The Distribution of Subjects and Predicates in Bulgarian: An (EPP) V-Feature Account[*]

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In the past decade or so there has been a lively discussion of the seemingly optional Aux-V or V-Aux order in Bulgarian periphrastic tenses (Rivero 1993, Embick & Izvorski 1994, Caink 1998, Lambova 2004). The proposed analyses include a Long Head Movement analysis (Rivero 1993), PF insertion accounts (Embick & Izvorski 1994, Caink 1998), and scattered deletion of parts of two copies of the same complex Aux-V head (Lambova 2004). However, the relative order of predicates and subjects has received comparatively little attention. The most notable exception is an attempt to explain the ungrammaticality of a sentence-initial subject with V-Aux order in Lambova (2004). To our knowledge, there have only been partial attempts to account for the subject-predicate order in all three types of sentences—declaratives, yes-no questions and *wh*-questions.

This paper shows that the order of subjects, verbs and auxiliaries in Bulgarian can be accounted for by positing an EPP V-feature in T (rather than a D-feature). This account eliminates unnecessary movement of the subject to Spec,TP. In addition, we provide new data that shows that the mechanism of "scattered deletion" (Franks 1998, Bošković 2001, Lambova 2004) cannot account on its own for the full array of empirical evidence. We extend the scattered deletion approach in order to explain constraints on the relative distribution of Aux and V, their interaction with the placement of the subject, and the availability of focus interpretations to constituents that do not move into Lambova's ΔP (i.e. FocusP).

1 Empirical issues

1.1 Optional V-Aux

The seemingly optional Aux-V or V-Aux order in Bulgarian (1a-b) has long been noted in the literature on Romance and South Slavic languages (Lema and Rivero 1989, Ćavar and Wilder 1994, Bošković 1995).[1]

(1) a. Bjaxa pročeli statijata.   Aux-V-O
         were   read   article
         'They had read the article.'
     b. Pročeli bjaxa statijata, ne pregledali.   V-Aux-O
         read   were article   not skimmed.through
         'They had read the article, and not skimmed through it.'

Since Bulgarian is a pro-drop language, the data in (1) masks the fact that only (1a) but not (1b) allows for the subject to surface in sentence-initial position (see 2a,b below). Note that (2a) is grammatical with the subject receiving either a topic or a focus reading. (2b), with V-Aux order, is ungrammatical, regardless of how the subject is interpreted.

(2) a. Studentite/**studentite** bjaxa pročeli statijata.
         students   were read   article
         'The students$_{TOP}$/STUDENTS$_{FOC}$ had read the article.'
     b. *Studentite   pročeli   bjaxa statijata
          students   read   were article

1.2 Lambova's 2004 account

To account for the data in (1) and (2), Lambova (2004) proposes that CP immediately dominates a ΔP which licenses both [topic] and [focus]. She argues further that Bulgarian (multiple) *wh*-movement is actually a focus fronting operation to Spec, ΔP, followed by *wh*-movement to Spec,CP of the left-most *wh*-word. Note first in (3) and (4) that a *wh*-element displays the same distribution as a focused element. First, like the *wh*-word *kakvo* in (3), the focused direct object DP *kljuka* in (4) is in sentence-initial position. Second, focus movement involves subject-verb inversion just like *wh*-fronting (in both examples the Aux-V complex

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[1] A reviewer of this paper notes that the analog of (1a) in Czech would be ungrammatical, on account of the "clitic status of the auxiliary" and the restriction of clitics to second position. This restriction also applies in Bulgarian, the difference being that only present tense auxiliaries have the status of clitics (cf. Lambova 2004). For instance, if *bjaxa* in (1a) were replaced by *sa* 'are', the sentence would be ungrammatical. Why past tense auxiliaries do not have clitic status in Bulgarian remains an open question, and one worth pursuing.

precedes the sentential subject *Ivan*).[2]

(3) **Kakvo** e kazal Ivan na Maria?
     what   is said Ivan to Maria
     'WHAT did Ivan say to Maria?'

