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Verb-second and the verb-stranding ellipsis debate

Emily Manetta, University of Vermont, emily.manetta@uvm.edu

Verb-stranding ellipsis, when a verb is stranded outside of the ellipsis site in which it originated, has been identified in a number of languages (Irish, McCloskey 1991; Hebrew, Doron 1999, Goldberg 2005; Greek, Merchant 2018; Uzbek, Gribanova, 2020; i.a.), and has been invoked productively in analyses investigating the position to which verbs move and the timing of verb movement in the grammar. Recently, Landau (2018; 2020a;b) has proposed a phase-based negative licensing condition which restricts head-stranding ellipsis and precludes verb-stranding verb phrase ellipsis (VPE) altogether. He claims that apparent verb-stranding VPE must be reanalyzed either as argument ellipsis (Oku 1998; Kim 1999; Takahashi 2008), or a clause-sized ellipsis that strands main verbs (Gribanova 2018). This article approaches this debate through an analysis of head movement and head-stranding ellipsis in the Indic verb-second (V2) language Kashmiri. We show that Landau’s phase-based approach encounters empirical challenges in accounting for ellipsis in V2 languages and requires an unworkable approach to V2 itself, at odds with accounts of V2 in Kashmiri and crosslinguistically (Holmberg 1986; Travis 1991; Vikner 1995; Zwart 1997; Bhatt 1999; Munshi and Bhatt 2009; Manetta 2011). While the present article argues in favor of the standard account of ellipsis (Merchant 2001; 2008), we affirm the important contribution of Landau’s work in identifying challenges that remain for any complete account of head-stranding ellipsis licensing.

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1 Introduction

One of the more intriguing controversies concerning ellipsis in recent work centers on the licensing of head-stranding ellipsis and, by extension, the nature of head movement itself. On one side of this debate is over thirty years of research on verb-stranding verb phrase ellipsis (VPE), a variety of head-stranding ellipsis identified in languages as diverse as Irish (McCloskey 1991), Hebrew (Doron 1999; Goldberg 2005), Portuguese (Martins 1994), Russian (Gribanova 2013a, b), Hindi-Urdu (Manetta 2018), Greek (Merchant 2018) and Uzbek (Gribanova 2020) (among others). On the other side, in a recent series of articles, Landau (2018; 2020a,b) argues against the existence of verb-stranding VPE altogether. His account includes a new negative licensing condition which restricts head-stranding ellipsis and blocks verb-stranding VPE from the grammar. Adopting this view requires that any apparent instances of verb-stranding VPE identified in previous work be subject to reanalysis as strings generated by (possibly multiple) instances of argument ellipsis (AE) (Oku 1998; Kim 1999; Takahashi 2008) or as instances of verb-stranding ellipsis of a larger, clause-sized constituent (TP-ellipsis). At stake is the larger question of whether and how verb-stranding ellipses can be used to better understand head movement.

The account proposed by Landau (2018; 2020b) makes strong claims about the way in which head movement and ellipsis licensing interact with the unit of derivation the phase, and differs substantially from the conventional view of ellipsis and ellipsis licensing dominant in the current literature (Merchant 2001; 2008). Briefly, in Landau's account ellipsis of a phrase XP is not licensed if its head X^0 has moved out of XP, and in so doing has crossed a phase spellout boundary. This state of affairs is assessed at the point at which the licenser is introduced into the derivation. For this reason, I will refer to the account Landau proposes as the "phase-based account" of head-stranding ellipsis licensing in what follows.

One productive approach to this debate taken recently is to identify new, fine-grained syntactic diagnostics which definitively identify instances of verb-stranding ellipsis in which the verb undergoes movement out of the elided constituent and which definitively differentiate them from other types of ellipsis processes (such as AE) (e.g. Simpson, Choudhury, and Menon 2013; Manetta 2018; Merchant 2018; Gribanova 2020). This has been a highly productive domain of research and continues to provide new diagnostic tools in new languages (e.g. Gribanova 2020). It has also proven to be a domain of challenging and delicate empirical work, featuring a wider interplay of grammatical and pragmatic factors than was previously well-understood. For this reason, it is important to seek additional approaches to testing the predictions made by the phase-based account. In the present article, I investigate whether the phase-based account Landau (2020b) proposes can be reconciled with our current understanding of head movement, and in particular the head movement resulting in verb-second (V2) word orders.

This article considers these questions through an analysis of head movement and head-stranding ellipsis in the Indic V2 language Kashmiri. Kashmiri is unusual among Indic languages

not only in that it is robustly V2 (while most languages in this family are verb-final), but also in that it features obligatory wh-fronting and a relatively rich (and rigidly ordered) left periphery. The present article argues that in addition to encountering empirical challenges in accounting for the presentation of ellipsis in V2 languages, the phase-based account would require a new and unconventional approach to V2, at odds with all recent accounts of Kashmiri V2 (Bhatt 1999; Munshi and Bhatt 2009; Manetta 2011; 2020b) and standard (even diverse) views of V2 more generally (e.g. Holmberg 1986; Travis 1991; Vikner 1995; Zwart 1997).

Insights emerging from this investigation of ellipsis in a V2 language do indeed argue in favor of the more standard account of ellipsis licensing (Merchant 2001; 2004; 2008), which I demonstrate here to be compatible with a conventional approach to verb-second. Nevertheless, maintaining the standard account of ellipsis (which does countenance verb-stranding VPE) does not resolve some of the major questions facing any account of head-stranding ellipsis that Landau's (2020a;b) contributions highlight. The final section of this article identifies next steps for the wider program of research.

In the theoretical domain, this research seeks to contribute to the wider ongoing effort to investigate the interaction between head movement and head-stranding ellipsis. The present article offers a critique of the phase-based approach to head-stranding ellipsis, revealing the constraint on head movement proposed in Landau 2020a to be too restrictive in languages in which verb movement is long-distance and obligatory. An additional goal of the article is to continue to advance our understanding of typological variation in the manifestation of verb-second phenomena crosslinguistically, with a particular focus on bringing Kashmiri, as a lesser-studied V2 language, to wider attention in the theoretical literature on verb movement.

The organization of the article is as follows: section 2 introduces head-stranding ellipsis as a syntactic phenomenon and provides background on the identification of verb-stranding ellipsis in the literature, detailing the current state of the art. Section 3 provides an overview of Kashmiri with a focus on data concerning verb-second, verbal morphosyntax, and ellipsis. In section 4, I present the nuts and bolts of the phase-based approach to head-stranding ellipsis licensing as it is proposed in Landau (2020b), so that in section 5 we can turn to an application of this account to head-stranding ellipsis phenomena in Kashmiri and other V2 contexts. Finally, section 6 outlines a more conventional account of Kashmiri head-stranding ellipsis consistent with V2, before summarizing the findings of the article and outlining steps for ongoing work.

2 Head-stranding ellipsis

2.1 Definitions

Head-stranding ellipsis describes an operation in which the head of a phrase undergoes movement out of that phrase, and the phrase itself is then elided, stranding the head. The present article is particularly concerned with ellipses in which a verb is the stranded head. The following naturally-

occurring example from Hindi-Urdu features verb-stranding ellipsis as well as subject pronominal drop, meaning that the entire clause of the audience's response is reduced to the verb alone.

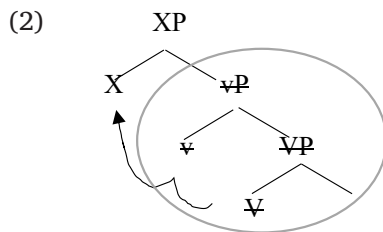
- (1) KK: Hey! Tum =ne kabhi kisi =se pyaar kiy-aa?
 Hey! 2SG=ERG ever someone=OBL love do-PRF.M.SG
 'Hey! Have you ever loved someone?'

Audience: Kiy-aa!

do-PRF.M.SG

'Did!' = 'I have loved someone!' [*Om shanti om*, Karz, 1980]

Of course, the systematic study of the syntactic and semantic properties of verb phrase ellipsis (VPE) itself has a long and rich history (Ross 1969; Grinder and Postal 1971; Hankamer and Sag 1976; Williams 1977; and so on), but in-depth research on verb-stranding ellipses (and in particular verb-stranding VPE) did not begin in earnest in the modern literature until about 30-40 years ago in work such as that of McCloskey (1991), Otani and Whitman (1991), Ngonyani (1997), Doron (1999), Sherman (Ussishkin) (1998), Martins (1994), and Goldberg (2005). In verb-stranding VPE, the verb moves out of the verb phrase to a higher head, and then the verb phrase is elided (including all remaining VP-internal material), stranding the verb itself.



As mentioned above, verb-stranding VPE has been argued to occur in a wide range of unrelated and typologically diverse languages including Irish (McCloskey 1991), Hebrew (Doron 1999; Goldberg 2005), Portuguese (Martins 1994), Russian (Gribanova 2013a; b), Hindi-Urdu (Manetta 2018), and Uzbek (Gribanova 2020), among many others. Consider the following examples from Russian and Portuguese:

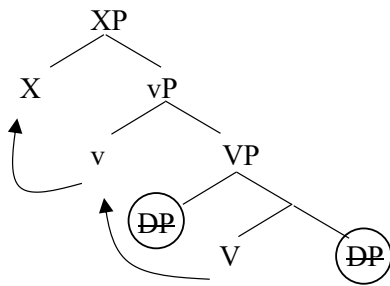
(3) *Russian*

- a. Èto daže esli ja vody v rot naberu?
 that even if I water.GEN in mouth collect.1SG.FUT
 'Is that even if I fill my mouth with water?'
- b. Daže esli i naberëte. Da ved' ne naberëte, ne naberëte že!
 even if and collect. Yes but NEG collect, NEG collect EMPH
 'Even if you fill (it with water). But you won't fill (it with water), you won't fill (it with water)!' (Ju. O. Dombrovskij. *Fakul'tet nenužnyx veščej*, čast' 2, 1978; Gribanova 2013a:92)

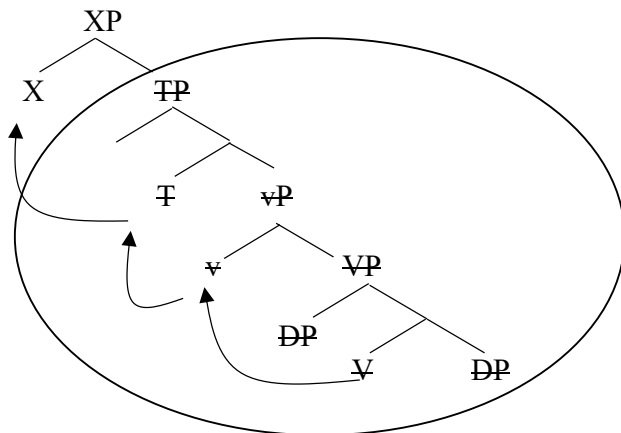
(4) *Portuguese*

- a. Deste-lhe o livro
gave-him the book
'Did you give him the book?'
- b. Sim, dei.
yes gave
'Yes I gave (him the book)' (Martins 1994: 174)

The now-familiar challenge to unambiguously identifying instances of verb-stranding VPE is that many languages that feature a verb-stranding string that could potentially be generated via VPE also permit DP arguments to go missing in other ways. For instance, the language may allow null pronominals for certain types of objects, or might feature Argument Ellipsis (AE), eliding individual arguments of the verb (Oku 1998; Kim 1999; Takahashi 2008).

