Agreement, (un)interpretable features, and syntactic dependencies

Introduction to Syntax, EGG Summer School 2017

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Overview

Where we left off...

Agreement and Agree

Other syntactic dependencies

Conclusions

Where we left off...

Theta theory and case theory

Theta theory and Case theory explain the ungrammaticality of (1):

(1) a. *Mary says.

b. *Mary loves she.

c. *Mary loves her her.

But there are even more causes of ungrammaticality:

(2) a. Mary love her.

b. I loves you.

The problem in (2) is new: subjects have to agree with finite verbs in English.

- Agreement is not a filter, however. We will see that our system does not generate (2) in the first place.

Agreement and Agree

Subject agreement in English

We have talked about φ-features before:

(3) a. [$_{N:\ 3SG}$ Olomouc] [$_{V:\ 3SG}$ is] [$_{A}$ beautiful].

b. [$_{N:\ 3PL}$ Czech towns] [$_{V:\ 3PL}$ are] [$_{A}$ beautiful].

In English finite clauses, the subject and the verb have to match in φ-features

- We want to come up with a mechanism that explains this
- To do this, we will try to answer a few questions...

? What is the problem with **I loves you*?

? Is the role of 3SG the same on both elements in (3a)?

Features and agreement

The goal for today will be to build an analysis that derives agreement

- to do this, we need to figure out where features come from

? How can we find and copy them?

? What is the nature of features on a noun and a verb?

? Redundancy? Asymmetries?

? Do we find similar effects in other domains?

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Agreement is another type of syntactic dependency. In English, it is clearly visible between the subject and a finite verb. Crucially, this dependency is asymmetric: intuitively, it is the subject's φ-features which are copied onto the verb, and not vice versa.

Agreement as a feature dependency

First, let's look at where features come from

(4) a. John loves Mary.
b. John loves them.
c. Mary loves John.

a. *They loves John.
b. They love John.
c. We love John.

Agreement as a feature dependency

First, let's look at where features come from

(4)

a. John loves Mary.	a. *They loves John.
b. John loves them.	b. They love John.
c. Mary loves John.	c. We love John.

- φ-features come from the subject, not the object
- number and person play a role, but gender does not

? Do the features **mean** anything?

▸ These properties motivate how we model the dependency

Uninterpretable and interpretable features

Asymmetry in agreement involves **uninterpretable** and **interpretable** features[1]

[1] This is the 'traditional' view (see Chomsky 2000, 2001). There are courses here at EGG which argue against this idea in different ways!

Uninterpretable and interpretable features

Asymmetry in agreement involves uninterpretable and interpretable features

- The verb has uninterpretable features
  - These features have to find matching features and be deleted
- DPs have interpretable features
  - These features can match uninterpretable features

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> Any clause in which some element carries an uninterpretable feature [uF] requires the presence of a matching interpretable feature [F]; otherwise the clause is ungrammatical. (Koeneman & Zeijlstra 2017: 116)

Back to English agreement

Yesterday, we reached the conclusion that (5) represents English finite clauses

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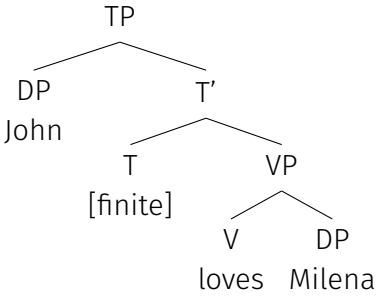

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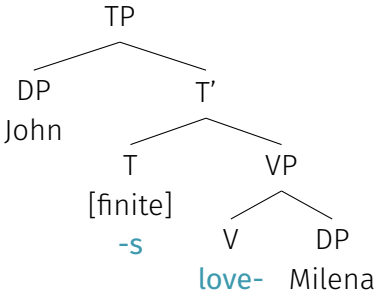
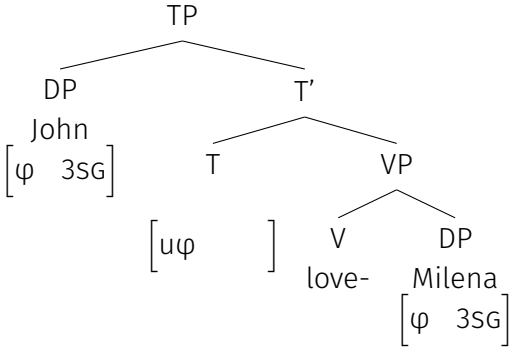


