RIGHT EDGE RESTRICTION IS NON-UNIFORM: EVIDENCE FROM TURKISH*

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1 Introduction

The Right Edge Restriction (RER) is invoked as an essential property of various phenomena and associated analysis involving structures where one set of overt material is interpreted as associated with multiple positions or phrases within an utterance; such as Right Node Raising (Ross, 1967, Hankamer, 1979, Sabbagh, 2007), Backwards Gapping (Ross, 1970, Wilder, 1997, İnce, 2009, Citko, 2017), and Suspended Affixation (Hankamer, 1979). It is a descriptive but robust generalization about a restriction on word orders with sharing of material across phrases, clauses, and conjuncts (Wilder, 1997, Sabbagh, 2007).

(1) *Right Edge Restriction (RER)* (Sabbagh, 2007:356, ex:12)
In the configuration: $[[_{A} \ldots X \ldots]$ Conj. $[_{B} \ldots X \ldots]]$
X must be rightmost within A and B before either (i) X can be deleted from A; (ii) X can be rightward ATB-moved; or (iii) X can be multiply dominated by A and B.

I will be providing data from Turkish to show that the Right Edge Restriction is epiphenomenal; apparently identical word order restrictions in Turkish are derived from two different structures – *constituent sharing* structures, and *string sharing* structures – by two different mechanisms: (i) a ban on rightward extraposition of certain immobile phrasal constituents, and (ii) a result of post-syntactic linearization being unable to linearize certain parallel merge configurations. Thus, the Right Edge Restriction in a language can be the result of minimally two separate processes.

I would like to proceed with the more theory-neutral descriptive label *Right Edge Sharing* for structures that share material at the right edge in a way constrained by the Right Edge Restriction, and avoid confusion with pre-theoretic labels such as *gapping*, *right node raising*, *suspended affixation*, *(multidominance) sharing*.

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2 Previous Work

The Right Edge Restriction states that an element has to be able to occupy the rightmost position in a phrase to be shareable at the right edge. A good example is prepositional ditransitives vs. double object constructions in English. In (2-a), the direct object can be shared at the right edge since it can independently be moved to the right of the dative argument; but, the inner argument in the double object construction cannot in (2-b), because it is unable to move to the right of the accusative argument.

(2) *Right-edge vs. Non-right edge gaps in Right Node Raising* (Wilder, 1999:ex.6)
  a. [I invited into my house __] and [congratulated *all the winners*]
  b. *[I gave __ a present] and [congratulated *all the winners*].

Right Node Raising has also been found to apply beyond coordination structures, namely embedding structures and comparatives, and therefore the Right Edge Restriction must account for more than Sabbagh (2007)'s formulation in (1): see (3) and (4) below for right edge sharing in non-conjunction structures.

(3) *Embedded Clauses with Right Edge Sharing* (Bachrach and Katzir, 2017:5:8)
  a. People who hate __ often ridicule people who enjoy **[songs by Elton John]**.
  b. John destroyed __ before Bill could read **[the only copy of my dissertation]**.

(4) *Ditransitive with Right Edge Sharing* (Wilder, 1997:87, ex.117)
  We must distinguish [psycho-__] [from socio-**linguistic claims**].

I will propose two mechanisms that are applicable, but not restricted to coordination structures: the *constituent sharing* mechanism requires the shared object to be rightward extraposable in order to be shared, and the *string sharing* mechanism requires shared material to be linearized rightmost within sister nodes; both are possible but not restricted to coordination.

2.1 Phonological Ellipsis Analyses

Previous analyses have proposed ellipsis accounts of right edge sharing strings where the *shared material* escapes the ellipsis site via movement and a constituent is elided in non-final conjuncts (Wilder, 1997, Hartmann, 2000, İnce, 2009).

I argue that a phrasal ellipsis account of the *constituent sharing* mechanism is undesirable for either the *constituent* or the *string* sharing structure. In the former, it would not explain why rightward extraposition and constituent sharing march in lockstep – if an element is not extraposable, it also cannot be shared at the right edge. In the latter, rampant stipulative movement would be needed to separate affixes and bound morphemes from hosts in otherwise unattested ways, including movement of immobile vP/VP-internal pseudo-incorporated objects to positions above TP.

2.2 Movement Analyses

Other analyses propose movement of the shared element from all gaps and the antecedent to a higher position, which dodges the *Coordinate Structure Constraint* island by parallel extraction (Ross, 1967, Hudson, 1976, Hankamer, 1979, Sabbagh, 2007).

I follow in this line of investigation, and adopt an Across-the-board Rightward Extraposition analysis, but crucially such an analysis only applies to one half of *right edge sharing* patterns. I argue that a movement analysis only generates *constituent sharing* strings, which corresponds to sharing of arguments and adjuncts in Turkish, but not verbal material; while *string sharing* strings need a non-movement analysis.