(5) Argument Ellipsis

Verb-stranding ellipsis could also be revealed to be ellipsis of a clause-sized constituent (TP) out of which the verb has moved.

(6) TP-ellipsis

2.2 Isolating verb-stranding ellipses: a short history and the state of the art

Due to the ambiguity inherent in determining the derivation of the strings produced by the processes in (2), (5), and (6), among others, a battery of syntactic diagnostics have been developed in the last several decades to try to definitively identify instances of verb-stranding VPE/TPE and to differentiate these operations from others that generate similar strings. The strongest of these diagnostics has the capacity to demonstrate that even in a language in which other processes may result in verb-stranding strings, verb-stranding VPE/TPE is necessarily available. Arguments in support of the existence of V-stranding VPE/TPE in a given language generally look like some or all of the following:

- These languages have independent evidence for verb movement out of the VP/vP in non-elliptical structures
- VP/TP-internal material that has gone missing is recoverable in the ellipsis site – in particular material that cannot be independently dropped but can only go missing as part of a larger constituent
- There may be matching requirements placed on the verb in the antecedent clause and the correlate clause (the Verbal Identity Condition (Goldberg 2005))

In her dissertation, Goldberg (2005) offers a review of diagnostics used to identify verb-stranding VPE to that point, including tests which link the characteristics of English-style VPE (which strands an auxiliary verb) to verb-stranding VPE in languages like Hebrew and Irish. Goldberg takes a critical stance toward earlier work which failed to fully recognize the potential for arguments to go missing independently from VPE. She attempts to isolate certain VP-internal constituents, such as manner adverbial PPs and benefactive PPs, and claims that they cannot be elided independently. These diagnostics later prove to be problematic for other languages (e.g. Russian in Gribanova 2013 a;b) and even for Hebrew as discussed in Landau 2018.

At the same time, other researchers have continued to develop new diagnostics (e.g. Simpson, Choudhury, and Menon 2013; Gribanova 2013a;b; Gribanova and Manetta 2018; Gribanova 2020) or investigate the interaction of existing diagnostics with other operations in the grammar (Merchant 2018; Gribanova and Mikkelsen 2018; Manetta 2018; 2020). For instance, Gribanova (2013a) proposes a new diagnostic to isolate verb-stranding VPE in Russian which features ellipsis of a VP containing two coordinated or disjoined VPs (themselves potentially containing multiple elements). Gribanova argues that because the coordinator cannot be independently dropped in this (or any other known) language, when such a complex VP goes missing in its entirety this can only be due to verb-stranding ellipsis. In this fashion, this particular approach to better understanding head-stranding ellipsis has indeed become a highly productive domain of crosslinguistic research and discovery.

Most recently, Landau (2018; 2020a;b) has forcefully argued that a number of the (often longstanding) diagnostics designed to isolate verb-stranding ellipses are ineffective and fail in some or all languages under investigation. For instance, he reviews and ultimately rejects the results of tests for island-sensitivity for object gaps without a linguistic antecedent (first proposed in Doron 1999) and for adjunct inclusion in the ellipsis site (proposed in Goldberg 2005). His explanation as to why these tests fail is not that there are other interfering language-specific or more general factors (see also Bailyn 2014; Erteschik-Shir, Ibn-Bari, and Taube 2013), but that the conditions for head-stranding ellipsis are tightly constrained, and indeed verb-stranding VPE does not exist at all (it is thus unsurprising that it cannot be positively identified).

As it turns out, applying these syntactic diagnostics is remarkably delicate work. Throughout the literature, judgements of native speakers as reported by researchers and even by native-speaker linguists reveal enough variation in acceptability of test sentences that we should be quite cautious in our interpretation of the results. For example, on the topic of the interpretation of adjuncts in verb-stranding VP ellipsis sites in Persian, Rasekhi (2016) claims that the elided adjunct reading is not available in downward entailing environments, though in a footnote (fnnt 7) admits that some speakers can obtain these readings with very strong contrastive stress on the adverb. On the other hand, Toosarvandani (2019) states the elided adjunct reading is indeed available in these environments in Persian without any further discussion (Toosarvandani 2019: 953). Additional instances of this kind of disagreement concerning acceptability judgements and interpretations in verb-stranding environments can be found in Japanese (Funakoshi 2016); Russian (Bailyn 2011; Erteschik-Shir, Ibn-Bari, and Taube 2013); Uzbek (Gribanova 2020); Hindi-Urdu (Manetta 2020a); and Portuguese (Landau 2020a), among others.

It also becomes increasingly clear that when multiple sizes of constituents may be elided, resulting in effectively identical strings, pragmatic, prosodic, and information-structural factors may be at work conditioning the way in which speakers parse structures (Merchant 2018; Manetta 2018; Gribanova, 2020). The diversity and degree of impact of these factors seems as yet poorly understood (though see Simpson (2021) for some recent thinking on which factors might be relevant).

Given these uncertainties, the crosslinguistic empirical picture concerning diagnostics designed to positively identify head-stranding ellipses is far from straightforward. For this reason, the present paper seeks an additional pathway by which to evaluate the newly proposed phase-based account for licensing head-stranding ellipsis. This is not to say, of course, that the careful analysis needed to probe for and isolate verb-stranding ellipses is infeasible; this is critical work pursued in the present article. But in addition to this effort, the investigation that follows explores the potential implications of the phase-based account of head-stranding ellipsis for our understanding of head movement, and in particular the head movement that generates verb-second word orders. If the phase-based account requires approaches inconsistent with what we

already know about V2, and we elect to maintain the dominant account of ellipsis licensing at the conclusion of this investigation, note that we are still left with many of the challenges presented by the empirical landscape described above. An important impact of Landau's recent work is to highlight that those challenges will require our serious attention.

3 Kashmiri: relevant facts

3.1 Word order

Kashmiri is an Indic language, and as such it is relatively unusual in that it requires verb-second word order in nearly all finite tensed clauses, both matrix and embedded.

- (7) a. *aslam = an dits mohn = as kitaab raam = Ini khətri raath*
aslam = ERG give.PRF Mohan = DAT book Ram = DAT for yesterday
 'Aslam gave Mohan a book for Ram yesterday.'
- b. *mohnas dits aslaman kitaab ram = Ini khətri raath*
- c. *kitaab dits aslaman mohnas ram = Ini khətri raath* (Wali and Koul 1997: 89)
- (8) *təmis chu pat-aa [ki aslam = an dits mohn = as gər]*
he.DAT AUX know-PRF.M that aslam = ERG give.PRF Mohan = DAT watch
 'He knew that Aslam gave a watch to Mohan.' (Wali and Koul 1997: 18)

When a tensed auxiliary is present, the auxiliary takes second position and the main verb appears in a participial form typically either immediately following the auxiliary or in final position (though it can be scrambled elsewhere) (Wali and Koul 1997: 220).

- (9) *ShiilI cha kitaab par-aan*
Sheila AUX book read-PRP
 'Sheila is reading a book. (Wali and Koul 1997: 104)

Kashmiri is understood to be underlyingly verb final, given that: (a) the untensed verb appears in clause final position in unmarked non-finite environments, (b) the participial form of the main verb appears in final position in the presence of a tensed auxiliary, and (c) in certain tensed clauses (e.g. relative clauses, comparative clauses) the unmarked position for the verb is clause-final as in (10).

- (10) *[yosI kitab Samir = aan raj = as dits], so kitaab...*
REL book Samir = ERG raj = DAT give.PRF that book...
 'Which book Samir gave to Raj, that book...' (Munshi and Bhatt 2009: (18a))

Kashmiri features obligatory *wh*-fronting to the immediately preverbal position. In *wh*-questions it is also possible (and for many speakers, preferable) for an additional XP typically interpreted as a topic to appear before the *wh*-phase, throwing the verb into third position.

- (11) a. kəmis **dits** raj=an kitaab?
 who.DAT give.PRF Raj=ERG book
 ‘To whom did Raj give a book?’ (Munshi and Bhatt 2009: (27a))
- b. raj=an kəmis **həv** nəv kitaab?
 raj=ERG whom.DAT show.PRF new book
 ‘As for Raj, to whom did he show his new book?’ (Wali and Koul 1997: 12)

The morphology of the tensed verb has been taken to support the view that the verb undergoes syntactic movement to and through T (Munshi and Bhatt 2009). The verbal stem is suffixed with morphemes marking tense and agreement (including a system of agreement clitics conventionally glossed as person suffixes or *ps*), negation when present, followed by the polar question marker when present (this inseparable sequence is bolded in (12)).

- (12) tsI **gatasha-kh n-aa** pagaah garI
 you go-2SGPS.FUT Neg-Q tomorrow home
 ‘Won’t you go home tomorrow?’ (Wali and Koul 1997: 12)

Bhatt (1999) reviews in detail other classic word-order-based evidence for the syntactic height of the Kashmiri verb (Pollock 1989). For instance, lower adverbs follow the tensed second-position verb, but precede the clause-final verb:

- (13) AtSERKI **chu** aksar monomer aasaan
 AtSERKI AUX generally monomer be.PRP
 ‘AtSERKI is generally a monomer.’
 (<https://core.ac.uk/download/pdf/29305846.pdf> accessed 9/15/19)

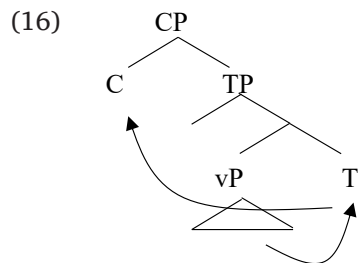
- (14) [yus laRkI dili aksar **chu** rooz-aan]
 k boy Delhi often AUX live-PRP
 ‘The boy who often lives in Delhi ...’ (JC 9/18/19)

Further, though negation is strictly a verbal suffix in V2 environments, in non-V2 tensed relative clauses it appears either immediately following the relative phrase or suffixed to the clause final tensed verb. If the latter, it may not be separated from that verb by other material (even if the verb subsequently scrambles elsewhere). Munshi and Bhatt argue that this data indicates that the tensed verb thus moves to a T in all tensed clauses (whether V2 or not) and then continues into the right-headed Neg⁰ head of NegP in the presence of negation.