- Since finiteness is correlated with both NOM and subject agreement in English, we want T to be involved in it

T as the source of agreement

T is the locus of finiteness and the source of NOM: it wants to agree

(6)



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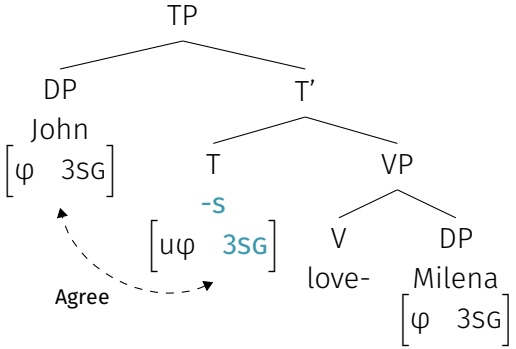

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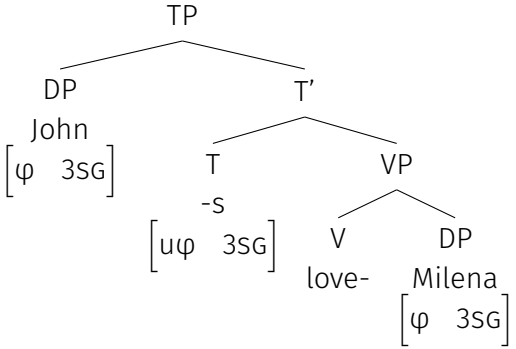


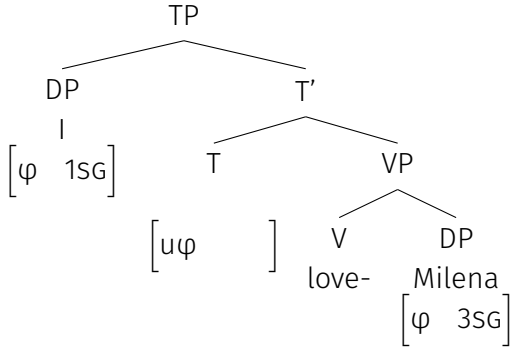
- The subject's φ-features value T's uninterpretable φ-features

Agreement and ungrammaticality

How would we represent (7a), then?

(7) a. *I loves Milena.

b.



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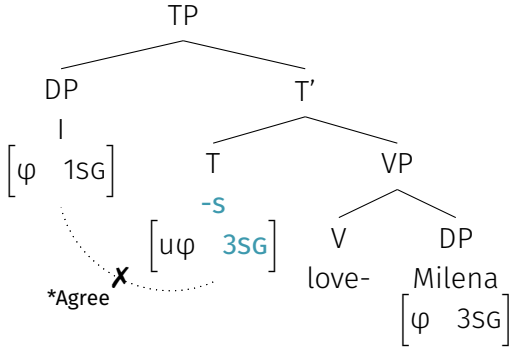
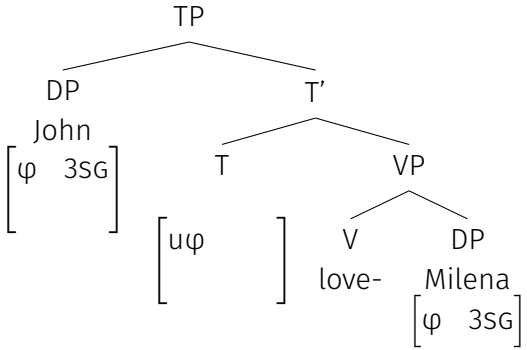


- If features are copied from the subject onto T, we cannot derive (7a)
- Agree is a separate operation from Merge

Agreement and Case

Recall that finite T does something else, too: it assigns NOM to the subject

(8)



