

**University of Leipzig, Department of Linguistics**  
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**Syntax of the noun phrase**

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## 1 Toosarvandani and van Urk (2014)

- why is agreement involving the *ezafe* interesting?
  - why is there such an element in the first place?
  - does it have any meaning?
  - which part of the structure does it occupy?
  - the Zazaki concord pattern is particularly relevant because it involves *split*-agreement when introducing a possessor
- major claim of the paper: concord functions like agreement at the clausal level
  - same restrictions: inherent case blocks  $\phi$ -agreement
  - extension of cyclic Agree by Béjar and Āezáč (2009) to the DP

- (1) a. ê kutik=ê gurs=ê rınd=i  
 that.M.S.OBL dog(M)=M.S.OBL big=M.S.OBL good=OBL.M.S  
 ‘that big good dog (obl)’  
 b. [Ga=yê çenek=a] vaş wen-o  
 ox(M)=EZ.M.S.OBL girl(F)=OBL.P grass(M) eat.PRS.3S.M  
 ‘the girl’s ox is eating grass’

- observations
  - (1-a) EZ agrees with head noun ins  $\phi$ -features and Case
  - (1-b)  $\phi$ -agr with the possessum, Case-agr with the possessor (obl)

### 1.1 Verbal agreement

#### 1.1.1 Case split based on tense

- past tense: Erg-Abs-pattern (oblique-direct):

- (2) a. Ez vazd-a b. Kutik=i ez guret-a  
 1S.DIR run.PST-1S dog(M)=OBL.M.S 1S.DIR bite.PST-1S  
 ‘I ran.’ ‘The dog bit me.’

- present tense: Nom-acc pattern (direct-oblique; acc only if specific/definite)

- (3) a. Ez vazden-a.  
 1S.DIR run.PRS-1S  
 ‘I run.’  
 b. ez layik=i vinen-a  
 1S.DIR boy(M)=OBL.M.S see.PRS-1S  
 ‘I see the boy.’

- direct Case only on nom/abs arguments

- oblique Case also on complements of P and possessors (in addition to erg/acc arguments):

- (4) a. Fatık=e Alık=i=rê şami pucen-a  
 Fatık(F)=F Alık(M)=OBL.M.S=for dinner(F)=F cook.PRS-3S.F  
 'Fatık makes dinner for Alık.'  
 b. Ga=yê Alık=i vaş wen-o  
 ox(M)=EZ.M.S.OBL Alık(M)=OBL.M.S grass(M) eat.PRS-3S.M  
 'Alık's ox is eating grass.'

### 1.1.2 Verbal agreement

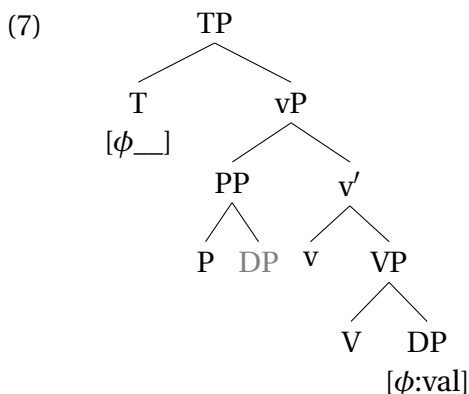
- Verb agrees in person, number and gender
- verb always agrees with the highest argument that bears direct Case:
  - present tense: SU
  - past: OBJ

- (5) Hesen=i Alık=i=rê mekdub=e nivısın-e  
 Hesen(M)=OBL.M.S Alık(M)=OBL.M.S=for letter(F)=F.S write.PST-3S.F  
 'Hesen wrote a letter for Alık.'

- (6) *Case opacity*

A DP with theta-related case may not agree in  $\phi$ -features (erg thus = inherent Case)

- ergative = assigned by P → if P = phase head, DP will be inaccessible for agreement outside the PP (but: by the same logic, the NP-complement of D should be inaccessible to v/T as well ... or conversely: suppose that P agrees with D [it assigns Case to it], one might expect it to get phi-features from D, which should then be accessible to v/T)



- accusative case: unclear if structural or inherent (PP)

## 1.2 Agreement in the nominal domain

- nominal concord appears on the ezafe-morpheme:
  - introduces dependents of the noun like adjectives and possessors (what about relative clauses?)
  - introduces dependents to its right, but cliticizes onto whatever precedes it to the left

- (8) [O ga=wo sur=o gırs] m1 vinen-o.  
 that.M.S.DIR ox(M)=EZ.M.S.DIR red=EZ.M.S.DIR big 1S.OBL see.PRS-3S.M  
 'That big red ox sees me.'

