

“Classic” Agree

Issues in the syntax of case and agreement, EGG Summer School 2017

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Overview

Plan for today and this week

Agree

Differential object marking

Failed Agree and uninterpretable features

Conclusions

Plan for today and this week

About this course

This course is about the relationship between case(-marking) and agreement

- Today we will start with Chomsky's (2000, 2001) operation **Agree** ...
- ... and some problems and extensions
- Tomorrow we'll look at Hungarian object agreement
- We'll continue with **case-marking determining agreement** ...
- ... and languages in which **agreement determines case-marking**;
- Finally, we'll look at **alignment** of case and agreement
- ... and some generalisations about **possible case and agreement systems**
- ▶ The level will be intermediate (I hope)

Agree

Chomsky's *Agree*

After exploring government, Spec-head agreement, and feature movement, Chomsky (2000, 2001) proposes **Agree**

- Agree models both agreement in φ -features ...
- and Case assignment (and other processes too)
- Agree is a very general operation based on a few crucial ingredients
- **Uninterpretable features** ...
 - ... are unvalued
 - and must be deleted
- **Interpretable features** ...
 - ... are valued
 - and Agree can transfer this value to a matching uninterpretable feature

Chomsky's Agree II

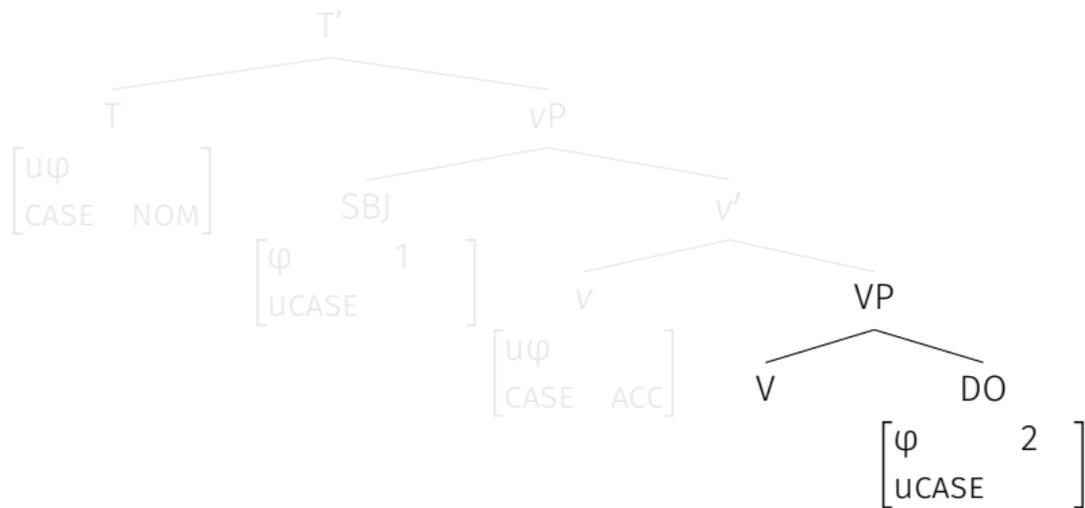
In order for Agree to happen, a **probe** and a **goal** must have matching features

- uninterpretable features are located on the probe, e.g. [$u\varphi$]
- interpretable features are located on the goal, e.g. [φ]
- ▶ Matching refers to the type of feature, φ in this case
- In addition, both the probe and the goal have to be **active**
 - ▶ being “active” means having uninterpretable features
 - e.g. a probe (a verb) has uninterpretable φ -features
 - a goal (a DP) has uninterpretable (structural) Case
- The probe must c-command the goal (and possibly other locality conditions)
- ▶ Agree values and deletes uninterpretable features and renders probes and goals **inactive**

So what does it look like?

Let's look at how this all works out in a derivation...

