VERB-MEDIAL WORD ORDERS IN AMHARIC[*]

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1 INTRODUCTION

Amharic has canonical SOV word order (as shown in (1)), and it generally has the characteristics of a prototypical head-final language (see e.g., Dryer 2007).

(1)   Käbbädä astämari näw
        Kebbede teacher   is
        'Kebbede is a teacher.'

However, in certain clauses, the verb can appear medially between the subject and the predicate. In (2), where the subject *Käbbädä* 'Kebbede' is interpreted as focused, the copula *näw* 'is' intervenes between the subject and the predicate *astämari* 'teacher.'

(2)   Käbbädä **näw** astämari
        Kebbede is   teacher
        'It is Kebbede who is a teacher.'

Verb-medial word order has received little attention in the descriptive literature on Amharic, often only briefly mentioned. However, verb-medial word order poses a direct challenge to a head-final approach to Amharic syntax. How does the verb surface in a non-final position? What has moved in order to generate this order and why? How is it connected to focus?

In this paper, we begin to document and analyze verb-medial word order in Amharic. The first portion of the paper (Section 2) focuses on establishing a more thorough description of verb-medial word order. We investigate the contexts in which verb-medial word order is used, as well as the syntactic properties of clauses with verb-medial word order. The main discovery is that the pre-verbal position is focused whereas the post-verbal constituent must be a topic.

Building on these results, we develop a preliminary analysis of verb-medial word order in the second portion of the paper (Section 3). We propose that the post-verbal constituent in verb-medial word orders like (2) has scrambled to be a rightward specifier of a Topic projection. The pre-verbal constituent moves leftward to be the specifier of a Focus projection, and the verb remains in situ and surfaces in the middle. This analysis generates the facts and allows for Amharic to retain a head-final syntax, as typologically expected.

Many head-final languages in fact license verb-medial word order, and a common analysis of this order is that the post-verbal constituent has scrambled rightwards (see e.g., Mahajan 1988, Manetta 2012 on Hindi, and Kural 1992, 1997 on Turkish). Besides developing the analysis, Section 3 also explores the connections between Amharic and these other head-final languages, and the paper thus contributes to the cross-linguistic investigation of this problematic issue for head-final syntax. Amharic is rarely (we venture: never) included in such conversations on head-finality, and we hope the facts and analysis here will be a first step towards fuller integration of Amharic into the head-final literature. From a more general perspective,

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this work is relevant to the analysis of non-canonical orders in all types of languages, and in particular the way in which those orders are associated with particular information structure requirements.

2 THE DATA

2.1 Initial Facts

Amharic is overall a well-behaved head-final (OV) language (Greenberg 1966, Dryer 2007, etc.). As noted in Section 1, it has SOV word order; another example is in (3).

(3)   astämari-w   doro   wät'-u-n   bälla
       teacher-DEF chicken stew-DEF-ACC ate.3MS
       'The teacher ate the chicken stew.'[1]

Additionally, lexical verbs precede auxiliaries (Leslau 1995:316), embedded clauses precede main clauses (Leslau 1995:743), and there is a sentence-final question particle (*wäy*; Leslau 1995:769). Genitives also precede nouns (Leslau 1995:191-192) and manner adverbs precede verbs (Leslau 1995:368).[2] Therefore, it is (*a priori*) unexpected that it licenses clauses where the verb is medial between two constituents, and not final after all constituents. In this section, we present the previously-known facts about verb-medial order, laying out a wider range of data and establishing some basic generalizations.

   To start, verb-medial word order is non-canonical in Amharic. It is never required (to the best of our knowledge), and it is much less common than verb-final order in both written texts and spoken elicitation. It is most frequently found in clefts, where the copula comes between the focused constituent and the relative clause. A verb-final cleft is in (4)a, which contrasts with the verb-medial cleft in (4)b. Note that it is reported that (4)a has the flavor of a pseudocleft, whereas (4)b is similar to an it-cleft.

(4)   a. [doro   wät'-u-n   yä-bälla-w]   [astämari-w] **näw**   **Verb-Final**
          chicken stew-DEF-ACC C-ate.3MS-DEF teacher-DEF   is
          'The one who ate the chicken stew is the teacher.'

       b. [astämari-w] **näw** [doro   wät'-u-n   yä-bälla-w]   **Verb-Medial**
          teacher-DEF is   chicken stew-DEF-ACC C-ate.3MS-DEF
          'It is the teacher who ate the chicken stew.'

Verb-medial order is also attested in wh-questions fairly often, as shown in (5), again with the more typical verb-final order first (note that Amharic is a wh-in-situ language generally).

(5)   a. man doro   wät'-u-n   **bälla**   **Verb-Final**
          who   chicken stew-DEF-ACC ate.3MS
          'Who ate the chicken stew?'

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b. man **bälla** doro wät'-u-n   **Verb-Medial**
   who ate.3MS chicken stew-DEF-ACC
   'Who ate the chicken stew?'

Verb-medial order is also grammatical in some non-cleft declaratives, although Leslau (1995:838) notes that it depends on "context." (6) is the verb-medial version of (3).

(6)   astämari-w **bälla** doro wät'-u-n   **Verb-Medial** (compare with (3))
        teacher-DEF ate.3MS chicken stew-DEF-ACC
        'The teacher ate the chicken stew.'