2.3 Multidominance Sharing Analyses

Another line of research argues for a multidominance analysis where the shared material is syntactically merged at at all the gap positions within the relevant conjuncts or phrases, and occupies each position simultaneously via multidominance (Wilder, 1999, Gračanin-Yüksek, 2007, Gračanin-Yüksek and İşsever, 2011, Citko, 2017, 2018). These analyses propose various extensions to post-syntactic linearization algorithms to accomodate multidominance structures, and derive the right-edge position of shared material by linearization principles such as asymmetric c-command (Kayne, 1994, Gračanin-Yüksek, 2007, Gračanin-Yüksek and İşsever, 2011, Citko, 2018), or invisibility of multidominated nodes at various cycles of cyclic linearization (Bachrach and Katzir, 2009, 2017).

I also follow a strand of this research, and propose that *string* sharing strings are generated by *parallel merge* of shared elements via multidominance. Crucially, the Right Edge Restriction falls out of not asymmetric c-command, contra Gračanin-Yüksek (2007), Gračanin-Yüksek and İşsever (2011), Citko (2017, 2018), but from cyclic linearization, à la Bachrach and Katzir (2009, 2017), based on language-specific evidence regarding immobile vP/VP-internal pseudo-incorporated objects, which would have to undergo large amounts of configurational remnant movement to get the attested linear orders in ways that are not possible for these objects. However, as to be discussed in section §3.3.1, I detract from Bachrach and Katzir (2009, 2017), and propose that linearization of multidominance still inherently encodes an asymmetry of right vs. left sisters in a structure, which derives the Right Edge Restriction, and the lack of a Left Edge Restriction.

3 Patterns

Right Edge Sharing in Turkish has a bimodal behaviour: a group of such target strings – *constituent sharing* strings – shares only constituent material, is blocked by islands, and cannot share elements that are unable to right extrapose; and a group of string – *string sharing* string – share strings of contiguous morphemes that do not need to form a constituent, and this shared string can cross syntactic island boundaries. Both varieties show evidence of conjunct/phrase-internal generation via selection and semantic interpretation, and obey the Right Edge Restriction.

	Constituent Sharing	String Sharing
Conjunct-internal generation	✓	✓
Right Edge Restriction	✓	✓
Non-constituent target	✓	✗
Bound by islands	✗	✓
Valid Target	material that can right-extrapose	material in base-generated pos.

3.1 Conjunct/Phrase-internal generation

The shared material originates inside the conjuncts or phrases containing the gaps, since the shared material's lexical identity and category are determined by the restrictions associated with the gap positions: the right-edge shared element must obey *lexical* and *categorical* selections within each phrase containing the gap. For example, the verbs *bık-* 'become fed up' and *nefret et-* 'hate' require an ablative case argument in Turkish, so when their goal argument is shared at the right edge in (6), it must appear in the l-selected *ablative* case.[1]

(6) a. *L-selected* ABL *argument:* ✓
Ali bıktı __, (ve) Veli de nefret etti __, **ben-den**.
Ali become_fed_up and Veli CONTR hate did 1SG-ABL
'Ali got fed up with __, and Veli came to hate **me**.'
b. *Not l-selected* ACC/NOM *argument:* ✗
*Ali bıktı __, (ve) Veli de nefret etti __, ben(-i).
Ali become_fed_up and Veli CONTR hate did 1SG-(ACC)

In string sharing structures, selectional restrictions likewise show base-generation at the gap, like (7), where the case of the non-shared argument in the first conjunct is still conditioned by the shared verb, showing the shared verb occupied the gap in the first conjunct.

(7) a. *L-selected* ABL *argument:* ✓
Ali *ben-den* __, (ve) Veli de *sen-den* **nefret etti**.
Ali 1SG-ABL and Veli CONTR 2SG-ABL hate did
'Ali got fed up with __, and Veli came to hate **me**.'
b. *Not l-selected* ACC/NOM *argument:* ✗
*Ali *ben(-i)* __, (ve) Veli de *sen-den* **nefret etti**.
Ali 1SG-(ACC) and Veli CONTR 2SG-ABL hate did

3.2 Constituent Sharing Patterns

The constituent sharing structures involve sharing of an argument or adjunct at the right edge of a string. Firstly, as described by the Right Edge Restriction, the shared element must be able to occupy right edge positions within the phrases of origin: in (8-a) we see that *çayı* can do so, and thus the sharing string (8-b) is acceptable. But caseless pseudo-incorporated direct objects like *çay* in (9-a) cannot move to the right edge of their original conjuncts, as in (26-a); so the expected sharing string (26-b) is unacceptable.

