

Some AGREEMENT Matters

Andrew Nevins and Pranav Anand

Massachusetts Institute of Technology

1. Introduction

While Minimalist syntax since Chomsky (1995) has assumed that MOVE is parasitic on AGREE (or its equivalent), a substantial body of recent cross-linguistic work suggests that A-movement can occur in the absence of a probe-goal AGREE relation (e.g., Collins 1997; Ura 2000; Wurmbrand 2002; Miyagawa 2001; Lavine and Freidin to appear). Building on such research, this paper argues that EPP satisfaction is not only independent of AGREEMENT, but also that AGREE-less movement is prohibited from reconstructing (the “Purely EPP Eliminates Reconstruction” generalization, or PEPPER):

- (1) (PEPPER): A-movement only for EPP does not reconstruct.

Our evidence for PEPPER begins with a surprising case of scope freezing in the Hindi ergative. Hindi is split-ergative, showing ergative subject marking and agreement with the object in perfective aspects.¹ As ergative and nominative subjects pattern alike on tests of control and binding (Mohan 1994; Mahajan 1990; Kachru 1987), it is often assumed that their difference is a superficial morphological quirk about postpositional marking and agreement. It is thus unexpected that the two subjects differ in scope-taking behavior – inverse scope is possible only with nominative subjects (Nevins and Anand 2002):²

- (2) a. *kisii šaayer-ne har ghazal lik^hii*
 some poet-ERG every song-NOM write.f-PERF
 ‘Some poet wrote every song.’ $(\exists > \forall, * \forall > \exists)$
- b. *koi šaayer har ghazal lik^htaa hai*
 some poet-NOM every song-ACC write.m-IMPF be-PRES
 ‘Some poet writes every song.’ $(\exists > \forall, \forall > \exists)$

* Many thanks to K. Abels, E. Anagnostopoulou, R. Bhatt, C. Boeckx, M. Butt, V. Dayal, S. Fisher, D. Fox, N. Hornstein, D. Pesetsky, M. Polinsky, and S. Takahashi.

1. There are lexical exceptions – transitives without ERG in PERF (e.g., *b^hudna* ‘forget,’ *laanaa* ‘bring’), intransitives with it (e.g., *c^hũkna*: ‘sneeze.’), and verbs that show optionality (e.g., *samaj^hnaa*). Section 3.1.2 discusses their scopal behavior.

2. This is only for unscrambled SOV sentences. Scopal freedom for OSV sentences is observed even for those Hindi speakers who report scopal rigidity in canonical SOV sentences. See Kidwai (2001) for a discussion of proposals to account for this.

We claim that the relevant difference between ergative and nominative subjects is the presence or absence of an AGREE relation with T, spelled out as morphological agreement between the verbal complex and the DP. That properties of the *subject*, and not those of the object or perfective aspect, are crucially responsible for scope freezing in the ergative, will be demonstrated in Section 3.

Indeed, scope-freezing occurs in other contexts where the subject and T are not in an AGREE relation. In English Locative Inversion, the verb does not agree with the subject, although the locative shows subject properties (Bresnan 1994; Collins 1997). Inverse scope readings are not possible (Kuno 1971):

- (3) a. Some actress stood on every stage. $(\exists > \forall, \forall > \exists)$
 b. On some stage stood every actress. $(\exists > \forall, * \forall > \exists)$

Following Johnson and Tomioka (1997), we will argue in Section 2 that inverse scope is dependent on subject reconstruction, thus explaining how the restriction in PEPPER deals with the facts above. After considering the Hindi data in more detail, in Section 4 we will tackle English raising and ECM constructions, both of which have been argued to involve EPP-driven movement; as predicted by PEPPER they show lack of reconstruction. Section 5 touches on cases of scope freezing in Greek promoted datives and Russian “accusative unaccusatives” and we conclude with speculations on the source of PEPPER.