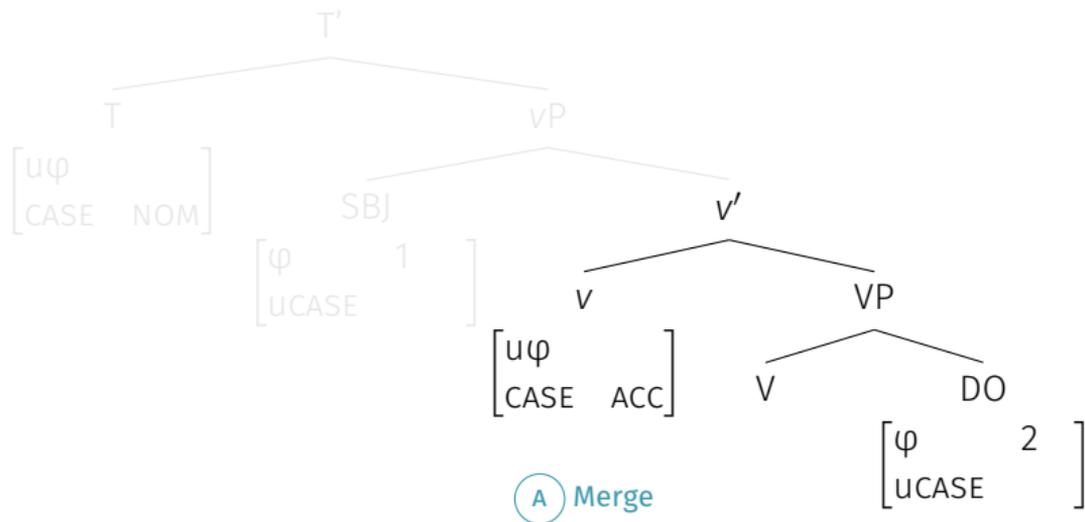
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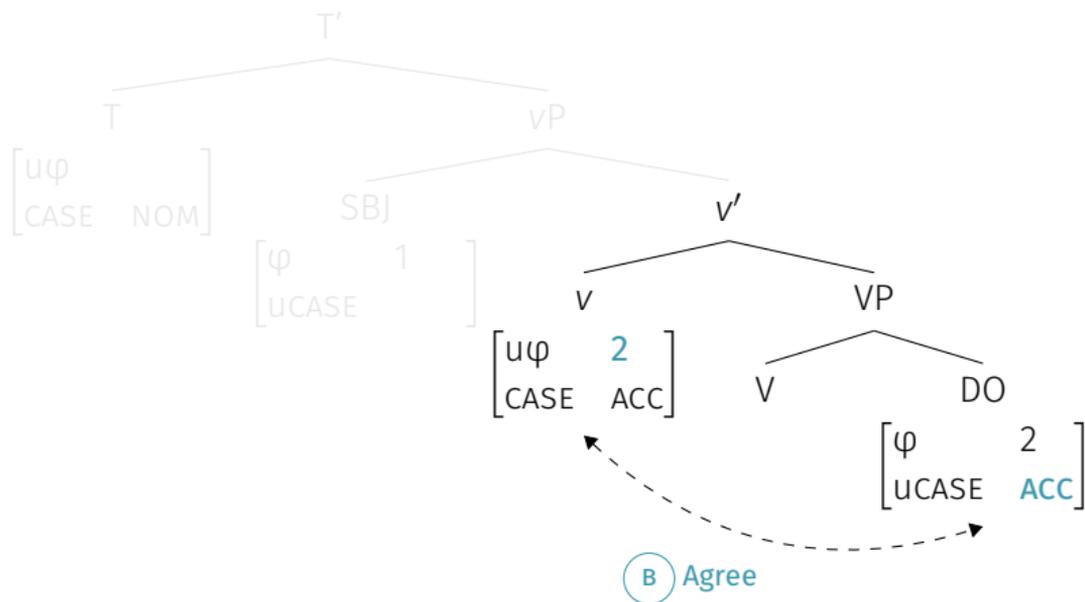
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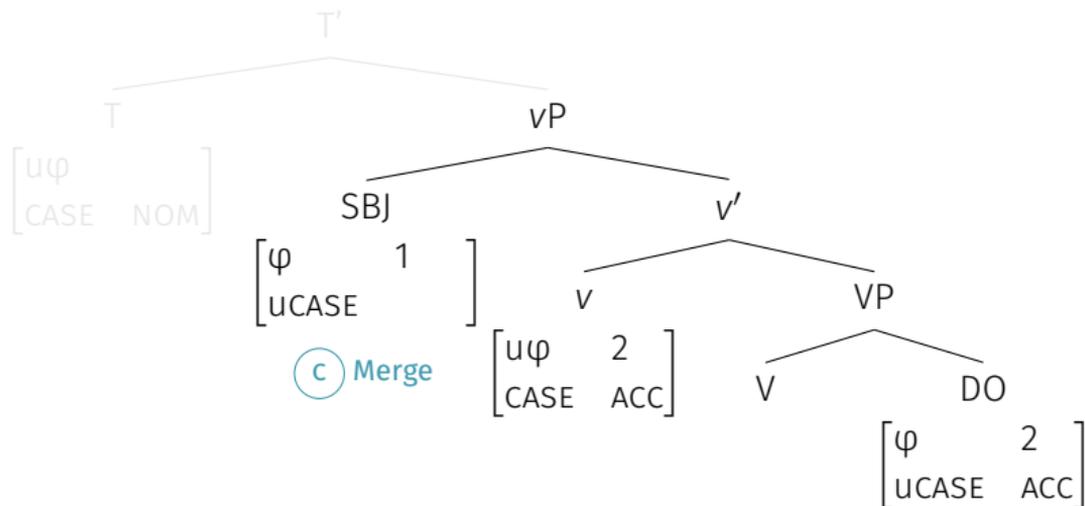