(8) *RER-conformity: target can occupy right edge*
a. Ali *demle-di* **çay-ı**, (ve) Veli de *iç-ti* **çay-ı**.
A. brew-PAST tea-ACC and V. CONTR drink-PAST tea-ACC

[1]Apparent counterexamples exist like (5) where a rightmost element that appears to be shared does not match the l-selection criteria of non-final conjuncts. The verb *sev-* 'love' selects a caseless or accusative argument, and the ostensibly shared argument at the right edge *ban-a* '1sg-DAT' is a dative argument, contra my claim. However, these cases turn out to be cases of argument drop. The first conjunct argument can co-refers with *ban-a* 'me-DAT', but it can also refer to other referents. Thus, this is a case of a phonologically *pro* argument being optionally co-referential with the argument of the second conjunct.

(5) ?Ali *sev-di*, ve *yardım et-ti* **ban-a**.
Ali love-PAST and help do-PAST 1SG-DAT
A: 'Ali loved (me) and helped me.'
B: 'Ali loved (someone/thing else) and helped me.'
✗ Structure: [Ali sevdi $\_\__i$], ve yardım etti $\textbf{bana}_i$.
✓ Structure: [Ali $pro_{i/j}$ sevdi], ve yardım etti $\textbf{bana}_i$.

b. Ali *demle-di* __, (ve) Veli de *iç-ti* **çay-ı**.
A. brew-PAST and V. CONTR drink-PAST tea-ACC
'What Ali did was *brew* the tea, and what Veli did was *drink* the tea.'

(9) *RER-violation: target unable to occupy right edge*

a. Ali **çay** demle-di, (ve) Veli de **çay** iç-ti.
A. tea brew-PAST and V. CONTR tea drink-PAST

b. *Ali demle-di **çay**, (ve) Veli de iç-ti **çay**.
A. brew-PAST tea and V. CONTR drink-PAST tea

c. *Ali demle-di __, (ve) Veli de iç-ti **çay**.
A. brew-PAST and V. CONTR drink-PAST tea
int'd: 'Ali tea-brewed, and Veli tea-drank.'

Also, the shared element must also surface at the right edge of the string, so a modified version of (8-b) in (10) where the shared element is followed by the verb is also unacceptable.

(10) *RER-violation: non-final shared material*
*Ali *demle-di* __, (ve) Veli de **çay-ı** *iç-ti*.
A. brew-PAST and V. CONTR tea-ACC drink-PAST
int'd: 'Ali *brewed* the tea, and Veli *drank* the tea.'

As the name suggests, these structures can only target constituents, whether an argument, or an adjunct. (11-a) shows the sharing of a direct object, while (11-b) of an NPI adjunct. However, even when the target material occupies the right edge, this mechanism cannot share non-constituent strings, like (12) where sharing the accusative suffix is not acceptable.

(11) *Constituent target:* ✓

a. Ali buldu __, (ve) Veli de kaybetti **kitab-ı**.
A. found and V. CONTR lost **book-ACC**.
'Ali found, and Veli lost the book.'

b. O yaz-ma-dı __, (ve) ben de oku-ma-dım **asla**.
3SG write-NEG-PAST and 1SG CONTR read-NEG-PAST **ever**.
'He never wrote, and I never read.'

(12) *Non-constituent target:* ✗
*Ali buldu kitab-__, Veli de kaybetti kitab**-lar-ı**.
A. found book-__ V. CONTR lost book-**PL-ACC**.
int'd: 'Ali found, and Veli lost the books.'

This mechanism also is blocked by syntactic islands. In (13-a), the dative argument can successfully extrapose to occupy the linearly rightmost position within each relative clause within each conjunct, but if we attempt to share a relative clause internal dative argument, as in (13-b), this string is not acceptable.

(13) a. *Control: unshared sentence with clause-internal right-edge dative arguments*
Ali bulmuş [benim yaz-dığ-ım mektubu
A. find-EVID 1SG-1.GEN write-REL-1.POSS letter-ACC
Ayşe-ye], Veli de yakmış [senin ada-dığ-ın şiirleri **Jale-ye**].
Ay.-DAT V. CONTR burn-EVID 2SG-GEN dedicate-REL-2.POSS poem-PL-ACC J.-DAT

‘Ali *found* [the letter that I wrote to Ayşe], and Veli *burned* the poems you dedicated to Jale.’

b. *Sharing of island bound dative argument:* ✗

*Ali bulmuş [benim yaz-dığ-ım mektub-u
A. find-EVID 1SG-1.GEN write-REL-1.POSS letter-ACC
__], Veli de yakmış [senin ada-dığ-ın şiirleri __] **Ayşe-ye**.
V. CONTR burn-EVID 2SG-GEN dedicate-REL-2.POSS poem-PL-ACC Ay.-DAT
int’d: ‘Ali *found* [the letter that I wrote to **Ayşe**], and Veli *burned* [the poems you dedicated to **Ayşe**].

Since targeting constituents, and being bound by syntactic islands are hallmark property of syntactic movement, I analyze this mechanism as syntactic movement.