(4) **Kljuka** e kazal Ivan na Maria, (ne istina)
     gossip is said Ivan to Maria (not truth)
     'Ivan has told Maria a GOSSIP not the truth.'

While it is certainly plausible, from (3) and (4), that *kakvo* and *kljuka* move to distinct positions (e.g. CP and ΔP, respectively), it is Lambova's contention that *kakvo* moves **through** the Spec, ΔP occupied by *kljuka* in (4). As evidence for this, she notes that a *wh*-cluster can be split in Bulgarian after the first *wh*-word as. In (5), the leftmost *wh*-element is claimed to occupy Spec,CP while the remaining *wh*-elements are left behind in Spec,ΔP.

(5) Koj, spored   teb, kakvo na kogo e kazal?
     Who according.to you what to whom is said
     'Who, according to you, said what to whom?'

Further support for this position is found in Tasseva-Kurktchieva (2001). Example (6) illustrates the fact that the head of CP can precede the *wh*-elements, suggesting that they occupy a position subordinate to CP.

(6) Vjarvaš,   če koj kakvo e kazal?
      you.believe that who what   is said
      'You believe that who said what?'

The position taken by Lambova is that *wh*- and focus movement are, at least initially, the same fronting operation resulting in focused and *wh*-elements moving to the Spec, ΔP. Lambova's proposed structure of the left periphery of Bulgarian *wh*-questions is shown in (7). Here, CP contains only the first *wh*-word and subsequent *wh*-words are licensed in an immediately subordinate ΔP where they bear either topic or focus interpretation.[3]

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[2] Note that it is possible for both the focused/*wh*-element and the subject to appear before the verb, as in (i).

[3] Lambova indicates that ΔP is also the target of topic movement in Bulgarian. Since topics are irrelevant to the current discussion we will direct the reader to Lambova (2004) for extended discussion of this proposal.

(7)   [$_{CP}$ wh$_1$ [$_{\Delta P}$ wh$_2$ wh$_3$ Δ [$_{TP}$ T [$_{vP}$ …]]]

Lambova also includes the ΔP projection in her analysis of the Aux-V/V-Aux alternation. A crucial aspect of her account is the assumption that the participial verb *pročeli* 'read' in (8) always right-adjoins to the auxiliary *bjaxa* 'were', forming a complex *v* head. On this assumption, her analysis of (1a/2a), both with an Aux-V-O order, is straightforward. The newly formed complex head in *v* is further moved to T^0. Where the subject is overt, as in (2a), this move is followed by a movement of the subject to Spec,TP. Only the left-most of all generated copies can survive at PF thus giving us the expected S-Aux-V linearization.

(8)   [$_{\Delta P}$ studentite   [$_{\Delta'}$ bjaxa+pročeli   [$_{TP}$ ~~studentite~~
        [$_{T'}$ ~~bjaxa+pročeli~~ [$_{vP}$ ~~studentite~~ [$_{v'}$ ~~bjaxa+pročeli~~
            [$_{VP}$ ~~pročeli~~ statijata]]]]

To account for the problematic data in (1b) and (2b) with a V-Aux-O order, Lambova proposes a scattered deletion approach modeled after Franks' (1998) "pronounce a copy" hypothesis. To this, Lambova adds a stipulation: Scattered deletion is only possible when the two copies of the same complex are immediately adjacent. Therefore, the sentential subject must be obligatorily null in the V-Aux linearization. Since the participial *pročeli* 'read' is generated with a [+focus] feature which needs to be checked, the whole complex head moves from head of *vP* (where it is derived) to T^0 and then to Δ^0 for feature-checking. The motivation for scattered deletion, according to Lambova, is phonological. The string *proceli bjaxa* (involving the participial *proceli* in the upper copy of Aux-V and the Aux *bjaxa* in the lower copy) form a phonological word. Pronouncing the upper copy of the Aux-V complex would result in a PF violation and scattered deletion is triggered to avoid this. Since the subject position is not filled overtly (shown with outline font in example (9)), it does not break up the prosodic constituent V$_{UPPER}$-Aux$_{LOWER}$. This leaves the two copies in Δ^0 and T^0 adjacent at PF and licenses scattered deletion in (9).

