CASE AND AGREEMENT

Selected Topics in Syntax Instructor: Suzana Fong ☑

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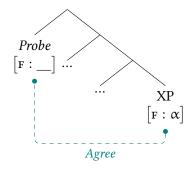
Baker, Mark C. 2013. "Agreement and Case" [§17.3]. In: Den Dikken, Marcel (ed), *The Cambridge handbook of generative syntax*. Cambridge University Press.

Bobaljik, Jonathan David. 2008. "Where's Φ? Agreement as a post-syntactic operation." Pages 295–328 of: Harbour, Daniel, Adger, David, & Béjar, Susana (eds), *Phi Theory: Phi-features across interfaces and modules*. Oxford University Press.

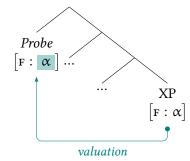
1 Overview

- We have been looking into the operation Agree, in which a probe (= an element that has an unvalued feature) enters a relationship with a goal (= an element that has a matching, but valued feature).
- The result is the valuation of the probe.

(1) a. *Step 1: Agree*



b. Step 2: valuation



• We skipped over a condition (2d) imposed on Agree and one of its outcomes (3b).

DEFINITION 1

(2) Conditions for Agree to apply

Agree holds between a probe and a goal *iff* all of the following conditions hold:

a. Probe specification

The probe bears [F: __], features that are unvalued.

b. Structural condition

The probe c-commands the goal.

c. Match condition

The $[F : \underline{\hspace{1cm}}]$ of the probe matches with valued matching [F : VAL] of the goal.

d. Activity Condition

The goal is active: it also has an unvalued feature [G: __].

e. Minimality condition

The goal is the closest element to the probe meeting the conditions above.

(Deal, To Appear: (1), adapted)

DEFINITION 2

- (3) The outcome of Agree
 - a. Valuation

[F: __]'s value is copied to the probe from the goal.

b. Goal flagging

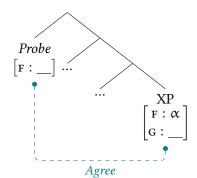
The unvalued features of the goal are given values according to the nature of the probe.

c. Halting

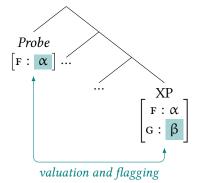
The probe stops probing once it is valued.

(Deal, To Appear: (2), adapted)

- (1) can, then, be revised as follows:
 - (4) a. Step 1: Agree



b. Step 2: valuation and flagging



• This "double outcome" of Agree has been used to model case assignment.

1.1 Today's goals

- ☑ Examine case across languages
 - ▶ Accusative alignment
 - ▶ Ergative alignment
- ☑ Investigate two different theories of how case is assigned
 - Case assigned as a reflex of the operation Agree (as in (4))
 - ▶ Dependent Case (no Agree involved)
- ✓ Compare these theories
- ☑ Examine the relationship between agreement phenomena and case phenomena

2 Case Morphology and Case alignment



- (5) Argument structure
 - a. Transitive predicate: two arguments, one internal (\approx object) and one external (\approx subject).
 - b. Intransitive predicate: one argument
 - Unergatives: external argument (\approx subject).
 - Unaccusatives: internal argument (\approx object).
- Languages like English and a few Romance languages (e.g. Brazilian Portuguese) do not have a lot of nominal morphology.
- Other languages, however, do.
- Going back to case, in Mongolian, subjects usually appear with nominative case, while objects, with accusative case.
 - (6) a. Tujaa jav-san. Tujaa.NOM go-PST

(Mongolian, Mongolic)

- Tuiss ment
 - 'Tujaa went.'
- b. Bi Bold-ig khar-san.

I.NOM Bold-ACC see-PST

'I saw Bold.'

- Yet other languages have ergative case for transitive subjects and absolutive case for objects and intransitive subjects. One such language is Koryak:
 - (7) a. ?ət?-ə-n Ø-vi?-i. dog-ep-abs 2/3.s/a.ind-die-aor

(Koryak, Chukotko-Kamchatkan)

'The dog died.'

b. yəm-nan t-ə-nu-ne-w ?əvən?-u.
1sG-ERG 1sG.S/A-EP-eat-3.O-3PL berry-ABS.PL
'I ate berries.'