3.3 String Sharing Patterns

In contrast, the string sharing mechanism, as the name suggests, targets strings. In Turkish, the strings under discussion correspond to sharing of verbal morphology due to head-final structure – this can be sharing of only verbal tense and agreement, as in *suspended affixation*, or more material, including the full inflected verb, when it is usually called *backwards gapping*. I will now argue that such previous labels fall under one phenomenon, where in-situ right-edge material can have sub-strings of morphemes shared at the right edge.

String sharing structures abide by the Right Edge restriction, all shared elements must occupy a contiguous string at the right edge of their own conjuncts or phrases to be shared grammatically, as seen in (14)–(16).

(14) *RER-conformity: target occupying right edge*
Ali çay __, (ve) Veli de kahve **iç-miş i-di**.
A. tea and V. CONTR coffee drink-PFV COP-PAST
‘Ali had drank tea, and Veli had drank coffee.’

(15) *RER-violation: target not right-edge in first conjunct*
*Ali çay __ i-di, (ve) Veli de kahve **iç-miş i-di**.
A. tea and V. CONTR coffee drink-PFV COP-PAST
int’d: ‘Ali had drank tea, and Veli had drank coffee.’

(16) *RER-violation: target not right-edge in last conjunct*
*Ali __ çayı, (ve) Veli de **iç-miş=Ø-di** kahve-yi.
A. tea-ACC and V. CONTR drink-PFV=COP-PAST coffee-PAST
int’d: ‘Ali had drank tea, and Veli had drank coffee.’

The string sharing mechanism can share strings ranging from morphemes to fully inflected verb, to virtually any adjacent string of morphemes from the right edge. (17) shows the range of possible sharing strings possible in a sentence; one can iteratively add one more morpheme each time to the shared material.[2]

(17) **Control:** *non-shared sentence*

[2] This mechanism cannot separate some morphemes, such as [V+Asp] and [V+T+Agr] type morphemes that have been argued to be built by head movement (Kural, 1993, Kornfilt, 1996, Kelepir, 2001, Zanon, 2014). In the absence of such conglomeration in complex heads, each suffix can be shared.

Ali ünlü bir şair-in kitab-ın-ı al-mak isti-yor-Ø-du,
Ali famous one poet-GEN book-3.POSS-ACC buy-INF want-PROG-COP-PAST
Veli de ünlü bir tarihçi-nin kitab-ın-ı al-mak isti-yor-Ø-du.
Veli CONTR famous bir historian-GEN book-3.POSS-ACC buy-INF want-PROG-COP-PAST
'Ali wanted to buy the book of a famous poet, and Veli wanted to buy the book of a famous historian.'

Examples: *Various sharings from right edge*[3]

a. Ali ünlü bir şair-in kitab-ın-ı al-mak isti-yor-_, …
Ali famous one poet-GEN book-3.POSS-ACC buy-INF want-PROG

b. Ali ünlü bir şair-in kitab-ın-ı al-mak _, …
Ali famous one poet-GEN book-3.POSS-ACC buy-INF

c. Ali ünlü bir şair-in kitab-ın-ı _, …
Ali famous one poet-GEN book-3.POSS-ACC

d. Ali ünlü bir şair-in kitab-ı-_ _, …
Ali famous one poet-GEN book-3.POSS

e.??Ali ünlü bir şair-in kitap-_ _, …
Ali famous one poet-GEN book

f. Ali ünlü bir şair-in _, …
Ali famous one poet-GEN

g. Ali ünlü bir şair-_ _, …
Ali famous one poet

As an aside, such morphemic sharing is not only a feature of Turkish, but also possible in English and German, as in (18), as will be discussed in section §5.1.

(18) a. *German* (Wilder, 1997:86:112)
Er sucht den Ein-_ und sie sucht den Aus-**gang**.
he seeks the in- and she seeks the out-way
'He is looking for the entry and she is looking for the exit.'

b. *English* (Wilder, 1997:83:100)
His theory under-_, and her theory over-**generates**.

One striking feature of the string-sharing mechanism is that the shared string can straddle syntactic island boundaries in Turkish. In (19), some parts of the shared string are internal to a relative clause island, while the rest is outside within each conjunct. If this mechanism abided by islands, we would expect that sharing of relative-clause internal material would not be possible.

(19) *Shared string crosses relative clause boundary*
Ali [[Fransız _ $]_{RC}$ _ $]_{DP}$ _,
A. French
ve Veli de [[Alman **yazar-lar-ın** **yaz-dığ-ı** $]_{RC}$ **roman-lar-ı** $]_{DP}$ **sev-iyor**.
and V. CONTR german writer-PL-GEN write-REL-POSS novel-PL-ACC like-PL-ACC
'Ali likes (novels that) French (authors wrote), and Veli likes novels that German authors wrote.'

[3](17-e) is degraded, but gets more acceptable if the direct object *kitap* contrasts with the antecedent direct object, for example *defter* 'notebook'.