- (15) a. [yosI kitaab samiir=an raaj=as **dits-nI**] [so kitaab...]
 which book.F Samir=ERG Raj=DAT give.PRF-NEG that book.F
 ‘the book that Samir did not give to Raj, that book...’
- b. *[yosI (kitaab) samiir-an **dits** raaj-as **nI**] ...

c. [yosI kitaab nI samiir-an dits raaj-as] ... (Munshi and Bhatt 2009: (35))

The facts above, alongside other word order facts reported in detail in previous work (Bhatt 1999; Munshi and Bhatt 2009) have prompted all recent accounts of Kashmiri V2 to posit that the second position verb (whether main or auxiliary) moves through the tense head T (right-headed) and then continues to a higher left-headed functional head which is identified either as in the C domain (Manetta 2011; 2020) as in (16) below, or between T and C (to a head labeled Mood) (Bhatt 1999; Munshi and Bhatt 2009). For concreteness, I will assume the account of V2 in Kashmiri along the lines of (16), though we will return to discussion of the version proposed in Munshi and Bhatt in what follows.



This account is largely consistent with the standard approach to V2 crosslinguistically, developed with reference to better-studied continental Germanic and Scandinavian languages (e.g. Den Besten 1983; Platzack 1986; Holmberg 1986; Holmberg and Platzack 1995; Vikner 1995; Gribanova and Mikkelsen 2018; Harizanov and Gribanova 2019).

3.2 V-stranding ellipsis in Kashmiri

Kashmiri exhibits what appears to be V-stranding ellipsis, stranding both auxiliary verbs as in (17b), and main verbs as in (18b). In this subsection, if not otherwise cited, acceptability judgements and interpretations for the Kashmiri language data were confirmed in consultation with 16 native speakers. Any disagreement amongst the speakers is noted.

- (17) a. Təm cha ciTh' liich-mIts ganT-as.
 3SG.ERG AUX.PST.F letter.F write-PSP.F hour-for
 'He has written a letter for an hour.'
- b. tami ti cha
 3SG.ERG also AUX.PST.F
 'She also has (written a letter for an hour).'
- (18) a. tsI di-kh pagaah təmis kitaab
 2SG.NOM give-FUT.2SG tomorrow 3SG.DAT book
 'You will give him a book tomorrow'

- b. Kabir ti di-yi
 Kabir also give-FUT.3SG
 ‘Kabir will also give (him a book tomorrow)’

In the case of the string which strands an auxiliary verb as in (17b), there is no question that ellipsis of some larger constituent is involved, as the participial form of the main verb has gone missing alongside the internal arguments but is obligatorily interpreted in the ellipsis site. As mentioned in section 3.1, the tensed auxiliary verb must occupy second position, and is thus understood to be in C. The elided phrase in (17b) could be a verbal projection (vP), or something larger (AuxP or TP) out of which the auxiliary verb has raised for the purposes of generating V2 word order.

Despite the superficial similarity between (17b) and (18b), the mechanisms by which (18b) is generated are less clear. There is no doubt, as in the case of the auxiliary verb, that the main verb in (18b) is in second position, and thus has moved outside the vP in which it originated. However, there are at least four ways in which the Kashmiri lexical items translated as ‘him’, ‘a book’, and ‘tomorrow’ could have been rendered missing.

- a) ‘him’ and ‘a book’ are null pronominals; ‘tomorrow’ is accommodated pragmatically
- b) ‘him’ and ‘a book’ are elided separately in an instance of argument ellipsis (AE); ‘tomorrow’ is accommodated pragmatically, or undergoes adjunct ellipsis
- c) verb-stranding VPE, eliding all VP-internal material
- d) verb-stranding TP-ellipsis, eliding all clause-internal material

Analysts typically provide evidence that not all missing internal arguments can be amenable to the null pronominal explanation in (a), by showing that verb-stranding strings admit interpretations unavailable to overt pronominals. For instance, Landau (2018) illustrates the fact that in Hebrew an internal argument consisting of disjointed nominals can antecede a verb-stranding string but not a pronoun. The same holds for Kashmiri:

- (19) a. Mohan = an khev batI kinI tsot
 Mohan = ERG eat.PRF rice or bread
 ‘Mohan ate either rice or bread.’ (I don’t know which)
- b. Pranav = an ti khev
 Pranav = ERG also eat.PRF
 ‘Pranav also ate (rice or bread)’ (= not necessarily what Mohan ate)
- c. Pranav = an ti khev su
 Pranav = ERG also eat.PRF it
 ‘Pranav also ate it.’ (= whichever one it was that Mohan ate)

Further, as in other languages, indefinite readings are not available for pro-dropped arguments (Holmberg 2016; Sato and Hayashi 2018; Gribanova 2020), such as the dropped subject in (20a) below, but an indefinite reading is certainly available for subjects that go missing in verb-stranding contexts with linguistic antecedents, as in (20b).

- (20) a. Q: az sokuul gav-aa? A: Aa, gav.
 to school go.PRF-Q Yes, go.PRF
 ‘Did he/#someone go to school? Yes he/#someone went.’
- b. Q: kaaNh az sokuul gav-aa? A: Aa, gav.
 Somone to school go.PRF-Q Yes, go.PRF
 ‘Did someone go to school? Yes, someone went.’

The data in (19)–(20) confirm that ellipsis is certainly available in Kashmiri (that is, not all missing material be understood to be a null pronominal). The question then becomes: what size of constituent is being elided?

Two very recent diagnostics have emerged in an effort to differentiate strings generated by VP or TP-ellipsis from those potentially generated by multiple instances of AE. The first of these tests, developed in Gribanova (2013a), shows that coordinated or disjoined verb phrases can be elided as a unit, stranding a common verb. While AE could be the mechanism eliding the internal arguments, there is no known mechanism that allows a coordinator to go missing independently.

- (21) a. Təm buuz zi miiraa di-yi mohn=as kitaab yaa shiil=as
 3SG.ERG hear.PRF that Mira give-FUT Mohan=DAT book or Sheila=DAT
 ciTh
 letter
 ‘He heard that Mira will give Mohan a book or Sheila a letter.’
- b. Na, miiraa di-yi nI
 No Mira give-FUT Neg
 ‘No, Mira will not give (Mohan a book or Sheila a letter).’ (Manetta 2020b)

A second diagnostic, developed in Gribanova (2020), depends on the claim that AE can elide arguments, but not predicates. To establish this clearly, we can show that there are predicate constituents that cannot go missing on their own but can quite naturally go missing as part of a larger elided constituent. The sentences in (22a–b) illustrate by interpretation that resultative predicates of verbs and adjectival phrase predicates of verbs cannot go missing independently. By contrast, the data in (23a–b) show that these same kinds of predicates can go missing and be necessarily interpreted as included in the ellipsis site if part of a larger missing constituent (preceded by a stranded main verb).

- (22) a. Ramesh = an kor darwaaz vozul rung tI Mohan = an kor dos
 Ramesh = ERG do.PRF door red color and Mohan = ERG do.PRF wall
 ‘Ramesh painted the door red and Mohan painted the wall.’ (≠ red).
- b. Aslam = an vuch-ukh tsI naaraaz tI Mohan = an vuch Sita.
 Aslam = ERG see.PRF-2SG 2SG angry and Mohan = Erg see.PRF Sita
 ‘Aslam saw you angry and Mohan saw Sita (≠ angry).’
- (23) a. Ramesh = an kor darwaaz vozul rung tI Mohan = an ti kor
 Ramesh = ERG do.PRF door red color and Mohan = ERG also did.PRF
 ‘Ramesh painted the door red and Mohan did too (painted the door red).’
- b. kyaa Aslam = an vuch-ukh-aa tsI naaraaz? Aa, vuch-unas
 Q Aslam = ERG see.PRF-2SG-Q 2SG angry yes, see.PRF-SG
 ‘Did Aslam see you angry? Yes, saw.’ (= he saw me angry)¹

It is the obligatory inclusion of the predicate in the sentences in (23) that reveals the operation of interest to be V-stranding ellipsis.²

The results of these preliminary tests, coupled with the fact that Kashmiri is clearly a language with verb movement to a position well outside of the verb phrase, would suggest that this language exhibits verb-stranding ellipsis of a larger constituent (vP or TP).

Several additional diagnostics which exploit the properties of Kashmiri V2 indicate that the ellipsis is indeed clause-sized (that is, this is V/Aux-stranding TPE). First, since any constituent can occupy first position so long as the verb is in second position, we should expect to see non-subject constituents followed by the verb preceding an ellipsis site, as in (24). In this string we have evidence of extraction of vP-internal constituents out of the ellipsis site, confirming that the missing material does not correspond to a proform. Further, the subject, which by all accounts occupies Spec, TP when it is not preceding the V2 verb, is missing as part of the ellipsis site. Since an indefinite reading is not available for pro-dropped subjects, as discussed in reference to (20) above, we can control for independent subject pro-drop by using an indefinite subject in the diagnostics that follow. The strings in (24) are then best understood as ellipsis of a TP.

¹ Out of 16 native speakers, 14 stated that the interpretation of the second clause of (22a) did not necessarily include “red”; all 16 maintained that the interpretation of (23a) did include “red”. Of those same speakers, 15 stated that the interpretation of the second clause of (22b) did not necessarily include “angry”; all 16 thought that (23b) obligatorily included “angry”.

² A reviewer points out that negated clauses with secondary predicates in (22)–(23) might make the case even more clearly. As is well-documented for Uzbek in Gribanova (2020: Appendix B), negated clauses with secondary predicates face similar interpretive uncertainties to those with verbs of creation and VP-adjuncts (also mentioned in section 2 above). While it is beyond the scope of this article to develop an account of the wider crosslinguistic phenomena conditioning the parsing of negated verb-stranding strings, analysts are making renewed progress in this domain (see Simpson (2021)).

- (24) a. kəNsi kor darwaaz thiikh ti dos ti kor-in [_{TP} kəNsi t_O t_V thiikh]³
 someone do.PRF door right and wall also do.PRF-3PS someone right
 ‘Someone fixed the door, and also the wall.’ (someone (else) also fixed the wall)
- b. kəNsi cha ciTh’ liich-mIts. Kitab ti cha-n
 someone AUX.PSP.F letter write-PSP.F book also AUX-PSP.F-3PS
 [_{TP} kəNsi t_O t_V liich-mIts]
 someone write-PSP.F
 ‘Someone wrote a letter. Also a book.’ (someone (else) also wrote a book)

The auxiliary-stranding string in (24b) is unquestionably TP-ellipsis, as the participial form of the main verb *liichmIts* ‘wrote’ goes unpronounced in the second clause. In order to ensure that main verb-stranding strings are also generated by TP-ellipsis and not multiple individual instances of argument ellipsis, we can draw on the diagnostics above in (19)–(23), combining those with scenarios in which the preverbal constituent is a non-subject. In (25)–(26), a non-subject initial constituent precedes the verb, and the interpretation illustrates that a predicate (which we have shown cannot go missing independently) is understood to be obligatorily present in the ellipsis site. In (27b), a non-subject initial constituent precedes the verb, and disjoined constituents go missing.

