

Focus Anti-Pied-Piping in Bangla and Hindi-Urdu

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ABSTRACT

Languages attest mismatches between the domain of focus and the constituent that bears a morpho-syntactic focus particle. This paper studies cases where the focus particle attaches to a sub-constituent of the domain of focus in Bangla and Hindi-Urdu and examines the relation between focus particle placement and scrambling within and outside the domain of logical focus. In certain cases, scrambling appears to feed the process of particle-placement, and in certain other cases, scrambling seems to follow particle-placement. Given that clause-internal scrambling has semantic effects and has been argued to be syntactic, this creates a paradox regarding the relative timing of scrambling and particle-placement. We claim that the paradox is only apparent and such a pattern is explained with a multi-dominance theory of movement, wherein movement creates multiple occurrences of a syntactic object and a post-syntactic operation performed on any one of them is reflected on both the occurrences.

1 Introduction

It is common for languages to mark a focused constituent with a morpho-syntactic focus particle. Crosslinguistic research on focus particles has shown that the particles do not always attach to the constituent that is logically under focus, but there can be a mismatch between the constituent that carries the focus particle and the domain of logical focus (locus of focus alternatives) (Kuroda 1965, Aoyagi 1998, Kotani 2009, Branam and Erlewine 2019). In some cases, the focus particle is attached to a constituent that properly contains the actual domain of logical focus, whereas in other cases the focus particle attaches to a constituent properly contained within the domain of logical focus. This paper examines the lack of surface correspondence of the latter kind attested in focus-marking in Bangla and Hindi-Urdu.

1.1 Pied-piping and Anti-pied-piping in Focus-Marking

Ever since Ross (1967)'s seminal work, the phenomenon of pied-piping has been discussed extensively in the literature. Pied-piping is a process where a probe targets a constituent, a sub-constituent of which carries the matching feature. This has been discussed extensively in relation to *wh*-movement. In (1), even though the [*wh*] feature is on *whose*, the entire DP is targeted by *wh*-movement.

- (1) [*Whose*]_{wh} house]_{wh-M} did you go visit yesterday?

Pied-piping has also been observed in focus-fronting (Branam and Erlewine 2019). In (2), a sub-constituent of the phrase that undergoes focus movement is the domain of logical focus. The entire DP [John's house] is targeted for focus movement, even though only [John] bears the logical focus.

- (2) It is [[John's]_F house]_{F-M} that we visited.

Even in languages where focus marking involves attachment of a morpho-syntactic particle on the focused phrase instead of movement to a designated structural position, similar effects are observed in focus particle attachment. Here the focus particle is placed on a phrase, a sub-constituent of which is the logical focus, as shown by the following data. (In all the data henceforth, **F** marks the constituent bearing the logical focus, **MSF** marks the constituent bearing morphosyntactic focus marking – Adopted from the conventions used

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in Branan & Erlewine 2019). In (3), even though the logical focus is the DP *song*, the particle attaches to the VP that contains the DP.

- (3) ano kin-medarisuto-wa [[uta-o]_F dasi]_{MSF}- sae si-ta.
 That gold-medalist-TOP song-ACC release even do-PST
 ‘In addition to releasing something else, that gold-medalist even released **a song**.’
 [interpreted as DP focus] Japanese (Kotani 2008:20)

Interestingly, in addition to the process of pied-piping, focus particle placement can also exhibit the exact opposite process - a process where the focus particle attaches to a sub-constituent of the constituent that bears the logical focus (Kuroda 1965, Aoyagi 1998, Kotani 2009, Branan and Erlewine 2019). In contrast with the notion of pied-piping, this process has been termed **anti-pied-piping** in Branan and Erlewine (2019). (3) was an example of pied-piping in focus particle placement from Japanese. (4) is an example of anti-pied-piping in focus particle placement from the same language (Aoyagi 1999:28). Here even though the focus particle is on the DP *song*, the sentence is interpreted as VP-focus, as is evident from the focus alternatives provided.

- (4) ano kin-medarisuto-wa [[uta]_{MSF}-sae dasi-ta]_F.
 that gold-medalist-TOP song-even release-PST
 ‘In addition to doing something else (e.g. being on TV or dating an actress), that gold- medalist even released a song.’