In general, these alternative word orders have not been thoroughly described. Leslau (1995) has the most information, noting that these orders are attested, they are more common in certain clause types than others, and that the declaratives need a particular (unspecified) context (i.e., roughly the facts described above). Most sources note that the orders exist (Cohen 1970, Hartmann 1980[3], Demeke 2003) or that just clefts have an alternative word order (Appleyard 1995, Ayalew 2006). There has been no investigation of more pointed questions about verb-medial word order like:

(7)   (i) Is any ordering possible of arguments around the verb and if so, what determines their
           order?[4]
        (ii) How can the arguments be arranged around the verb in a clause with more than two arguments?
        (iii) What is the context that these verb-medial orders are licensed in?
        (iv) Why are certain types of clauses more frequently used with verb-medial word order?

Our goal for the next section is to answer these questions, and thus to flesh out our knowledge of the distribution and structure of verb-medial clauses in Amharic.

2.2 A More Detailed Investigation

In this section, we take on the questions in (7). We begin by investigating the basic syntactic properties of verb-medial clauses – the ordering of constituents around the verb, and how more than two constituents are ordered. Next, we investigate their use – identifying the contexts they are licensed in. This in turn helps to explain why constituents can be ordered the way that they are, as well as the frequency of certain kinds of clauses with verb-medial order. The section closes with an overview of the new generalizations.

We start with the question of how the constituents can be arranged around the verb. In most of the examples seen so far, the subject precedes the verb and the object/predicate follows the verb. However, that need not be the case. In declarative clauses, either the subject or the object/predicate may precede the verb. This is shown for a non-copular clause in (8) and for the copular clause from Section 1 in (9).

(8)   a. astämari-w **bälla** doro wät'-u-n   **S < V < O**   (= (6))
           teacher-DEF ate.3MS chicken stew-DEF-ACC
           'The teacher ate the chicken stew.'

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[3] Hartmann states that the post-verbal constituent is like an afterthought. This is unlikely given the lack of an intonational break between the verb and the post-verbal constituent, at least in the examples we have elicited. One speaker, though, reports an intuition of an afterthought, particularly for the non-copular examples, and we hope to test the relevant sentences across a large number of speakers in future fieldwork.
[4] We focus on the arrangement of arguments to make the initial investigation of these word orders more manageable. See Section 4, however, for some examples of adjuncts in verb-medial clauses.

b. doro   wät'-u-n   **bälla**   astämari-w   **O < V < S**
   chicken stew-DEF-ACC ate.3MS teacher-DEF
   'The teacher ate the chicken stew.'

(9)   a.   Käbbädä **näw** astämari   (**S<V<Pred**)   b. astämari **näw** Käbbädä   (**Pred<V<S**)
             Kebbede is   teacher   teacher is   Kebbede
             'It is Kebbede who is a teacher.'   'It is a teacher that Kebbede is.'

However, in a verb-medial cleft, the focused constituent must be pre-verbal and the relative clause must be post-verbal. Placing the relative clause before the verb and the focused constituent afterwards is ungrammatical, as shown in (10)b.

(10)   a.   [astämari-w] **näw** [doro wät'-u-n   yä-bälla-w]   (= (4)b)
              teacher-DEF is   chicken stew-DEF-ACC C-ate.3MS-DEF
              'It is the teacher who ate the chicken stew.'

        b.   *[doro   wät'-u-n   yä-bälla-w]   **näw** [astämari-w]
              chicken stew-DEF-ACC C-ate.3MS-DEF is   teacher-DEF
              Attempted: 'It is the teacher who ate the chicken stew.'[5]

Wh-questions are also restricted in terms of which arguments can go where. The wh-word must be pre-verbal and the other constituent must be post-verbal, as shown in (11).

(11)   a. mïndïn **anäbbäb-äcc** Tïgïst   b. *Tïgïst **anäbbäb-äcc** mïndïn
           what   read-3FS   Tigist   Tigist read-3FS   what
           'What did Tigist read?'   Attempted: 'What did Tigist read?'

Overall, then, there are some restrictions on the ordering of constituents around the verb, but not for all clauses. In declaratives, it is grammatical for either constituent to precede the verb (as long as the other one follows). In clefts and wh-questions, only one ordering is available, with the focused constituent or the wh-word in pre-verbal position.

        What happens when the clause becomes more complicated, i.e., when there are more than two constituents to arrange? This will occur with ditransitive clauses since they contain multiple internal arguments. For reference, an Amharic ditransitive clause with canonical word order is in (12).

(12)   astämari-w   mäs'haf-u-n   lä-Tïgïst   asayy-ä
        teacher-DEF book-DEF-ACC DAT-Tigist showed-3MS
        'The teacher showed the book to Tigist.'

Ditransitive clauses contain three arguments, which we will refer to by grammatical function as the subject (*astämariw* 'the teacher'), the direct object (*mäs'hafun* 'the book'), and the indirect object (*läTïgïst* 'Tigist'). It is plausible to think that two of these arguments could occur post-verbally. However, this is ungrammatical -- only one argument is grammatical after the verb. (13)a shows a verb-medial ditransitive with the direct object and indirect object after the verb, conforming to the canonical order in (12) except for the position of the verb. It is ungrammatical, as are all the other combinations of two arguments after the verb ((13)b-f).

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[5] The same speaker who reports the afterthought intuition finds this sentence grammatical. We suspect that it is grammatical with an afterthought interpretation of 'the teacher.'