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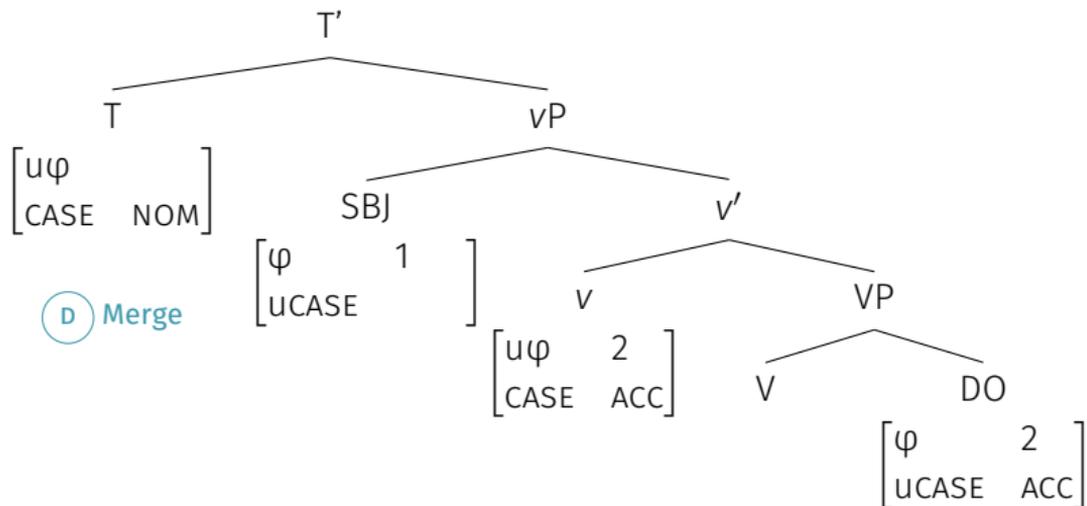
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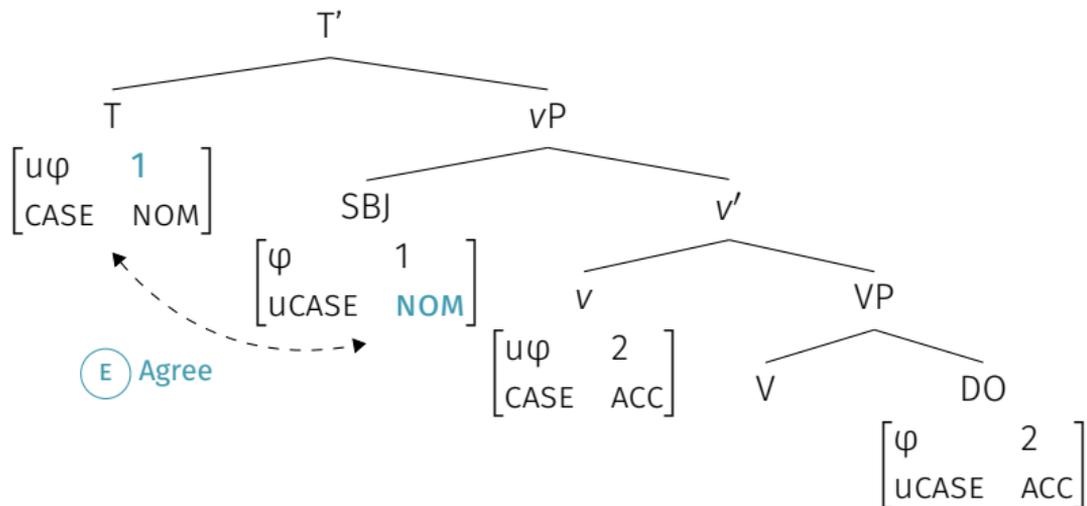
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So what does it look like?