Such anti-pied-piping effects in focus-marking are also observed in Bangla and Hindi-Urdu. It is further observed that the focus particle necessarily attaches to the highest/leftmost sub-constituent within the domain of logical focus as observed in many other languages. A phrase can be the highest/leftmost sub-constituent either by virtue of having been externally merged into the highest specifier position within the domain of logical focus, or by virtue of having scrambled into that position. This seems to indicate that the process of focus-marking follows the process of scrambling, such that scrambling can feed focus particle placement. However, in certain other cases, it is observed that when the highest/ leftmost sub-constituent within the domain of logical focus scrambles out of the focus domain, it can still bear the focus particle while retaining the focus interpretation, which seems to indicate that scrambling follows focus-marking. In this paper, we address this paradoxical pattern from Bangla and Hindi-Urdu. We claim that scrambling following particle placement is an illusion, and that this paradoxical behaviour can be explained by adopting a multi-dominance theory of movement (Harizanov and Gribanova 2019, Johnson 2016 and references cited therein), whereby movement creates ‘multiple occurrences’ of the same syntactic object, and a post syntactic operation on one of those occurrences is reflected on both/all occurrences (Harizanov and Gribanova 2019).

The paper is organized as follows: section 2 discusses the empirical properties of focus anti-pied-piping, and its interaction with scrambling; section 3 summarizes the empirical patterns and discusses the properties of Bangla and Hindi-Urdu focus particles *-i/-hii*; section 4 discusses the analysis we propose for focus anti-pied-piping. Section 5 concludes the paper.

2 Focus Anti-pied-piping Data from Hindi-Urdu and Bangla

2.1 Focus particle placement

Bangla and Hindi-Urdu, the languages under investigation in this project, also exhibit anti-pied-piping effects in focus marking. In (5) and (6) the focus particle *-i* in Bangla and its counterpart *-hii* in Hindi-Urdu attaches to the indirect object but the domain of logical focus is considered to be the entire VP, as can be seen from the alternative set in the example. Essentially, the constituent bearing the morpho-syntactic focus marking (the indirect object) is properly contained within the domain of logical focus (VP). It is to be noted

that this example gives an ambiguous reading between VP focus and DP focus (DP=IO). The latter reading is obtained by the focus particle being directly attached to the indirect object.

Context - It's a festival day. Pulkit plans to feed the poor, and also distribute gifts to children. However, due to some emergency, he fails to be able to feed the poor. So, he ends up only distributing gifts to children.

Hindi-Urdu

(5) diwalii-ke tyohaar par pulkit garibo-ko khanaa nahi khilaa payaa
 Diwali-GEN festival on Pulkit poor.PL-DAT food NEG feed.CAUS able.PERF.3

(vo) (sifr) [[bachcho-ko]_{MSF} **hi** tohfe de payaa hai]_F
 PRON only child.PL-DAT PRT gift.PL give able.PERF.3 AUX

Bangla

(6) diwali-r din pulak gorib manush-ke kha-wa-te pare-ni,
 Diwali-GEN day Pulak poor people-DAT eat-PTCPL-INF able-NEG.PERF

o shudhu [[bacca-der]_{MSF} -i upohar di-te pereche]_F
 PRON only child-PL.DAT -PRT gift give-INF able.PRES.PERF.3

‘During Diwali celebrations, Pulkit couldn’t feed the poor, he could only give gifts to the children.’

In the next examples (7) and (8), we see yet another case anti-pied-piping but with TP focus. The domain of logical focus is the entire TP but the morpho-syntactic placement of the focus particle is right after the subject. This sentence is also ambiguous between a TP focus reading and a DP focus (DP=subject) reading.

Context - There's a party at home. Different people have been entrusted with different responsibilities. The gardeners are supposed to decorate the garden, the cooks are supposed to prepare the food, and we are supposed to send invitations to people.

Hindi-Urdu

(7) maaliyo-ne garden nahi sajayaa, bawarchiyoN-ne khaanaa nahi
 gardener-ERG garden NEG decorate.PERF.3 cook.PL-ERG food NEG

banayaa (sifr) [[hum]_{MSF} **hi** nyotaa (#**hi**) bhej kar beitheN heiN]_F
 make.PERF.3 only we PRT invitation (PRT) send do sit.PERF.1PL AUX

Bangla

(8) mali-ra bagan shajay-ni, Thakur-ra ranna kOre-ni, shudhu [[amra]_{MSF} -i
 gardener-PL garden decorate-NEG.PERF cook-PL cook do-NEG.PERF only we -PRT

nemontonno-ciThi (#-i) paThi-ye bosh-e achi.]_F
 invitation-letter (-PRT) send-PTCPL sit-PTCPL be.PRES.1

‘Gardeners haven’t decorated the garden, cooks haven’t cooked the meal, it is only the case that we have sent the invitations.’