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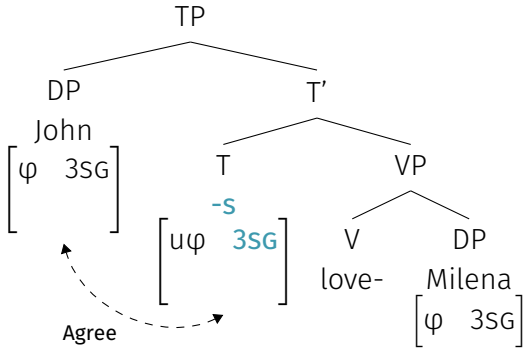

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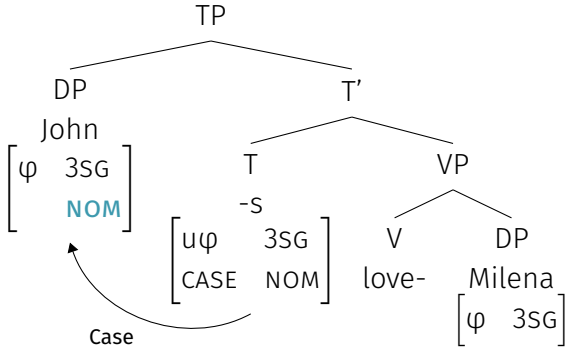
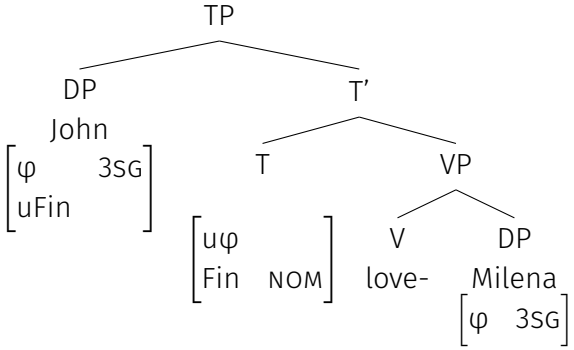


- T assigns NOM to the subject:
- **?** Can we make this work with uninterpretable and interpretable features?

NOM and finiteness

The condition for NOM on subjects in English was finiteness: [uFin] and [Fin]?

(9)



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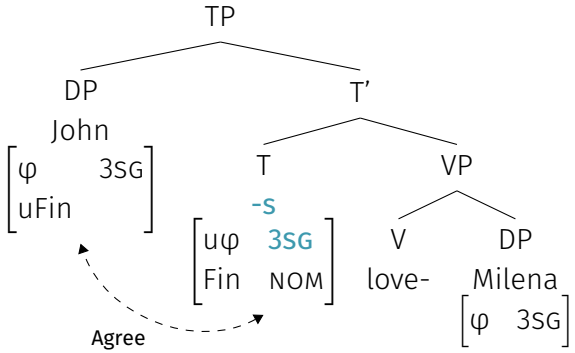

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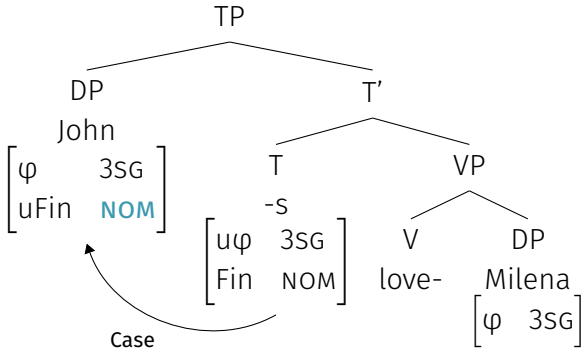

- In (9), the subject's [uFin] is matched by T's [Fin] and T assigns NOM

? What do you think of this solution?

Interpretable and uninterpretable features: interim summary

This system follows Koeneman & Zeijlstra generalisation we saw earlier:

> Any clause in which some element carries an uninterpretable feature [uF] requires the presence of a matching interpretable feature [F]; otherwise the clause is ungrammatical. (Koeneman & Zeijlstra 2017: 116)

- Part of the motivation is that [uF]s drive the derivation
- [uF]s, if not checked, crash the derivation

? Is this semantic or syntactic reasoning?

What about accusative?

Accusative is independent of finiteness: can we associate it with a [uF]-[F] pair?