Let's look at how this all works out in a derivation...

(1)



- By applying Merge and Agree, we build structure and copy values of features

Agree, Case and φ features

Pairs of uninterpretable and interpretable features capture an asymmetry

- In an Agree relation, one element has something, and one needs something
- ? Why uninterpretable and interpretable? Are there other ways?

Of interest to us in this course is that Case- and φ -features are **valued together**

- Chomsky (2001: 46, n. 37): T and v have a “Case-assigning property”
- Failure to value Case features leads to a violation of the Case Filter \Rightarrow crash
- Failure to value φ features leaves uninterpretable features \Rightarrow crash
- ▶ When a φ -probe enters an Agree relation with a goal
 - the probe gets the goal’s φ features
 - and simultaneously values the goal’s Case features

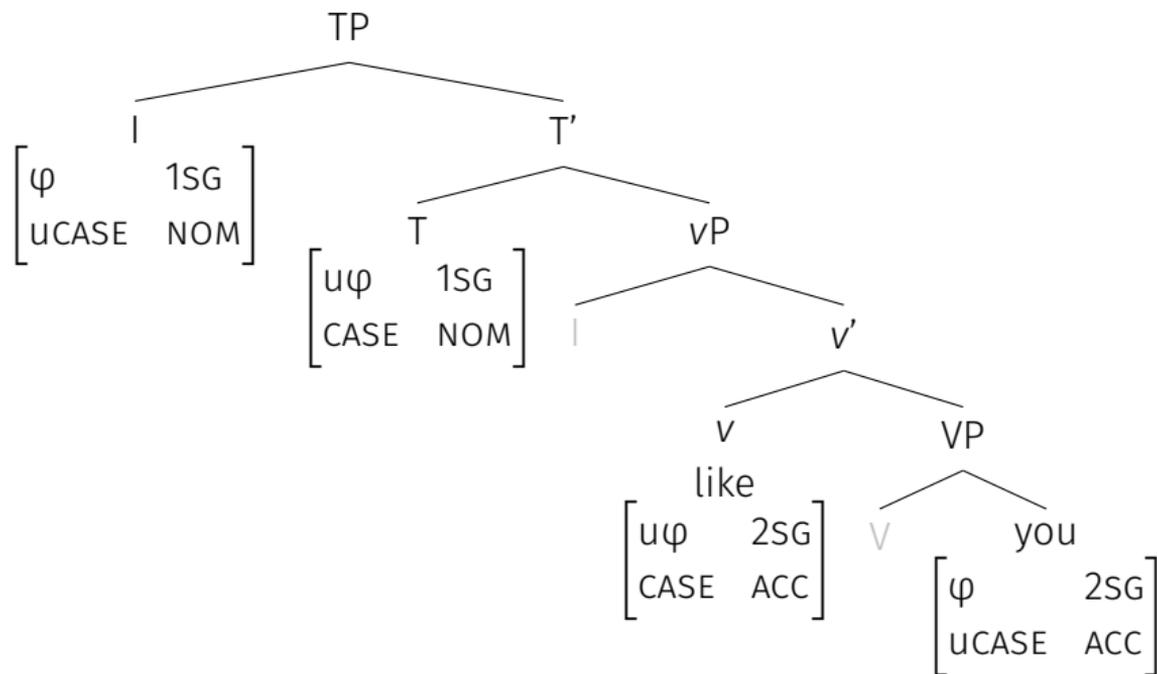
Interim summary

Agree is a general syntactic operation that involves

- An active probe P that c-commands an active goal G
 - A matching operation: pairing [uF: ___] and [F: *val*]
 - A valuing operation: copying *val* from G to P: [uF: *val*]
 - A deletion operation: deleting uninterpretable features [uF]
- ⚠ Not all probes are the same: T values NOM, v values ACC
- ? How well does this describe English? And other languages?