### 1.2.1 Concord in $\phi$ -features

- ezafe co-varies in  $\phi$ -features with head noun (where does pl on the ezafe in (9-c) come from?):

- (9) a. [Kutık=o                    gırs] mı        vinen-o.  
           dog(M)=EZ.M.S.DIR big 1S.OBL see.PRS-3S.M  
           ‘The big dog sees me.’
- b. [Ju bız=a                    gırs]=e vaş    wen-a.  
           one goat(F)=EZ.F.S big=F.S grass eat.PRS-3S.F  
           ‘A big goat is eating grass.’
- c. [Ê        bız=ê                    gırs]=i    vaş    wen-i.  
           those.P goat(F)=EZ.P big=P.DIR grass eat.PRS-3P  
           ‘Those big goats eat grass.’

- agreement is strictly local: if adj modifies possessor, ez agrees with possessor, not possessum (recall that fem nouns/DPs take an invariant Case marker):

- (10) [O                    goşt=ê    [bız=a                    gırs]=e] ben-o                    xrab.  
           that.M.S.DIR meat(M)=EZ.M.S.OBL goat(F)=EZ.F.SG big=F.S become.PRS-3S.M rotten  
           ‘That meat of a big goat is rotting.’

- even if the ezafe introduces a possessor, it does not agree with it in phi-features but with the head noun:

- (11) [Bız=a                    Alik=i]                    vaş    wen-a.  
           goat(F)=EZ.F.S Alik(M)=OBL.M.S grass eat.PRS-3S.F  
           ‘Alik’s goat is eating grass.’

- if the adj modifies the possessum rather than the adjacent possessor, the ezafe introducing the adj agrees with the possessum:

- (12) [Kutık=ê                    Fatık=o    gırs] goşt    wen-o.  
           dog(M)=EZ.M.S.OBL Fatık(F)=EZ.M.S.DIR big meat eat.PRS-3S.M  
           ‘Fatık’s big dog is eating meat.’

### 1.2.2 Case agreement in the DP

- adj: ez always agrees in Case and  $\phi$ -features with the head noun, unsurprising given that the adj does not have any inherent features:

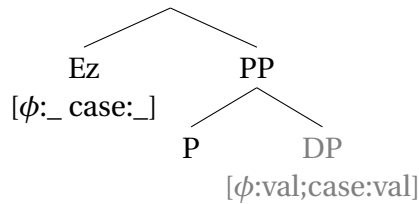
- (13)
- 
- ```

      / \
     Ez  AP
    [phi: _ case: _] |
                   A
  
```

- possessors: do have inherent  $\phi$ -features, yet ezafe does not agree with them: oblique case  $\rightarrow$  Case-opacity; possessor = PP; this holds even if ‘possessor’ is an argument of the noun (note that the fem nouns do not have an oblique Case form, yet the ez takes obl agreement):

- (14) [Werdiş=ê                    [vaş]=ê                                            [bız]=e]    ginen-o                    mı-ra.  
           eating(M)=EZ.M.S.OBL grass(F)=EZ.M.S.OBL goat(F)=F.S bother.PRS-3S.M 1S.OBL-LOC  
           ‘The goat’s eating grass bothers me.’

(15)



→ ezafe must look for a different goal for  $\phi$ -agreement

- opacity only constraints agreement for an ezafe that introduces a possessor; an adjective that modifies a possessor (bearing oblique case) can agree with it (the ezafe is within the oblique phrase):

(16) Ez [zeri-=ya [beran=ê gırs]=i] wena.  
 1S.DIR liver(F)=EZ.F.S sheep(M)=EZ.OBL.M.S big=OBL.M.S eat.PRS.1S  
 'I eat liver of a big sheep.'

### 1.2.3 Case concord

- if the ezafe introduces an adj: agr with Case of DP, direct or oblique:

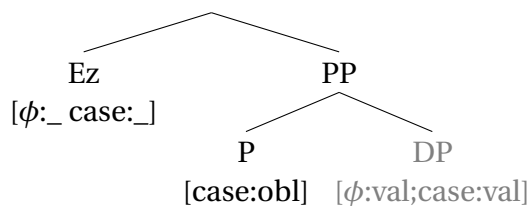
(17) a. [Kutık=o gırs] mı vinen-o.  
 dog(M)=EZ.M.S.DIR big 1S.OBL see.PRS-3S.M  
 'The big dog sees me.'  
 b. Ez [kutık=ê gırs]=i vinen-a.  
 1S.DIR dog(M)=EZ.M.S.OBL big=OBL.M.S see.PRS-1S  
 'I see the big dog.'