2. The proposal in detail

2.1. Theoretical framework

Following Chomsky (2001), we postulate the existence of an EPP feature, which, when specified on a head H, requires there to be an element in [Spec, HP] before the next strong phase. Hence, subject DPs MOVE to [Spec, TP], checking T’s EPP feature. Crucially, this MOVE is separated from the relation AGREE(Probe, Goal), which values the uninterpretable ϕ -features of the Probe with those of the Goal and checks uninterpretable Case on the Goal.³ Visible consequences of AGREE relations between a DP and T include NOM morphological case on the DP and agreement of the verbal complex with the DP. Given this background, we may state PEPPER as follows:

- (4) If the only feature-checking relation a probe and goal G stand in is EPP, then G cannot reconstruct.

3. Moving purely for the EPP requirement has been characterized as MOVE under MATCH without AGREE by Boeckx (2001); the predictions of (4) are unchanged under this formulation of the EPP, although (4) must be restated as the requirement that MATCH-only move does not reconstruct.

In more familiar language, if an XP MOVES solely for satisfaction of the EPP feature of a head H, then XP cannot reconstruct from [Spec, HP].

At this point, we must mention how ergative DPs are assigned Case, given that T can only assign NOM. We will assume that in Hindi ERG is a lexical Case (see also Nash 1995, Woolford 1997; among others), and that an ergatively marked DP is Merged in [Spec, *v*P] without uninterpretable Case features. The ergative moves to [Spec, TP] for pure EPP reasons, and, by virtue of this position, has identical subject properties to a nominative subject. For a fuller treatment of the technical details of and arguments for this proposal, see Anand and Nevins (forthcoming).

2.2. A two-operation approach to inverse scope

Our proposal is based in part on the QR-plus-reconstruction derivation for inverse scope advocated by Hornstein (1995) and Johnson and Tomioka (1997). Johnson and Tomioka observe that inverse scope is not obtained when reconstruction is impossible. Consider the following ambiguous sentence:

- (5) Some student or other has answered many of the questions on the exam. (*many* > \exists , \exists > *many*)

Recall that English *some* is a positive polarity item and cannot be in the scope of negation:

- (6) I have not met some student (\neq I haven't met any student).

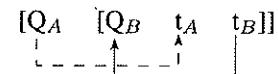
When negation is added to sentence (5), inverse scope is impossible. However, when *some* is replaced by a non-PPI, inverse scope is again possible.

- (7) a. Some student or other hasn't answered many of the questions on the exam. (**many* > \exists , \exists > *many*)
 b. Two students haven't answered many of the questions on the exam. (*many* > \exists , \exists > *many*)

This argument suggests that inverse scope requires *two* operations: reconstruction of the higher QP and raising of the lower QP, as schematized below. The failure of either operation to apply can yield scopal rigidity.⁴

4. This logic holds regardless of whether OP_B is QR as adjunction, movement of \forall to DistP à la Beghelli and Stowell (1997), "bvert scrambling" à la Johnson and Tomioka (1997), or A-movement à la Hornstein (1995).

(8) "Two Ships Passing"



Thus, scope-freezing can occur either when Q_B cannot QR above a trace of Q_A or when Q_A one cannot reconstruct to the trace Q_B scope above. In each case considered in this paper, we will show that indeed Q_B can target a position above a trace of Q_A , leaving lack of reconstruction as the only remaining source for scope-freezing.

3. A Closer Look at Hindi

In the first half of this section, we consider other possibilities for the scopal contrast in (2): that Hindi is scopally rigid and the apparent scopal ambiguity in imperfective cases is due to generic interpretation; that somehow the perfective (and not the ergative nature of the subject) somehow freezes scope; and that object QR cannot target a position above a trace of the subject. We demonstrate that none of these can be right, leaving subject reconstruction as the sole culprit.

This explanation for scope freezing in the ergative suggests both that all other non-nominative subjects should also show scope freezing and that ergative subjects should be rigidly above quantificational heads such as negation. Neither of these predictions is borne out, and the second half of this section attempts to explain why this is.