(9)   [$_{\Delta P}$ [$_{\Delta'}$ ~~bjaxa~~+pročeli [$_{TP}$ studentite [$_{T'}$ bjaxa+~~pročeli~~
            [$_{vP}$ studentite [$_{v'}$ ~~bjaxa+pročeli~~ [$_{VP}$ ~~pročeli~~ statijata]]]]

A prediction of this analysis is that "if the subject cannot be pronounced in SpecTP, it should be possible for its lower copy to be activated outside of the prosodic constituent of the verb. Presumably, that will be below TP, i.e. in the VP internal position" (Lambova 2004: 148) as in (9) above.
        Note that Lambova's account operates on the assumption that the

subject (albeit a phonologically null copy) must obligatorily move to Spec,TP. This necessitates an explanation of (i) why only the lower copy is pronounced and (ii) why the upper copy does not break up a phonological word. In our account, here below, we will show that there is no movement of the subject to Spec,TP in cases such as (9).

1.3 The problematic data
Lambova's account relies crucially on two facts: (i) the formation of a complex verbal Aux-V head and (ii) the stipulation that in the marked V-Aux order the sentential subject position is phonologically null. We first turn to a discussion to the complex Aux-V head (saving our discussion of the latter for section 2). Since Aux and V form a complex head, nothing should be able to intervene between the two verbal elements. There are, however, cases in which the Aux and the V can indeed be split. (10a,b) show that an adverb can intervene between Aux and V, provided that either the Aux or the adverb are focused. Although highly marked, these structures are not ruled out. Note however that (10c) is ill-formed in any context, V-Adv-Aux order being uniformly ungrammatical. (10d) shows the normal order of these elements with a focused Aux or Adv and with no special context.

(10) a. ?A-xa, **bjaxa** često čeli statii studentite, njama   što.
            uh-huh were often read articles students there.is.no PART
            'Sure, the students HAD often read the articles, I believe that.'
       b. Da be,   bjaxa **često** čeli   statii   studentite.
            yes PART were often read   articles students
            'Sure, I believe that the students had OFTEN read the articles.'

       c. *A-xa /Da   be,   čeli   često bjaxa statii   studentite
             uh-huh/yes PART read   often were article   students
       d. **Često** bjaxa/često **bjaxa** čeli   statii...
            often were/often were   read   articles...
            'They had OFTEN read articles.'/
            'They HAD often read articles.'

        The same situation obtains when a subject intervenes between Aux and V. A subject can split Aux and V in their canonical order (11a,b), although only in highly marked contexts, but it cannot ever split V and Aux, as shown in (11c).

(11) a. A-xa,   **bjaxa** studentite pročeli statijata, njama   što.
            Uh-huh were students   read   article   there.is.no PART
            'Sure, the students HAD read the article, I believe that.'

b. Da be,   bjaxa **studentite** pročeli statijata, ne profesorite.
   yes PART were students read   article not professors
   'Sure, I believe that the STUDENTS had read the article, not the
   professors.'

c. *Pročeli   studentite   bjaxa statijata
    read   students.the were article.the

Leaving aside the problematic fact for Lambova's account that the
pronominal clitics mandatorily split the Aux-V complex (Franks 2007),
her account also cannot explain the focus shift in (10a-b) and (11a-b).
Section 2 presents our revision of her analysis of the linearization of Aux
and V in Bulgarian.

2   Analysis of declaratives and wh-questions

In revising and extending Lambova's account, we propose that: (i) Aux
and V do not form a complex head when Aux precedes V, (ii) Bulgarian
is one of a group of languages (typified by V-initial languages, but
including Slavic languages) that require movement of a V-element to
check an EPP V-feature (rather than a D-feature) in T (Massam 1991 and
2001, Alexiadou & Anagnostopoulou 1998, McCloskey 2001, Davies &
Dubinsky 2001).