(13) a. *astämari-w **asayy-ä** mäs'haf-u-n lä-Tïgïst **S < V < DO < IO**
teacher-DEF showed-3MS book-DEF-ACC DAT-Tigist
Attempted: 'The teacher showed the book to Tigist.'

   b. *astämari-w asayy-ä lä-Tïgïst mäs'haf-u-n **S < V < IO < DO**

   c. *lä-Tïgïst asayy-ä mäs'haf-u-n astämari-w **IO < V < DO < S**

   d. *lä-Tïgïst asayy-ä astämari-w mäs'haf-u-n **IO < V < S < DO**

   e. *mäs'haf-u-n asayy-ä lä-Tïgïst astämari-w **DO < V < IO < S**

   f. *mäs'haf-u-n asayy-ä astämari-w lä-Tïgïst[6] **DO < V < S < IO**

The fact that two arguments cannot follow the verb naturally raises the question of whether two arguments can instead precede the verb, e.g., S < DO < V < IO. The empirical picture becomes considerably murkier here, and initial elicitations may not have controlled strictly enough for certain key factors (i.e., information structure). We postpone discussion of this type of order until Section 4.

Multiple constituents cannot follow the verb, but the verb may be surrounded by any pair of the relevant arguments in a ditransitive verb-medial clause. Some examples are in (14).

(14) a. astämari-w **asayy-ä** mäs'haf-u-n **S > V > DO**
teacher-DEF show-3MS book-DEF-ACC
'The teacher showed the book.'

   b. mäs'haf-u-n **asayy-ä** lä-Tïgïst **DO > V > IO**
book-DEF-ACC show-3MS DAT-Tigist
'He showed the book to Tigist.'

   c. lä-Tïgïst **asayy-ä** astämari-w **IO > V > S**
DAT-Tigist show-3MS teacher-DEF
'The teacher showed (it) to Tigist.'

This data echoes the generalization drawn above for non-cleft declaratives, where either the subject or the object may precede the verb. The generalizations seen so far are summarized in (15).

(15) **Interim Summary of Generalizations for Section 2 (to be revised)**
   a. Any pair of arguments may surround the verb, with two exceptions:
       i. In clefts, the focused constituent must be pre-verbal.
       ii. In wh-questions, the wh-word must be pre-verbal.
   b. More than one constituent may not follow the verb: (13).

We now know how arguments can be arranged around the verb (although not yet why), and have a partial description of what happens in ditransitive clauses, i.e., these generalizations begin to provide some answers to the questions in (7)i and (7)ii.

We move on now to the major question in (7)iii: what contexts are these orders licensed in? We submit that these orders are dependent on information structure, and draw the specific generalization in (16).

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[6] Again, the speaker with the afterthought intuition finds these sentences just marginal, not ungrammatical, especially if there is an intonational break after the verb.

(16)   **Verb-Medial Order Licensing Generalization**
        Given a verb-medial sentence [XP V YP], XP must be focused (new), whereas YP must be a topic (given information).

A pre-verbal constituent in a verb-medial sentence is focused, but the post-verbal constituent is a topic.[7] The generalization in (16) is the major new descriptive result of this work; to the best of our knowledge, no previous research has connected these verb-medial orders to information structure. We present three pieces of evidence in support of (16).

The first piece of evidence is that focused constituents can never be post-verbal (and accordingly must be pre-verbal). This is why the focused constituent of a cleft cannot come after the verb (see (10)b) and why a wh-word cannot come after the verb (see (11)b, assuming that wh-words are universally focused; see e.g., Horvath 1986, Rochemont 1986). Moreover, in an answer to a wh-question, the constituent which answers the question must be pre-verbal (see e.g., Rochemont 1998, Merchant 2004 on how answers to questions are focused). For example, (17)a, where 'the teacher' is pre-verbal, is grammatical in response to the question 'Who ate the chicken stew?' In contrast, (17)b, where 'the chicken stew' is pre-verbal, is grammatical in response to the question 'What did the teacher eat?'

(17)   a. astämari-w **bälla**   doro   wät'-u-n   **S < V < O**
           teacher-DEF ate.3MS chicken stew-DEF-ACC
           'The teacher ate the chicken stew.'
           Grammatical in response to the question: 'Who ate the chicken stew?'

        b. doro   wät'-u-n   **bälla**   astämari-w   **O < V < S**
           chicken stew-DEF-ACC ate.3MS teacher-DEF
           'The teacher ate the chicken stew.'
           Grammatical in response to the question: 'What did the teacher eat?'

In fact, all of the ordering restrictions (or lack thereof) observed above are expected if the post-verbal position is not focused (and the pre-verbal position is at least capable of bearing focus). Clauses that contain an already focused constituent must have the constituent in the pre-verbal position (clefts, wh-questions) whereas clauses where any constituent could in theory be focused can have any constituent pre-verbal as long as it is actually focused (non-cleft monotransitives and ditransitives).

The second piece of evidence that supports (16) is that the post-verbal constituent must be a constituent that is capable of being a topic. For example, the non-referential NP *mïnïmm* 'anything' cannot be a topic (see Eilam 2007 on the incompatibility between non-referential expressions and topichood). When it is a direct object, it cannot undergo topicalization and be moved to the left in a verb-final sentence (see Demeke and Meyer 2007:34-35 on this kind of topicalization in Amharic).[8]

(18)   *mïnïmm$_i$ Käbbädä t$_i$ a-y-fällïg-ïmm
         anything   Kebbede   NEG-3MS-want-NEG
         Attempted: 'Kebbede doesn't want anything.'

Accordingly, *mïnïmm* 'anything' cannot be a post-verbal constituent in a verb-medial sentence.

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[7] We identify the post-verbal constituent as a topic here for syntactic concreteness, but it is possible that it encodes a different type of given information (e.g., it could be backgrounded information).
[8] It also cannot precede the focus of a cleft, where there are other clear indications that this is a topic position (Eilam 2011).

(19)   *Käbbädä a-y-fällïg-ïmm   mïnïmm
          Kebbede NEG-3MS-want-NEG   anything
          Attempted: 'Kebbede doesn't want anything.'