3.3.1 Right Edge vs. Left Edge

Bachrach and Katzir (2009, 2017) propose a *general* edge sharing analysis, where the Right Edge Restriction is generalized to the Edge Restriction, as in (20), and base their analysis on this characterization, since cross-linguistically there are left-edge sharing phenomena as well.

(20) a. Either α's position is rightmost in all the nonrightmost constituents containing it, in which case it surfaces within the rightmost constituent;
b. Or α's position is leftmost in all the nonleftmost constituents containing it, in which case it surfaces within the leftmost constituent.

However, the underlying premise that sharing at the right and left edge are uniform is not correct for *string* sharing. While strings of morphemes of arbitrary length can be shared at the right edge of phrases, such sharing of sub-constituent morphemes at the left edge are not grammatical, as in (21) and (22). Sharing mechanisms at the left edge must be generated by a different mechanism, and does not behave as string sharing does.

(21) *Tr. suffix sharing at right edge:* ✓

a. kitap-_ ve kırtasiye-**ci-lik**
book-_ and stationary-seller-ABSTR

b. kedi-_
cat-_
ve köpek-**ler-im-in** **isim-ler-i**
and dog-PL-1.POSS-GEN name-PL-POSS
'my cats' and dogs' names'

c. ön-_ ve son-**söz**
front-_ and end-word
'the preface and the afterword'

(22) *Tr. prefix/stem sharing left edge:* ✗

a. ***kitap**-çı ve _-lık
book-seller and _-thing
'the bookseller and the bookcase'

b. ***Kitap**-çı _-lık-lar-ı sildi.
book-seller _-thing-PL-ACC wiped
'The bookseller wiped the bookcases.'

c. ***na:**-mümkün ve _-mükemmel
NEG-possible and _-perfect
'impossible and imperfect'

d. ***gayri**-ihtiya:ri: ve _-muntazam
NEG-intensional and _-careful
'unintentional and sloppy'

Interestingly, this claim also rings true for English, where stems can be shared at the right edge and strand a prefix as in (23), but the inverse is not possible; sharing a prefix at the left edge and stranding the stem in the second conjunct is not possible with the shared-prefix interpretation, as in (24).

(23) *English stem sharing at right edge:* ✓

a. pre-_ and post-**natal** care
b. pre-_ and post-**industrialist** cityscapes
c. over-_ and under-**generation**

(24) *English prefix sharing at left edge:* ✗

a. ***pre**-modern and _-industrialist
b. ***over**-generation and _-estimation
c. ***Over**-estimation _-came our fiscal precautions.

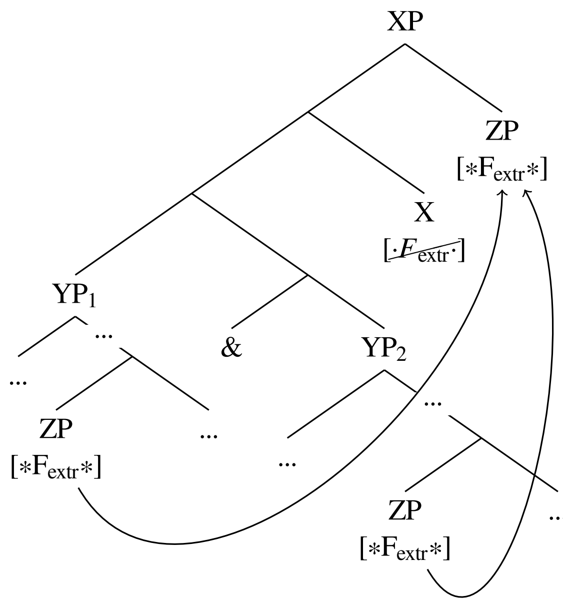
In fact, it is possible that the string sharing mechanism is available in a large variety of languages independent of a constituent sharing mechanism akin to the one discussed in section §3.2. I will for now leave this discussion to section §5.1.

4 Proposal

4.1 Constituent Sharing Mechanism

Since the constituent sharing mechanism (i) targets constituents, (ii) is not sensitive to category, (iii) is blocked when the gap is inside an island, I propose that this mechanism is a syntactic A-bar movement to a higher head, as in (25). For concreteness, let us call the movement triggering head X, and the selectional feature probe triggering the movement [$\cdot F_{extr}\cdot$] that probes for an node bearing the A-bar feature [$*F_{extr}*$] and internal merges it to its right.[4]

(25) *A-bar across-the-board movement of a featurally-marked element*



Crucially, this movement is not constrained to coordinations, it is simply an A-bar rightwards extraposition mechanism that can be triggered by a extraposition head X, which can result in either phrase-internal extraposition if the phrase contains X, or across-the-board extraction when X is outside of a coordination to derive a *constituent sharing* string.