- if ezafe introduces a possessor, it agrees with the oblique form, irrespective of the function of the entire DP, viz. direct or oblique:

(18) a. [Ga=yê Alık=i] vaş wen-o.  
 ox(M)=EZ.M.S.OBL Alık(M)=OBL.M.S grass eat.PRS-3S.M  
 'Alik's ox is eating grass.'  
 b. Ez [ga=yê Alık=i] vinen-a.  
 1S.DIR ox(M)=EZ.M.S.OBL Alık(M)=OBL.M.S see.PRS-1S  
 'I see Alik's ox.'

- ezafe agrees with the P-head (which bears a valued Case-feature):

(19)



### 1.3 Cyclic Agree in the nominal domain

- Why does the EZ prefer to agree with the possessor in Case rather than the entire DP?

#### 1.3.1 Cyclic Agree in Béjar and Řezáč (2009)

- observation: hierarchical agreement and preference for agr with IA
  - verb agrees with highest argument, irrespective of GF → structured probes
  - preference for Agree with internal argument visible when hierarchy is not fixed (e.g. Basque: 2>1 and 1>2) → follows from cyclicity: v first probes its complement before targeting its specifier

|      |    |                                                               |           |
|------|----|---------------------------------------------------------------|-----------|
| (20) | a. | ikusi z-in-t-u-da-n<br>seen 2-x-PL-have-1-PST<br>'I saw you.' | 1 > 2 → 2 |
|      | b. | ikusi n-ind-u-en<br>seen 1-x-have-PST<br>'He saw me.'         | 3 > 1 → 1 |
|      | c. | ikusi n-ind-u-zu-n<br>seen 1-x-have-2-PST<br>'You saw me.'    | 2 > 1 → 1 |
|      | d. | ikusi n-u-en<br>seen 1-have-PST<br>'I saw him.'               | 1 > 3 → 1 |

- first slot does not encode a particular GF
- agreement with EA only if IA 3rd person, cf. (20-d)

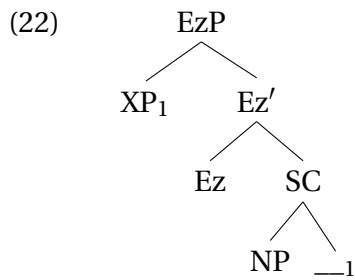
- assumptions:
  - decomposition of person: 1st: [1,2,3]; 2nd: [2,3]; 3rd: [3]
  - probe is structured: [2, 3] → derives hierarchy 1,2 > 3
  - probe can potentially agree with 2 arguments
  - probe first probes its c-command domain. if it finds a matching goal, it copies all features of G onto P (thus potentially more features than the probe contains, e.g. if IA = 1st)
  - if IA is 3rd person, not all features of the probe are checked → 2nd cycle: probe probes into its specifier and agrees with the EA
  - at least one of the segments of the probe have to enter Agree; if a segment is not involved in Agree, it undergoes default deletion
  - in local scenarios (1>2, 2>1): an additional probe is merged

#### 1.3.2 DP-Syntax in Zazaki

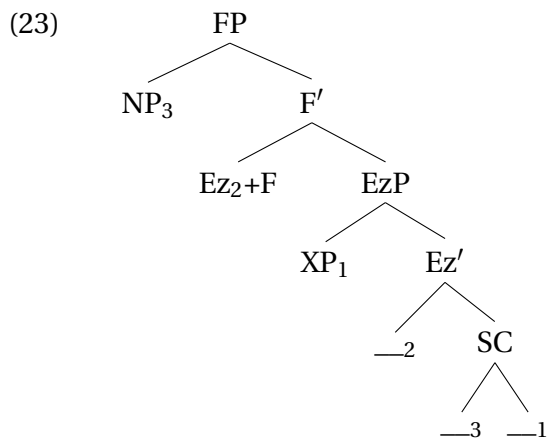
- order: Dem > N > possessor > Adj
- Case: on D (if present) and on the Case particle:

|      |    |    |         |          |                                                                              |
|------|----|----|---------|----------|------------------------------------------------------------------------------|
| (21) | Ez | [ê | kutik=ê | Alik=i=ê | girs=i]                                                                      |
|      |    |    |         |          | 1S.DIR that.OBL.M.S dog(M)=EZ.M.S.OBL Alik(M)=OBL.M.S=EZ.M.S.OBL big=OBL.M.S |
|      |    |    |         |          | vinen-a.                                                                     |
|      |    |    |         |          | see.PRS-1S                                                                   |
|      |    |    |         |          | 'I see that big dog of Alik's.'                                              |