Since a constituent that cannot be a topic cannot be post-verbal (and focused constituents cannot appear post-verbally), we conclude that the post-verbal position is reserved for a topic.

Both pieces of evidence are exemplified with specificational copular clauses. Specificational copular clauses are a subtype of copular clause that have the inverse order of the standard predicational copular clause (see Higgins 1979 for the taxonomy of copular clauses). In the predicational copular clause in (20)a, the proper name is the subject and *the killer* serves as the predicate. In the specificational copular clause in (20)b, *the killer* seems to be the subject whereas the proper name is now serving as the predicate.

(20)   a. John is the killer.   **Predicational Copular Clause**
          b. The killer is John.   **Specificational Copular Clause**

Regardless of the syntactic analysis of specificational copular clauses (see Mikkelsen 2004 and references therein), they have a rigid information structure. The subject (*the killer*) is a topic whereas the predicate complement *(John)* is focused (see Mikkelsen 2004: Ch.8). For example, the subject cannot serve as the answer to a wh-question.

(21)   Q: What is John?
               A1: *The WINNER is John.   **Specificational**
               A2: John is the WINNER   **Predicational**
               (Mikkelsen 2004:195)

Their information structure requirements make specificational copular clauses an interesting probe into the discourse status of the arguments in verb-medial clauses. Attempting to craft a verb-medial specificational copular clause ends in failure; such clauses are ungrammatical as shown in (22).

(22)   *gäday-u   näw dʒon
               killer-DEF is   John
               Attempted: 'The killer is John.'

However, this is expected if the pre-verbal position must be a focused XP and the post-verbal position must be a topic.[9] There is a complete mismatch between the information structure needs of the specificational copular clause and the word order imposed on it. The specificational copular clause subject *the killer* is a topic but is in the pre-verbal focused position; the proper name *John* is focused but is in the post-verbal topic position. The ungrammaticality of (22) therefore supports the generalization in (16) about the discourse status of the pre- and post-verbal arguments in verb-medial clauses.

The final piece of evidence for (16) has already been encountered in part. Recall that verb-medial order is most commonly reported in clefts and wh-questions. Moreover, in our fieldwork, non-cleft

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[9] If the subject and predicate complement are switched, then the string is grammatical. We speculate that this is a specificational copular clause with *John* in the pre-verbal focus position

(i)   dʒon näw gäday-u
              John is   killer-DEF
              'The killer is John.'

declarative verb-medial clauses are easiest to elicit when they are answers to wh-questions. What all three types of sentences have in common is that they contain a focused constituent – a wh-word, a wh-answer or a constituent that the syntactic structure has clearly indicated as focused. Moreover, in the non-cleft copular clause examples above, speakers report that the pre-verbal constituent is focused and prefer an it-cleft interpretation (see e.g., (9)). We conclude that verb-medial order is dependent on there being a focused constituent (and that focused constituent is pre-verbal). It is not merely the case that if there is a focused constituent, it must be pre-verbal; there must be a focused constituent to license verb-medial order at all.

To review, the three pieces of evidence for (16) are the following: (i) constituents which are independently known to be focused (the focused portion of a cleft, wh-words, wh-answers) must be pre-verbal, (ii) constituents that cannot be topics ('anything,' predicate complement of a specificational copular clause) cannot be post-verbal, and (iii) verb-medial orders are licensed only in clauses where a constituent is focused. We conclude that the Verb-Medial Order Licensing Generalization, repeated in (23), holds in Amharic.

(23)   **Verb-Medial Order Licensing Generalization**   (= (16))
       Given a verb-medial sentence [XP V YP], XP must be focused (new), whereas YP must be a topic
       (given information).

Verb-medial orders are used when this particular information structure is licensed by the discourse. The availability of both a topic and a focus is the mystery "context" of Leslau (1995).

To wrap up this section, a list of the generalizations discovered is in (24).

(24)   **Summary of Generalizations for Section 2**
       a.   Verb-Medial Order Licensing Generalization: (23)
       b.   Any pair of constituents may surround the verb, given (23) (i.e., if the first is focused and the
            second is a topic).
       c.   More than one constituent may not follow the verb.

All of the questions from Section 2.1 have been answered, at least in a preliminary fashion. The Verb-Medial Order Licensing Generalization does a fair amount of the work, explaining how arguments are arranged around the verb and the frequency of certain sentences with verb-medial orders. It does not, however, explain why more than one constituent may not follow the verb. We explore this aspect of verb-medial clauses in the analysis in the next section.

3 A RIGHTWARD SCRAMBLING ANALYSIS

3.1 A Cross-Linguistic Perspective

So far, we have been delving deeply into the properties of verb-medial order within Amharic, accumulating and refining generalizations about their use and syntax. To begin to analyze these word orders, we would like to adopt a different, cross-linguistic perspective.

To begin with, many (if not all) OV languages have scrambling: fronting/raising of various constituents with somewhat subtle effects on meaning and structure (Webelhuth 1989, Neeleman and Reinhart 1998, Karimi 2003:xv). Moreover, many OV languages can scramble constituents after the verb (see e.g., Bhatt and Dayal 2007, Manetta 2012 on Hindi; Kural 1997, Kornfilt 2005 on Turkish; Choe 1987, Ko and Choi 2009 on Korean; Tanaka 2001, Takano 2007 on Japanese).[10] This results in verb-medial order,

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[10] See also Butt and King (1996), Mahajan (1997) on Hindi and Jayaseelan (2001 et seq.) on Malayalam for non-

similar to Amharic. A basic Amharic verb-medial example is repeated in (25), for easier comparison with the Hindi, Turkish and Korean verb-medial examples in (26)-(28).