- (25) kəNsi kor darwaaz vozul rang ti dos ti kor-in
 someone do.PRF door red color and wall also do.PRF-3PS
 [_{TP} kəNsi t_O vozul rang t_V]
 someone red color
 ‘Someone painted the door red and the wall too (= red).’

- (26) kyaa kəNsi vuch-ukh-aa tsI naaraaz? Aa, bI vuch-unas
 Q someone see.PRF-2SG-Q 2SG angry yes, 1SG see.PRF-2SG
 [_{TP} kəNsi t_O naaraaz t_V]
 someone angry
 ‘Did someone see you angry? Yes, saw me (= angry).’

- (27) a. Təm buuz zi kəNsi di-yi mohn = as kitaab yaa shiil = as
 3SG.ERG hear.PRF that someone give-FUT Mohan = DAT book or Sheila = DAT
 ciTh pagaah
 letter tomorrow
 ‘He heard that someone will give Mohan a book or Sheila a letter tomorrow.’

³ For concision and ease of exposition, in (24)–(27) the gaps left by material extracted from the elliptical site are indicated with a *t* subscripted with V (verb), O (object), or A (adverbial).

- b. Na, pagaah di-yi nI [_{TP} kəNsi — di-yi — mohn = as — kitaab yaa —
 No tomorrow give-FUT NEG someone give-FUT mohan = DAT book or
 shiil = as — ciTh t_A]
 Shila = DAT letter
 ‘No, not tomorrow (= someone will not give Mohan a book or Sheila a letter).’

Sentences like those in (25)–(27) indicate that Kashmiri has a process of main verb/aux-stranding TP-ellipsis. Further new support for this conclusion stems from tag questions.

An old insight that dependent tag questions are generated via ellipsis over an interrogative clause (Huddleston 1970) is further developed in Sailor (2013), who shows that in a range of languages, the set of heads available for stranding in dependent tag questions in a language is precisely the set of heads stranded in regular head-stranding ellipsis structures. For instance, English features ellipsis structures that strand auxiliary verbs but not main verbs (*Sita is meeting with the candidate, but Tara isn't.*), and tag questions with auxiliary verbs but not main verbs (*Tara left, didn't she/*left she?*). On the other hand, Irish features main verb-stranding ellipsis, and permits main verb tags (McCloskey 1991: 273–74; Sailor 2013).

This parallelism pans out in Kashmiri as well. Kashmiri features head-stranding ellipsis with both auxiliary and main verbs, and both auxiliary and main verbs can be stranded in dependent tag questions (Manetta 2020b):

- (28) Təm cha ciTh' liichmIts, cha-n n-aa?
 3SG AUX.PST.F letter.F write-PSP.F AUX.F-3SGPS NEG-Q
 ‘He has written a letter, hasn't he?’ (Wali and Koul 1997: 7)
- (29) su leekhi nI ciTh' leekh'-aa?
 3SG write.3SG.FUT NEG letter write.3SG.FUT-Q
 ‘He won't write a letter, will he?’ (Wali and Koul 1997: 7)

Expanding the scope of Sailor's insights slightly (which are restricted to VPE), the claim is that dependent tag questions are generated via whatever head-stranding ellipsis process(es) is/are available in the language applying to a root question, explaining the set of parallelisms.

These facts are of relevance here because they suggest that we could not explain verb-stranding strings in tag questions as generated by only multiple instances of AE. Ellipsis of all VP-internal argument material in dependent tags is obligatory. That is, grammatical tag questions crosslinguistically include only the verbal tag (whatever it may be), polarity particles and/or negation, and in some cases the subject, external argument, or expletive pronominal (Sailor 2013). It is ungrammatical for, say, one of the internal arguments to remain.

- (30) Fiona provided a written statement to the senator, didn't she (*to the senator)?

Since each separate instance of AE should be optional, and there is no obvious mechanism by which the ellipsis of any one internal argument can be linked to the ellipsis of another, this fact is hard to explain under the AE-approach to head-stranding strings. Consider Portuguese, for which Landau (2020a) claims that for at least some speakers, verb-stranding strings are derived solely by AE.⁴ In both European and Brazilian Portuguese, no internal arguments may grammatically remain in the tag (data courtesy of Ana Maria Martins, p.c.).

(31) *E./B. Portuguese*

- a. O João comprou o carro, não comprou?
 DEF Juan bought the car, NEG bought
 ‘Juan bought the car, didn’t he?’
- b. *O João comprou o carro, não comprou o carro?
 DEF Juan bought the car, NEG bought DEF car

(32) *E. Portuguese*

- a. (Nós) demos um telefone novo ao João, não demos?
 We gave.1PL a telephone new to Juan NEG gave.1PL
 ‘We gave a new telephone to Juan, didn’t we?’
- b. *Nós demos um telefone novo ao João, não demos um telefone / não
 We gave.1PL a telephone new to Juan NEG gave.1PL a telephone/NEG
 demos ao João?
 gave.1PL to Juan

Under Landau’s account of main verb-stranding strings in Portuguese — that they are only generated by AE and not by ellipsis of larger constituents — there is no straightforward way to prevent the partial deletion structures in (31b)–(32b). Of course, in Kashmiri it is equally ungrammatical for an internal argument to remain following the main verb in a tag question:

(33) *Kashmiri*

- Tse d’ut-uth Ram nov phone, d’ut-uth-as n-aa
 you.ERG give.PRF-2SPS Ram new phone, give.PRF-2SPS-3PS NEG-Q
 (*nov phone/*Ram)
 new phone/Ram
 ‘You gave Ram a new phone, didn’t you (*a new phone/*Ram)?’⁵

⁴ After discussing some variation in the grammaticality judgements for the interpretation of adverbs in verb-stranding structures in Portuguese, Landau (2020a) writes: “in any event, the fact that some (maybe most) speakers exclude adjuncts in properly constructed OG sentences... indicates that AE is the only elliptical strategy available to them” (p. 355).

⁵ A reviewer asks whether there could be other factors conditioning ungrammaticality here such as the discourse-status of the missing material. Sailor (2014) and Thoms and Walkden (2018) point out that tag question ellipsis seems to be obligatory, and that the elliptical clause is resistant to the introduction of material not contributed by the antecedent clause (‘neophobia’ in Sailor (2014, §3.3.1)). The ungrammatical versions of (33) must then be due to the failure to undergo ellipsis of a constituent larger than a single argument (TP-ellipsis, by our account).

This data supports our position that the AE-only reanalysis of main-verb stranding strings is not viable for languages like Kashmiri and Portuguese, which feature elliptical strings stranding both main verbs and auxiliary verbs (Martins 2016; Manetta 2020b). At the very least, verb-stranding via ellipsis of a larger constituent must be available in some domains in order to correctly generate dependent tag questions (see also Landau, 2020b: 302).

In summary, we have seen a variety of types of empirical evidence which lead us to conclude that Kashmiri features TP-ellipsis stranding both main and auxiliary verbs. We now ask: how would the head movement restrictions imposed by the phase-based account of head-stranding ellipsis licensing (Landau 2020a;b) interact with the verb movement required to create verb-second word orders in a language like Kashmiri? Would it be possible to generate auxiliary and main verb-stranding TP-ellipsis strings in Kashmiri under the phase-based account?

4 The phase-based account of head-stranding ellipsis

Landau (2020b) introduces a new account of the licensing conditions on head-stranding ellipsis by revisiting an old puzzle (Lasnik 1999): why is sluicing incompatible with auxiliary fronting (Aux-to-C movement), in (35), though auxiliary fronting is obligatory in a wh-question, in (36)?

(34) Liz appointed someone.

(35) Who?/*Who did? SLUICE

(36) Who did she appoint?/*Who she did appoint? WH-QUESTION

Landau proposes a new solution to this puzzle: in essence, head-stranding ellipsis is controlled by the head of the elided category itself, and that it is licensed only if the stranded head has not crossed a spellout domain at the point at which the licensor is introduced. This fact he attributes, at its most basic level, to PF visibility of licensing features. Before examining the account in greater detail, it is important to underline that the phase-based account of head-stranding ellipsis is a certainly a welcome effort within the wider program of research on ellipsis, as it seeks to answer the pressing question posed by crosslinguistic (and possibly even crossdialectal) differences in the types of headless constituents can be elided. Even if the phase-based approach does not prove viable in its particulars, it should be viewed as an important step toward identifying a principled mechanism in the grammar (indeed, in the syntax) for restricting the range of ellipses available.

The phase-based account of head-stranding ellipsis features two core innovations. The first is concerned with the role taken by the feature which instructs the phonological component not to spell out the elided phrase, termed [E] in the literature (Merchant 2001). In the conventional approach to ellipsis, this feature on a head X^0 instructs PF not to spell out X 's complement (Merchant 2001). In the phase-based account, in part following Aelbrecht (2010), the [E] feature on a head X^0 instructs PF not to spell out its maximal projection XP when in an Agree relation

with a licensing head H (XP need not be a sister to H). Though Landau's licensing process differs in interesting ways from that proposed in Aelbrecht 2010, those distinctions won't be of relevance to us here so I omit them for brevity.

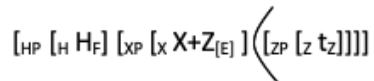
The second innovation concerns the visibility of the [E] feature at PF – this is the portion of the account that relies on the derivational unit of the phase. The host of [E] must be PF-visible (PF-overt) inside its spellout domain at the time of introduction of the licensing head in order to trigger ellipsis. Thus the topmost copy of the movement chain of a head X^0 bearing [E] must still be in the same spellout domain as the bottommost copy of X^0 (the foot of the chain) when the licensing head is merged to trigger ellipsis of XP. These two innovations together underlie Landau's Constraint on Head Stranding Ellipsis, which is applied derivationally to any attempted ellipsis licensing:

(37) Constraint on Head Stranding Ellipsis (CHSE)

If X^0 crosses a spellout domain, then XP cannot be the target of ellipsis.

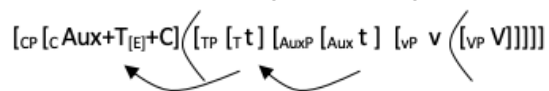
The schematic in (38) provides an abstract illustration of the CHSE. If ZP is the spellout domain of phase head X^0 (delineated by the arc), and if head Z^0 moves out of ZP to X^0 (or higher) and bears the [E] feature, then [E] is no longer visible inside the spellout domain containing the foot of Z's movement chain (that is, within ZP). At the point in the derivation at which the licensing head for ellipsis is merged (H_p), Z bearing [E] has moved outside of ZP, so licensing of ZP-ellipsis is impossible.