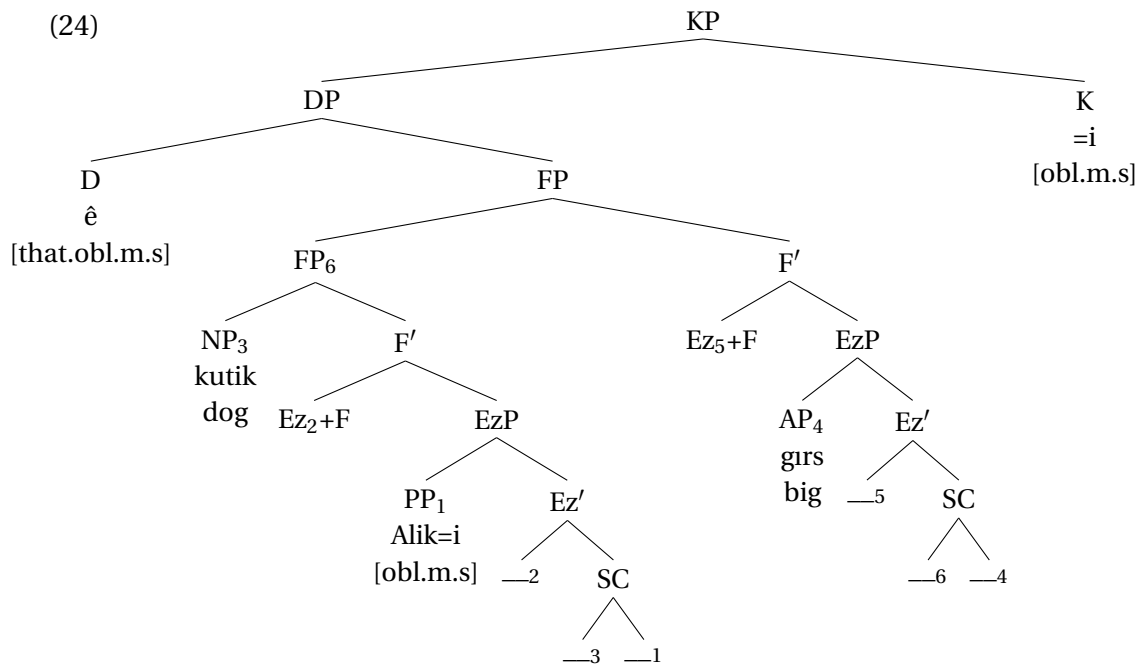
- ezafe analyzed as a linker that takes an SC-complement consisting of the head noun and its dependent
- ez triggers predicate inversion (cf. Dikken and Singhapreecha 2004):



- to derive the surface word order, the head noun must raise to be DP-initial and the ez has to move past the predicate:



- with more than one dependent, the process iterates:



- evidence for this constituency

– coordinated Ns cannot each take an ezafe → coordinated NP is SpecEzP/SpecFP:

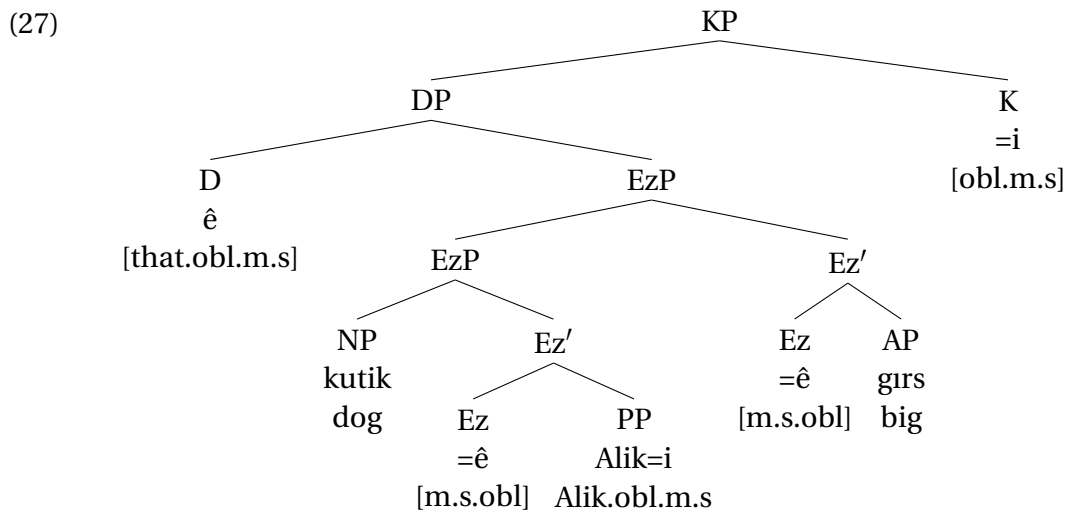
(25) Ez [kɪla(\*=yê) o palto=yê Alik=i] vinen-a.  
 1S.DIR hat=EZ and coat=EZ Alik(M)=OBL.S.M see.PRS-1S  
 'I see Alik's hat and coat.'

– NP-ellipsis targets only the noun, the ezafe does not go missing:

(26) a. Q: T1 kutik vinen-a?  
 2S.DIR dog(M) see.PRS-2S  
 'Do you see any dogs?'  
 b. A: Ez ponj=yê girs=a vinen-a.  
 1S.DIR five=EZ.P big=OBL.P see.PRS-1S  
 'I see five big ones.'

→ so NP in SpecEzP/SpecFP is deleted, but unclear why this should be different if the Ez took the NP as its complement

– simplified structure henceforth:

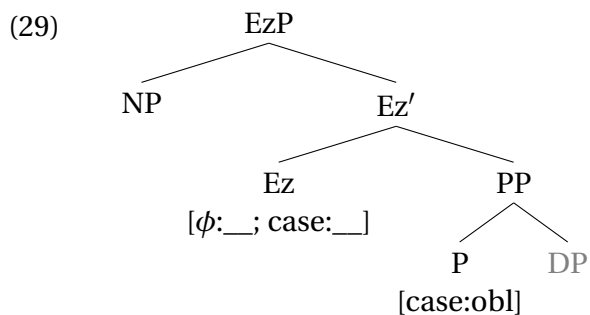


### 1.3.3 Deriving nominal concord in Zazaki

(28) Bidirectional Agree

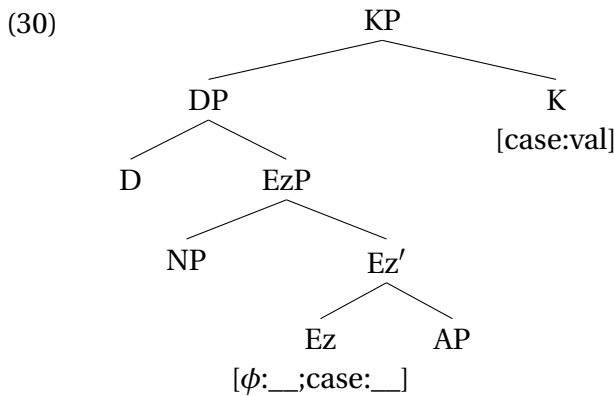
A head H with an unvalued feature F agrees with a goal G with a valued feature F only if H c-commands G or G c-commands H

- cyclicity implies that the probe will first look downward
- case agreement 1: possessor:



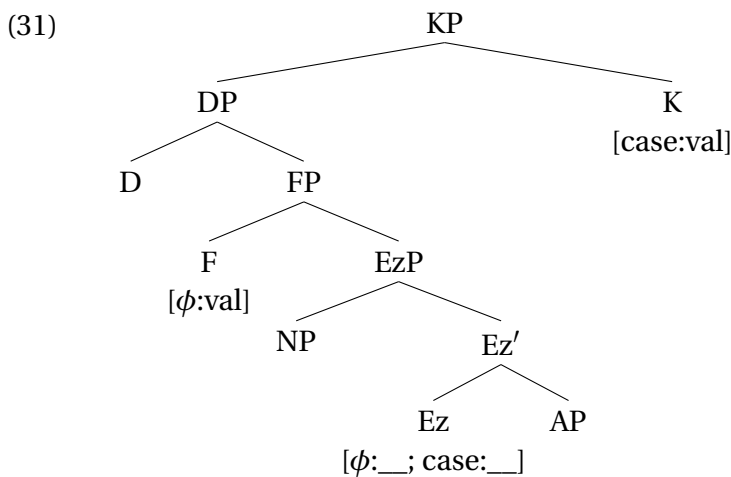


- case assignment 2: adj: no goal in the c-command domain → upward probing, Agr with K:



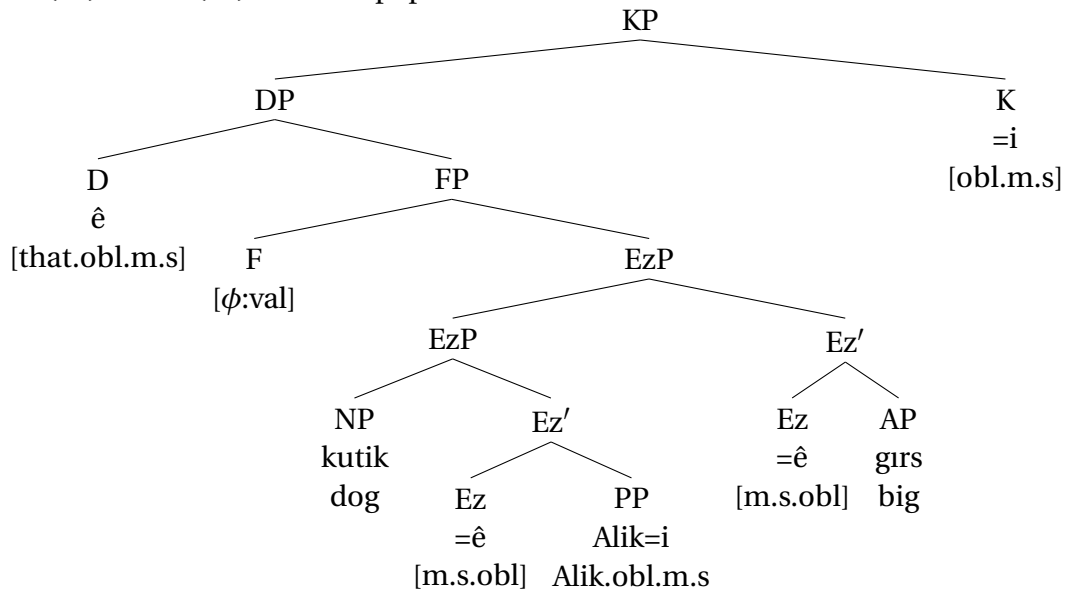
- problem 1: Does K already have Case at this point – or only feature-sharing? (is K a goal that comes with a valued feature that is checked against a matrix Case-assigner?)
- problem 2: what about D, which bears the same Case as K?
  - § D cannot probe downward as it would wrongly get the possessor Case
  - § upward Agree (because Ez = phase head), → Agree D–K? But does K already have a valued Case-feature at this point?

- concord in  $\phi$ -features:



- $\phi$ -features on F; possible argument: plural is only marked on D and Ez but never on N
- ezafe probes upward (also with possessors, as there are no accessible  $\phi$ -features)
- why no  $\phi$ -features on N? (perhaps: because NP is not a head? but how can you tell?)
- what if there are several adjectives? cf. ex. 12 2x ezafet (or ex. 29 with 1x possessor + 1x adj): both Ez probe upwards → crucially, this only works if the  $\phi$ -features are above EzP as NP does not c-command the second Ez (for two adj, replace PP with Adj):

(32) ex. (29) from the paper



- What about the  $\phi$ -features of D? – features cannot be inherent – downward probing?
- K also expresses  $\phi$ -features: also a phi-probe on K?