3.1. Hindi scope freezing is due to inability of reconstruction

3.1.1. Genericity is not the source of free scope

Fox and Sauerland (1995) noticed that normally scopally rigid sentences may show an 'illusive' inverse scope reading when read generically:

- (9) QR out of finite clause
 a. Yesterday, a guide ensured that every tour to the Louvre was fun. (\exists > \forall , \forall > \exists)
 b. In general, a guide ensures that every tour to the Louvre is fun. (\exists > \forall , \forall > \exists)

Such phenomena open the door to the possibility that Hindi is a scopally rigid language, and that apparently ambiguous sentences are being interpreted generically (which is more difficult in perfective aspect). However, wide-scope readings for the ambiguous Hindi cases remain after controlling for genericity:

- (10) a. koi šaayer har ghazal lik^h rahaa hai
 some poet every song write PROG be-PRES
 'Some poet is writing every song.' ($\exists > \forall, \forall > \exists$)
- b. kal raat koi bacca har kitaab paR^hega
 tomorrow night some child every book read-FUT
 'Tomorrow night, some child will read every book.' ($\exists > \forall, \forall > \exists$)

3.1.2. Perfectivity is not the source of frozen scope

As ergativity is conditioned by perfective aspect, it is possible that scopal freezing is a result of perfective aspect, and has nothing to do with Case. However, there is no cross-linguistic evidence for a constraint on inverse scope in the perfective. In addition, it is unclear *what* about perfective aspect would explain this scopal freezing, especially given that even in Hindi the imperfective, another aspect requiring event-framing, admits inverse scope readings.

Most compelling, though, is the existence of inverse scope readings in the perfective between: an intransitive subject and adjunct, the subject and object of verb that is (exceptionally) nominative-accusative in the perfective, and a restructuring verb and embedded clause object.

- (11) Intransitive Subject and Prepositional Adjunct
 koi caukidaar har mandir-ke samne j^hukaa
 some watchman-NOM every temple in-front-of crouch-PERF
 'Some guard crouched in front of every temple.' ($\exists > \forall, \forall > \exists$)
- (12) NOM Subject and ACC Object in Perfective
 koi aadmii har kitaab laayaa
 some man-NOM every book-ACC bring-PERF
 'Some man brought every book.' ($\exists > \forall, \forall > \exists$)
- (13) Restructuring verb and embedded clause Object
 Sumita saare darvaaze k^holnaa b^huul gayii
 Sumita-NOM all doors-ACC open-INF forget go-PERF
 'Sumita forgot to open all the doors.' (forget $> \forall, \forall > \text{forget}$)

The possibility of inverse scope in the perfective when the subject *does* agree with the verb suggests that the distinguishing factor between scopally free and frozen sentences is that when the subject does not bear ergative case in the perfective, it can take narrow scope.

3.1.3. Object QR is not blocked in the perfective

Recall that under the TWO SKEIPS PASSING approach to inverse scope, scopal freezing can occur when either the higher quantifier cannot reconstruct or the lower quantifier cannot raise high enough. The latter explanation is unlikely, given example (12), in which the object *can* QR high enough for inverse scope with the subject. Instead, it must be the case that the ergative subject itself cannot reconstruct, a fact which PEPPER explains.

3.2. Potential problems and their solutions

This section deals with two potential problems for a PEPPERcentric explanation for Hindi scope freezing. First, Hindi sentences with dative subjects admit inverse scope readings, even though the subject and verb do not agree. Second, sentences with ergative subjects admit both sentential and predicational negation readings, a fact which usually (e.g., in English) is accounted for by recourse to reconstruction.

3.2.1. Dative experiencer constructions

Hindi has a dative-experiencer construction (DEC), in which the experiencer, marked with the DAT postposition *-ko*, shows subject-oriented behavior (default word order, control into adjuncts; Hook (1990)), but the verb agrees with the NOM-marked theme:

- (14) Ram-ko b^huuk lagii
 Ram-DAT hunger-NOM.F attach-PERF.F
 'Ram felt hungry. (lit. Hunger attached to Ram.)'