2.1 EPP V-feature in T
As proposed in Davies & Dubinsky 2001, languages may be either V-
prominent or D-prominent. D-prominence correlates with the presence of
a D-feature on T, and V-prominence with a V-feature on T. On this view,
the EPP involves checking a D-feature in TP in D-prominent languages
(e.g. English and French) and a V-feature in TP in V-prominent
languages (e.g. Bulgarian, Niuean, and Irish). The division of languages
into D-prominent and V-prominent categories is supported by work on
various V-initial languages (Chung 1982 on Chamorro, Massam 1991
and 2001 on Niuean, and McCloskey 2001 on Irish), as well as by
contrastive studies of D- and V- prominent languages in Dubinsky &
Davies (2001) and Alexiadou & Anagnostopoulou (1998) on Celtic,
Greek, and Romance.[4]
        Evidence supporting this view includes the fact that V-prominent
languages do not exhibit subject islandhood. This is seen both in V-initial

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[4] A reviewer of this paper suggests that Breton, which exhibits both VSO and SVO
"neutral wide-focus" order, might variously be V-prominent and D-prominent. A fuller
investigation of this possibility is obviously outside the scope of this paper.

languages such as Chamorro and in Slavic languages. (12) provides an illustration from Chamorro (Chung 1982) in which extraction is seen to be possible out of a subject. In (12), *hafa* 'what' has been extracted from the CP subject *ni maloago'-a i lhi-mu* 'that your son wants x'. Similarly, Bulgarian allows *wh*-extraction out of the infinitival subject of a subordinate clause as in (13), as long as the clause is not headed by a noun.[5]

(12) $hafa_1$ um-istoba hao [ni   maloago'-a   i   lhi-mu t_1]?
      what um-disturb you comp want+nmlz-his the son-your
      'What does that your son wants disturb you?'

(13) Na kakvo$_1$ misliš   [če [da otide t_1] beše važno
      to what   you.think that to go   was   important
      za   nego].
      for him
      'To what do you think that to go was important for him?'

      Another fact that speaks in favor of our proposal that Bulgarian is a V-prominent language is shown in (14). While conjoined NP subjects in Bulgarian trigger obligatory plural agreement (14a), conjoined non-NP subjects cannot trigger plural agreement on the verb (14b). This contrasts with a D-prominent language such as English where a non-NP subject may trigger singular or plural agreement (14c/d) on account of two ways in which an AP subject can have a DP-shell.

(14) a. Ivan i   Lili   bjaxa nevnimatelni /*beše   nevnimatelen /
          Ivan and Lily   were inattentive$_{PL}$ was   inattentive$_{MascSG}$/
          *beše nevnimatelna.
          *was inattentive$_{FemSG}$
          'Ivan and Lily were inattentive.'

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[5] The extraction of *na kakvo* out of *da otide* in (13) is possible, not because the infinitival VP is not in Spec,TP (as suggested by a reviewer of this paper), but rather because the subject is not itself a DP. In Davies & Dubinsky 2001, it is shown that English non-nominal arguments are contained in a DP-shell when in subject position(i.e. Spec.TP), but not when in other positions. This leads to island (i.e. subjacency) effects for non-nominal subjects but not for non-nominal objects. V-prominent languages do not impose a DP requirement on subject position and, accordingly, non-nominal subjects may in fact occupy Spec,TP without becoming subject islands.

b. [IP da zakâsnjavaš za zasedanija] i   [IP da zabravjaš
        to be.late   for meetings and   to forget
    knigite] beše neprostimo   / *bjaxa neprostimi.
    the.books was unexcusable_SG   were inexcusable_PL
    'To be late for meetings and to forget the books was/were
    inexcusable.'
c. [DP [AP [AP attentive] and [AP handsome]]] is how Julia likes her
    dates.
d. [DP [DP [AP attentive]] and [DP [AP handsome]]] are not mutually
    exclusive characteristic(s).[6]

Finally, V-initial sentences in Bulgarian do not show
definiteness effects (15a). In contrast, D-prominent languages show such
effects (15b).