(38) How the CHSE blocks ZP-ellipsis



We now turn to illustrate how the CHSE functions by applying it to various types of putative head-stranding ellipsis configurations. Consider first the puzzle with which Landau opens his account: what bars auxiliary fronting in sluicing in a language like English?

(39) *Aux-to-C TPE as in English sluicing



In the schematic in (39), T bears the [E] feature. Aux + T crosses the TP spellout domain to C. C is the licensing head and upon its introduction into the derivation the [E] feature on T is no longer PF-visible inside its spellout domain (TP), thus cannot trigger TP-ellipsis.

However, auxiliary stranding VPE is certainly possible under the phase-based account, as in in English:

(40) Joe visited several states. Kamala did too.

In the phase-based account, Landau considers this an instance of Aux-stranding AuxPE, as schematized in (41):

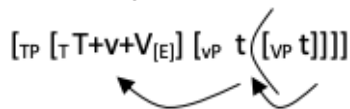
(41) Aux-stranding VPE/AuxPE as in English



It is the Aux head that bears the [E] feature. Short Aux-to-T movement begins and ends inside the same spellout domain (TP). The licensing head for this ellipsis is T, and the [E] feature on Aux is still PF-visible when T is merged, so Agree ($T_F, Aux_{[E]}$) applies and the ellipsis of AuxP is licensed.

We can now turn to the way in which the account prohibits V-stranding VPE altogether. In essence, as is clear from the schematic in (42), any movement of the verb outside of VP (the spellout domain of v) will render ellipsis of VP impossible.

(42) *V-stranding VPE



In this account, V bears the [E] feature and moves to v , creating V - v complex. This complex then moves to T . T is the licensing head for ellipsis, targeting the category vP .⁶ V - v has crossed outside of the spellout domain (VP), so at the time T is introduced, and v - V goes to T , [E] is no longer PF-visible inside V 's original spellout domain and thus cannot trigger vP -ellipsis.

Under the phase-based account, verb-stranding ellipsis is certainly possible, so long as it is ellipsis of a larger category such as TP, as in the following Hungarian example of a verbal response to a polar question:

(43) *Hungarian*

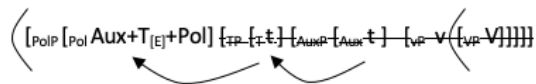
- Q: Meg hívta János a szomszédokat? A: Meg hívta.
 VM invited János the neighbors? VM invited.
 'Did János invite the neighbors?' 'He did.' (Lipták 2019)

In this case, both auxiliary verbs and main verbs can be stranded, since in either case the [E] feature is on T , and the composite head goes no higher than the Pol head. Landau takes the spellout domain to be PolP (and in general whatever phrase is complement to C). As a result,

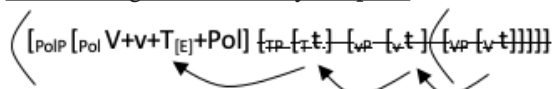
⁶ Why can't v bear the [E] feature here, permitting ellipsis of vP (since no spellout domain is been crossed)? Landau claims that that the host of [E] must be an overt head (word or morpheme). Since in American English the lexicalized head is V , not v , that is the only head on which the [E] feature can reside. He adds that: "...ellipsis applies to the constituent headed by the derived head V - v , namely vP " (Landau 2020b:292). These stipulations are necessary for verb-stranding vPE to be blocked. As a reviewer points out Landau's logic would prove problematic for generating V -stranding in Persian simplex predicates, since it would predict vPE , eliding the verb.

the [E] feature on T is still PF visible on the composite heads Aux-T-Pol or V-v-T-Pol inside the spellout domain when the licensing head Pol is introduced, so the ellipsis of TP will be licensed.

(44) Aux-stranding TPE (Polarity Ellipsis)



(45) V-stranding TPE (Polarity Ellipsis)



In sum, the phase-based approach to head-stranding ellipsis licensing completely blocks verb-stranding VPE, though a verb can be stranded by the ellipsis of a larger constituent (TPE) provided that the composite head has not crossed a phase boundary. The core analytical innovation places limitations on how far from its base position a head can be found if ellipsis of its own maximal projection is to be licensed. With these components of the account in mind, let us now turn to an application of the phase-based approach to ellipsis in V2 environments such as in Kashmiri.

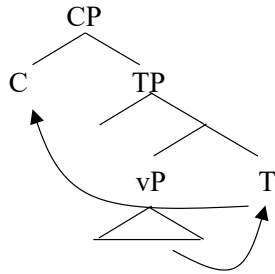
5 Consequences of the phase-based approach for V2

Under the phase-based approach to ellipsis licensing there are only narrowly-defined contexts in which main verb-stranding ellipsis is licensable (unlike aux-stranding ellipsis, which can be generated in a wider range of configurations). This presents challenges for our understanding of languages in which aux-stranding and main verb-stranding ellipsis strings appear to exist side-by-side and have superficially similar properties, including Hebrew, Russian, Portuguese, and Uzbek (among others). Additional concerns arise especially in the case of V2 languages like Kashmiri, in which auxiliary and main verbs have typically been understood to occupy the same position in the syntax, high in the clausal spine.

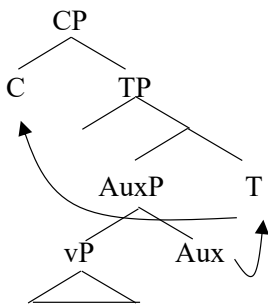
5.1 How high is V2?

As discussed in detail in section 3 above, recent approaches to verb-second in Kashmiri posit that the tensed verb undergoes head movement to C (Manetta 2011, 2020b). Further, standard approaches to V2 assert that auxiliary and main verbs move to the same head for the purposes of creating V2 word orders, and there is no evidence to the contrary for Kashmiri (e.g. den Besten 1980; Vikner 1995). The default assumption would then seem to be that all tensed verbs in Kashmiri move to the C head as in (46) and (47):

(46) Main verb moves to C



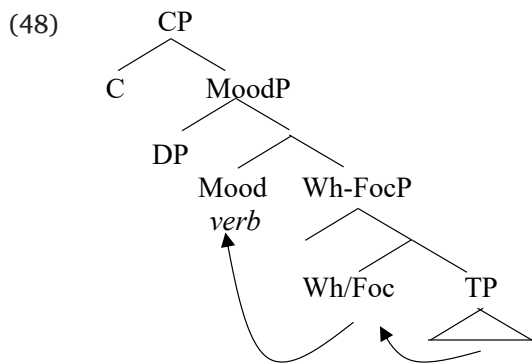
(47) Aux verb moves to C



In both scenarios, the composite head V-v-T/Aux-T head moves to C.

Turning to verb-stranding and Aux-stranding ellipsis, under the phase-based approach to ellipsis licensing the CHSE prohibits the ellipsis of a category XP if its head X has crossed outside of a spellout domain at the time at which the licenser is introduced into the derivation. Recall that this is a PF condition, in that the host of [E] must be PF-visible in its Spell-Out domain. Under this account, there seems to be no configuration in which headless ellipsis of TP, stranding the tensed, second-position verb (main or auxiliary) is licensable. In either scenario, T would have crossed outside of its spellout domain (TP) to the C head (as part of a composite verbal head) at the point at which the licenser C has been merged. Much like in the case of the blocked Aux-to-C movement prior to TPE in English sluicing (schematized in (39) above), TP ellipsis can never be licensed in this configuration. Thus, given standard assumptions about V2 (that both aux and main verbs move to C), the phase-based account predicts no verb-stranding TP-ellipses to be available at all in Kashmiri, contrary to fact.

A first alternative to reconsider is the height of the tensed verb in V2 structures: what if the verb does not move all the way to C, but instead to some lower head beneath the phase boundary? Indeed, there is a relatively recent alternative approach to Kashmiri V2 which proposes that V2 in the language is head movement of the tensed verb (main or auxiliary) to a Mood head, found above TP but below C (Munshi and Bhatt 2009), as in (48).



Head-stranding TP ellipsis is indeed possible in the configuration in (48). According to the CHSE, TP can be targeted for ellipsis here because the T head (as a part of the composite V-v-T/Aux-T head) has not crossed a phase boundary on the way to the Mood head. In fact, verb-stranding ellipsis as TP-ellipsis with the verb in a head between T and C looks structurally analogous to cases of Polarity ellipsis discussed above, and is licensable in the phase-based view (Landau 2020b). While this might at first seem to suggest that the phase-based account of head-stranding ellipsis can handle the facts of Kashmiri if this modified V2 approach is adopted, by which the second-position verb moves to a head lower in the clausal spine than C (within the same spellout domain as T), a problem arises when we consider sluicing.

5.2 Sluicing and head movement in Kashmiri

It is not unexpected that Kashmiri, a language with obligatory wh-fronting to a position immediately preceding the second position verb, would feature typical sluicing (clause-sized ellipsis, stranding a wh-phrase).

- (49) Ra:ʃI rani ka: nʰ magar me chu-nI pataa k'a.
 Raj cook.FUT something, but 1SG.DAT AUX-NEG know what
 'Raj will cook something, but I don't know what.' (Rakesh Bhatt, p.c.)

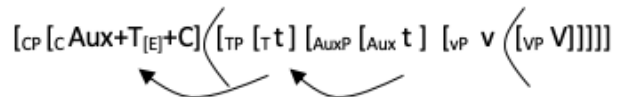
Indeed, languages with similar V2 patterns, such as Icelandic and Yiddish, also exhibit sluicing:

- (50) *Icelandic*
 Jón sá einhvern en ég veit ekki hvern
 John.NOM saw someone.ACC but I know not who.ACC
 'John saw someone, but I don't know who.'
 (Wood, Barros, & Siggurðsson 2016: (7))

Again, an important accomplishment of the phase-based approach, as discussed above in section 4, is a straightforward account for the well-known fact that the auxiliary verb never appears in sluicing structures in languages like English (a component of the Sluicing-Comp generalization),

even when subject-auxiliary inversion should have applied, sending the auxiliary verb to the C head (repeated in (51)).