Hence, DAT-subjects, like ERG-subjects, do not enter into an AGREE relation with T. If PEPPER is the right characterization for scopal freezing in the ergative, we should find the same in dative-experiencer constructions. We do not:

- (15) kisii bacce-ko har kitaab milii
 some child-DAT every book-NOM.F meet-PERF.F
 'Some child received every book.' ($\exists > \forall, \forall > \exists$)

However, as pointed out by Hook (1990), the DEC is structurally ambiguous – it is possible for the DAT DP to bind into the NOM DP, or vice versa:

- (16) muj^he_i [apne_i sab rishtedaar] pasand hāī, lekin māt_j
 I-DAT [self's all relative] like be-PRES.3pl, but I-NOM
 [apne_j sab rishtedaarō]-ko pasand nahī hūū
 [self's all relatives]-DAT like NEG be-PRES.1sg
 'I like all of my relatives, but all my relatives do not like me.'

Lavine and Freidin (to appear) argue that constructions such as (29) are composed of a structure with a T_{def} and a ϕ -complete v . In addition, they provide evidence that there is no thematic argument, (ii) the object is structurally ACC-case marked (it undergoes Genitive of Negation, and bears Quantificational Genitive, both marks of structural but not quirky accusative, and the ACC or INSTR DPs A-MOVE to [Spec, TP] (that it is movement is diagnosed by placement relative to VP- and TP-oriented adverbs; that it is A-movement by lack of Focus disruption).

Thus, the Russian “accusative unaccusatives,” in which an element A-MOVED to [Spec, TP] without AGREE, are precisely cases where PEPPER predicts scope-freezing. Indeed, this is true:

(30) (L. Nash, Y. Tsedryk p.c.)

- a. *dvux soldat ranilo kazhdoj pulej*
two-ACC soldiers-ACC wound-PAST every-INST bullet-INST
'Every bullet wounded two soldiers.' (* $\forall > 2$, $2 > \forall$)
- b. *dve puli ranili kazhdogo soldata*
two-NOM bullet-NOM wounded every-ACC soldier-ACC
'Two bullets wounded every soldier.' ($2 > \forall$, $\forall > 2$)

5.2. Greek promoted goals

In Greek ditransitive constructions, the goal appears either as a GEN-marked DP or as a locative PP. When ditransitives are passivized, either the theme or the goal may be promoted to [Spec, TP], as in English.⁸ Both the DP and PP forms of the goal may be promoted. Importantly, neither enters into an AGREE relation with T, since in both cases the verbal predicate shows agreement with the theme, which is nominatively marked (promoted goal DPs retain GEN case).⁹

Again, this is a test case for PEPPER – the promoted theme and goal should behave differently as to the attestation of inverse scope. Indeed, they do. When the promoted subject is the nominative theme, inverse scope is possible. A fronted goal, however, does *not* allow inverse scope:

(31) a. Fronted NOM DP Passive

- Kapjo vivlio tu stalhike kathe ekdhoti*
Some book-NOM Cl was-sent every reviewer-GEN
'Some book was sent to every reviewer.' ($\exists > \forall$, $\forall > \exists$)

8. Only the fronted argument controls TP-oriented adjuncts, demonstrating that fronting is in fact promotion to subject position (Tsimplici 2000).

