct for
the agent-related category, a hierarchy of Aux > vP (light verb) > vP (caus) could fall out nicely, lending further validity to both the light verb analysis of non-agent related so-called auxiliaries.

4 Lexical verbs with functions similar to Aux

Aside from the 13 auxiliary verbs listed in 2.1, there are at least two others that are often included in lists of Uyghur auxiliary verbs. The verb bär- (main verb: ‘give’) is listed as an auxiliary by Hahn (1991), Engasaeth (2002), and Tömür (2003); the verb başla- (main verb: ‘start’) appears on the lists of Engasaeth and Tömür. These two verbs function in a similar way as auxiliaries, in that they appear in the final position of complex verb constructions and are not serial or directional modification verbs, but I argue here that they are not auxiliaries. The two differ in how they are not aligned with auxiliaries, so I address each individually.

4.1 Benefactive bär-

The verb bär- is very commonly used in Uyghur complex verbs. As a main verb, the meaning is ‘give,’ but in complex verb constructions, it carries a benefactive meaning, so that the event of the main verb is done for the benefit of someone else other than the agent. In the following examples, bär- follows another main verb and has the benefactive meaning. Like all complex verb
constructions in Uyghur, the sentence-final \textit{bär}- carries tense and person agreement.

\begin{quote}
\textbf{(124)} siz u-ning-ga \textit{kitap-ni} oku-p \textit{bär-d-ingiz}
2.SG 3-POS-DAT book-ACC read-NFT give-DRPST-2SG
\text{‘You read a book to/for him.’}
\end{quote}

\begin{quote}
\textbf{(125)} Män siz-gä \textit{eyt-ip} \textbf{ber-d-im}.
1SG 2SG-DAT say-NFT give-dirpst-1SG
\text{‘I told you.’}
\end{quote}

\begin{quote}
\textbf{(126)} Bowa-m da'im hikayä sözl-äp \textbf{ber-idu}.
grandfather-1POS always story say-NFT give-NPST3
\text{‘My grandfather always tells stories.’}
\end{quote}

\begin{quote}
\textbf{(127)} Tomas William-ga tärjimä \textit{ķil-ip} \textbf{ber-idu}.
tomas William-DAT translation do-NFT give-NPST3
\text{‘Tomas translates for William.’}
\end{quote}

\begin{quote}
\textbf{(128)} u mangä tamaḵ et-ip \textbf{ber-idu}
3SG 1SG.DAT food prepare-NFT give-NPST3
\text{‘He will cook food for me.’}
\end{quote}

As stated above, several accounts (Hahn 1991, 2002, Tömür 2003) list \textit{bär}- as an auxiliary verb. However, I argue that it does not belong in this category at all, but in a category of its own as a benefactive semi-functional verb. In this section I give three arguments to support separating this verb from its common characterization as an auxiliary: addition of a theta role to the clause, a structural position lower than all of the other auxiliaries, and semantic transparency.
4.1.1  *Bär-* adds a theta role

When *bär-* is not the main verb in a clause, it may introduce an additional theta role. As explained in Section 3.1.2, auxiliaries do not introduce additional theta roles. In (129)-(130), the (a) examples have no benefactive (no *bär-*), and the (b) examples have both a benefactive and an additional theta role. The (c) examples show that the additional theta role must be marked as dative, and the (d) examples show that the extra theta role may not be added without the presence of the benefactive.

(129)  a. tomas  tärjimá  şi-il-idu.  
   Tomas  translation  do-NPST-3
   ‘Thomas translates.’

   b. tomas  **William-gha** tärjimá  şi-il-ip  **ber-idu**.  
   tomas  William-DAT  translation  do-NFT  give-NPST3
   ‘Thomas translates for William.’

   c. *tomas  **William** tärjimá  şi-il-ip  **ber-idu**.

   d. *tomas  **William-gha** tärjimá  şi-il-idu.

(130)  a.  **u**  tamağ  et-idu  
   3SG  food  prepare-NPST3
   ‘He will cood food.’

   b.  **u**  **manga**  tamağ  et-ip  **ber-idu**  
   3SG  1SG.DAT  food  prepare-NFT  give-NPST3
   ‘He will cook food for me.’

   c. * **u**  **män**  tamağ  et-ip  **ber-idu**

   d. * **u**  **manga**  tamağ  et- **idu**
In some cases, there is no overt DP that realized the benefactive theta role when *bär*- is used. However, the action is clearly done for someone else; therefore the benefactive may be used with no overt beneficiary. In (126), given here again as (131), there is no overt dative-marked beneficiary of the action; it is clear that the grandfather is not simply talking to himself, but for others:

(131) Bowa-m da’im hikayä sözl-äp ber-idu.
    grandfather-1POS always story say-NFT give-NPST3
    ‘My grandfather always tells stories.’