In Bangla and Hindi-Urdu, unlike in some other languages like Japanese, Southern Tiwa and Navajo (Branan and Erlewine 2019), anti-pied-piping of the focus particle is obligatory. The focus particle cannot be placed at the end of a VP or a TP. It essentially has to attach to a sub-constituent contained within the domain of logical focus. Furthermore, the particle attachment exhibits a leftmost preference, i.e. a preference to attach to the highest/leftmost constituent within the domain of logical focus (the preference is

much stronger in TP focus cases rather than VP focus cases). Yet another property exhibited by the particle is that it only attaches to the arguments inside the domain of logical focus. As can be seen in (9) and (10), if an adjunct is the leftmost sub-constituent in a TP the particle still attaches to the leftmost argument.

Hindi-Urdu

- (9) kal maaliyo-ne garden nahi sajayaa, aaj bawarchiyoN-ne
 yesterday gardener.PL-ERG garden NEG decorate.PERF.3 today cook.PL-ERG
- khaanaa nahi banayaa [kab-se (#hii) [hum]_{MSF} hii nyotaa bhej kar
 food NEG make.PERF.3 when-since (PRT) we PRT invitation send do
- beitheN heiN]_F
 sit.PERF.1PL AUX

Bangla

- (10) kal mali-ra bagan shajay-ni, aj Thakur-ra ranna kOre-ni,
 yesterday gardener-PL garden decorate-NEG.PERF today cook-PL cook do.PERF.NEG
- shudhu [kObe theke(#-i) [amra]_{MSF-i} nemontonno-ciThi paThi-ye bosh-e achi]_F
 only when since (-PRT) we -PRT invitation-letter send-PTCPL sit-PTCPL be.PRES.1

‘Gardeners didn’t decorate the garden yesterday, cooks haven’t cooked the meal today, it is only the case that we have sent the invitations a long time ago.’

2.2 Interaction of focus particle placement with scrambling

We observe that a scrambled constituent can be marked with the focus particle if it scrambles within the domain of logical focus. For instance, in (11) and (12), the direct object has been scrambled over the indirect object but below the subject (i.e., it is scrambled within VP) and now bears the focus particle *-i/-hii*. This too is an anti-pied-piping structure wherein the focus particle is marked on a sub-constituent (direct object) contained within the domain of logical focus (VP). A similar case is also attested in TP focus cases where if an argument scrambles over the subject, that then becomes the leftmost argument within a TP (Following Keine (2016) we assume that clause internal scrambling lands in spec,TP). This argument then bears the morpho-syntactic focus particle as seen in (13) and (14).

Hindi-Urdu

- (11) diwalii-ke tyohaar par pulkit khanaa garibo-ko nahi khilaa payaa
 Diwali-GEN festival on Pulkit food poor.PL-DAT NEG feed.CAUS able.PERF.3
- (vo) (sirf) [[kuch tohfe]_{MSF} hii bachchoN-ko de payaa hai]_F
 PRON only some gift.PL PRT child.PL-DAT give able.PERF.3 AUX

Bangla

- (12) diwali-r din pulak gorib manush-ke kha-wa-te pare-ni,
 Diwali-GEN day Pulak poor people-DAT eat-PTCPL-INF able-NEG.PERF
- o shudhu [[kichu upohar]_{MSF-i} bacca-der di-te pereche]_F
 PRON only some gift -PRT child-PL.DAT give-INF able.PRES.PERF.3

‘During Diwali celebrations Pulkit could not feed the poor. He could only give some gifts to the children.’