Interim summary II

(2)



Post “classic” Agree

Since Chomsky (2000, 2001) many aspects of Agree have been modified

- The role of activity, e.g. Nevins (2004)
- The connection between Case assignment and φ agreement, e.g. Bhatt (2005), Legate (2008), Keine (2010), Georgi (2012), Deal (2016, 2017)
- Cyclic aspects of Agree, e.g. Béjar (2003), Béjar & Rezac (2003), Rezac (2004), Béjar & Rezac (2009)
- The role of uninterpretable and interpretable features and **what halts Agree**, e.g. Amy Rose’s course and Deal (2015), Preminger (2014)
- The role of functional heads for Case assignment, e.g. Marantz (1991), Bittner & Hale (1996), McFadden (2004), Bobaljik (2008), Baker (2015)

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Differential object marking

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In DOM, only a proper subset of direct objects is coded as such morphologically

- In e.g. Spanish, animate and specific direct object are preceded by *a*

(3) a. *Veo la mesa.* [Spanish]

see.1SG the table

'I see the table.'

b. *Veo a la mujer.*

see.1SG DOM the woman.

'I see the woman.'

? What does this mean for Agree?

? Are both objects ACC, but only one is spelled out as such?

Failed Agree and uninterpretable features

Can Agree fail?

Preminger (2011, 2014) argues for a revision of a particular aspect of Agree:

- ▶ He suggests that Agree **can fail**: if a probe cannot find a goal ...
 - the **derivation does not have to crash**
 - Rather, the derivation can continue and a probe can establish further Agree relations
 - Uninterpretable features are not **“derivational time-bombs”**

Agreement and case-marking in Hindi

In Hindi, arguments **without case-marking** can trigger agreement on the verb

(5) a. *Rahul* *kitaab* *paṛh-taa* *thaa*. [Hindi]

Rahul.M book.F read-HAB.M.SG be.PST.M.SG

'Rahul used to read a/the book.'

b. *Rahul-ne* *kitaab* *paṛh-ii* *thii*.

Rahul.M-ERG book.F read-PFV.F be.F.SG

'Rahul had read the book.'

(Bhatt 2005: 759)

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Both the subject and the object can be case-marked:

(6) *Mona-ne is kitaab-ko paṛh-aa thaa.* [Hindi]

Mona.F-ERG this.OBL book.F-ACC read-PFV.M.SG be.PST.M.SG

'Mona had read this book.'

(Bhatt 2005: 768)

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- ▶ When all arguments in the clause are case-marked, the verb is M.SG

Agreement and case-marking in Hindi II

Neither the subject nor the object provides the φ -features in (6):

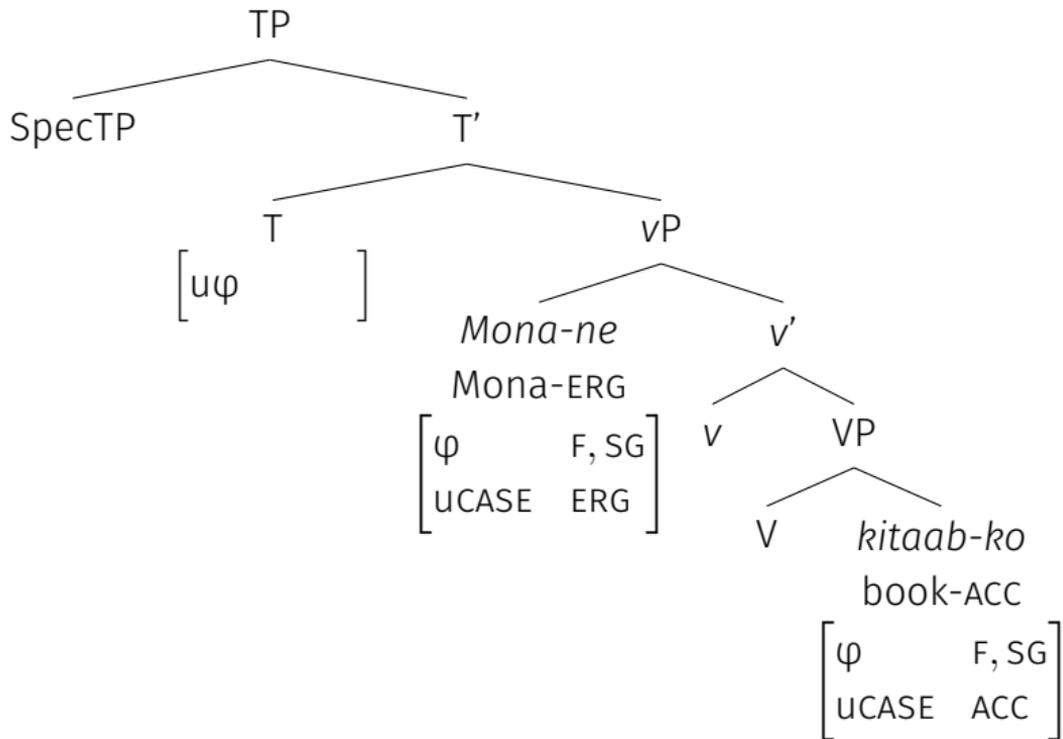
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 'Mona had read this book.' (Bhatt 2005: 768)