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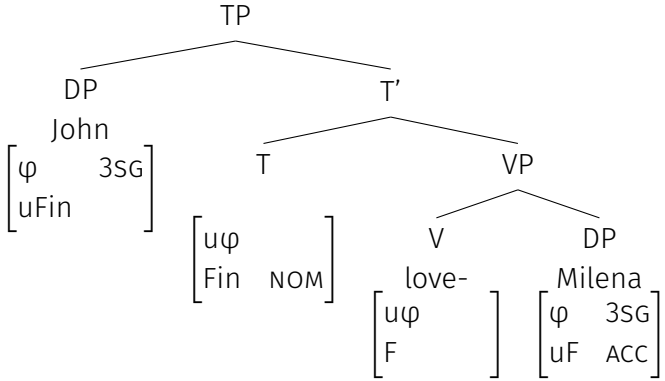

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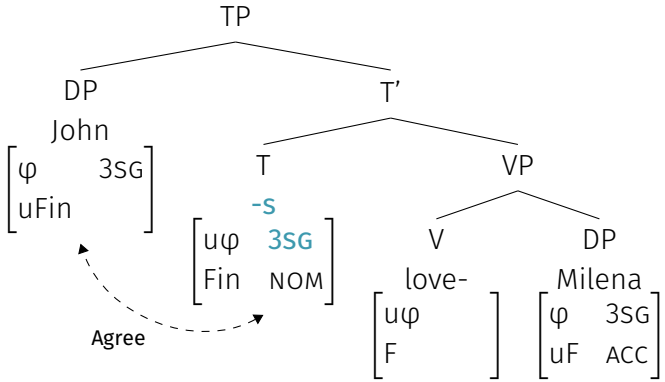

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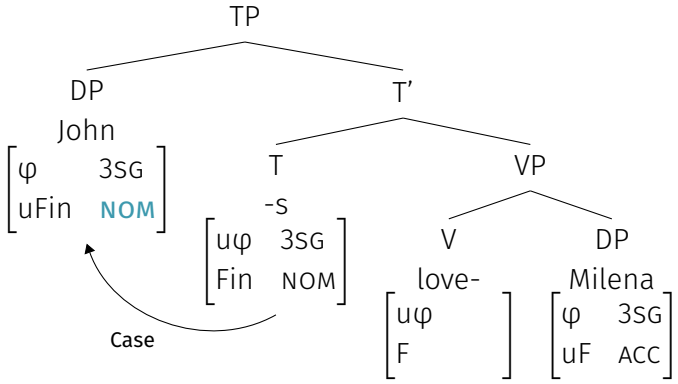

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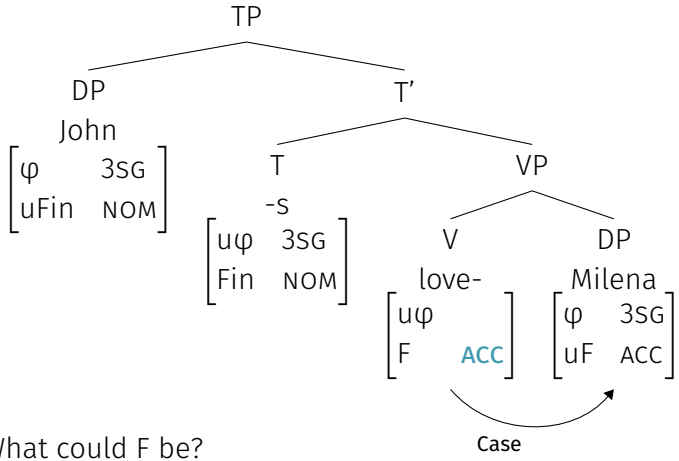

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Other syntactic dependencies

Binding

Case and agreement are syntactic dependencies; **binding** is another one

(11) a. Mary$_i$ likes herself$_i$.

b. *Mary$_i$ likes her$_i$.

c. *Mary$_i$ thinks [that John likes herself$_i$].

d. Mary$_i$ thinks [that John likes her$_i$].

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- A reflexive must be bound by an **antecedent** in the same finite TP

? Are there restrictions on agreement and Case?