Hindi-Urdu

- (13) garden maaliyo-ne nahi sajayaa, khaanaa bawarchiyoN-ne nahi
garden gardener.PL-ERG NEG decorate.PERF.3 cook cook.PL-ERG NEG

banayaa (sarf) [[nyotaa]_{MSF} hii (hum(#hii)) bhej kar beitheN heiN]_F
make.PERF.3 only invitation PRT we PRT send do sit.PERF.1PL AUX

Bangla

- (14) bagan mali-ra shajay-ni, ranna Thakur-ra kOre-ni,
garden gardener-PL decorate-NEG.PERF cook cook-PL do.PERF-NEG

shudhu [[nemontonno-ciThi]_{MSF}-i am-ra(#-i) paThi-ye bosh-e ach-i]_F.
only invitation-letter -PRT I-PL (-PRT) send-PTCPL sit-PTCPL be.PRES-1

‘Gardeners haven’t decorated the garden, cooks haven’t cooked the meal, it is only the case that we have sent the invitations.’

Furthermore, a sub-constituent bearing the focus particle can scramble out of the domain of logical focus while still retaining the focus interpretation. As can be seen in (15) and (16), the indirect object has scrambled over the subject outside of VP which is the domain of logical focus. The indirect object still bears the focus particle and the VP focus interpretation is retained. A point to note is that the examples in (15) and (16) is ambiguous between a TP focus and VP focus interpretation. In case the domain of logical focus is the entire TP, the scrambled indirect object being the leftmost element bears the focus particle. And in case where the domain of logical focus is the VP the indirect object that bears the focus particle may have scrambled out of the domain of logical focus while retaining the VP focus interpretation.

Hindi-Urdu

- (15) diwali-ke tyohaar par Pulkit garibo-ko khana nahi khilaa payaa
Diwali-GEN festival on Pulkit poor.PL-DAT food NEG feed.CAUS able.PERF.3

(sarf) [bachcho-ko]_{MSF}-hii vo [<bachcho-ko> tohfe de payaa hai]_F
only child.PL-DAT -PRT PRON child.PL-DAT gift.PL give able.PERF.3 AUX

Bangla

- (16) diwali-r din Pulak gorib manush-ke kha-wa-te pare-ni,
Diwali-GEN day Pulak poor people-DAT eat-PTCPL-INF able-NEG.PERF

shudhu [baccader]_{MSF}-i o [<baccader> upohar di-te pereche]_F
only child-PL.DAT -PRT PRON child-PL.DAT gift give-INF able.PRES.PERF.3

‘During Diwali celebrations, Pulkit did not feed the poor, he could only give gifts to the children.’

This interaction of focus particle placement with scrambling creates a paradox. In (11), (12), (13) and (14) we noted that scrambling a sub-constituent within the domain of logical focus may result in the scrambled element bearing the focus particle, thereby suggesting that scrambling may feed focus particle placement. In addition to that we also observed in (15) and (16) that a sub-constituent bearing the focus particle can appear outside of the domain of logical focus while retaining the focus interpretation. Interestingly, this suggests that a sub-constituent to which a focus particle attaches can be scrambled outside of the domain of logical focus. This interplay between movement and focus particle placement provides us with interesting insights into the relative timings of the movement, particle placement and the semantic interpretations associated with it.

3 Generalizations

The following paragraph summarizes the major observations from the data discussed above.

(i) Focus particle *-i/-hii* in Bangla and Hindi-Urdu have the following phonological constraints-

- (a) They cannot occur in the utterance-final position.
- (b) They are suffixal in nature and hence they cannot also occur in utterance initial positions.

(ii) The particle shows a preference to attach to the leftmost/ highest sub-constituent within the domain of logical focus.

(iii) When there is scrambling within the domain of logical focus, the scrambled element is considered the highest/leftmost sub-constituent and the focus particle attaches to it, thereby indicating that scrambling feeds focus marking.

(iv) The focus particle can attach to a scrambled element even when the element that was externally merged in the highest/leftmost position within the domain of logical focus has been scrambled outside of the domain of logical focus.

The anti-pied-piping possibilities in the TP-focus and the VP-focus cases discussed are presented schematically in (I) and (II) respectively.

(I) VP Focus Patterns

- i. S [[IO]_{MSF} DO V]_F
- ii. S [[DO]_{MSF} IO V]_F
- iii. [DO]_{MSF} S [IO <DO_{MSF}> V]_F
- iv. [IO]_{MSF} S [DO <IO_{MSF}> V]_F

(II) TP Focus Patterns

- i. [[S]_{MSF} IO(#_{MSF}) DO(#_{MSF}) V (AUX)]_F
- ii. [[IO]_{MSF} S(#_{MSF}) DO#_{MSF}) V] (AUX)]_F
- iii. [[DO]_{MSF} S(#_{MSF}) IO(#_{MSF}) V] (AUX)]_F
- iv. [Adjunct(#_{MSF}) [S]_{MSF} IO(#_{MSF}) DO(#_{MSF}) V] (AUX)]_F

4 Analysis

4.1 Previous Analyses

As discussed, such focus anti-pied-piping patterns have been observed in many different languages and have been discussed in a number of previous works. We briefly mention three previous proposals explaining such patterns and discuss some potential problems they face in accounting for the data.

