Agree and ergative case-marking in Hindi and Nez Perce

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Introduction

By adopting a revised definition of Agree and relying on feature valuation at phase closure as a criterion for convergence, ergative case phenomena in two unrelated languages can be unified under a single analysis. Revised Agree states that

1) all features on all functional heads act as probes;
2) all features on a head probe in tandem;
3) Agree may take place if a given feature is valued on either the probe or the goal;
4) a probe Agrees with its maximally compatible goal, even if it is more distant.

Possibilities for Agree

Given two items in a Probe ~ Goal relationship, there are five logically possible ordered pairs of feature values. An underscore represents an unvalued feature.

Exact match	[A] ~ [A]	?
Low value	[_] ~ [A]	✔
High value	[A] ~ [_]	✔
No value	[_] ~ [_]	✗
Value mismatch	[A] ~ [B]	✗

Exact Match is the relationship required for the original formulation of Agree as defined in Minimalist Inquiries (Chomsky 1998).

Low value is the canonical configuration for phi-feature Agree as defined by Chomsky (1999).

When Agree takes place, the value on the goal is copied and fills the unvalued "slot" on the probe.

(1) [_] ~ [A] ⟶ [A] ~ [A]

High value is the configuration used to implement structural case "assignment" using Agree.

(2) Case[NOM] ~ Case[_] ⟶ Case[NOM] ~ Case[NOM]

No value configurations are used by Frampton et al. (2000) for case assignment, since they follow Chomsky (1999), which states that all and only unvalued features are uninterpretable, essentially barring valued features on probes.

This requires that feature valuation is not done by copying, but by an independent "side effect", which I argue lies outside the narrow syntax and should be avoided.

Value mismatch uncontroversially bars Agree between the two feature occurrences in question, but not necessarily between other features on the same probe / goal pair.

Two ways of valuing Case[]

Structural case is valued by Agree in the high value configuration.

Inherent case is valued on the Spec of the inherent case assigner at time of merge. This type of agreement in a sisterhood relation can only occur with *lexically specified* features on the head, and only with an *externally merged* Spec.

There is no method of "upward" case assignment (cf. Marantz 1991). Case[] is valued either in a sisterhood (set-member) or c-command (Probe ~ Goal) relation.

Ontologically, there is only a single type of Case[] feature, which is manipulated by both processes.

As a result, Agree operations can be affected by the presence of inherently valued Case[] features.

Handling phase closure

In all of Chomsky's accounts, *unchecked uninterpretable features* are what cause derivations to crash. This in effect requires two levels of diacritic marking (u/i and checked/unchecked).

I argue that neither is necessary. Crashes can be determined solely by feature valuation.

(3) **Condition for convergence at phase closure**
At phase closure, if there is an unvalued feature f[_] on the phase head or any element in its complement domain, the derivation crashes; otherwise it converges.

The definition in (3) allows all types of agreement possible in a u/i system, while allowing additional possibilities, namely:

(4) **High features need not Agree**
A valued (high) feature need not enter an Agree relationship for the derivation to converge.

(5) **Maximize Agree**
A probe searches its entire complement domain, and Agrees with the goal that bears the most compatible features. If two goals are equally compatible, the probe Agrees with the nearer one.

Ergative patterns in Hindi

Hindi has two case patterns with an ergative-marked subject: ergative-nominative and ergative-objective. Additionally, there are passive clauses with nominative subjects.

(6) Raam-ne rotii khaayii
Raam-ERG bread-NOM eat-PAST.FEM
"Ram ate bread."

(7) Raam-ne rotii-ko khaayaa
Ram-ERG bread-OBJ eat-PAST.DEF
"Ram ate the bread."

(8) rotii khaayii gayii
bread-NOM eat-PERF go-PERF
"The bread was eaten."

(Anand and Nevins 2006, ex. 29, 30, 32)

ERG and OBJ are inherent cases, while NOM is a structural case.

Anand and Nevins (2006) claim that the ERG subject must be "punted" – raised above T – in order to allow T to Agree with the object DP and value its case feature [NOM].

To do so, the EPP property of T must operate separately from and prior to phi-Agree. This is problematic for several reasons:

- EPP is treated as a feature, despite the fact that EPP cannot be valued/unvalued and does not find a corresponding feature on a goal.
- Movement for EPP satisfaction ordinarily must follow or occur in conjunction with Agree, not precede it (Chomsky 2005; Mensching and Remberger 2006). Even optionality of order between EPP and Agree overgenerates in English raising constructions:

(9) a. *It seem [the men] to be smart. (EPP by Merge, Agree)
b. [The men] seem to be smart. (EPP by Move, Agree)
c. It seems [that John is smart]. (EPP by Merge, no Agree)
d. *[That John is smart] seems. (EPP by Move, no Agree)

Punting can be avoided entirely under my revision of Agree.