(25)　　astämari-w **bälla** doro　wät'-u-n　　　　　　　　　**Amharic**
　　　　teacher-DEF ate.3MS chicken stew-DEF-ACC
　　　　'The teacher ate the chicken stew.'

(26)　　Sita-ne　dhyaan-se **dekh-aa thaa**　Ram-ko.　　　　**Hindi**
　　　　Sita-ERG care-with　see-PFV be. PST　Ram-ACC
　　　　'Sita had looked at Ram carefully.' (Bhatt and Dayal 2007:288)

(27)　　Ahmet　　**konuştu**　　　öğrencilerle　　　　　　**Turkish**
　　　　Ahmet.NOM　speak.PAST.3SG　students.WITH
　　　　'Ahmet spoke with the students.' (Kural 1997:499)

(28)　　Chelswu-ka **mek-ess-ta**　sakwa-lul　　　　　　　**Korean**
　　　　Chelswu-ka eat-PAST-DEC apple-ACC
　　　　'Chelswu ate an apple.' (Ko and Choi 2009:1)

Although Korean and Japanese (allegedly) have verb-medial order, we will focus on Hindi and Turkish since these languages have the most developed literatures on the topic.

Beyond superficial word order similarities, verb-medial clauses share at least two more traits across Amharic, Hindi and Turkish. First, the post-verbal constituents are most often given information, although it is controversial whether they are topics (Gambhir 1981:311[11] for Hindi) or background information (Butt and King 1996 for Hindi and Turkish, Kural 1997:499 for Turkish).[12] The discourse status of post-verbal constituents is therefore consistent across these languages as given, further supporting the independently discovered fact that the post-verbal constituent in Amharic is a topic.

Also, post-verbal constituents in Amharic, Hindi and Turkish all reconstruct, taking scope as if they were interpreted in the position they would have in a verb-final sentence (see Jones 1992, Manetta 2012 on Hindi, among others; see Kornfilt 2005 on Turkish; see also Sauerland 1999 for general discussion). For example, in Turkish, a pre-verbal universal quantifier can bind into a post-verbal constituent, indicating that the post-verbal constituent does not c-command the pre-verbal constituent..

(29)　　Herkes$_i$　　dün　　aramiş　　[pro$_i$ annesini].
　　　　everyone.NOM yesterday call.PAST.3SG　3SG mother.3SG.ACC
　　　　'Everyone$_i$ called his$_i$ mother yesterday.' (Kural 1997:506).

Similar facts hold in Amharic, and we will demonstrate the chain of reasoning fully since very little is known about binding in Amharic. First of all, in Amharic, when a universal quantifier c-commands a pronoun as in (30)a, the pronoun can receive a bound variable reading. If the universal quantifier does not c-command the pronoun as in (30)b, no binding is possible. This is all as expected.

(30)　　a. [säw-u　　hullu]$_i$ amat-u$_i$-n　　　　yï-t'äll-al
　　　　　　man-DEF　every　mother.in.law-his-ACC 3MS-hate-AUX.3MS
　　　　　　'Every man$_i$ hates his$_i$ mother-in-law.'

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scrambling approaches to the same data.
[11] Although Gambhir (1981:318-319) also notes that in certain restricted contexts (stories, news reporting) new information can be post-verbal.
[12] See also discussion in Dayal 2003:79-80 and Manetta 2012 for Hindi, Erguvanlı 1984 for Turkish, among others.

b. amat-u   [säw-u-n   hullu] tï-t'äll-alläcc
   mother.in.law-his man-DEF-ACC every 3FS-hate-AUX.3FS
   'His$_i$ mother-in-law hates every man$_{j*i/j}$.'

In verb-medial order, just as in Turkish, the universal quantifier can bind into the post-verbal constituent.

(31)   [säw-u   hullu]$_i$ yï-t'äll-al   amat-u$_i$-n   (compare with (29))
        man-DEF   every   3MS-hate-AUX.3MS   mother.in.law-his-ACC
        'Every man$_i$ hates his$_i$ mother-in-law.'

Moreover, if the universal quantifier is post-verbal and the pronominal is pre-verbal, then the post-verbal universal quantifier does not trigger a bound variable reading. This is further evidence that the post-verbal constituent reconstructs.

(32)   amat-u   tï-t'äll-alläcc   [säw-u-n   hullu]
        mother.in.law-his 3FS-hate-AUX.3FS   man-DEF-ACC every
        'His$_i$ mother-in-law hates every man$_{*i/j}$.'

Overall, then, these clauses are interpreted exactly like verb-final clauses; the post-verbal constituent has the same scope as in the SOV word order.

So far, verb-medial order in Amharic and verb-medial order in other head-final languages seem quite similar. However, Amharic departs from these languages in two ways. First, the pre-verbal constituent must be focused in Amharic, whereas it need not be in Hindi (Manetta 2012) or Turkish (Kural 1997). This difference may relate to restrictions on pre-verbal constituents in Amharic, which are discussed in Section 4.

We have already encountered the other difference between Amharic and other head-final languages. It was established in Section 2 that Amharic only allows for one post-verbal constituent in verb-medial clauses. However, in Hindi and Turkish, multiple post-verbal constituents are grammatical. The Hindi and Turkish facts are given first in (33) and (34), and then a similarly structured example in Amharic in (35) is shown to be ungrammatical.