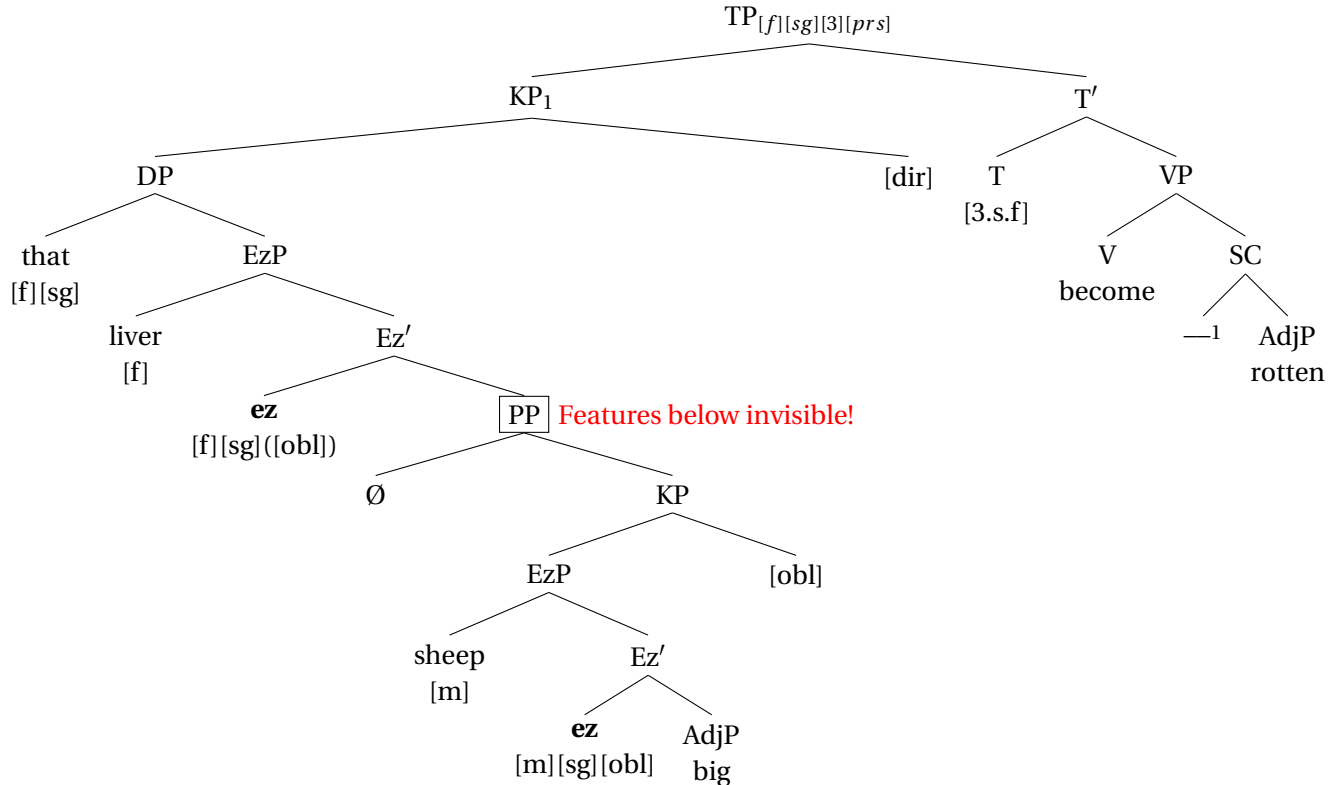
## 1.4 Discussion

- issues
  - agreement can target probe features, e.g. the Case-feature of P
  - a mixture of valuation and checking it seems w.r.t. Case: probes start out unvalued, goals are already valued
  - What is the goal of v/T-Agree? arguably KP, as K also expresses phi-features
- possible questions
  - are the facts also compatible with the NP-hypothesis?
  - what if an adj/P takes a modifier/complement?
  - what about analyzing the Ez as a functional head that introduces the adj (so finally evidence for the many heads postulated in cartographic approaches?) – adj is on the wrong side of the ezafe ...
  - what about relative clauses?
  - what about linkers in other languages: cf. associative marker in Bantu (agr only with possessum)
  - is there a comparable phenomenon in the verbal domain?