The Right Edge Restriction is derived from the availability of rightward extraposition for different elements. The evidence comes from pseudo-incorporated objects in the language. Caseless pseudo-incorporated objects in Turkish are housed in a low vP/VP projection based on their linear order with low adverbs, and inability to scramble with indirect objects, adverbs, and subjects (Aygen, 1999, Öztürk, 2005a,b). For example, the pseudo-incorporated objects in (26) ((9) partially repeated) cannot extrapose conjunct internally, or across-the-board. This is because such objects are not available targets for the A-bar extraposition movement proposed.[5]

(26) *Pseudo-incorporated objects cannot extrapose: either clause-internal or across-the-board*

[4] If one takes issue with rightward attachment due to independent considerations such as the *Final-over-Final* Constraint, then an alternative remnant movement analysis is also possible where the shared element would be extracted across-the-board and internal merged leftwards onto the root of the structure, followed by remnant movement of the full structure to a higher position. I leave the discussion of the merits of banning rightward attachment vs. formalizing and linearizing remnant movement for other work.

[5] I leave whether such objects cannot host [$*F_{extr}*$], this ban is about case licensing, or something else for further work.

a. *Ali demle-di **çay**, (ve) Veli de iç-ti **çay**.
A. brew-PAST tea and V. CONTR drink-PAST tea
b. *Ali demle-di __, (ve) Veli de iç-ti **çay**.
A. brew-PAST and V. CONTR drink-PAST tea
int'd: 'Ali tea-brewed, and Veli tea-drank.'

But, if a constituent can be extraposed, then conjunct-internal extraposition and constituent sharing would be derived via the same mechanism: if each conjunct contains an extraposing X head, then each X can extrapose a clause-internal [$*F_{extr}*$]-bearing element to derive extraposition within each conjunct; if there is a single extraposing X head outside a coordination, then it can attract identical conjunct-internal [$*F_{extr}*$]-bearing elements and extract them across-the-board, therefore dodging a *Coordinate Structure Constraint* violation. Additionally the island sensitivity of constituent sharing automatically follows, since syntactic A-bar movement is constrained by islands.

4.2 String Sharing Mechanism

I propose that the string sharing mechanism is in-situ parallel merge. During the derivation of such structures, a shared node undergoes parallel merge with multiple mothers, so that it ends us shared between two separate projections, and whether this structure is linearizable is determined by the properties of linearization in multidominance structures. Crucially, I propose a linearization algorithm that derives the observation that shared elements must surface in the final conjunct, and also the requirement that the shared elements must occupy right edge positions within non-final conjuncts, i.e. the Right Edge Restriction. If the positions of the shared nodes in each conjunct doesn't abide by the Right Edge Restriction, then the ungrammaticality of such a string stems from such a configuration of nodes being unlinearizable.

4.2.1 Not Constituent Ellipsis

The pseudo-incorporated object data also provides a counterargument to an ellipsis account of the string-sharing structure as well. Any string that minimally elides some verbal morphology, and stranding pseudo-incorporated objects must extract all stranded material, including these vP/VP bounded objects to extract out of a very large, minimally TP-sized ellipsis site. Because of the head-final structure of Turkish, string sharing start on agreement and tense morphology, which minimally occupies T; and therefore any constituent ellipsis generating such a string would require all stranded material to move outside TP. Not only does this require large amounts of separate remnant movement of all surviving arguments, adjuncts, and verbal material that is not shared, but if one of these surviving argument is a pseudo-incorporated object, then it must move outside TP, despite being unable to independently extract out of vP/VP.[6]

4.2.2 Sisterhood-based Linearization

This proposal is built on a foundation of an asymmetry of string sharing structures: string sharing is only possible at the right edge, hence the discussion of the Right Edge Description, and a mirror image left edge morpheme sharing is not possible. While *Linear Correspondence Axiom* (LCA) based analyses of multidominance linearization encode this asymmetry into the relationship between asymmetric

[6]Öztürk (2009) notes that extraction to a high position is marginally acceptable when a pseudo-incorporated object under certain discourse conditions, which could have to do with topicalization, but that movement is accompanied with a specific intonational emphasis on the topic that is not present in the target string sharing structures.

c-command and precedence (Kayne, 1994, Gračanin-Yüksek, 2007, Gračanin-Yüksek and İşsever, 2011), I detract from LCA-based linearization due to the extensive stipulative reconfigurational movement, and movement of immobile pseudo-incorporated objects it would require, as discussed in section §4.2.1.

Like previous multidominance linearization work, I make a distinction between *domination* and *complete domination* (Gračanin-Yüksek, 2007, Gračanin-Yüksek and İşsever, 2011, Citko, 2017, 2018, Bachrach and Katzir, 2009, 2017). This is a necessary step for linearizing parallel merge in all multidominance approaches: if a node α has mother in the left sister A, and a mother in the right sister B, then linearizing A with respect to be would result in a contradiction if α is *visible* in both A and B for statements about linear precedence. If a linearization statement ordered all nodes dominated by A as preceding those dominated by B, then α would have to precede itself, which is a contradiction. Thus, I also adopt the *domination* vs. *complete domination* distinction, and formulate this in terms of paths, which are lists of nodes directly dominating one after the other, as in (28). In a structure where each node in question has one mother, *complete dominance* reduces down to the more familiar *dominance*; but if a node has multiple mothers, it can be *dominated* by another node and still not *completely dominated* by that node.