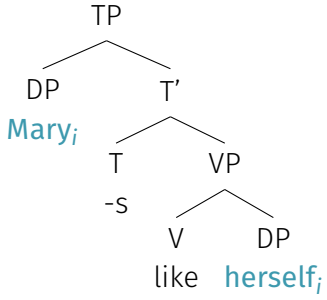
What kind of “closeness”?

In (12), *Mary* is in the same finite TP as the reflexive.

(12) a. Mary$_i$’s sister$_j$ likes herself$_{*i/j}$.

b. Mary$_i$’s brother$_j$ likes herself$_{*i/*j}$.

(13)



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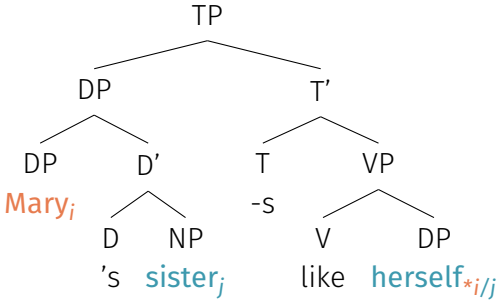

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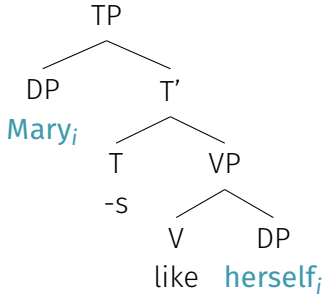

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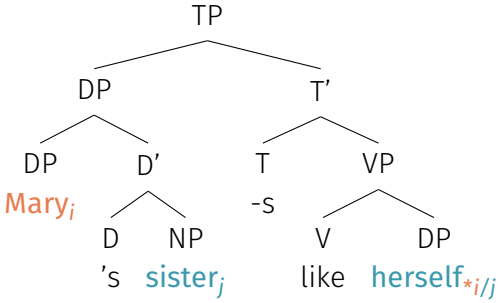


- *Mary* and *herself* are in the same finite TP in both (13) and (14)

? What’s wrong with (14)?

C-command

Binding is not only sensitive to **locality** but also to **hierarchical relationships**

- A binder must be **local enough** (same finite TP)
- And the binder must **c-command** the bindee

Node A c-commands node B if, and only if, A's sister either:

- is B, or
- contains B.

(Adger 2003: 117)

- C-command plays a role in many syntactic dependencies
- In (12), *Mary* c-commands the reflexive
- In (13), *Mary* **does not** c-commands the reflexive

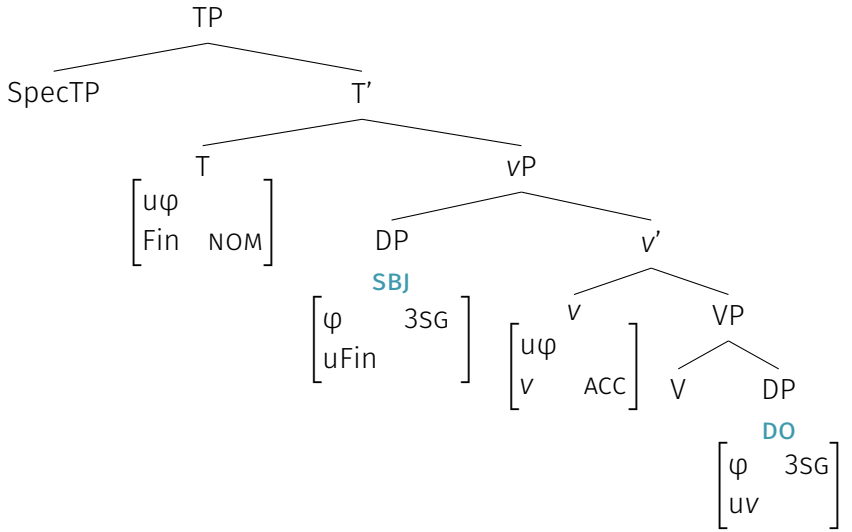
C-command and syntactic dependencies

Does c-command play a role for agreement and Case assignment, too?