(15) a. Dojdoxa studentite / njakolko studenti/ vsički studenti.
         came   students.the/several   students/ all   students
         'The/several/all students came.'
     b. There arrived some students/ *the students/ *all students

With the TP in Bulgarian having an EPP V-feature, rather than a
D-feature, movement of the subject NP to TP is unmotivated. Only
verbal constituents can check off this [+V] feature. We take this further
and suggest, in accordance with principles of economy, that the V-
prominence of Bulgarian renders the projection of Spec,TP unnecessary
(since EPP is normally checked by V via head movement). When a
specifier of TP is inserted, it is for purposes other than feature checking.

2.2 Lambova 2004 revised
We further revise Lambova's analysis of the periphrastic tenses in
Bulgarian, maintaining her proposals of a discourse-oriented projection
ΔP between TP and CP and of scattered deletion applying to portions of
two copies of the same constituent. We propose however that V right-
adjoins to Aux in a complex head only when there is motivation for it to
do so.
When V has [+focus], it must check this feature in ΔP. However,
being separated from ΔP by the projection of Aux, it must either move
through Aux (adjoining to it along the way), or else move to Δ^0 without
stopping at Aux. In the latter case, movement would violate the Head
Movement Constraint (HMC) of Travis 1984. A [+focus] Aux, on the
other hand, can move freely to Δ^0 without violating the HMC. There thus
is no need for a complex head to be formed when Aux alone is moved.

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[6] We thank an anonymous reviewer for providing a better example for (14d).

When V is generated without [+focus], it remains in situ, adjunction to Aux being unnecessary and unmotivated. The discourse-neutral example with Aux-V-O order in (1a) is derived by movement of Aux to T^0 for EPP feature checking, as shown in (16). In case Aux is enumerated with a [+focus] feature, it also moves from T^0 to Δ^0.

(16)   [$_{TP}$ bjaxa$_1$ [$_{vP}$ t$_1$ [$_{VP}$ pročeli] statijata]]]
              were   read   article

The only difference between (1a) and (2a) is the appearance of the subject *studentite* in sentence-initial position. On our account, (2a) is derived in a manner similar to (1a/16) by movement of Aux to T for EPP and movement of the focused or topicalized subject to Spec,ΔP (shown in 17).[7]

(17)   [$_{\Delta P}$ studentite$_1$ Δ [$_{TP}$ bjaxa$_2$ [$_{vP}$ t$_1$ t$_2$ [$_{VP}$ pročeli …]]]
              students   were   read   [article]

In contrast with this, the V-Aux-O order in (1b) (shown in (18)) is a result of the enumeration of the participial verb *pročeli* with a [+focus] feature. This triggers its right adjunction to Aux in head of vP. The complex Aux-V head moves to T for EPP and then to Δ for focus, followed by scattered deletion triggered by the prosodic requirement that a focused V is part of a larger phonological constituent (Lambova 2004, following Franks 1998 and Bošković 2001).

(18)   a.   [$_{\Delta P}$ Δ [$_{TP}$ T$_{[+V]}$ [$_{vP}$ [[bjaxa] pročeli$_1$] [$_{VP}$ t$_1$ …]]]
         b.   [$_{\Delta P}$ [$_\Delta$ ~~bjaxa~~-pročeli$_2$] [$_{TP}$ [$_T$ bjaxa-~~pročeli~~$_2$] [$_{vP}$ t$_2$ …]]]

The ungrammatical (2b) (given in (19)) with an overt subject preceding the V-Aux order can only be derived like (1b/18) with the additional movement of the subject to Spec,ΔP. But here, the V-Aux complex in Δ and the subject in Spec,ΔP compete to check [+focus] in Δ. (2b/19) is thus ill-formed as a consequence of one head checking two elements.[8]

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[7] This derivation assumes, following Lambova 2004, that both Topic and Focus are checked in Spec,ΔP.