(33)   Vah kitaab **dii**   **thii**   Sita-ne Ram-ko.   **Hindi**
        that book.F give.PFV.F be.PST.F Sita-ERG Ram-DAT
        'Sita had given that book to Ram.' (Bhatt and Dayal 2007:288)

(34)   Bu   kitabı **vermiş**   Ahmet   Berna'ya   **Turkish**
        this book   give.PAST.3SG Ahmet.NOM Berna-DAT
        'Ahmet gave this book to Berna.' (Kural 1992:2)

(35)   *yïh-ïn   mäs'haf **asayy-ä**   astämari-w   lä-Tïgïst   **Amharic**
        this-ACC book   showed-3MS teacher-DEF DAT-Tigist
        Attempted: 'The teacher showed this book to Tigist.'

To summarize, we have seen three major areas of overlap in verb-medial clauses across Amharic, Hindi and Turkish: word order, discourse status of the post-verbal constituent and reconstruction of the post-verbal constituent. However, Amharic disallows multiple post-verbal constituents whereas Hindi and Turkish do not. In the next section, we explore whether a rightward scrambling analysis of Amharic can successfully capture the Amharic facts as well as the similarities and differences between Amharic and the

other head-final languages.

3.2 Rightward Scrambling and Amharic

There are two main approaches to rightward scrambling in Turkish and Hindi.[13] In the first approach, individual constituents scramble to some specifier position higher than the verb (see e.g., Kural 1997 on Turkish, Manetta 2012 on Hindi). In Manetta 2012, a post-verbal constituent scrambles to a rightward specifier of TP, whereas for Kural, it right-adjoins to CP. In the other approach to rightward scrambling, the verb vacates the VP, and the remnant VP (which contains one or more VP-internal constituents) scrambles rightward (Bhatt and Dayal 2007). This is shown for a ditransitive verb-medial clause in Hindi in (36); the verb has moved out of the VP in (36)a, and the VP (containing the direct object) has shifted rightwards in (36)b.

(36)   a. Ram-ne   Sita-ko   [$_{VP}$ kitaab t_i] dii$_i$ thii.
            Ram-ERG   Sita-DAT   book. F   give.PFV.F   be.PST.FSG
            'Ram had given a book to Sita.'

        b. Ram-ne   Sita-ko t_j dii$_i$ thii   [$_{VP}$ kitaab t_i]$_j$.   **S < IO < V < DO**
            Ram-ERG   Sita-DAT   give.PFV.F   be.PST.FSG.   book.F
            'Ram had given a book to Sita.' (Bhatt and Dayal 2007:293[14])

Which of these two approaches (if any) works for Amharic?

From the start, there are several arguments against pursuing the remnant VP movement approach. First, it does not (straightforwardly) explain the restriction to just one post-verbal constituent in Amharic. Since the moved item is a remnant VP, there is not an obvious way to restrict its contents to a single constituent.[15] Additionally, in Hindi, VPs can move rightward and adjoin to the verbal spine even if there is no rightward scrambling of arguments (Gambhir 1981, Bhatt and Dayal 2007). This is shown in (37)b.

(37)   a. Order without rightward movement of VP   **Hindi**

            Vo [hamaarii baatẽ   sun rahaa]   thaa.
            he our.F   talks.F hear PROG.MSG be.PST.MSG
            'He was listening to our conversation.'

        b. Order with rightward movement of VP and adjunction to verbal spine

            Vo t_j thaa   [hamaarii baatẽ   sun rahaa]$_j$
            he be.PST.MSG   our.F   talks.F hear PROG.MSG
            'He was listening to our conversation.' (Bhatt and Dayal 2007:292)[16]

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[13] See also Kornfilt (2005). Kornfilt argues that all post-verbal constituents move to their post-verbal position in the PF component, post-syntactically. There are two main reasons for assuming this: (i) to capture asymmetries between leftward and rightward scrambling and (ii) to account for the fact that multiple post-verbal constituents c-command each other (i.e., seem to be flat/linearized). It is impossible to test the second claim in Amharic since the language disallows multiple post-verbal constituents, and we do not have sufficient data to test the first claim. However, we remain open in principle to a post-syntactic analysis, and hope to return to this option in future work.

[14] Slightly simplified for ease of exposition.

[15] Bhatt and Dayal (2007) distinguish two VPs within the Hindi clause: a smaller VP1 that contains the verb and the direct object, and a larger VP2 that contains the indirect object and VP1. One potential way to restrict the contents of the remnant VP in Amharic would be to say that only VP1 moved. However, this would predict that indirect objects cannot appear post-verbally in Amharic, and this prediction is incorrect (see (14)b).

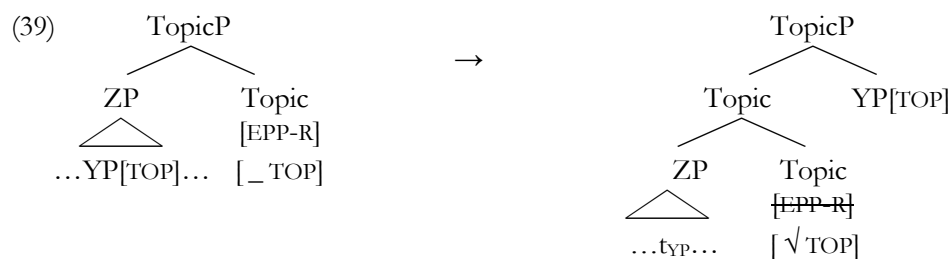[16] Slightly simplified for ease of exposition.

However, there is no independent evidence for VPs ever moving rightward in Amharic. A similar example to (37)b in Hindi is ungrammatical, as shown in (38)b.