Aoyagi (1998) argues that the focus feature which is eventually realized by the focus particle starts off attached to its surface position and at LF, the feature percolates up to the maximal projection that effectively becomes the domain of logical focus. The impression of anti-pied-piping is thereby created by feature-percolation at LF. Apart from the theoretical complications of feature percolation at LF, there seems to be no intrinsic motivation for the sub-constituents contained inside the eventual domain of logical focus to carry the focus feature. We argue for an analysis wherein the domain of logical focus carries the focus feature and the realization of the feature as a particle attached to a sub-constituent is a result of certain particle-particular properties as a repair strategy.

Another account of Japanese focus particles by Kotani (2009) follows a similar strategy wherein the focus feature attaches to the domain of logical focus in the narrow syntax. The impression of anti-pied-

piping is established when other sub-constituents within the domain of logical focus move out of the domain, creating the appearance that the particle attaches to a sub-constituent contained within. This explains the Japanese patterns that is investigated, where VP focus appears to be marked on the DO in transitive sentences. In these cases, it is claimed that because the verb has moved out of the VP, attachment to VP ends up appearing like attachment to the DO. However, this approach clearly does not explain the leftmost / highest preference discussed in earlier sections. It is also hard for this approach to account for any kind of anti-pied-piping in TP-focus cases. Additionally, Kotani (2009) considers scrambling to be a PF-phenomenon, and hence a focus-marked sub-constituent in Japanese is available for further scrambling, given that focus particle placement precedes scrambling. However, this approach fails to explain the Bangla and Hindi-Urdu cases discussed in (11-14), where an element scrambled within its domain of logical focus can bear the focus particle by virtue of being the highest/ leftmost element within the focus domain.

Branan & Erlewine (2019) in their recent comparative work on anti-pied-piping structures in multiple languages argue that focus particle placement is not post-syntactic but happens during cyclic spell-out. The particle is available in the narrow syntax and hence a sub-constituent carrying the focus particle can be targeted for scrambling to a subsequent spell-out domain. This is an interesting proposal that can explain the patterns observed in this paper. However, focus particle attachment in Bangla and Hindi-Urdu seems to be sensitive to particle-particular prosodic restrictions and shows inter-particle and inter language differences. We thereby maintain the notion that anti-pied-piping is essentially a repair strategy employed by particles with affixal properties, and thereby focus particle placement is essentially post-syntactic. We account for the interaction with scrambling effects by adopting a multi-dominance theory of movement detailed below.

4.2 Proposed Analysis

The analysis that we propose in this paper for the Bangla and Hindi-Urdu anti-pied-piping facts contains three essential components.

a. Scrambling in Bangla and Hindi-Urdu as a syntactic movement- Based on the fact that scrambling has clear scope and binding effects in Bangla and Hindi-Urdu (both in cases of IO over DO and object over subject), we consider scrambling in Bangla and Hindi-Urdu to be a syntactic operation (see Mahajan 1990, Kidwai 2000, Keine 2016 for properties of scrambling in Hindi). Thereby we aim to explain the interaction between the syntactic process of scrambling with the post-syntactic process of focus particle placement.

b. Post-syntactic focus particle lowering - We argue that the process of focus particle attachment is motivated by particle-particular properties as attested by specific prosodic constraints sensitive to the particle itself and also with inter-language differences. Hence, we argue for the lowering of the affixal particle to be a post-syntactic operation.

c. Movement as Multi-dominance- Based on Harizanov and Gribanova (2019), Johnson (2016), and others, we adopt the theory of movement as multi-dominance. The multi-dominance theory of movement postulates that movement re-merges a syntactic object and creates multiple occurrences of the same syntactic object. This syntactic object, as a result, occupies multiple positions by virtue of having been re-merged, and is dominated by multiple nodes. Crucially, **any post-syntactic operation on one of those occurrences is reflected on both/all occurrences.** (Harizanov and Gribanova 2019 on interaction between syntactic and post-syntactic head movement.)