- So far, the subject c-commands T, but V c-commands the object
- **?** Can we justify a different structure?
- There is debate about the direction of Agree, but it should be consistent
- There is evidence for a lower subject position
- ▸ I will leave you with the following structure...

The structure of the clause, agreement, and Case

(15)



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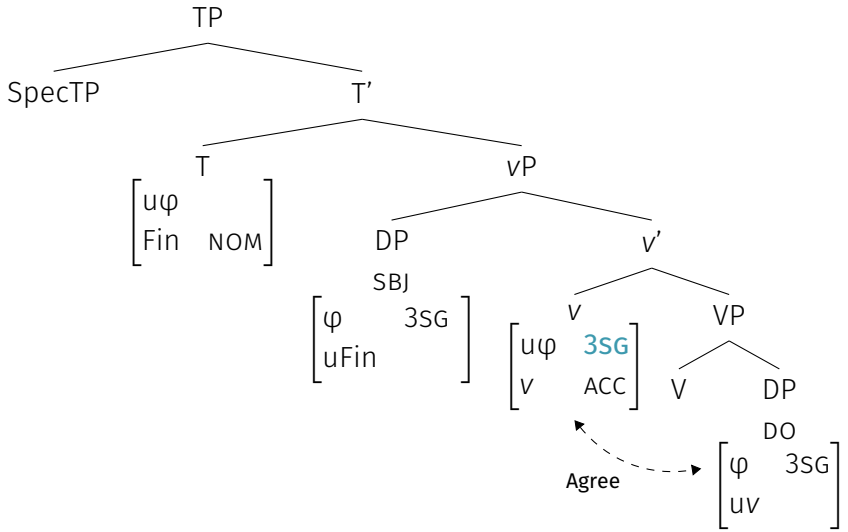

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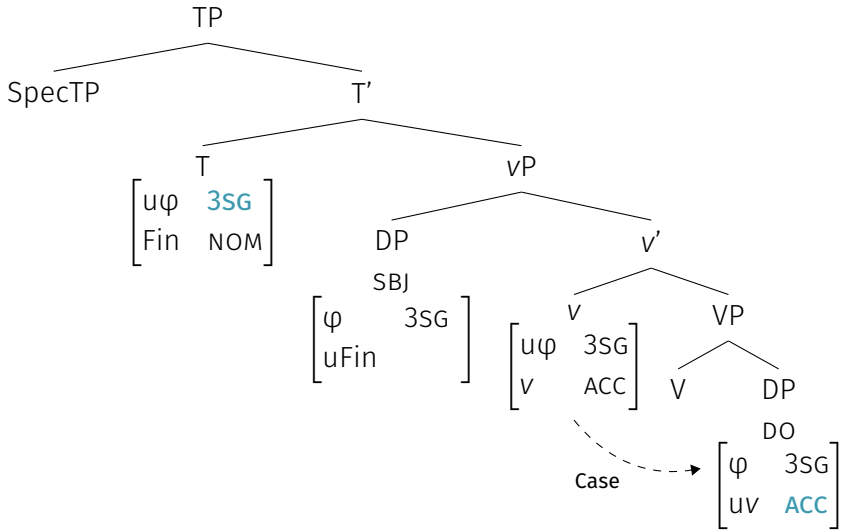

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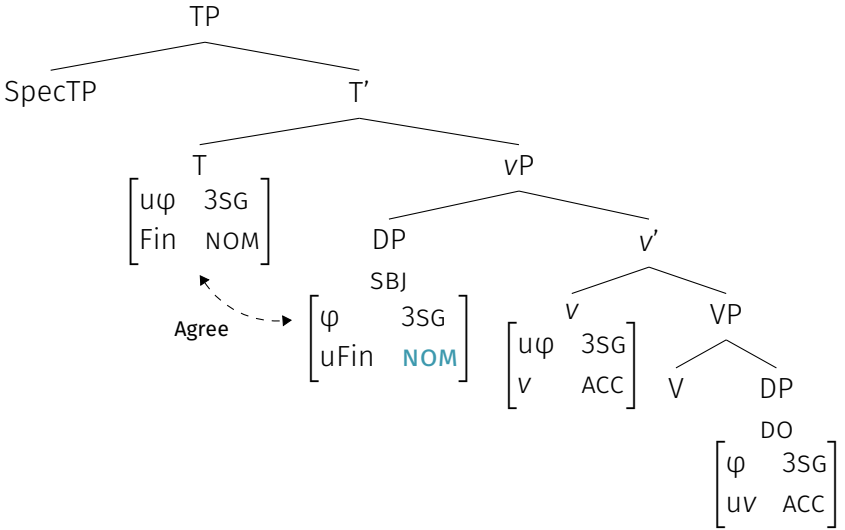

