Focus Anti-Piedpiping in Bangla and Hindi-Urdu

Objective - It is common for languages to mark a constituent which is logically under focus with a morpho-syntactic focus particle. Crosslinguistic research into focus particles has found that the particle does not always attach to the constituent that is the logical focus but can attach to a subpart of it (Kuroda 1965, Aoyagi 1998, Kotani 2009, Branan & Erlewine 2019). This paper examines such lack of surface correspondence between the placement of the focus particle and the constituent that it marks logical focus of, in Bangla and Hindi-Urdu.

Background - Kuroda (1965) was amongst the first to notice this mismatch in Japanese as shown in (1). Even though the focus particle is on the object we get an interpretation where the entire VP is the logical focus. This is in addition to the interpretation wherein just the DP is in focus.

1. ano kin-medarisuto-wa uta-sae dasi-ta.
   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.’ - [VP-focus]

Branan & Erlewine (2019) define this phenomenon as anti-piedpiping. Here the morpho syntactic focus particle attaches to the sub-part contained within the constituent which is logically focused. This will be in contrast with piedpiping cases where focus particle would appear on a constituent which contains the logically focused constituent.

Data & Analysis – An interesting empirical observation for both Bangla and Hindi-Urdu is that anti-piedpiping is obligatory, as opposed to other languages like Japanese, Southern Tiwa, Navajo among others (Branan & Erlewine 2019) where it is optional. So (2a) and (2b) are the only ways in which VP focus can be obtained in the respective languages. A similar situation is attested in TP-focus cases, as seen in (3a) and (3b). The logical focus is marked with parentheses in each case.

2a. pulkit shudhu [ayushi-ke-i ghor i diyche] Bangla
    pulkit only ayushi-DAT-Foc watch give.PERF.3

2b. pulkit-ne (sirf) [ayushi-ko hii ghaDii dii hai] Hindi
    pulkit-ERG only ayushi-DAT Foc watch give.FSg AUX.PRES.3FSg
    ‘Pulkit has only given a watch to Ayushi.’ (He hasn’t taken any gift from Raja) – [VP-Focus]

3a. shudhu [pulkit-i ayushi-ke ghor i diyche] Bangla
    only Pulkit-Foc Ayushi-DAT watch give.PERF.3

3b. (sirf) [pulkit-ne hii ayushi-ko ghaDii dii hai] Hindi
    only pulkit-ERG Foc ayushi-DAT watch give.FSg AUX.PRES.3FSg
    ‘Only Pulkit has given a watch to Ayushi.’, (Raja hasn’t taken a gift from Surbhi) - [TP-focus]

In Bangla and Hindi-Urdu, the focus particle -i/hii cannot occur in an utterance final position. In fact, it has a preference to attach to the leftmost constituent contained within the logical focus, a preference also observed in anti-piedpiping cases in other languages. This preference tells us that -i/hii in Bangla and Hindi-
Urdu has access to the linearized structure, which seems to suggest that anti-piedpiping in VP/TP-focus cases in head-final languages is a product of post syntactic restrictions on particle placement. However, in (4) we observe that a -i/hii marked constituent can be a target for syntactic movement, which rules out a pure post syntactic analysis. We adopt an analysis of particle placement at cyclic spell out (Urigeraka 1999, Chomsky, Branan & Erlewine 2019). As per this analysis, a phasal constituent gets linearized and the focus particle is attached to a sub-part of the logically focused constituent. This focus marked constituent of a lower phase can then be available for movement into a higher domain. Essentially the VP-focus interpretation available in (2b) is also attested in (4) despite the scrambling of the constituent which carries the focus marking.

4. ayushi-ko hii pulkit-ne ghaDii dii hai Hindi
    ayushi-DAT Foc pulkit-ERG watch give.FSg AUX.PRES.3FSg
    ‘Pulkit has only given a watch to Ayushi.’ (He hasn’t taken any gift from Raja) – [VP-Focus]

A further interesting complication in these languages is shown in (5) wherein scrambling can feed focus particle placement.

5. (sirf) ayushi-ko hii pulkit-ne ghaDii dii hai Hindi
    only ayushi-DAT Foc pulkit-ERG watch give.FSg AUX.PRES.3FSg
    ‘Only Pulkit has given a watch to Ayushi.’, (Raja hasn’t taken a gift from Surbhi) – [TP-focus]

In (5), with an OSV derived word order and a TP focus interpretation, the particle necessarily attaches to the object and can’t attach to the subject. This is due to the leftmost attachment preference of the -i/hii focus particle as mentioned earlier. So, in effect, we have scrambling feeding focus particle placement, and a focus-marked constituent being available for scrambling. We claim that this exact behavior is predicted by a cyclic spell out account of particle placement if CPs and vPs are considered to be phases and TPs and VPs to be the corresponding spell-out domains (Chomsky 2000, 2001). In (5), the OSV word order is derived by scrambling the object to the Spec,TP position, which we assume is the landing site for A-scrambled elements in Hindi (Keine 2017) (similar assumptions are being made for Bangla). Given that TP is the logical focus in (5), particle placement for TP focus should happen after the spell-out of TP. Because the scrambling of the indirect object ayushi takes place within the TP domain, this scrambled order is linearized at TP spell-out, with the scrambled IO as the leftmost element within logical focus. Thus, scrambling feeds into focus particle placement in (5). In (4), VP is the logical focus, and hence particle placement for VP focus happens at the VP spell-out, after which the IO is scrambled to the TP domain. This is how a focus-marked constituent becomes available for scrambling. Similar effects obtain in Bangla.

**Additional Observations** - Another focus particle -o/bhii ‘also’ attests to similar properties as the ‘only’ particle with one major difference. In both languages -o/bhii does not exhibit a leftmost attachment preference but still cannot occur in an utterance final position. This suggests that the leftmost preference exhibited by -i/hii is a particle specific property. Thereby we observe -o/bhii in anti-piedpiping cases occurs attached to any non-final subpart contained within the logical focus. We additionally observe differences in anti-piedpiping cases in DPs and PPs when contrasted with VPs and TPs. Inter language differences are also attested. Anti-piedpiping is possible in DPs in certain cases and also possible in PPs in Hindi but banned in Bangla. In contrast, focus piedpiping is obligatory in DPs and PPs in Bangla and optional in Hindi. We explain these differences with particle particular and language particular properties.