Assuming that T attempts to agree with the closest argument, what happens?

- The failure of Agree does not lead to ungrammaticality
- Rather, we see **default agreement**
- ▶ This implies that morphological case can block Agree relations (see (7))

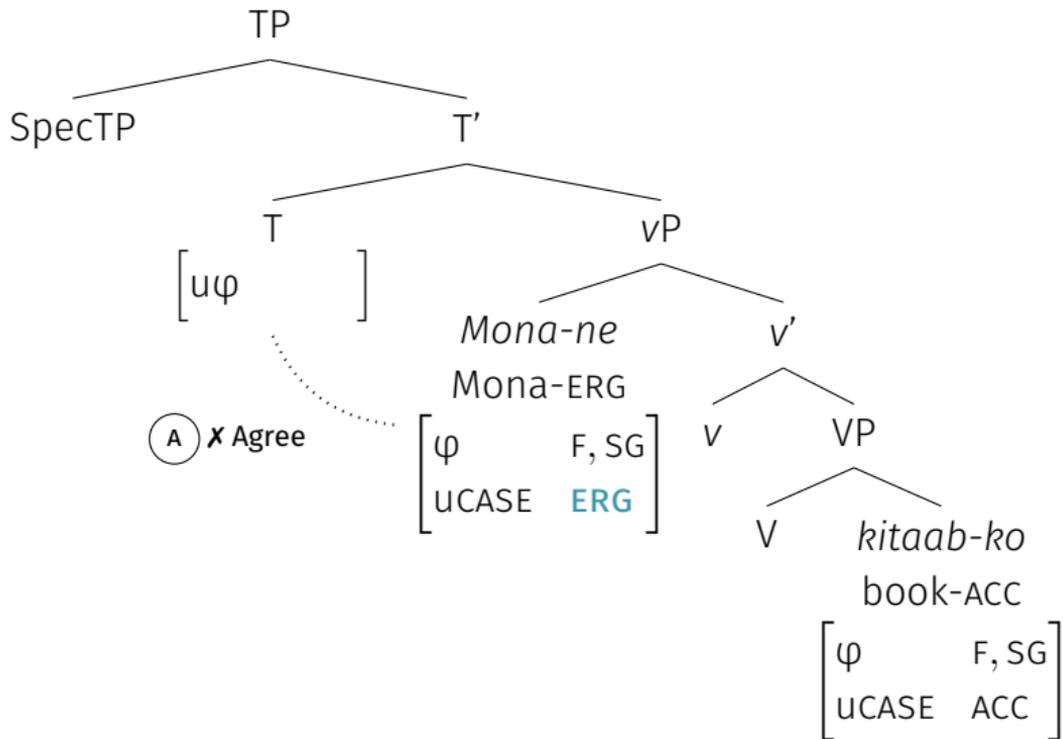