- T bears Case[NOM] and unvalued phi features, which probe in tandem.
- The first potential goal is DP_S, but it is inherently valued Case[ERG], a mismatch.
- The next potential goal is DP_O. It bears Case[_] and valued phi features. Despite being the more distant phi-compatible goal, all features Agree with DP_O under Maximize Agree.

A similar analysis can also account for "long-distance agreement" into embedded infinitivals.

(10) Firoz-ne [rotii khaa-naa] chaah-ii
Firoz-ERG bread.FEM eat-INF want-PAST.FEM
"Firoz wanted to eat bread" (Boeckx 2004, ex. 11)

Ergative patterns in Nez Perce

Nez Perce has two major case-marking patterns in transitive active clauses: ERG-OBJ and "caseless".

The caseless pattern breaks into two classes: "antipassives" (12) and "extended reflexives" (14).

NB: What Deal glosses as OBJ is taken to be a structural case.

(11) 'ip-ním pée-qn'i-se qeqíi-ne
3SG-ERG 3/3-dig-IMPF root-OBJ
"He digs qeqíit roots."

(12) 'ipí hi-qn'íi-se qeqíit
3SG 3SUBJ-dig-IMPF root
"He digs qeqíit roots."

(13) pit'íin-im páa-'yax-na picpíc-ne
girl-ERG 3/3-find-PERF cat-OBJ
"The girl found the cat."

(14) pit'íin hi-'yáax-na pícpic
girl 3SUBJ-find-PERF cat
"The girl found her cat."

(Deal 2009, ex. 13–14)

Deal correctly observes that object agreement (manifested in the portmanteau 3/3 morpheme) is correlated with the ERG-OBJ pattern.

Deal dismisses previous analyses that rely on what she calls the "agreeing *v* hypothesis".

(15) **Agreeing *v* hypothesis**
The difference between transitive and intransitive clauses lies in the syntax of the *v* head only. Transitive *v* but not intransitive *v* participates in object agreement and assigns/licenses ergative case to its specifier. (Deal 2010, ex. 65)

Her main evidence comes from causatives, which have three arguments: typically an ERG subject, an OBJ causee, and an OBJ or caseless subject.

(16) Harold-nim pée-sepe-wemsi-se sík'em Lini-ne
Harold-ERG 3/3-CAUSE-borrow-IMPF horse Lindy-OBJ
"Harold is having Lindy borrow a horse (lending a horse to Lindy)." (Deal 2010, ex. 69)

If the clause has two identical occurrences of v^0, an ERG causee should be possible, but is not.

(17) [$_{vP}$ causer v^0 [$_{CauseP}$ Cause^0 [$_{vP}$ causee v^0 [$_{VP}$ V object]]]] after (Deal 2010, ex.71)

I contend that the presence of Cause^0 is what permits two "flavors" of *v*, with different properties.

Selected *v* heads *v*P selected as the complement of CauseP, and is not an ERG assigner.

Free *v* occurs above CauseP or in non-causatives, and is an ERG assigner.

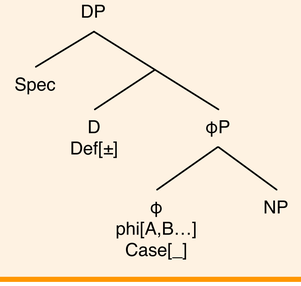
Both flavors are valued Case[OBJ], but whether that feature Agrees depends on its potential goals.

Agree and DP structure

For Hindi ERG-OBJ patterns, there is no case agreement between T and an argument DP.

Anand and Nevins require a non-agreeing $T_{checked}$ head to be selected to avoid a crash.

However, there is definiteness agreement even in these cases (7).



Deal analyzes Nez Perce "antipassives" as a type of covert incorporation, which can only occur with bare nominals, not DP.

Nez Perce nominals may contain only an NP layer and remain caseless, unlike Hindi nominals, which have a larger minimal structure.

A properly articulated DP structure explains these facts:

- The locus of phi-features and Case[] is not D, but an intermediate ϕP.
- If Def[+] D^0 is a phase head, it can prevent case agreement. This featural determination of phase status is similar to finite vs. non-finite T.
- In DP headed by Def[+] D^0, the only method of valuing Case[] on ϕ^0 is inherently.
- ERG-assigning v^0 in Nez Perce bears Def[_]

Conclusions and extensions

The formal modifications I have proposed explain ergative patterns in Hindi and Nez Perce in a single, narrowly syntactic account.

The interaction of inherent vs. structural valuation of Case[], plus the locus of and interactions with Case[] in an articulated DP is powerful syntactic machinery with broad descriptive coverage.

Possible extensions of this framework include applications to quirky case constructions, apparent "split" agreement between multiple arguments, and person / case effects.

Selected References

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