[8] Under Lambova's 2004 analysis, (2b/19) should be allowed, since nothing separates the two copies of the complex head other than the trace of the subject (in Spec,TP), which is phonologically null and cannot block scattered deletion (see discussion surrounding example (9)).

(19) *[$_{ΔP}$ studentite$_1$ [$_Δ$ ~~bjaxa~~-pročeli$_2$] [$_{TP}$ [$_T$ bjaxa-~~pročeli$_2$~~] [$_{vP}$ t$_1$ t$_2$
[$_{VP}$ pročeli …]]]

   Returning to (10-11) with the canonical Aux-V order, recall that
they are problematic for Lambova's analysis in that Aux and V can be
split by adverbs or subjects and clearly must not form a complex head in
these instances. Our revision to Lambova's analysis makes the correct
predictions for (10a) and (11a) with an adverb and a subject,
respectively, intervening between Aux and V. The examples are repeated
in (20a,b) respectively. Here, Aux moves alone through T to Δ for
[+focus].

(20) a. [$_{ΔP}$ bjaxa$_2$ [$_{TP}$ često [$_{TP}$ t$_2$ [$_{vP}$ t$_2$ [$_{VP}$ čeli …]]]
   b. [$_{ΔP}$ bjaxa$_2$ [$_{TP}$ t$_2$ [$_{vP}$ studentite t$_2$ [$_{VP}$ čeli …]]]
    were   often   students   read

   (10b) and (11b) have the same word order as the (a) examples,
but have focus on the second element. These too are problematic for the
original account in Lambova (2004), not only because there is an
intervening element between the two verbs but also because this
intervening element bears [+focus]. We propose that (10b) and (11b),
represented here as (21a) and (21b) respectively, involve the familiar
autonomous movement of Aux through T to Δ, except that the Aux-Δ
head in this instance "exceptionally" checks the focus feature of the
intervening element adjoined to TP and subjacent to Δ.

(21) a. [$_{ΔP}$ bjaxa$_2$ [$_{TP}$ često [$_{TP}$ t$_2$ [$_{vP}$ t$_2$ [$_{VP}$ čeli …]]]
   b. [$_{ΔP}$ bjaxa$_2$ [$_{TP}$ studentite$_1$ [$_{TP}$ t$_2$ [$_{vP}$ t$_1$ t$_2$ [$_{VP}$ pročeli …]]]

In (21), *bjaxa* does not have a [+focus] feature and cannot check Δ.
However, the element occupying Spec,TP (its complement) does have
[+focus] and is visible to Δ (being dominated by only one segment of
TP). In this configuration, *bjaxa*-Δ checks the focus feature of its
complement in the same manner as a verb exceptionally checks the
accusative case of a complement subject in an ECM construction.[9]
   We thus claim that the formation of an Aux-V complex head (as
proposed by Lambova) only applies in the discourse-marked V-Aux
order, and that this is specifically motivated by the need for the
participial to check its [+focus] feature in Δ. We also retain her
adjacency restriction on scattered deletion, namely that it is only possible
when the two heads are immediately adjacent. The ungrammaticality of
(10c) and (11c) with an adverb and subject, respectively, intervening

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[9] We assume here that the movement of *bjaxa* to Δ is motivated by the need for the
checking element to be overt in this case.

between V and Aux follows. The structure of these examples is shown in (22a,b), where adjunction of an adverb or a subject to TP blocks scattered deletion as predicted.