4.3 Deriving the patterns

We propose that the focus feature is hosted on the constituent that is to be the logical focus, for our purposes the VP or the TP. The feature is later spelled out by the *-i/-hii* particle. The focus particle on a TP or a VP then post syntactically lowers to an immediately adjacent sub-constituent which explains the leftmost attachment preference of the particle. The sub-constituent highest (leftmost when linearized) by virtue of being externally or internally merged to the highest specifier position. Particle lowering happens due to the specific prosodic and affixal properties of the particle itself. This is what creates the impression

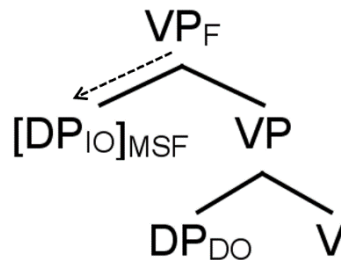
of anti-pied-piping. Essentially this post syntactic operation of particle lowering affects all occurrences created by scrambling and hence gives us the configurations:

- (17) i. $[DO]_{MSF} S [<DO_{MSF}> IO V]_F$
 ii. $[IO]_{MSF} S [<IO_{MSF}> DO V]_F$

In (17) the focus particle is hosted by VP, as the domain of logical focus is VP. Then the direct object in (i) and the indirect object in (ii) scrambles out of the VP over the subject. In post syntax, when the focus feature is realized as the focus particle *-i/-hii*, it needs to be lowered to satisfy its attachment preferences. This lowering is realized in both occurrences of the scrambled element. Chain reduction then decides which occurrence would be pronounced. Essentially post syntactic lowering of focus particles precedes Chain reduction (Harizanov and Gribanova 2017).

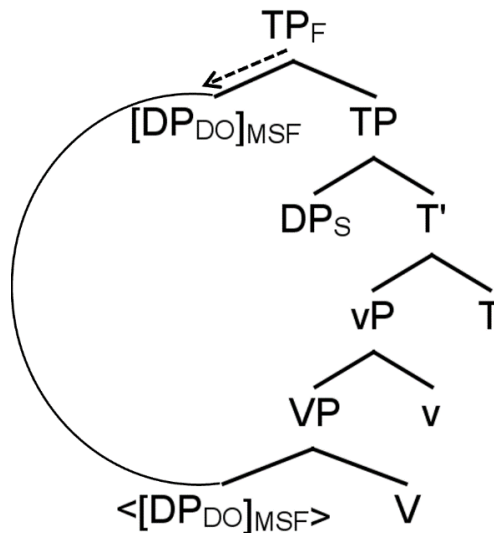
For instance, in the structure in (18), the focus feature is hosted by the VP in the narrow syntax. Post syntactically the focus feature is realized by the focus particle *-i/-hii* which lowers onto the adjacent sub-constituent which is the indirect object in this case.

- (18) Logical Focus = VP, MSF= IO



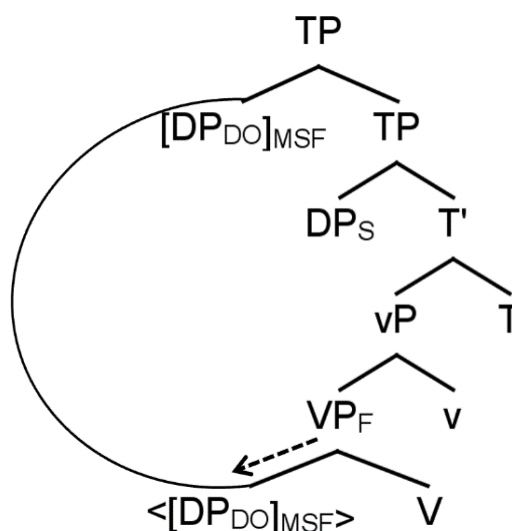
In the structure in (19), the focus feature is hosted on the logical focus which the TP in this case. Then the direct object scrambles over the subject by virtue of which it becomes the highest sub-constituent in TP. The focus particle lowers onto the higher occurrence of the direct object. This is how we derive the scrambling feeding focus particle placement phenomenon.