(51) *Aux-to-C TPE as in English sluicing



Returning to Kashmiri, let us imagine that we have adopted the view that both auxiliary and main verbs move to a Mood head, above T but below C. Notice that in that scenario, TP can be elided while the main or auxiliary verb remains present, since neither complex head would have crossed outside the relevant spellout domain. This means that we should expect an overt verb to obligatorily appear in typical sluicing structures as well, contrary to fact, as it would have moved to Mood⁰ to satisfy V2. In essence, in rejecting the account of Kashmiri V2 in which the second position verb moves to C in order to accommodate the phase-based account of verb-stranding ellipsis as discussed in 5.1, we run into the problem of losing the explanation for the missing verb in sluicing contexts (an explanation central to the phase-based account to begin with).⁷

One could propose yet another adjustment in the way in which verb movement functions in Kashmiri, in which in interrogative contexts only, the second-position verb moves to C; otherwise it is found lower in the clausal spine, in the Mood head. However, there are empirical reasons to reject this move. In Kashmiri, a special word order variation is available only in *wh*-interrogatives in which an additional non-*wh* DP (with a topic or focus interpretation) may appear preceding the *wh*-phrase, creating V3 order. Indeed, many speakers report that this word order, in (52), is preferred in unmarked *wh*-questions (Wali and Koul 1997).

(52) raj = an kəmis həv nəv kitaab?
 Raj = ERG whom.DAT show.PRF new book
 ‘As for Raj, to whom did he show his new book?’ (Wali and Koul 1997: 12)

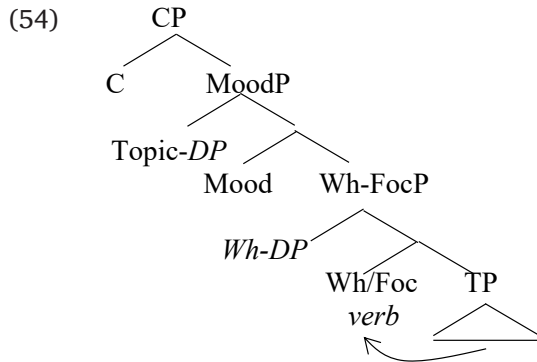
Notably, the V3 word order for interrogatives is also found in Yiddish, suggesting that this is not an exceptional configuration found only in Kashmiri, but part of a wider pattern in a set of V2 languages.

(53) *Yiddish*
 mit di kinder vos tut men?
 with the children what does one
 ‘What does one do with the children?’ (Diesing and Santorini 2020: (25))

In order to accommodate Kashmiri word orders like those in (52), Munshi and Bhatt (2009) posit that V2 in interrogatives is actually head movement to a head lower than V2 in declaratives (they

⁷ I thank a reviewer for emphasizing to me the importance of this conundrum.

term this head the Wh/Focus head). In their account, the pre-wh phrase is found in the specifier of MoodP, and the wh-phrase is found in the specifier of Wh/FocusP, with the verb in the Wh/Foc head.



The phase-based account of ellipsis licensing would force us into an approach to V2 in Kashmiri in which we would need to postulate that V2 in interrogative clauses would be movement to a head higher than in non-interrogatives; this is the opposite of what Munshi and Bhatt propose in (54), in which interrogative V2 is to a head which is lower in the clausal spine. This would result in a loss of the explanation for the ordering of preverbal constituents in wh-questions.

Finally, a reviewer asks whether we could consider sluicing to be wh-movement to Spec, CP followed by MoodP ellipsis, with the verb remaining in the Mood head and thus going unpronounced. Although this would derive the desired lone wh-remnant, we could no longer maintain the Ross-Merchant position that the internal syntax of a sluice should be a strategy of wh-question formation independently available in the language. Not only would the adjustment the reviewer proposes not align with a known wh-question formation strategy in Kashmiri, but the special structure needed to feed sluicing would be sharply ungrammatical in the absence of ellipsis — the word order WhXP-Topic-Verb is not possible (Wali and Koul 1997; Manetta 2011).

The upshot of the examination of V2 in this section is that the neither the more widely-accepted view of verb-second, in which both auxiliary and main verbs are found in the C head, nor an alternative view developed in reference to Kashmiri V2, in which tensed verbs are found in the Mood head in non-interrogatives and in a lower Wh/Focus head in interrogatives, are compatible with the requirements of the phase-based account of verb-stranding ellipsis. No empirical evidence supports the approach to V2 imposed by the phase-based approach to ellipsis licensing – indeed, it would seem to be contravened by the data at hand.

In the most general sense, the phase-based account predicts that no verb-stranding ellipsis options would be available in languages with obligatory long-distance head movement to the C domain (V2 languages), but this does not seem to be the case. In section 6 we shall see that the more conventional account of verb-stranding ellipsis along the lines developed in

Merchant (2001, 2008) and more recently extended in Gribanova (2013a,b; 2017), has clear advantages in that it works well in concert with a standard, well-supported approach to V2 crosslinguistically.

5.3 Other approaches to V2

In fact, any account of V2 language in which main or auxiliary verbs move directly to a head in the C domain without stopping in the T domain will face incompatibilities generating head-stranding ellipsis strings under the phase-based account. Consider a language like Danish, which permits auxiliary-stranding strings only (Mikkelsen 2006; 2015; Houser et al 2008):

- (55) a. *Mona og Jasper havde vask-et bilen, eller rettere Mona havde*
Mona and Jasper has.PAST wash-PART car.DEF or rather Mona has.PAST
 ‘Mona and Jasper have washed the car, or rather Mona has.’ (Sailor 2018: (6a))
- b. **Mona og Jasper vaskede bilen, eller rettere Mona vaskede*
Mona and Jasper wash.PAST car.DEF or rather Mona wash.PAST
 ‘Mona and Jasper have washed the car, or rather Mona has.’ (Sailor 2018: (7b))

Presumably Landau would analyze Danish, like English, to exhibit Aux-stranding AuxPE.⁸

Several accounts of V2 in Danish propose that V2 is movement of the tensed verb directly to C, with no intermediate landing site (Vikner 1995; Sailor 2018; Harizanov and Gribanova 2019). Consider this approach to V2 under the phase-based account: if the auxiliary verb does not move at all until C is merged, and then goes directly to C, it would be either: (a) still inside the ellipsis site AuxP when T is merged, meaning ellipsis of AuxP would not strand Aux if T is the ellipsis licensor; or (b) moved outside the spellout domain to C at the point at which C is merged, prohibiting headless ellipsis of AuxP by the CHSE if C is the licensor. In either case, licensing Aux-stranding AuxPE would be impossible. Of course, Danish features typical sluicing with no auxiliary verb remaining (Merchant 2003; Chung 2005), so once again, simply positing that Aux-stranding ellipsis is TP-ellipsis licensed by C will not solve the problem. We would then be unable to generate grammatical sluicing structures, and unable to limit verb-stranding ellipsis to auxiliary verbs in this language.

This brief discussion of Danish illustrates that the phase-based approach is not only incompatible with accounts of V2 in Kashmiri, but also with at least some approaches to verb movement in more familiar V2 languages.

⁸ In the phase-based account, language-specific constraints on head-stranding ellipsis (such as those in Danish discussed in Houser et al 2011) are attributed to properties of the head of the elided category (the host of [E]).

5.4 Interim summary

This section has made a number of attempts to extend the phase-based approach to ellipsis licensing to verb-stranding ellipses in Kashmiri and has revealed that the phase-based approach is incompatible with the dominant accounts of V2 in the language (Munshi and Bhatt 2009; Manetta 2011; 2020). This means that no matter where we postulate that main and auxiliary verbs are found in the clausal spine in V2 word orders, the phase-based approach cannot correctly predict the fact that main and auxiliary verb-stranding ellipses are available, alongside typical sluicing structures. Ultimately, the phase-based approach encounters serious challenges in explaining head-stranding ellipsis in a V2 context. For this reason, in what follows I propose that more conventional approach to head-stranding ellipsis following Merchant (2001; 2008) combined with an understanding of V2 as syntactic head movement to C, provides a straightforward account of head-stranding TP-ellipsis in Kashmiri (and likely quite generally).

6 Conclusions and ongoing research

At the core of the phase-based account to the licensing of headless ellipsis is a new claim about the required proximity of the topmost copy of and the bottommost copy of a head movement chain at the time the ellipsis licenser is merged. If we maintain the optimal position that the underlying syntax of a clause which has undergone ellipsis is not distinct from the syntax of its non-elided counterpart (Ross 1969), this restrictive requirement on head movement must apply in a given language across the board. V2 languages like Kashmiri test this locality requirement in particular, as these are languages in which all verbs are known to be displaced significantly from their point of entry into the derivation, and in which this displacement is systematic and obligatory. In the case of V2 languages, we have no substantive evidence for such a restrictive constraint on head movement in the presence of ellipsis. Indeed, other evidence about the movement of verbs in V2 clauses argues against it.

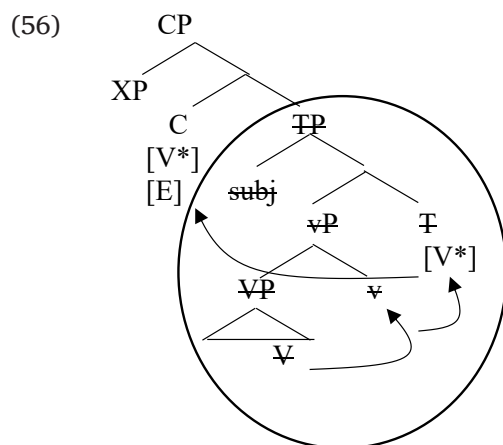
The present article represents not so much an empirical refutation of the ban on verb-stranding VPE, but instead reveals that the phase-based approach requires unsupportable claims about head movement and V2. In 6.1, I sketch an alternative view featuring a conventional view of both ellipsis and verb-second phenomena.

6.1 A conventional account of head-stranding ellipses in Kashmiri

I maintain here that a relatively conventional approach to head movement and ellipsis in Kashmiri offers a straightforward account of the phenomena discussed above. For completeness, I will illustrate how this account functions before moving on to the larger, more speculative question of how to handle crosslinguistic variation in head-stranding ellipsis.

I assume that V2 in Kashmiri is main and auxiliary verb movement to C as proposed and defended in detail in Manetta (2011; 2020) and consistent with proposals in Vikner (1995) and more recently Harizanov and Gribanova (2019). Following Manetta (2020b), I understand this head movement to take place in the narrow syntax and proceed via head-to-head adjunction through T on the way to the C domain (see also Sailor 2018). I also adopt the dominant approach to ellipsis (Merchant 2001; 2004; 2008), in which a category XP is marked for non-pronunciation when its selecting head Z bears the [E] feature. Head-stranding ellipsis occurs when X^0 has moved outside of XP and XP (or a containing phrase) is elided, stranding X.

For a typical (discourse-neutral) instance of verb-stranding ellipsis in Kashmiri, I propose that the auxiliary or main verb moves to T, which has a feature to motivate verb movement ([V*]). The T head also has a feature attracting the external argument to its specifier. The complex head V-v-T or Aux-T subsequently moves to C, and the preverbal constituent moves to Spec, CP. C also hosts the [E] feature, prompting ellipsis of TP.