(27) *Domination*:
A node α dominates a node β iff
a. α is the mother of β, or
b. α dominates a node γ such that γ dominated β, or
c. $\alpha = \beta$.

(28) *Complete Domination (proposed)*:
A node α completely dominates a node β in γ iff
a. γ dominates α and β,
b. and every path from γ to β contains α.

Based on these definitions, I propose the *Asymmetric Sister Linearization Principle* below in (29) to derives both the string-final realization of shared material, as well as the Right Edge Restriction.

(29) a. *Asymmetric Sister Linearization Principle*:
Given the structure $[_C$ A B$]$, all terminal nodes **completely dominated** by A in C, precede all terminals **dominated** by B.

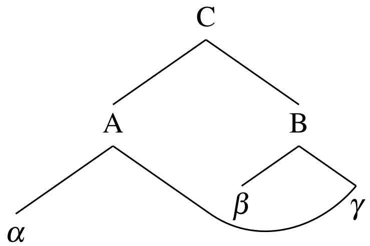
This principle requires concepts of *left* and *right* sisters, but I can remain mostly agnostic to how the nodes get named *left* and *right*, whether structurally or through head/complement directionality features on heads, as long as head directionality is encoded in this interface representation. The choice of complete dominance for the left sister and dominance for the right sister encodes the asymmetry of right and left edge sharing into how sister nodes are linearized. Crucially a node that has a mother in A, and a mother in B would count as **not** completely dominated by A in C, but dominated by B, and thus would be invisible in A, but visible in B, resulting in being linearized within the right sister, deriving the last-conjunct/phrase surface position.

4.3 Deriving the Right Edge Restriction

Now, let me demonstrate how this principle derives the surface strings, derives Right Edge Restriction obeying strings, and the linearization fails when the structure does not obey the Right Edge Restriction.

In (30), if we start linearizing bottom up, we start by linearizing the two daughters of A – α and γ – and we get the precedence statement $\alpha < \gamma$ because γ is *completely dominated* by γ in A – i.e. it is *visible* while linearizing A. Likewise, we can get the statement $\beta < \gamma$ for linearizing B. When we get to linearizing C, however, both A and B dominate γ, so *complete dominance* makes a difference: A does *not* completely dominate γ in C because there is another path through B to γ from C, and therefore γ is not one of the A-internal nodes that are linearized preceding B-internal nodes – i.e. γ becomes invisible in A for linearization purposes when we get to C.

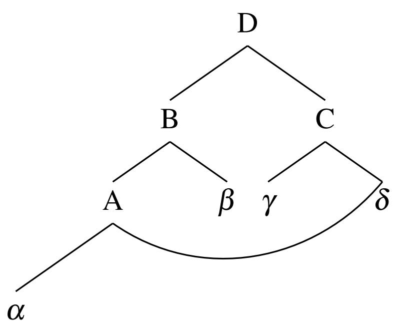
(30)



Ⓒ	CompDom(A,C)	=	$\{\alpha\}$
	Dom(B)	=	$\{\beta,\gamma\}$
	Linearize(A,B)	$\Rightarrow$	$\{\alpha\} < \{\beta,\gamma\}$

However, if the shared node is not right-edge in a structure, such as (31), then linearization results in a contradiction and fails, deriving the Right Edge Restriction. In (31), the parallel merged node δ is not rightmost in B, because β is the right sister of A, thus violating the Right Edge Restriction. While linearizing B-internal nodes, δ remains visible since it is not completely dominated by A or B in B, because there is only one path from B to δ; thus, we get a fully linearized $\alpha < \delta < \beta$ for B-internal nodes. This becomes a problem when we get to linearizing the daughters of D, because δ, due to D having one path to δ through B and one through C, becomes invisible for linearizing B with respect to C. In this step, we get $\{\alpha,\beta\} < \{\gamma,\delta\}$, which contradicts with our previous statement $\alpha < \delta < \beta$ since δ must both precede and follow β. This is the linearization failure that derives the Right Edge Restriction.