4.1.2 Structurally lower than all AUX

Continuing to assume the Mirror Principle, the relative position of *bär*- compared to the other auxiliaries should indicate its position within the clause.

The data in (132)-(135) give the interactions between *bär*- and *tur-*:, *baḵ*-, *ḵal*-, and *çik*-. The evidence shows that in fact, *bär*- must precede all types of auxiliaries (duration (*tur*-*), completion (*çik*-*), initiation (*baḵ*-*), and unintentionality (*ḵal*-*)), meaning that it must also be lower in structure than all of the auxiliaries.\(^44\):

(132) a. Adil api-si-gha gezit-ni ok-üp ber-ip
    Adil mother-POS-DAT newspaper-ACC read-NFT give-NFT
    \textit{tur-d-i}.
    \textit{tur}-DRPST-3
    ‘Adil continued to read the newspaper for his mother.’

b. *Adil apisigha gezitni okup turup bärđi.

\(^{44}\) Pylkkänen (2002) argues for a high and a low-level applicative, the higher one tying the benefactee to the \textit{event} and the lower one tying the benefactee to the object of the verb. The Uyghur benefactive is consistent with the higher applicative, appearing above \textit{vP}. 
(133) a. Adil gezit-ni api-si-gha oḵ-up ber-ip
Adil newspaper-ACC mother-POS-DAT read-NFT give-NFT

baḵ-t-i.
care.for-DRPST-3
‘Adil tried to read the paper for his mother.’

b. *Adil gezitni apisigā oḵup baḵup bārdi.

(134) a. Adil gezitni api-si-gha oku-p ber-ip
Adil newspaper-ACC mother-POS-DAT read-NFT give-NFT

ḵal-d-i.
ḵal -DRPST-3
‘Adil ended up reading the paper for this mother.’

b. * Adil gezitni apisigha oḵup ḵal-ip bār-d-i.

(135) a. Adil gezitni apisigha oḵup ber-ip çik-t-i
‘Adil completely read the paper for his mother.

b. ?Adil gezitni apisigha oḵup çikip bārdi.
‘Adil completely read the paper for his mother.’

Based on these data, benefactive bār- may interact with other auxiliaries but only if it comes first in the string of functional verbs. Again, this alone would not necessarily indicate that bār- is not an auxiliary. However it does place this verb at the edge of the lexical/functional boundary, which is consistent with its retention of main verb semantics. For these reasons, I am giving it the status of semi-functional; a verb which falls somewhere in the middle of a lexical-functional continuum, but not the status of a purely functional auxiliary. It is very likely a light verb.
4.1.3  \textit{Bär-} and negation

An interesting thing occurs when \textit{bär-} interacts with negation. Recall that
other auxiliary constructions may be negated at the level of the auxiliary, the main
verb, or both, resulting in various scopes of negation. (109) gives the full
spectrum of negation placement and scope; it is partially repeated here as (136):

\begin{align}
\text{(136) a.} & \quad \text{No negation} \nonumber \\
& \quad \text{män tamač-ni yā-p tur-dum} \\
& \quad 1SG \text{ food-ACC eat-NFT tur-DRPST-1SG} \\
& \quad \text{‘I kept eating the food.’} \\
\hline
\text{b.} & \quad \text{Negation on AUX, clausal negation} \nonumber \\
& \quad \text{män tamač-ni yā-p tur-\textbf{mi}-d-im} \\
& \quad 1SG \text{ food-ACC eat-NFT tur-NEG-DRPST-1SG} \\
& \quad \text{‘I \textbf{didn’t keep eating} the food.’} \\
\hline
\text{c.} & \quad \text{Negation on first verb, VP complement negation} \nonumber \\
& \quad \text{män tamač-ni ye-\textbf{may} tur-d-um} \\
& \quad 1SG \text{ food-ACC eat-NEG tur-DRPST-1SG} \\
& \quad \text{‘I \textbf{kept not eating} the food.’}
\end{align}

\begin{description}
\item[NEG on AUX] resulted in clausal negation, and \textbf{NEG} on the main verb resulted in
negation of the VP, with the VP remaining a complement to \textbf{AUX}. With \textit{bär-}, \textbf{NEG}
on the sentence-final functional verb results in the same clausal negation (137)b.
\item[However, NEG on the main verb is interpreted differently, and the first verb and its
object are negated as an adverbial adjunct, no longer as a complement to \textit{bär}, and
\textit{bär-} reverts to its main verb meaning (137)c:
\end{description}
a. No negation
siz uning-gha kitap-ni oku-p bär- dingiz
2.SG 3-DAT book-ACC read-NFT give-DIRPST.2SG
‘You read a book to/for him.’