(22) a. *[$_{\Delta P}$ ~~bjaxa~~-pročeli$_2$ [$_{TP}$ često [$_{TP}$ bjaxa-~~pročeli$_2$~~ [$_{vP}$ t$_2$ …]]]
      b. *[$_{\Delta P}$ ~~bjaxa~~-pročeli$_2$ [$_{TP}$ studentite$_1$ [$_{TP}$ bjaxa-~~pročeli$_2$~~ [$_{vP}$ t$_1$ t$_2$ …]]]

2.3 The declarative pattern in (multiple) wh-*questions*
The patterns of subject and adverb placement we have seen in declaratives, and which are problematic for Lambova's account, hold for interrogatives as well. The *wh*-questions in (23a,b) below show once again that a subject or adverb can split verbal heads in the canonical order (Aux-V), and that either of them can take a [+focus] reading. We thus propose the same derivation for (23a) and (23b) as for the examples with Aux-S-V or Aux-Adv-V order discussed above. Since (23) involves *wh*-questions, additional movement of a *wh*-element to CP is motivated. (23c) is ungrammatical for the same reason as the V-Aux examples with an intervening subject or adverb above (i.e. because the adjunction of the subject *Ivan* to TP blocks scattered deletion).[10]

(23) a. Kakvo **beše** Ivan/skoro   pročel?   (from Franks 2008)
          what   was Ivan/recently read
          'What HAS Ivan read?' / 'What HAS he recently read?'
       [$_{CP}$ kakvo$_1$ [$_{\Delta P}$ beše$_2$ [$_{TP}$ t$_2$ [$_{vP}$ Ivan/skoro t$_2$ [$_{VP}$ pročel t$_1$]]]
       b. Kakvo beše **Ivan/skoro**   pročel?
          what   was Ivan/recently read
          'What has IVAN read?' / 'What has he RECENTLY read?'
       [$_{CP}$ kakvo$_1$ [$_{\Delta P}$ beše$_2$ [$_{TP}$ Ivan$_3$/skoro [$_{TP}$ t$_2$ [$_{vP}$ t$_3$ t$_2$ [$_{VP}$ pročel t$_1$]]]
       c. *Kakvo   pročel Ivan   beše
           what   read Ivan   was
       *[$_{CP}$ kakvo$_1$ [$_{\Delta P}$ ~~beše~~-pročel$_2$ [$_{TP}$ Ivan$_3$ [$_{TP}$ beše-~~pročel$_2$~~ [$_{vP}$ t$_3$ t$_2$ t$_1$]]]

    The same pattern is observed in multiple *wh*-questions (24),

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[10] A reviewer suggests that (23c) and (24c) are bad even without an intervening subject between V and Aux. However, this turns out not to be true. When the participles *pročel* or *kazal* in (i) and (ii) carry focus intonation, they can precede the Aux *beše* as long as nothing intervenes.

(i) Kakvo **pročel** beše? Če toj ne čete.
     what read   was $_{PART}$ he not read
     'What had he read? But he doesn't read, (ever)!'

(ii) Kakvo na kogo **kazal** beše? Mi toj s   nikoj   ne govori.
      what   to whom said   was $_{PART}$ he with nobody not talks
      'What had he said to whom? But he doesn't talk with anybody!'

which are derived in the same manner as the single *wh*-questions in (23), except for the fact that the second *wh*-element occupies Spec,ΔP (as suggested in Lambova 2004).[11]

(24) a. ?Kakvo na kogo **beše** Ivan kazal?
　　　　 what to whom was Ivan said
　　　　 'What DID Ivan say to whom?'
　　 b. Kakvo na kogo beše **Ivan** kazal?
　　　　 what to whom was Ivan said
　　　　 'What did IVAN say to whom?'
　　 c. *Kakvo na kogo kazal Ivan beše?
　　　　 what to whom said Ivan was

3 Still more puzzles from *yes-no* questions

Not surprisingly, the Aux-V and V-Aux orders show the same distribution in yes-no questions as in declaratives and *wh*-questions, except that the question particle *li*, unlike subjects or adverbs, can indeed split V-Aux as in (25). We suggest that (25) is generated in much the same way as the declarative V-Aux sentence, except that the verb *pročeli* is inserted into the derivation with the question/focus particle –*li* attached (following Bošković 2001 and Lambova 2004).[12] *Pročeli-li* first adjoins to *bjaxa* to form the complex head *bjaxa-pročeli-li* as in (25(i)). This then moves through T and Δ to C to check its question feature as in (25(ii)). Scattered deletion operates across the adjacent heads C and Δ.[13]

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[11] See Lambova (2004) for arguments that ΔP can simultaneously check both [topic] and [focus]. Note that (24a), while not ungrammatical with focus on the Aux *beše*, is simply anomalous, there being few contexts in which a multiple *wh*-question would require focus of the auxiliary verb.