9. Promoted goal DPs also trigger clitic doubling, which Anagnostopoulou (to appear) argues allows AGREEMENT across them.

b. Fronted DAT DP Passive

- Enos ekdhoti (tu) stalhike kathe vivlio*
Some reviewer-GEN Cl was-sent every article-NOM
'Some reviewer was sent every article.' ($\exists > \forall$, $*\forall > \exists$)

c. Fronted PP Goal

- Sena ekdhoti stalhike kathe vivlio*
To-some reviewer was-sent every article-NOM
'To some reviewer was sent every article.' ($\exists > \forall$, $*\forall > \exists$)

6. An anti-Duke-of-York condition on derivations

The previous sections have presented evidence from several languages that there is a proscription on reconstruction of an argument from a head it does not AGREE with. In concluding, we consider important constellatory questions surrounding PEPPER:

What does ‘moving for the EPP’ mean? Any displacement of an argument from the theta domain to the functional domain. Usually this means displacement to T(ense), but other heads may also have EPP features that trigger movement (see Ceplova (2003) for a similar view). Proposals for EPP-driven movement encompass a wide range of functions (e.g., topicality, predication, or binding of event variables), and nothing in PEPPER is dependent on a particular theory of *function* of the EPP. The point is that when “subjecthood” and verbal agreement do not line up, the PEPPER restriction comes into play.

What explains the PEPPER restriction? Our intuition is one of economy of interpretation and movement: if a DP reconstructs to position P, it must be the case that it was, at some earlier stage in the derivation, impossible to interpret the DP at P (i.e., because at the derivational step in which the DP was in P, it still had *uninterpretable* features.) We propose the following constraint on interpretations *equivalent* to the that of the structure *without* any displacement:

- (32) *ASAP Spellout*: If a phrase XP contains no uninterpretable features, evaluate XP immediately.¹⁰

When the interpretation of a phrase in its base position is not possible through ASAP Spellout (because, e.g., it needs to be displaced to check uninterpretable features), there is another interpretive option available after it has moved: Reconstruction. As we take *Economy* only to mean: doing less operations to achieve the same effect,

10. See McGinnis (2000) and Svenonius (2001) for different arguments for *Earliness*.

(33) Reconstruction applies only when ASAP-Spellout could not have.

How does it work derivationally? In all *non-English* constructions we mention, there are two DPs *both* eligible for EPP movement. If the lower one (Nominative) moves, inverse scope (through reconstruction) *will* be possible, as that movement is also for Case. In contrast, if the higher DP moves, it must keep widest scope. As it will do no further feature-checking, by (32), it should be interpreted as soon as possible. Earliness *can* be violated, to achieve interpretive effect(s) (discourse-structural or truth-conditional); these are the essence of the EPP. But if Earliness is violated to achieve a given interpretation, it would be Duke-of-York-ish to move it *back* to the lower site for interpretation [=33]. Hence, DPs that move 'only for EPP' cannot reconstruct; that is the only reason they moved in the first place!¹¹

References

- Anagnostopoulou, Elena. to appear. *The syntax of ditransitives: Evidence from clitics*. Mouton de Gruyter.
- Anand, Pranav, and Andrew Nevins. forthcoming. The locus of Ergative Case assignment: Evidence from scope. In *Ergativity*. Kluwer.
- Aoun, Joseph. 1982. On the logical nature of the binding principles: quantifier lowering, double raisings of 'there' and the notion empty element. In *Proceedings of NELS 12*.
- Beghelli, Filippo, and Tim Stowell. 1997. Distributivity and negation. In *Ways of scope taking*, ed. Anna Szabolsci. Kluwer.
- Boeckx, Cedric. 2001. Scope reconstruction and A-movement. *Natural Language and Linguistic Theory* 19:503–548.
- Bresnan, Joan. 1994. Locative inversion and the architecture of universal grammar. *Language*.
- Büring, Daniel, and Christine Gunlogson. 2000. Aren't positive and negative questions the same? UCLA/UCSC Manuscript.
- Ceplova, Marketa. 2003. What's the problem with VSO/VOS sentences in Czech? Presented at the North American Syntax Conference, Concordia, Montreal.
- Chomsky, Noam. 1995. *The minimalist program*. MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. M. Kenstowicz. MIT Press.
- Collins, Chris. 1997. *Local economy*. MIT Press.
- Fox, D., and U. Sauerland. 1995. Illusive scope of universal quantifiers. In *Proceedings of NELS 26*. GLSA.
- Hook, Peter. 1990. Experiencers in South Asian languages: A gallery. In *Experiencer subjects in South Asian languages*, ed. M.K. Verma and K.P. Mohanan. CSLI.