b. Negation on bär-, clausal negation
siz uning-gha kitap-ni oku-p bär-mi-dingiz
2.SG 3-DAT book-ACC read-NFT give-NEG-DIRPST.2SG
‘You **did not read a book** to/for him.’

c. Negation on first verb; Adverbial adjunct negation
siz uning-gha kitap-ni oku-may bär-dingiz
2.SG 3-DAT book-ACC read-NEG.NFT give-DIRPST.2SG
‘You gave him the book **without reading it.**’

Perhaps a serial or adjunct reading is preferable to an auxiliary reading, so
whenever it is possible, that interpretation is chosen. This is what we saw in 3.3
with some cases where certain auxiliaries could not co-occur, but were acceptable
if there was an alternative serial verb interpretation available. In addition, if an
action is done on behalf on another, it is unlikely that the action is an act of *not*
doing something, as would be suggested if the scope were the same as the negated
main verbs with other auxiliaries. That is, [you [for him [neg [ read book]]]], or
‘for his benefit, you didn’t read the book,’ which is a more awkward and unlikely
message. Regardless of the specific reason for this difference, the functional verb
*bär-* does not interact with negation in the same way as other auxiliaries.

---
45 This form of the 3SG, nominative form *uning*, is different from the usual *u* for phonological reasons.
4.1.4 Semantically transparent

As a main verb, the meaning of \textit{bär}- is ‘give.’ This is clearly related to the meaning of a benefactive usage, where an act is done for the sake of another entity. Cross-linguistically, this is hardly unexpected, as benefactive constructions often use verbs with a similar meaning to indicate that an action was performed for the benefit of a specific person (Anderson 2006).

Some of the other Uyghur auxiliaries retain an aspect of their main verb meaning, but in the case of \textit{bär}- there is very little semantic bleaching. Again, although this rationale alone would not be enough to exclude \textit{bär}- from the list of auxiliaries, when combined with the other reasons given below, it certainly argues for the sake of exclusion.

4.2 \textit{Başla}- as initiation

The verb \textit{başla}- has the main verb meaning, ‘begin’. Recall that one type of meaning in Uyghur auxiliaries is initiation (i.e., the auxiliary verbs \textit{kör}- and \textit{baḵ}-). Presumably because of this similarity in meaning, Engaseth includes \textit{başla}- in his list of auxiliaries. I follow Hahn and Engasaeth in not including this verb as an auxiliary.

The complement clause is of \textit{başla}- must be in a nominal infinitive form which is marked by –ş (not the –ip form in auxiliary constructions), and then marked with dative case as in (138). As seen throughout this thesis, the
auxiliaries take a non-finite clause marked with –ip as their complement, but in
the case of başla-, this is impossible, as in b.

(138) a. män kitap-ni oğu-ş-ka başlı-d-im
     1SG book-ACC read-INF-DAT begin-DRPST-1SG
     ‘I started reading the book. (Lit., I started to reading the book.)’

   b. *män kitap-ni oğu-up başlı-d-im

In addition to case differences, there are also differences with other
functional heads (negation and causation). When negation appears on the final
verb başla-, the entire clause is negated in the same way as auxiliary construction,
i.e., the action was not begun.

(139) män kitap-ni oğu-ş-ka başlı-mi-d-im
     1SG book-ACC read-INF-DAT begin-NEG-DRPST-1SG
     ‘I didn’t start reading the book.’

When negation appears on the non-final verb as in (140), the scope is different
than the parallel construction with auxiliaries. The interpretation is like that of
bär- in the previous section, where the first verb and its object form an adverbial
adjunct constituent.

(140) män kitap-ni oğu-may başlı-d-im
     1SG book-ACC read-NEG.NFT begin-DIRPST-1SG
     ‘I started (something) without reading the book.’
     Or, ‘Without reading the book, I started (something).’

An adjunct interpretation is to be expected, since the verbs here are not in the
same type of hierarchical relationship as auxiliary constructions. As a main verb,
başlı- may not take a TP complement, so the phrase ‘kitapni oḵumay’ is an
adjunct instead of a complement.
This section shows that the status of a verb as an auxiliary is a matter of both syntax and semantics, and is not solely dependent on the verb’s semantics. Even if a verb’s form appears similar to that of auxiliaries, such as bär- selecting –ip form complements, its function and meaning put it into a slightly different (semi-functional) category. Likewise, even if a verb’s meaning overlaps with that of some auxiliaries, such as başla- as a verb of initiation similar to the auxiliaries kör- and bak-, it is not an auxiliary because it does not display the structural behavior of true auxiliaries.

5 Conclusion

The scope of a study such as this one is wide, aiming to investigate both the semantic and syntactic properties of auxiliaries in a language that has so many of them.