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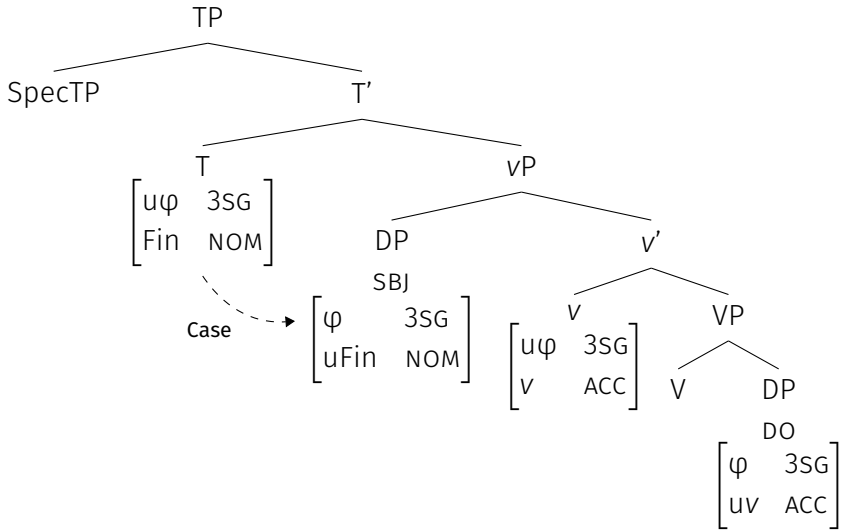

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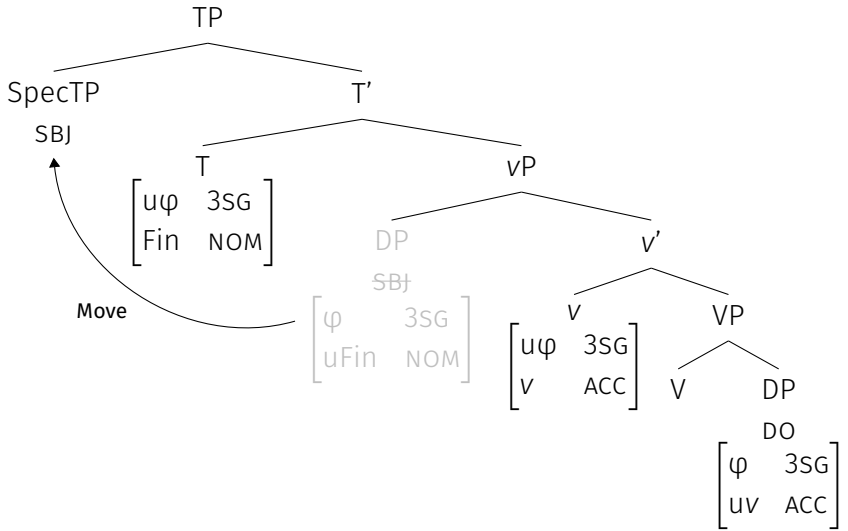

Conclusions

Conclusions

Agreement is a linguistic phenomenon we haven't accounted for before...

- Certain features can be represented on more than one element
- We described this as a syntactic dependency between a head and a DP
- A syntactic process, *Agree*, copies features from a DP onto a head
- Case seems to be a consequence of this operation, too
- Binding showed that locality and c-command can influence syntactic dependencies

Next week, it's Sandhya's turn!

Thanks a lot for coming and for your questions!

Abbreviations: 1 = first person, 3 = third person, NOM = nominative, PL = plural, SG = singular.

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