(38) a. Order without rightward movement of VP   **Amharic**

      Käbbädä [c'ïwïwït-accïn-ïn   y-adamït'] näbbär

      Kebbede conversation-our-ACC 3MS-listen was

      'Kebbede was listening to our conversation.'

    b. Order with rightward movement of VP = *

     *Käbbädä t$_j$ näbbär [c'ïwïwït-accïn-ïn   y-adamït']$_j$

      Kebbede   was   conversation-our-ACC 3MS-listen

      Attempted: 'Kebbede was listening to our conversation.'

We conclude that the VP remnant approach is not the ideal analysis of the Amharic data (see also Manetta 2012 for arguments against the VP remnant approach for Hindi).

The constituent scrambling approach, however, shows promise in accounting for the Amharic facts. Manetta (2012) proposes that constituent scrambling to the right is feature-driven, similar to leftward scrambling under many approaches (see e.g., Miyagawa 1997, 2001, Grewendorf and Sabel 1999, Ko 2007). Specifically, rightward scrambling is triggered by an EPP feature on some functional head. The EPP feature causes movement into a rightward specifier of that functional head; following Manetta, we call this special kind of EPP an EPP-R feature. The availability of rightward scrambling thus depends on whether or not the (EPP-R feature on this) functional head is present in the derivation.

In Manetta's account, T is the head that hosts the EPP-R feature, causing constituents to scramble to a rightward specifier of TP. For Amharic, though, we propose that it is a Topic head that has the EPP-R feature.[17] The Topic head has an unvalued topic feature that causes it to search downward for a constituent with a matching topic feature. They enter into the Agree relation, the topic feature on Topic is valued and, then, the constituent moves to be a rightward specifier to fulfill Topic's [EPP-R]. This is shown in (39).

(39)
        TopicP   TopicP

    ZP   Topic   →   Topic   YP[TOP]

          [EPP-R]

 …YP[TOP]… [_ TOP]   ZP   Topic

                                 [EPP-R]

                  …t$_{YP}$… [√ TOP]

This captures the fact that the post-verbal constituent is always a topic in Amharic, directly linking
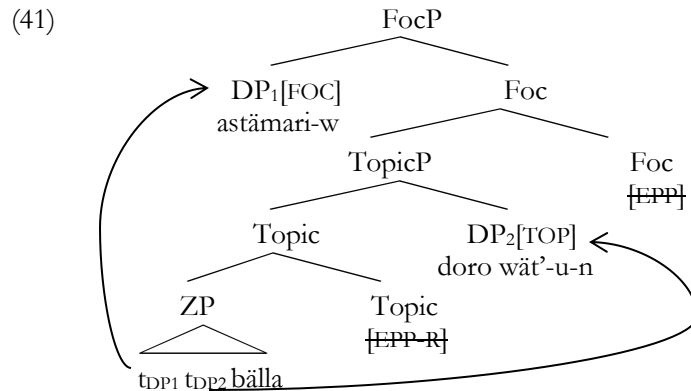
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[17] Manetta (2012) selects T as the head with the EPP-R feature for Hindi because constituents contained within the spell-out domain of vP can scramble rightwards, i.e., they are visible to the head with the EPP-R feature. In order for this to be the case, the functional head with EPP-R must be merged in the derivation before vP has been spelled out, i.e., it must be T, the only functional head present before the merger of the next highest phase head (presumably C) as per standard minimalist assumptions about cyclicity (Chomsky 2000, 2001).

    As our analysis of Amharic stands, the Topic head is probably too high to access material within the spell-out domain of the vP (depending on what counts as a phase head within an exploded CP à la Rizzi 1997). To remedy this, we need to assume that before being rightward-scrambled, the relevant constituent moves to the specifier of vP (the escape hatch) and thus is no longer part of the spell-out domain of vP. There is some independent evidence for this movement; it is required in order to allow a Topic head with a regular (leftward) EPP feature to access a direct object for leftward topicalization as in e.g., (18) (see also Demeke and Meyer 2007).

information structure with rightward movement.

We still need to connect the availability of verb-medial order to the presence of a focused constituent. To accomplish this, we posit that the [EPP-R] Topic head is only selected for by a Focus head. This Focus head has a (normal) EPP feature that triggers leftward movement of a focused constituent to the specifier of FocusP. This will result in the desired word order: a focused XP preceding the verb, and the verb in turn precedes a rightward-scrambled YP. The derivation of (40) under this analysis is shown in (41), focusing on the EPP features on the relevant heads.

(40)   astämari-w **bälla**   doro   wät'-u-n
         teacher-DEF ate.3MS chicken stew-DEF-ACC
         'The teacher ate the chicken stew.'

(41)   FocP
                         ┌────────┴────────┐
                  DP₁[FOC]   Foc
                  astämari-w   ┌──────┴──────┐
                              TopicP   Foc
                         ┌──────┴──────┐   [EPP]
                      Topic   DP₂[TOP]
                    ┌────┴────┐   doro wät'-u-n
                   ZP   Topic
                  ╱ ╲   [EPP-R]
              t_DP1 t_DP2 bälla

The pre-verbal constituent *astämariw* 'the teacher' moves to the leftward specifier of FocP, whereas the post-verbal constituent *doro wät'un* 'the chicken stew' moves to the rightward specifier of TopP. This analysis formalizes the connection between information structure and verb-mediality: the topic head triggers rightward movement, and is only present in the derivation when selected by a Focus head.

The analysis also offers a straightforward explanation for why there can be only one post-verbal constituent in Amharic, but multiple post-verbal constituents in Hindi (or Turkish). In order to ensure that the EPP-R feature in Hindi can move multiple post-verbal constituents, Manetta (2012) proposes that there is a property [multiple] on the EPP feature itself. This property causes all the matching goals within the search domain of the probe to move to the specifier of the relevant functional head (cf. Bulgarian multiple wh-movement (Bošković 1999) and Multiple Move (Hiraiwa 2001, 2004 et seq.)).