I hope that section 2 on semantics will serve as an update to older work, to help refine the list of currently used auxiliaries and determine how they are being used. A second aim of the semantic study was to group together the wide array of meanings, and find cohesive categories of meaning. The result was a list of two major categories, aspectual and agent-oriented auxiliaries, each divided into sub-groups. These categorizations are easier when they reflect cross-linguistic trends (i.e., completive and durative aspect, and the occasionally reported inceptive aspect). Agent-oriented modification such as ‘suddenly’ or
‘accidentally’ usually falls into the categories of adverbs, but here they are also grammaticalized as auxiliaries.

The notion of light verbs offers a very useful insight into these constructions. At this point there are no strong Uyghur-specific syntactic tests to differentiate light verbs from auxiliaries, but these could certainly be discovered, and I suspect that all of the agent-oriented “auxiliaries” will fall into the light verb category. If so, there would be a robust collection of both light verbs and auxiliaries in one language, and any empirical differences would perhaps enrich the somewhat murky boundary between them. This is certainly an interesting area for further research. Given the small amount of literature on the difference between light verbs and auxiliaries, Uyghur, as a language which has many of both types, may have some noteworthy empirical differences between them upon further investigation.

Section 3 looked at morpho-syntactic behavior of auxiliaries in the context of how they differ from lexical verbs and exactly what kind of structure they occur in. These non-compositional, functional heads are part of a very robust hierarchy that is typical of Turkic languages. Following ideas from Fukada (2007) and Cinque (1999), Uyghur auxiliaries appear in two places, both above and below vP. The split placement explains various scope (CAUS, NEG) and interpretive (raised subject) results. Uyghur supports Cinque’s universal hierarchy of functional projections, although it does not appear to follow the
bounded/unbounded distinction above and below vP, as causative morphemes (presumably on vP) may appear on most auxiliaries or main verbs, regardless of the (un)bound nature of the event.

Returning to the discussion of complex verb constructions in Uyghur with which this study began, the study of auxiliary structures given here elaborates on what was already known about the three types of complex verb constructions in Uyghur: serial verbs, directional modification, and auxiliaries. All three have in common the –(I)p suffix on the non-final verb, but the relationship between the verbal elements is quite different. Unlike the first two types, auxiliaries (including the agent-related light verbs) have been shown here to allow functional structure within the non-final verb (i.e., causation, negation, and in some cases ability). The complement of the final verb then is of a different category in the case of auxiliaries. For serial verbs and directional modification verbs, the complement is of a smaller category (probably VP), but the complement of Aux is more complex.

There is clearly more to be learned in terms of both semantics and syntax, but this study should help to further our understanding of the interestingly complex system of Uyghur auxiliaries.
## Appendix A: Abbreviations and associated suffixes

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Description</th>
<th>Forms for front/back, voicing harmony, where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABIL</td>
<td>ability</td>
<td></td>
</tr>
<tr>
<td>ABL</td>
<td>ablative case</td>
<td></td>
</tr>
<tr>
<td>ACC</td>
<td>accusative case</td>
<td></td>
</tr>
<tr>
<td>AUX</td>
<td>auxiliary</td>
<td></td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
<td>-ghuz / -ḵuz / -guz / -kuz</td>
</tr>
<tr>
<td>DAT</td>
<td>dative case</td>
<td>-gha/ -ḵa / -gä / kä</td>
</tr>
<tr>
<td>D/R/P/ST</td>
<td>directly known past tense</td>
<td></td>
</tr>
<tr>
<td>DP</td>
<td>Determiner Phrase</td>
<td></td>
</tr>
<tr>
<td>FAM</td>
<td>familiar⁴⁶</td>
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<tr>
<td>GEN</td>
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</tr>
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</tr>
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<td></td>
</tr>
<tr>
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<td>imperfect</td>
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<td>LOC</td>
<td>locative case</td>
<td>-da / dä / ta / tä</td>
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<td>NEG</td>
<td>negation</td>
<td>-ma(y) / mä(y)</td>
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<tr>
<td>NFT</td>
<td>non-finite</td>
<td>-p / -ip / -up / -üp</td>
</tr>
<tr>
<td>NP</td>
<td>noun phrase</td>
<td></td>
</tr>
<tr>
<td>NOM</td>
<td>nominalizer</td>
<td></td>
</tr>
</tbody>
</table>

⁴⁶ Only 2nd person has an informal/formal distinction. The formal version is much more common, and is considered the default here. Unless otherwise marked, 2SG is the formal register.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ORD</td>
<td>ordinal number</td>
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<tr>
<td>POS</td>
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<td>verb phrase</td>
</tr>
<tr>
<td>vP</td>
<td>v phrase</td>
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</table>
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