11. This proposal covers every derivation considered except English double raising (as ASAP SpellOut could not apply in the lower position, where uninterpretable features remained). Our hope is to be able to unify these cases with the others considered here.

- Hornstein, Norbert. 1995. *Logical form*. Blackwell.
- Johnson, Kyle, and Satoshi Tomioka. 1997. Lowering and mid-size clauses. In *Tübingen Workshop on Reconstruction*, ed. Katz, Kim, and Haike.
- Kachru, Yamuna. 1987. Ergativity, subjecthood, and topicality in Hindi-Urdu. *Studies on Ergativity (a special volume of Lingua)* Edited by R.M.W. Dixon, Elsevier.
- Kidwai, Ayesha. 2001. *XP-adjunction in Universal Grammar: Scrambling and binding in Hindi-Urdu*. Oxford UP.
- Kuno, Susumu. 1971. The position of locatives in existential sentences. *Linguistic Inquiry*.
- Ladd, Robert. 1981. A first look at the semantics and pragmatics of tag questions and negative questions. In *Chicago Linguistics Society Vol. 17*.
- Lasnik, Howard. 1999. Chains of arguments. In *Working minimalism*, ed. S. Epstein and N. Hornstein. MIT Press.
- Lavine, James, and Robert Freidin. to appear. The subject of defective tense in Slavic. *Journal of Slavic Linguistics*.
- Lebeaux, David. 1996. Where does the Binding Theory apply? Technical report, NEC.
- Linebarger, Marcia. 1980. The grammar of negative polarity. Doctoral Dissertation, MIT.
- Mahajan, Anoop. 1990. The A/A' distinction and movement theory. Doctoral Dissertation, MIT.
- McGinnis, Martha. 2000. Phases and the syntax of applicatives. In *Proceedings of NELS 31*. GLSA.
- Miyagawa, Shigeru. 2001. EPP, scrambling, and wh-in-situ. In *Ken Hale: A life in language*, ed. M. Kenstowicz. MIT Press.
- Mohanan, Tara. 1994. *Argument structure in Hindi*. CLSI.
- Nash, Léa. 1995. Portée argumentale et marquage casuel dans les langues slaves et dans les langues ergatives: l'exemple du géorgien. Doctoral Dissertation, Université Paris VIII.
- Nevins, Andrew, and Pranav Anand. 2002. Some ergative subjects don't reconstruct. In *Paper presented at the Ergativity Workshop, Toronto*.
- von Stechow, Arnim, and Doris Penka. 2003. N-words and negation in German. Presented at Datenvielfalt und Perspektivenvielfalt zwischen Universalität und Variation, Tübingen, January 2003.
- Svenonius, Peter. 2001. On object shift, scrambling, and the PIC. In *A few from Building e39*, ed. E. Guerzoni and O. Matushansky, 39. MIT Working Papers in Linguistics.
- Tsimpli, Ianthi Maria. 2000. Gerunds in Greek. *Journal of Greek Linguistics* 1:133–169. Ed. Drachman et al. John Benjamins.
- Ura, Hiroyuki. 2000. *Checking theory and grammatical functions in universal grammar*. Oxford University Press.
- Woolford, Ellen. 1997. Four way case systems: Ergative, nominative, objective and accusative. *Natural Language and Linguistic Theory* 15:181–227.
- Wurmbrand, Susi. 2002. A-movement to the point of no return. In *Proceedings of NELS 33*. GLSA.

WCCFL 22

**Proceedings of the 22nd West Coast
Conference on Formal Linguistics**

edited by Gina Garding
and Mimu Tsujimura



Cascadia Press Somerville 2003