We can now turn to the question of sluicing, which presented an obstacle for the phase based account. Recall that one of the enduring puzzles in the conventional approach to sluicing (Merchant 2001) is the question of why material typically located in C, including complementizers, auxiliary verbs in languages with subject-auxiliary inversion, clitics, and second position verbs, are not present in the sluice (the remnant consists solely of a *wh*-phrase). This observation was traditionally captured in the Sluicing-Comp generalization (Lobeck 1995; Lasnik 1999; Merchant 2001), which requires that in sluicing structures no non-operator material appear in Comp (Merchant 2001: (71)). In the phase-based account, Landau (2020b) proposes a novel solution to a part of this problem: the CHSE prohibits the movement of a complex verbal head including T up to C and subsequent ellipsis of TP. However, as we saw above in section 5.2, the account of verb-stranding ellipsis in V2 languages forced by the CHSE would predict that the verb remain in sluicing, contrary to fact.

There are a number of viable approaches to the Sluicing-Comp generalization circulating in the literature, including earlier accounts based on the notion of feature strength (Lasnik 2001; Merchant 2001) and a set of accounts relying on a split CP-projection (such that the missing head material appears in a lower head than the one that licenses ellipsis) (e.g. Baltin 2010; Yoshida et al 2015). While space does not permit a detailed review of these approaches here, suffice it to say that many of them could certainly be adapted to work well with the account of ellipsis and V2 in Kashmiri thus far presented. Here I will adopt a mechanism pursued in various forms in Ott (2011), Arano (2014), and Bruening (2015) (see also Wurmbrand 2017, ft 10), which defines the spellout domain targeted for non-pronunciation such that in certain configurations, the phase head is spelled out together with its complement. In this view, if sluicing is a scenario (marked by a C bearing [Q] and [E]) in which C is included in the spellout domain, and thus goes unpronounced, the second position tensed verb will not appear in sluicing structures.

Very little is new in the conventional approach to Kashmiri proposed in this section. What is important here is to demonstrate that a coherent account of ellipsis already exists that is fully compatible with a well-supported view of verb-second. An account along these lines represents a viable alternative to the phase-based account in Landau (2020b), which requires a series of unsatisfying and unjustifiable moves to accommodate verb-second.

6.2 Future research: crosslinguistic variation in head-stranding ellipsis

One of the most valuable outcomes of Landau's recent work is to point to a persistent question prompted the ellipsis literature to this point: is there a systematic way to predict the types and sizes of ellipsis that will be available in a given language based on an independent set of characteristics? How can we avoid appealing only to what Landau calls "irreducible, idiosyncratic parametric statements, amounting to a list of the functional heads (or even lexemes), in each language, that license ellipsis of their complements" (Landau 2020b: 287). This is certainly not a new question, but it is one newly relevant, as the phase-based licensing condition for head-stranding ellipsis discussed here is but one a series of new efforts to establish the systematic relationship between head movement and ellipsis licensing in the grammar (Schoorlemmer and Temmerman 2012; Thoms 2010; Lipták and Saab 2014; Aelbrecht and Harwood 2015; Sailor 2018; Gribanova 2018, 2020; Bennet, Elfner, and McCloskey 2019; i.a.).

These diverse proposals (often dealing in detail with only a single language) include claims about when head-stranding ellipsis should be available based on head movement patterns, the relative timing of these operations, and the locus of these operations in the grammar. The degree of variation in approaches across these accounts and the empirical challenges they face indicate that there is still real work to do.

First, a complete account would ideally explain why some languages lack certain head-stranding ellipses altogether even when they would otherwise seem to have all of the necessary

characteristics; for instance, Landau (2018) argues convincingly that Hebrew lacks verb-stranding VPE, despite the fact that it was long thought to be the prototypical instantiation of the construction. Further, we must ask how extra-syntactic factors such as information structure, argument structure pragmatic cues, and prosody influence the felicity of head-stranding ellipsis in context. Finally, we must better understand how head-stranding elliptical clauses are to be parsed when they are ambiguous with respect to the size of the elided constituent. How does the speaker, the hearer, or, for that matter, the learner interpret such a string in real time, and by what rubrics (e.g. economy) are such strings evaluated? What components of the grammar are engaged in such an evaluation? While these questions lack definitive answers, our understanding of crosslinguistic variation in ellipsis operations and how they interact with head movement will remain partial. I maintain that exploring the empirical landscape of lesser-studied languages like Kashmiri is crucial to testing new hypotheses in this domain.

Abbreviations

AUX = auxiliary, DAT = dative, DEF = definite, EMPH = emphatic, ERG = ergative, F = feminine, FUT = future, GEN = genitive, M = masculine, NEG = negation, OLB = oblique, PL = plural, PRF = perfective, PRP = participle, PS = person suffix, PST = past, Q = question particle, REL = relative pronoun, SG = singular

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Competing Interests

The author has no competing interests to declare.

References

- Aelbrecht, Lobke. 2010. *The syntactic licensing of ellipsis*. Amsterdam/New York: John Benjamins. DOI: <https://doi.org/10.1075/la.149>
- Aelbrecht, Lobke & Harwood, William. 2015. To be or not to be elided: VP ellipsis revisited. *Lingua* 153. 66–97. DOI: <https://doi.org/10.1016/j.lingua.2014.10.006>
- Arano, Akihiko. 2014. Spell-out of intermediate projections. In *Papers from the 14th annual Conference of the English Linguistic Society of Japan* (JELS 31), 3–9.
- Bailyn, John F. 2014. Against a VP ellipsis Account of Russian Verb-Stranding Constructions. In *Studies in Japanese and Korean Linguistics and Beyond*, Vovin, Alexander (ed.), Alexander, 93–109. Folkestone and Leiden: Global Oriental/Brill.
- Baltin, Mark. 2010. The nonreality of doubly filled Comps. *Linguistic Inquiry* 41. 331–335. DOI: <https://doi.org/10.1162/ling.2010.41.2.331>
- Bennett, Ryan & Elfner, Emily & McCloskey, Jim. 2019. Prosody, focus and ellipsis in Irish. *Language* 95(1). 66–106. DOI: <https://doi.org/10.1353/lan.2019.0012>
- Bhatt, Rakesh. 1999. *Verb Movement and the Syntax of Kashmiri*. Dordrecht: Kluwer. DOI: <https://doi.org/10.1007/978-94-015-9279-6>
- Bruening, Benjamin. 2015. “Non-Constituent Coordination: Prosody, Not Movement.” *University of Pennsylvania Working Papers in Linguistics* 21(1). 1–10.

- Chung, Sandra. 2005. Sluicing and the lexicon: The point of no return. In *BLS 31: General Session and Parasession on Prosodic Variation and Change*, Cover, Rebecca T. & Kim, Yuni (eds.), 73–91. Berkeley Linguistics Society.
- den Besten, Hans. 1983. 'On the Interaction of Root Transformations and Lexical Deletive Rules.' In Abraham, Werner (ed.), *On the Formal Syntax of the Westgermania. Papers from the "3rd Groningen Grammar Talks" Groningen, January 1981*. Amsterdam/Philadelphia: Benjamins. 1983. *Linguistik Aktuell* 3. 47–131. DOI: <https://doi.org/10.1075/la.3.03bes>
- Diesing, Molly & Santorini, Beatrice. 2020. The scope of embedded Verb Second in modern Yiddish. In Woods, Rebecca & Wolf, Sam (eds.), *Rethinking Verb Second*, 665–681. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oso/9780198844303.003.0028>
- Doron, Edit. 1999. V-movement and VP ellipsis. In *Fragments: Studies in ellipsis and gapping*, Lappin, Shalom & Benmamoun, Elabbas (eds.), 124–140. New York: Oxford University Press.
- Erteschik-Shir, Nomi & Ibn-bari, Lena & Taube, Sharon. 2013. Missing Objects as Topic Drop. *Lingua* 136. 145–169. DOI: <https://doi.org/10.1016/j.lingua.2013.07.009>
- Funakoshi, Kenshi. 2016. Verb-Stranding Verb Phrase Ellipsis in Japanese. *Journal of East Asian Linguistics* 25(2): 113–142. DOI: <https://doi.org/10.1007/s10831-016-9143-8>
- Goldberg, Lotus. 2005. *Verb-stranding VP ellipsis: a cross-linguistic study*. PhD dissertation, McGill University, Montréal.
- Gribanova, Vera. 2013a. Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. *Natural Language and Linguistic Theory* 31(1). 91–136. DOI: <https://doi.org/10.1007/s11049-012-9183-3>
- Gribanova, Vera. 2013b. A new argument for verb-stranding verb phrase ellipsis. *Linguistic Inquiry* 44(1). 145–157. DOI: https://doi.org/10.1162/LING_a_00122
- Gribanova, Vera. 2018. Head movement and ellipsis in the expression of Russian polarity focus. *Natural Language and Linguistic Theory* 35(1). 1–43. DOI: <https://doi.org/10.1007/s11049-017-9361-4>
- Gribanova, Vera. 2020. Predicate formation and verb-stranding ellipsis in Uzbek. *Glossa* 5(1), 124. 1–40. DOI: <https://doi.org/10.5334/gjgl.1042>
- Gribanova, Vera & Mikkelsen, Line. 2018. On the interaction of head movement and ellipsis in Danish. In Merchant, Jason & Mikkelsen, Line & Rudin, Deniz & Sasaki, Kelsey (eds.), *A Reasonable Way to Proceed: Essays in Honor of Jim McCloskey*, 105–124. UC eScholarship Repository.
- Grinder, John, & Postal, Paul. 1971. Missing antecedents. *Linguistic Inquiry* 2. 269–312.
- Hankamer, Jorge & Sag, Ivan A. 1976. Deep and Surface Anaphora. *Linguistic Inquiry* 7. 391–426.
- Harizanov, Boris & Gribanova, Vera. 2019. Whither Head Movement? *Natural Language and Linguistic Theory*, 1–47.
- Holmberg, Anders. 1986. *Word Order and Syntactic Features in the Scandinavian Languages and English*. PhD diss. Stockholm University.
- Holmberg, Anders & Platzack, Christer. 1995. *The role of inflection in Scandinavian Syntax*. Oxford: Oxford University Press.