Agreement and case-marking in Hindi III

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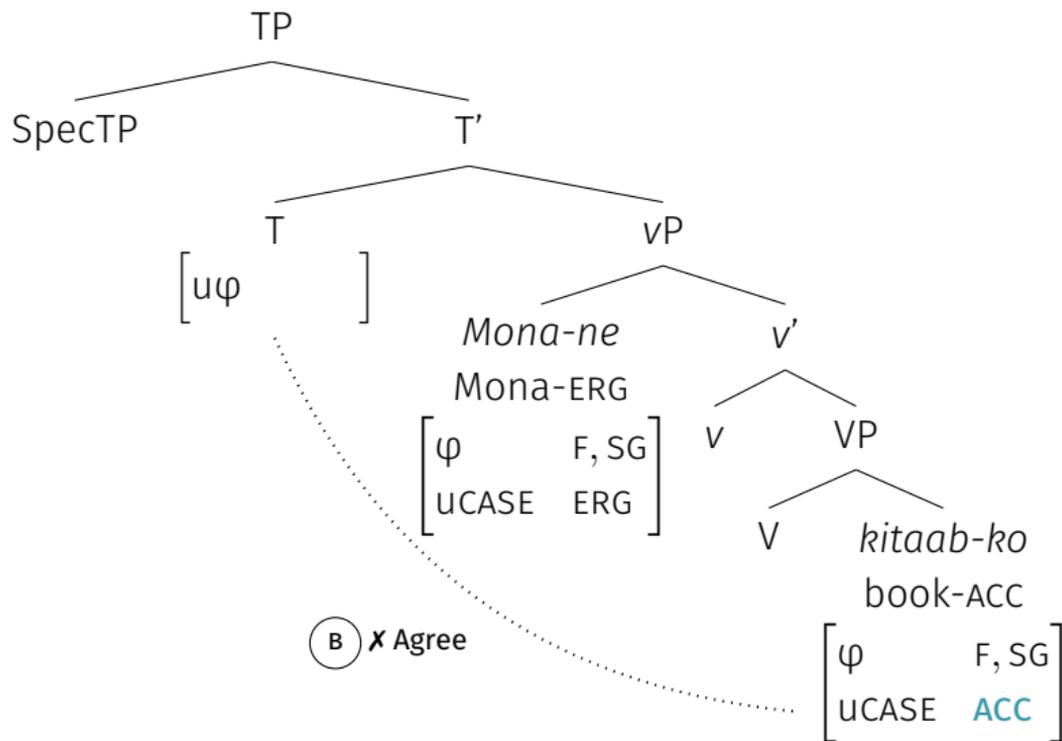
Agreement and case-marking in Hindi III

(7)



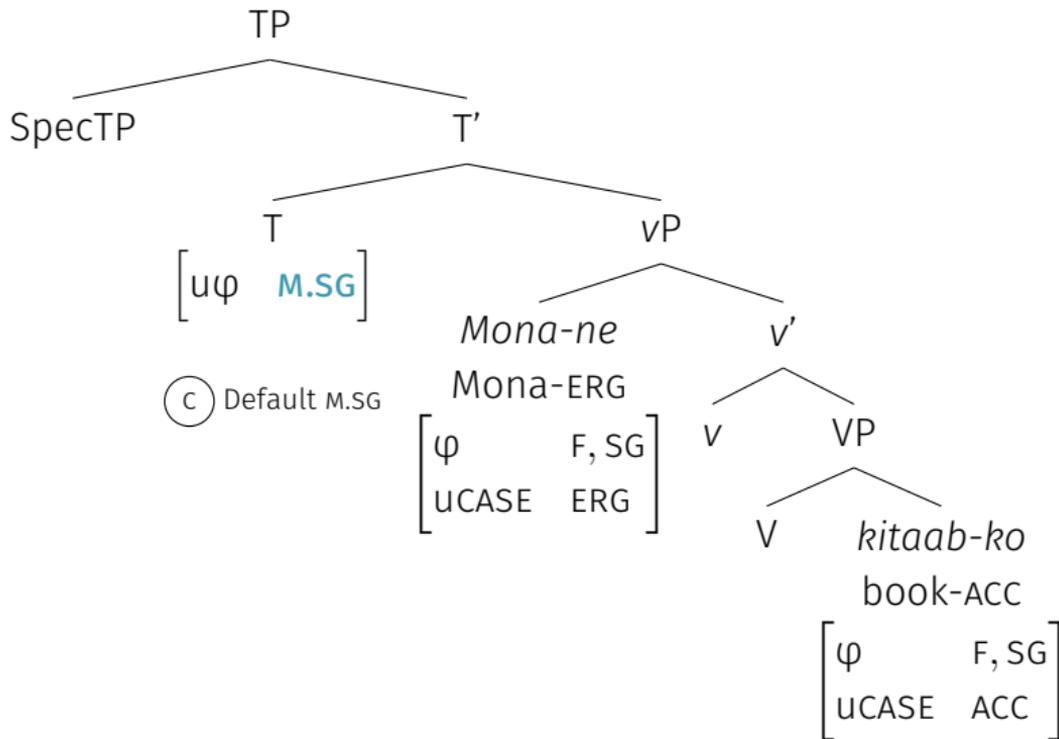
Agreement and case-marking in Hindi III

(7)