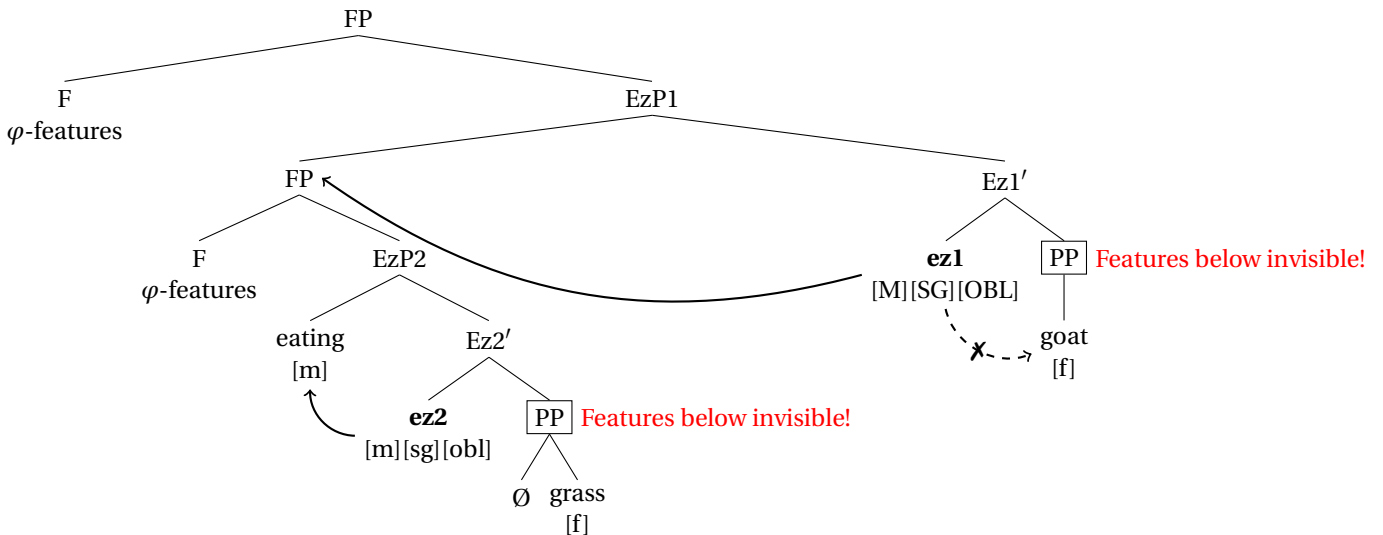
• exercises

1. Draw a tree structure for 14
2. Draw a tree structure for 19 (pay attention to the gender agr on T)
  - solutions by courtesy of Jelena Stojkovic:

(33) Example (14a) from Toosarvandani & van Urk (2014)



(34) Example (19) from Toosarvandani & van Urk (2014)



- it is arguably sufficient to have just one FP, viz., one above the higher EzP and both Ez would get their  $\phi$ -features from it, basically as in the tree for ex. 29 (in the text) above. However, what remains strange is the non-local and very indirect relationship between the head hosting the phi-features and the head noun - after all, the FP is arguably part of the extended projection of the noun – and the gender feature arguably comes from N
- if [gender] first has to be copied/shared from N onto F (as in the concord approach by Danon 2011 between N and D), feature sharing between F, N, ez1 and ez2 seems required

## 2 Notes on concord

- possessor agr in Turkish/Hungarian: inherent vs. probe/contextual features
  - the feature-sharing approach blurs the distinction between inherent features (that normally participate in Agree) and probe-features (that are invisible once they have participated in Agree)
  - while this is welcome for DP-internal concord, it becomes problematic once N (or some agreement head/D) bears agreement features that result from Agree with a possessor dependent on N: we have to make sure that only the inherent features of N are visible to an outside probe (the agreeing verb takes 3sg, not 1pl):

(35) (biz-im) kitab-ımız  
 we-GEN book-1PL.POSS  
 'our book'

- Tundra Nenets (Uralic): observation 1: possessum agrees with possessor, agreement suffix expresses inherent as well as probe/contextual features (Nikolaeva 2005: 225):

(36) (pidør°) serako-q tí-d°  
 you.S white.P reindeer-P.2S  
 'your (sg) white reindeer (pl)'

- observation 2: attributive adj agrees with the possessor in person (Nikolaeva 2005: 226):

(37) (pidør°) serako-d° tí-d°  
 you.S white-P.2S reindeer-P.2S  
 'your (sg) white reindeer (pl)'

- blurring of inherent vs. contextual features both w.r.t. agreement as such and morphology
  - does the A agree directly with the possessor or via the possessum? With the possessum as agr on A depends on agr on N (which seems generally optional), cf. Nikolaeva (2005: 227):
- (38) a. Wata-h serako ti/te-da  
 Wate-GEN white reindeer/reindeer-3S  
 'Wata's white reindeer'
- b. Wata-h serako-da te-da/\*ti  
 Wate-GEN white-3S reindeer-3S/reindeer  
 'Wata's white reindeer'
- via doesn't the possessor trigger agreement on T?
- agreement hierarchy and adjectives that agree with N in different ways (e.g. lower one: grammatical gender; higher one: biological gender) → argument against feature sharing

## References

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