[12] A reviewer of this paper suggests that *li* could not be "attached" at insertion in cases which have "multi-word focus phrases" such as in (i).

(i) Ne **sŭm** li mu go dala?
　　 not am LI him it give
　　 'AM I not giving it to him?'

We would suggest that *ne sŭm li mu go* is not a "multi-word focus phrase", or indeed that if it is, it is derived through insertion of its parts. In any event, we note that it is *sŭm* and no other part of this "phrase" which is focused and that under our account, *sŭm* is simply inserted into the derivation with its focus feature spelled out as *li*.

[13] Another piece of the puzzle here is the appearance of the subject in sentence-final position. As Izvorski (1995) notes, this position of the subject in yes-no questions is preferred but still optional (c.f. *Pročeli li bjaxa studentite statijata?* where the subject *studentite* precedes the object *statijata*). Izvorski claims that this is due to an optional rule of subject postposing, much in line with Kayne & Pollock's (1978) Stylistic Inversion (which in French is obligatory).

(25) **Pročeli** li bjaxa statijata   studentite?
      read   LI   were article   students
      'Had the students READ the article?'
      (i)   ... [$_{vP}$ [[bjaxa] pročeli-li$_1$] [$_{VP}$ t$_1$ …]]]
      (ii) [$_{CP}$ ~~bjaxa~~-pročeli-li$_2$ [$_{ΔP}$ bjaxa-~~pročeli-li~~$_2$ [$_{TP}$ ~~bjaxa-pročeli-li~~$_2$
                                                        [$_{vP}$ t$_2$ …]]]]

Now, compare the marked V-Aux order in the grammatical (25) with *li*
intervening between the two verbal elements and the ungrammatical
(26). There we can see that, with or without *li*, the subject is still illicit
between V and Aux. Assuming Lambova's analysis of *li* as a clitic
enumerated on its host, we predict (26) to be ill-formed in the same way
that any other V-Aux sentence with an intervening element between the
two verbs is. The presence of the subject *studentite* between the two
copies of *bjaxa-pročeli-li* precludes the operation of scattered deletion.

(26) *Pročeli   li   studentite   bjaxa statijata
       read   li   students   were   article
       *[$_{CP}$ [$_C$ ~~bjaxa~~-pročeli-li]$_2$[$_{ΔP}$ studentite$_1$[$_Δ$ bjaxa-~~pročeli-li~~]$_2$ [$_{TP}$t$_1$t$_2$
        …]]]

4   Conclusion

In the account presented here, we have seen that word order in certain
declaratives and questions can be accounted for by positing movement of
verbal elements to T, claiming that this movement is motivated by the
required checking of an EPP V-feature in T. The interaction of this V-
flavored EPP requirement, in conjunction with a revised version of the
scattered deletion account of the optional Aux-V/V-Aux orders in
Bulgarian (Lambova 2004), is seen to account for the full range of
available orderings of subjects, auxiliaries, and verbs in a range of clause
types, including declaratives, yes-no interrogatives, and *wh* questions. In
our view, the formation of a complex verbal head (such as Lambova
proposes) only occurs when the participial verb has a [+focus] feature.
We see right adjunction and incorporation of the V to the Aux as the only
way the [+focus] feature can be checked in an appropriate configuration
in ΔP without violating the HMC. Our account is not only successful in
explaining the data at hand, but does so without positing unneeded and
otherwise unmotivated functional categories. We also see the success of
this analysis as further support for a view of clause structure in which
clausal well-formedness conditions such as the EPP are seen to vary
parametrically across languages.

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