For Amharic, we can simply say that the EPP-R feature lacks this property, and only moves one goal (like a normal EPP feature). This places the source of the variation between Amharic and Hindi in the properties of the functional heads of these languages. Thus, this work is in line with the Chomsky-Borer Hypothesis (Borer 1984, Chomsky 1995) that linguistic variation comes from differences in how features are bundled together to make functional heads.

Finally, recall that the post-verbal constituent reconstructs in Amharic (see (32)). Since the post-verbal constituent is moving to a Topic head, it is reasonable to claim that it undergoes A'-movement. A'-movement reconstructs (Chomsky 1993, Boeckx 2001), so the analysis successfully predicts the facts. We do not claim that all rightward scrambling necessarily involves A'-movement, but insofar as rightward scrambling is driven by information structure, this seems to be a likely reason why post-verbal constituents reconstruct consistently.

To summarize this section, many OV languages have post-verbal constituents, and Amharic verb-medial order seems to fit in to this group (with the exception that only one constituent may be post-verbal). A rightward scrambling analysis of Amharic verb-medial order along the lines of Manetta (2012) generates the facts, formalizes the connection between information structure and verb-medial order, and provides an explanation for Amharic only allowing one post-verbal constituent.

4   CONCLUSIONS

This paper aimed to document and analyze verb-medial word orders, and both goals have been accomplished. We now have a better sense of when verb-medial orders are used (they are dependent on information structure) and their syntactic properties. We have analyzed the post-verbal constituent as a rightward-scrambled topic, whereas the pre-verbal constituent is a (leftward-moved) focus. The work here contributes to the literature on rightward scrambling across head-final languages in that it demonstrates that the relevant EPP feature need not be [multiple], and it emphasizes the central role of information structure in rightward scrambling.

There is another approach to solving the puzzle of verb-medial word order that we have not yet discussed. It may be that none of the OV languages are head-final in the first place, as assumed in the antisymmetry framework proposed in Kayne (1994). However, an antisymmetric approach has proved unsuccessful for Hindi (Bhatt and Dayal 2007, *pace* Mahajan 1997) and Turkish (Kural 1997). Although the research here does not present an argument against an antisymmetric approach, an antisymmetric approach is certainly not required to plausibly generate the facts in Amharic.

There is much remaining work to be done on verb-medial word orders in Amharic, both in investigating their empirical properties and in fleshing out the analysis. One of the major empirical questions that we have postponed until now is whether multiple constituents can precede the verb in verb-medial word order. The analysis predicts that VP-internal material that is neither a focus nor a topic can come after the focused constituent but before the verb (see (41)). Initial results indicate that such sentences are ungrammatical, but information structure was not controlled for strictly enough to render the results reliable. We hope to test this prediction in future work, and in the meantime note that VP adjuncts and higher non-manner adjuncts can come after the focused constituent but before the verb.[18]

(42)   yätïññaw-ïn s'ïhuf k'äss bïla s'af-äcc S'ähay?   **O < Adjunct < V < S**
        which-ACC   paper slow being wrote-3FS Tsehay
        'Which paper did Tsehay write slowly?'

(43)   anakostiya-n awk'a ʃäʃʃ-äcc Almaz   **O < Adjunct < V < S**
        Anacostia-ACC deliberately avoided-3FS Almaz
        'Almaz deliberately avoided Anacostia.'

In Hindi and Turkish, it is grammatical to have multiple constituents before the verb in verb-medial word order. In fact, such clauses are usually described as normal clauses that have one or more constituents scrambled to the right. The fact that Amharic may have stricter restrictions on what comes before the verb is

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[18] Additionally, clefts license contrastive topics above the focused constituent. It is unclear whether these structures are grammatical for non-clefts.

(ii)   lä-Tigist ,   Haylu näw kärämella-w-ïn y-asayy-ä-w
        DAT-Tigist , Haylu is   candy-DEF-ACC C-show-3MS-DEF
        'To Tigist, it's Haylu who showed the candy.'

potentially connected to the observation that the pre-verbal XP is necessarily a focused constituent in Amharic. It is common for focused constituents to occupy a privileged place immediately adjacent to the verb (see e.g., Jayaseelan 2001 for Malayalam, Butt and King 1996 and Manetta 2006 for Hindi, Butt and King 1996 and Kural 1997 for Turkish), although it remains to be seen how this observation can explain the Amharic restrictions in a pinpointed way.[19]

In terms of fleshing out the analysis, perhaps the most difficult question raised is how to ensure that both a topic and a focus are present in the verb-medial word orders, i.e., the syntax-discourse connection. This is currently accomplished via a syntactic mechanism (selection), but that may not be the correct approach ultimately (see also Bokamba 1975 et seq., Ndayiragije 1999, and Henderson 2006 for approaches to a similar question for an alternative word order in Bantu). Overall, the literature on verb-medial clauses cross-linguistically has mostly focused on their syntactic properties, and it may be that more simultaneous investigation of information structure and syntax will provide insight on how non-canonical word orders are formally connected to discourse.

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[19] Another major area of empirical investigation to be completed concerns embedded clauses, in two respects. First, embedded clauses obligatorily scramble rightward in Hindi (Manetta 2012), and while embedded clauses definitely do not obligatorily scramble rightward in Amharic (see Leslau 1995:743 for examples of preverbal embedded clauses), it is unclear whether they can optionally do so. Second, it is an open question whether verb-medial word orders are licensed **within** embedded clauses.

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