- (19) Logical Focus = TP, MSF = DO (scrambled - within the domain of logical focus)



In (20), the domain of logical focus is the VP and hence the focus feature starts off hosted by the VP. The direct object scrambles out of the VP over the subject. Essentially, when the focus particle lowers onto the lower occurrence of the direct object it is also reflected on the higher occurrence of the direct object, given that a post-syntactic operation is reflected on all the occurrences of a syntactic object created by internal merge. Chain reduction then decides to pronounce the higher occurrence. What we see on the surface is a configuration where the direct object marked with the focus particle has moved outside of the domain of logical focus while still retaining the VP focus interpretation. This gives us the impression that a focus marked sub-constituent can be a target for scrambling. The derivations in (19) and (20) thereby explain the paradox of interactions between focus particle placement and scrambling.

(20) Logical Focus = VP, MSF = DO (scrambled - outside of the domain of logical focus)



5 Conclusion

We finally conclude, contra Branan and Erlewine (2019), that anti-pied-piping is a repair strategy conditioned by particle-particular phonological properties. We further observe that the operation of focus particle lowering has similar adjacency-requirements as observed in post-syntactic head movement (Harizanov and Gribanova 2019). The interaction between syntactic phrasal movement (scrambling) and post syntactic focus particle lowering seems to be similar to the interaction between syntactic and post-syntactic head movement laid out in Harizanov and Gribanova (2019).

In this project, we have barely scratched the surface of mismatches between morpho-syntactic focus marking and domain of logical focus. There remain many more interesting issues for further exploration. For example, another focus particle in Bangla and Hindi-Urdu *-o/bhii* ‘also/even’ attests properties similar to the *-i/hii* particle, albeit with one major difference. *-o/bhii* does not exhibit a leftmost attachment preference in either of the languages. This suggests that the leftmost preference exhibited by *-i/hii* (and also exhibited by focus particles in many other languages) is probably not universal but a particle specific property, further strengthening our belief that the anti-pied-piping phenomenon may be a repair strategy. T Initial observation suggests that *-o/bhii*, in anti-pied-piping cases, attaches to any non-final sub-constituent contained within the domain of logical focus leading us to conclude that there may be more than one repair strategies at play here to respect the restriction that these particles cannot occur in the utterance final position. We also observe mismatches between morpho-syntactic particle placement and domain of logical focus in DP and PP cases. Interestingly, not only focus anti-pied-piping is degraded in DPs and PPs, focus

pied-piping becomes obligatory, wherein the focus particle needs to attach to the DP when a sub-constituent of the DP is the logical focus. We leave the detailed study of such cases for future perusal.

Acknowledgements

We are especially thankful to Michael Erlewine for bringing these focus anti-pied-piping patterns to our notice. We are grateful to Michael Erlewine, Stefan Keine and Andrew Simpson for insightful ideas and detailed discussions. We also owe our thanks to the participants at (F)ASAL-10 and USC Syntax+ lab where this paper was presented, for their valuable feedback. We of course, take full responsibility for all the errors.

References

- Aoyagi, Hiroshi. 1998. On the nature of particles in Japanese and its theoretical implications. PhD. Dissertation University of Southern California.
- Branan, Kenyon and Michael Y, Erlewine. 2019. Anti-pied-piping. Talk presented at Syntax+ Meeting, University of Southern California.
- Harizanov, Boris, and Vera Griбанова. 2017. Post-syntactic head movement in Russian predicate fronting. *Linguistic Society of America (LSA)*, 91.
- Harizanov, Boris, and Vera Griбанова. 2019. Whither head movement?. *Natural Language & Linguistic Theory*, 37(2), pages 461-522.
- Johnson, Kyle. 2016. Towards a Multidominant theory of Movement. *Talk presented at University College London*.
- Keine, Stefan. 2016. Probes and their horizons. Ph.D. dissertation, University of Massachusetts, Amherst, MA
- Kidwai, Ayesha. 2000. *XP-adjunction in Universal Grammar: Scrambling and binding in Hindi-Urdu*. Oxford University Press, USA.
- Kotani, Sachie. 2009. Focus particles and their effects in the Japanese language: University of Delaware dissertation.
- Kuroda, S. Y. 1965. Generative grammatical studies in the Japanese language: Massachusetts Institute of Technology dissertation.
- Mahajan, Anoop Kumar. 1990. *The A/A-bar distinction and movement theory* (Doctoral dissertation, Massachusetts Institute of Technology).
- Ross, John. Robert. 1967. Constraints on variables in syntax. PhD. Dissertation Massachusetts Institute of Technology