Agreement and case-marking in Hindi III

(7)



Conclusions

Conclusions

Chomsky's (2000, 2001) Agree licenses Case and values φ -features simultaneously

- Very Minimalist, since uniform across languages
- But arguably this is empirically not adequate
- We have seen a few mismatches between Case and agreement (DOM)
- And the possibility of morphological case blocking agreement
- ▶ Failed Agree relations do not crash the derivation



Tomorrow, we'll look at Cyclic Agree and some more differential object agreement in Hungarian.

Abbreviations: 1 = first person, 2 = second person, ACC = accusative, DOM = differential object marking, ERG = ergative, F = feminine, HAB = habitual aspect, M = masculine, NOM = nominative, OBJ = object, OBL = oblique, PFV = perfective, PST = past, SBJ = subject, SG = singular.

References I

- Baker, Mark C.** 2015. *Case: Its principles and its parameters*. Cambridge: Cambridge University Press.
- Béjar, Susana.** 2003. *Phi-Syntax: A Theory of Agreement*. University of Toronto dissertation.
- Béjar, Susana & Milan Rezac.** 2003. Person licensing and the derivation of PCC effects: Theory and acquisition. In Ana-Teresa Pérez-Leroux & Yves Roberge (eds.), *Romance linguistics*, 49–62. Amsterdam: John Benjamins.
- Béjar, Susana & Milan Rezac.** 2009. Cyclic agree. *Linguistic Inquiry* 40(1). 35–73.
- Bhatt, Rajesh.** 2005. Long distance agreement in Hindi-Urdu. *Natural Language & Linguistic Theory* 23(4). 757–807.
- Bittner, Maria & Ken Hale.** 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27(1). 1–68.

References II

- Bobaljik**, Jonathan David. 2008. Where's phi? Agreement as a postsyntactic operation. In Daniel **Harbour**, David **Adger** & Susana **Béjar** (eds.), *Phi theory: Phi-features across modules and interfaces*, 295–328. Oxford: Oxford University Press.
- Chomsky**, Noam. 2000. Minimalist inquiries: The framework. In Roger **Martin**, David **Michaels** & Juan **Uriagereka** (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky**, Noam. 2001. Derivation by phase. In Michael **Kenstowicz** (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.
- Deal**, Amy Rose. 2015. Interaction and satisfaction in φ -agreement. *Proceedings of NELS* 45. 1–14.
- Deal**, Amy Rose. 2016. Person-based split ergativity in nez perce is syntactic. *Journal of Linguistics* 52. 533–564.
- Deal**, Amy Rose. 2017. Syntactic ergativity as case discrimination. In Aaron **Kaplan** et al. (eds.), *WCCFL 34: Proceedings of the 34th West Coast Conference on Formal Linguistics*, 141–150. Somerville, MA: Cascadilla Proceedings Project.

References III

- Georgi**, Doreen. 2012. A local derivation of global case splits. In Artemis **Alexiadou**, Tibor **Kiss** & Gereon **Müller** (eds.), *Local modelling of non-local dependencies in syntax* (Linguistische Arbeiten 547), 305–336. Berlin: De Gruyter.
- Keine**, Stefan. 2010. *Case and agreement from fringe to core: A minimalist approach*. Berlin: De Gruyter.
- Legate**, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39(1). 55–101.
- Marantz**, Alec. 1991. Case and licensing. In *ESCOL '91: Proceedings of the eighth Eastern states conference on linguistics*, 234–253. Ohio State University.
- McFadden**, Thomas. 2004. *The position of morphological case in the derivation: A study on the syntax-morphology interface*. University of Pennsylvania PhD dissertation.
- Nevins**, Andrew. 2004. Derivations without the activity condition. *MIT Working Papers in Linguistics* 49. 287–310.
- Preminger**, Omer. 2011. *Agreement as a fallible operation*. MIT PhD dissertation.
- Preminger**, Omer. 2014. *Agreement and its failures*. Cambridge, MA: MIT Press.

References IV

Rezac, Milan. 2004. *Elements of cyclic syntax: Agree and merge*. University of Toronto dissertation.