(31)



Ⓑ	CompDom(A,B)	=	$\{\alpha,\delta\}$
	Dom(β)	=	$\{\beta\}$
	Linearize(A,β)	$\Rightarrow$	$\{\alpha,\delta\} < \{\beta\}$
Ⓒ	CompDom(B,C)	=	$\{\alpha,\beta\}$
	Dom(C)	=	$\{\gamma,\delta\}$
	Linearize(γ,β)	$\Rightarrow$	$\{\alpha,\beta\} < \{\gamma,\delta\}$
$\Rightarrow$	*Contradiction*		$\alpha < \underline{\delta} < \beta < \gamma < \underline{\delta}$

4.4 How to handle Internal Merge

One other necessity of linearizing multidominance structures is internal merge. As copy theoretic analyses of movement need some mechanisms such as *copy deletion*, multidominance structures need some mechanism to pinpoint the position that each moved element occupies for the interfaces. Thus, I propose a mechanism called *Branch Pruning* that severs direct dominance connections in PF-interface structures before linearization, lest the multiple internal-merge positions of moved elements result in problems: PF-overt movement should make moved element only in the final destination for linearization, while PF-covert movement should have them low.

(32) *Branch Pruning (pre-linearization)*
In a PF-interface representation with a node α with mothers $\beta_1,...,\beta_n$ such that β_1 dominates β_2, ..., and β_{n-1} dominates β_n, sever the branch from each mother to α except for:

a. *for PF-covert movement*: β_x such that β_x is in the longest path to the root from α, or
b. *for PF-overt movement*: β_x such that β_x is in the shortest path to the root from α.

5 Conclusion

I have argued novel patterns demonstrating that strings that share material at the right edge, and are constrained by *Right Edge Restriction* in Turkish are a bimodal group: one group of structures is generated by a constituent-sharing mechanism which shows hallmark movement properties such as targeting constituents, not being able to separate bound morphemes, and being bound by syntactic islands, while the other group is generated by a string sharing mechanism that targets contiguous strings of morphemes and is insensitive to islands. I have argued that the constituent sharing mechanism is across-the-board rightwards A-bar extraposition, while the string sharing mechanism is parallel merged elements which is constrained by post-syntactic linearization properties of multidominance structures. The Right Edge Restriction is an epiphenomenon that is derived by a ban on extraposing certain elements in constituent sharing structures, and linearization principles in string sharing structures.

In terms of linearization, I have argued that the fact that the string sharing mechanism only generates bound-morpheme stranding strings on the right edge in Turkish, English, and possibly German shows that linearization has a direction bias: linearization principles regarding sister nodes makes a distinction between parallel merged elements in the *left* sister and the *right* sister. I have proposed the *Asymmetric Sister Linearization Principle* to encode this asymmetry, and argued that it derives the Right Edge Restriction.

5.1 Right Edge Sharing Crosslinguistically

I have also argued that English and German show evidence of having a string sharing mechanism. While I have shown one example of a language with one movement-based and one linearization-based Right Edge Sharing mechanism, Turkish, it is quite likely that English and German might be added to this list. Bachrach and Katzir (2009, 2017) argue that English Right Node Raising is indeed derived by linearizing parallel merged multidominated elements. Since such an analysis does not depend on movement, string sharing at the right edge is likely possible crosslinguistically independent of a movement-based edge sharing mechanism.

This proposal makes both predictions about the proposed mechanisms, and also descriptive crosslinguistic typological predictions. The right edge string sharing mechanism is predicted to be derive different patterns in different syntactic typologies: a string sharing mechanism will derive backwards gapping and verbal suspended affixation in head-final languages – aka backwards gapping and verbal suspended affixation, but the same mechanism will instead derive string sharing of post-verbal material in a head-initial language – i.e. full or morpheme sharing of arguments, adjuncts, and other material. The constituent sharing mechanism should only be possible if the language has an independent rightward extraposition or scrambling mechanism, and should be blocked when such movements are blocked independent of sharing.

Another large prediction raised by the asymmetric linearization proposal is that parallel merge can only derive sharing at the right edge. Since the Asymmetric Sister Linearization Principle makes a hard-coded distinction between parallel merged elements in the left and right sister, sharing at the left edge would not be able to be linearized as attested. Crucially, one other prediction falling from this is that there should be no string sharing at the left edge crosslinguistically. If parallel merge proposals for left edge sharing also show other movement properties such as island boundedness, then this paper would predict that the mechanism is not actually parallel merge.

If these predictions turn out to be false, but the Turkish patterns and analysis holds its ground to further scrutiny, then further questions about right-asymmetric and left-asymmetric linearization as a language-specific parameter would become highly relevant, and lead to a more nuanced understanding of both linearization and PF-interface phenomena.

In any case, linearization in cases of multidominance and parallel merge are in need of further inquiry, and they can provide viable alternative analyses to subsets of complicated PF-interface phenomena such as Right Node Raising and Gapping, and also help develop newer benchmark tests for distinguishing fully syntactic, pre-linerization PF-interface, and bona fide linearization phenomena that makes more nuanced cuts and refactors of previously noted phenomena – as I hope the reader agrees has been done to Right Node Raising, Edge Affixation, and Backwards Gapping strings in Turkish throughout this discussion; the relevant distinction is not the targeting of argument/adjuncts, inflected verbs, or affixes, but instead the different behaviors of the underlying mechanisms.

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