- Houser, Michael & Mikkelsen, Line & Toosarvandani, Maziar. 2008. Verb phrase pronominalization in Danish: Deep or surface anaphora? In *Proceedings from the 34th Western Conference on Linguistics*, Brainbridge, Erin & Agbayani, Brian (eds.), 183–195.
- Houser, Michael & Mikkelsen, Line & Toosarvandani, Maziar. 2011. A defective auxiliary in Danish. *Journal of Germanic Linguistics* 23(3). 245–298. DOI: <https://doi.org/10.1017/S1470542711000043>
- Huddleston, R. 1970. Two approaches to the analysis of tags. *Journal of Linguistics* 6(2). 215–22. DOI: <https://doi.org/10.1017/S0022226700002619>
- Kim, Soowon. 1999. Sloppy/strict identity, empty objects, and NP ellipsis. *Journal of East Asian Linguistics* 8. 255–284. DOI: <https://doi.org/10.1023/A:1008354600813>
- Landau, Idan. 2018. Missing Objects in Hebrew: Argument Ellipsis, not VP Ellipsis. *Glossa* 3(1). 76. 1–37. DOI: <https://doi.org/10.5334/gjgl.560>
- Landau, Idan. 2020a. Constraining head-stranding ellipsis. *Linguistic Inquiry* 51(2). 281–318. DOI: https://doi.org/10.1162/ling_a_00347
- Landau, Idan. 2020b. On the non-existence of verb-stranding VP-ellipsis. *Linguistic Inquiry* 51(2). 341–365. DOI: https://doi.org/10.1162/ling_a_00346
- Lasnik, Howard. 1999. On Feature Strength: Three Minimalist Approaches to Overt Movement. *Linguistic Inquiry* 30. 197–217. DOI: <https://doi.org/10.1162/002438999554039>
- Lasnik, Howard. 2001. When can you save a structure by destroying it? *Proceedings of the North East Linguistic Society (NELS)* 31(2). 301–320.
- Lipták, A. 2019. Hungarian. In van Craenenbroeck, Jeroen & Temmerman, Tanja (eds.), *The Oxford Handbook of Ellipsis*, 815–840. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780198712398.013.30>
- Lipták, Anikó & Saab, Andrés. 2014. No N-raising out of NPs in Spanish: Ellipsis as a diagnostic of head movement. *Natural Language and Linguistic Theory* 32. 1247–1271. DOI: <https://doi.org/10.1007/s11049-014-9247-7>
- Lobeck, Anne. 1995. *Ellipsis: Functional heads, licensing, and identification*. New York: Oxford University Press.
- Manetta, Emily. 2011. *Peripheries in Kashmiri and Hindi-Urdu: The Syntax of Discourse-Driven Movement*. Amsterdam: John Benjamins. DOI: <https://doi.org/10.1075/lfab.4>
- Manetta, Emily. 2018. VP-ellipsis and complex predicates in Hindi-Urdu. *Natural Language and Linguistic Theory* 37(3). 915–953. DOI: <https://doi.org/10.1007/s11049-018-9429-9>
- Manetta, Emily. 2020a. *Rarely Used Structures in Lesser-Studied Languages: Insights from the Margins*. New York: Routledge. DOI: <https://doi.org/10.4324/9780429280917>
- Manetta, Emily. 2020b. Expanding the Typology of V2 VPE: The case of Kashmiri. In Biberauer, Theresa & Wolfe, Sam & Woods, Rebecca (eds). *Rethinking Verb Second*. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oso/9780198844303.003.0031>
- Martins, Ana-Maria. 1994. Enclisis, VP-deletion and the nature of sigma. *Probus* 6. 173–205. DOI: <https://doi.org/10.1515/prbs.1994.6.2-3.173>

- Martins, Ana-Maria. 2016. VP and TP Ellipsis: sentential polarity and information structure. *Manual of Grammatical Interfaces in Romance* 10. 457–486. DOI: <https://doi.org/10.1515/9783110311860-018>
- McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85. 259–302. DOI: [https://doi.org/10.1016/0024-3841\(91\)90023-X](https://doi.org/10.1016/0024-3841(91)90023-X)
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2003. Sluicing. *SynCom Case 98*. University of Chicago.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27(6). 661–738. DOI: <https://doi.org/10.1007/s10988-005-7378-3>
- Merchant, Jason. 2008. ‘Variable island repair under ellipsis’. In *Topics in ellipsis*, Johnson, Kyle (ed.), 132–153. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9780511487033.006>
- Merchant, Jason. 2018. Verb-stranding predicate ellipsis in Greek, implicit arguments, and ellipsis-internal focus. In Merchant, Jason & Mikkelsen, Line & Rudin, Deniz & Sasaki, Kelsey (eds.), *A reasonable way to proceed: Essays in honor of Jim McCloskey*, 229–269. University of California eScholarship.
- Mikkelsen, Line. 2006. “Verb phrase anaphora in a verb second language”. *Presented at Linguistics at Santa Cruz (LASC) annual symposium*. March 2006.
- Mikkelsen, Line. 2015. VP anaphora and verb-second order in Danish. *Journal of Linguistics* 51(3). 595–643. DOI: <https://doi.org/10.1017/S0022226715000055>
- Munshi, Sadaf & Bhatt, Rajesh. 2009. “Two locations for negation”. In Van Craenenbroeck, Jeroen (ed.), *Linguistic Variation Yearbook 2009*, 205–240. DOI: <https://doi.org/10.1075/livy.9.06mun>
- Ngonyani, Deogratias S. 1997. VP ellipsis in Ndendeule and Swahili applicatives. *Syntax at Sunset: UCLA working papers in syntax and semantics 1*. University of California, Los Angeles. 109–128.
- Oku, Satoshi. 1998. *A theory of selection and reconstruction in the minimalist perspective*. PhD dissertation, University of Connecticut.
- Otani, Kazuyo & Whitman, John. 1991. V-Raising and VP-ellipsis. *Linguistic Inquiry* 22. 345–358.
- Ott, Dennis. 2011. A note on free relative clauses in the theory of phases. *Linguistic Inquiry* 42. 183–192. DOI: https://doi.org/10.1162/LING_a_00036
- Platzack, Christer. 1986. Comp, infl, and the Germanic Word Order. In Hellan, Lars & Christensen, Kirst Koch (eds). *Topics in Scandinavian Syntax*, 185–234. Dordrecht: Riedel. DOI: https://doi.org/10.1007/978-94-009-4572-2_9
- Pollock, Jean-Yves. 1989. Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20. 365–424.
- Rasekhi, Vahideh. 2016. Missing Objects in Persian. In Ghomeshi, Jila & Jahani, Carina & Lenepveu-Hotz, Agnès (eds.), *Further Topics in Iranian Linguistics*. Cahiers de Studia Iranica series 58. 157–174. Leuven: Peeters Publishers.

- Ross, John Robert. 1969. Guess who? In Binnick, Robert & Davison, Alice & Green, Georgia & Morgan, Jerry L. (eds.), *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, 252–286. Chicago: University of Chicago, Chicago Linguistic Society.
- Sailor, Craig. 2013. Tag questions and the typology of VP ellipsis. Ms., UCLA.
- Sailor, Craig. 2014. *The Variables of VP Ellipsis*. PhD Dissertation, University of California, Los Angeles.
- Sailor, Craig. 2018. The typology of head movement and ellipsis: a reply to Lipták & Saab (2014). *Natural Language & Linguistic Theory* 36. 851–875. DOI: <https://doi.org/10.1007/s11049-017-9391-y>
- Sato, Y. & Hayashi, S. 2018. String-vacuous head movement in Japanese: new evidence from verb-echo answers. *Syntax* 21(1). 72–90. DOI: <https://doi.org/10.1111/synt.12148>
- Schoorlemmer, Erik & Tanja Temmerman. 2012. Head movement as a PF-phenomenon: Evidence from identity under ellipsis. In Jaehoon Choi, E. & Hogue, Alan & Punske, Jeffrey & Tat, Deniz & Schertz, Jessamyn & Trueman, Alex (eds.), *29th West Coast Conference on Formal Linguistics (WCCFL)*, 232–240. Somerville: Cascadilla Press.
- Sherman (Ussishkin), Adam. 1998. VP ellipsis and subject positions in modern Hebrew. In *Proceedings of the 13th annual meeting of the Israel association of theoretical linguistics*, Bar-Ilan University, Tel-Aviv, Israel & Wyne, Adam Zachary (eds.), 211–229. Jerusalem: Akademon.
- Simpson, Andrew. 2021. In defense of verb-stranding VP ellipsis. ms, lingbuzz/005907.
- Simpson, Andrew & Choudhury, Arunima & Menon, Mythili. 2013. Argument Ellipsis and the licensing of covert nominals in Bangla, Hindi and Malayalam. *Lingua* 134. 123–138. DOI: <https://doi.org/10.1016/j.lingua.2013.06.007>
- Takahashi, Daiko. 2008. Quantificational null objects and argument ellipsis. *Linguistic Inquiry* 39. 307–326. DOI: <https://doi.org/10.1162/ling.2008.39.2.307>
- Thoms, Gary. 2010. ‘Verb floating’ and VP-ellipsis: Towards a movement theory of ellipsis licensing. *Linguistic Variation Yearbook* 10. 252–297. DOI: <https://doi.org/10.1075/livy.10.07tho>
- Thoms, Gary & Walkden, George. 2018. vP fronting with and without remnant movement. *Journal of Linguistics* 55(1). 161–214. DOI: <https://doi.org/10.1017/S002222671800004X>
- Toosarvandani, Maziar. 2019. Persian. van Craenenbroeck, Jeroen & Temmerman, Tanja (eds.), 934–961. *The Oxford handbook of ellipsis*. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780198712398.013.32>
- Travis, Lisa. 1991. “Parameters of Phrase Structure and Verb Second Phenomena.” In Freidin, R. (ed.), *Principles and Parameters in Comparative Grammar*, 339–364. Cambridge, Mass.: MIT Press.
- Vikner, Sten. 1995. *Verb movement and expletive subjects in the Germanic languages*. Oxford: Oxford University Press.
- Wali, Kashi & Koul, Omkar. 1997. *Kashmiri*. New York: Routledge.
- Williams, Edwin. 1977. Discourse and Logical Form. *Linguistic Inquiry* 8. 101–139.

Wood, Jim & Barrons, Matthew & Siggurðsson, Einar Freyr. 2016. Clausal Ellipsis and Case (Mis) Matching in Icelandic. *Working Papers in Scandinavian Syntax* 96. 49–90.

Wurmbrand, Susi. 2017. Stripping and Topless Complements. *Linguistic Inquiry* 48(2). 341–366. DOI: https://doi.org/10.1162/LING_a_00245

Yoshida, Masaya & Nakao, Chizuru & Ortega-Santos, Iván. 2015. The syntax of why-stripping. *Natural Language and Linguistic Theory* 33. 323–270. DOI: <https://doi.org/10.1007/s11049-014-9253-9>

Zwart, Jan-Wouter. 1997. Morphosyntax of verb movement: A Minimalist approach to the syntax of Dutch, vol. 39 of *Studies in Natural Language and Linguistic Theory*. Dordrecht: Kluwer. DOI: <https://doi.org/10.1007/978-94-011-5880-0>