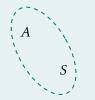
• The difference between e.g. Mongolian and Koryak can be stated in terms of alignment.



Definition 3

- ▶ Alignment is how arguments can be grouped together with respect to case and/or agreement.
- ▶ Languages can have *accusative* or *ergative* alignment.

(8) Accusative case system



Ergative case system



A = subject of transitive verb, O = object of transitive verb, S = subject of intransitive verb

- Languages with NOM/ACC alignment: subject of intransitive and subject of transitive verbs are marked with the same case (NOM), to the exclusion of object of a transitive verb (ACC).
- · Languages with ERG/ABS alignment: subject of intransitive verbs and object of transitive verbs are marked with the same case (ABS), to the exclusion of subject of transitive verbs (ERG).



EXERCISE 1

The case morphology of the DPs in the sentences (10-11) was deliberately left unglossed—the gloss was replaced with '△.' Determine what type of alignment (viz. ergative or accusative) each language has and provide a gloss for the cases.

In (10–11), '-Ø' denotes a a morphologically null case suffix.

a. Elena-Ø mitantasïti omutakua-ni. (10)door- \triangle

(P'urhepecha, isolate)

Elena-△ opened

'Elena opened the door.'

b. Iamindu-eecha uatsapi-cha-Ø ch'anaxatisï.

child-PL-△ are.playing

'All the kids re playing.'

a. rus:i-le qar-Ø b-erk-un (11)

(Chirag, Northeast Caucasian)

girl- \triangle apple- \triangle ate

'The girl ate an apple.'

b. rus:e-Ø r-is:-ib

girl-△ started.crying

'The girl started crying.'

• How to model these alignment differences?

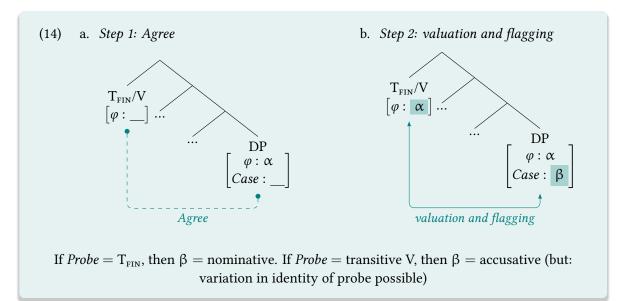
- ▶ Case assignment as a reflex of Agree
- ▶ Dependent Case (no Agree involved)

3 Case assignment via Agree

- Empirical observation: there is often (though not universally) a correlation between case assignment and Agree.
 - Subjects are assigned nominative case and they trigger subject agreement with the verb (e.g. English (7) and Brazilian Portuguese).
 - (12) a. $I_{NOM}/{}^*Me_{ACC}$ am_[1sg] writing a book.
 - b. $She_{NOM}/*Her_{ACC}$ is_[3SG] writing a book.
 - Dijects are assigned accusative case and they may also trigger object agreement with the verb.
 - (13) ma tam kalaN-at we:l-sa-l-am.

(Khanty, Uralic)

- I this reindeer-pl kill-pst-plO-1sGS
- 'I killed these reindeer.'
- Basic ingredients of a case theory:
 - ▶ Which elements must be assigned case?
 - → DPs with an unvalued case feature, [*Case*:].
 - ▶ Which elements are able to assign case?
 - Finite T and transitive V, which are able to assign NOM and ACC, respectively, though this is subject to variation—see (18) below.
- Chomsky (2000, 2001): the element that is able to assign case is a Probe, i.e. case is assigned as a reflex of φ -feature valuation. The identity of the case feature is a function of the nature of the Probe (= Goal flagging in (3b)).



- So-called subject-verb agreement in English:
 - (15) Faatu/She own-s own an apartment in St. John's.
 - ▶ The same DP that is a goal for the probe T is assigned NOM.
 - ▶ This is clear from the form of the pronoun that would be used in the same position (she_{NOM} vs. her_{ACC}).
- Explanation of empirical observation under a theory where case assignment is modeled in terms of Agree:
 - ▶ Observation: there is a correlation between agreement and case assignment.
 - DP that is a goal for subject-verb agreement is assigned NOM.
 - DP that is a goal for object-verb agreement is assigned ACC.
 - ▶ Analysis: this is not just correlation, but causation.

According to a theory such as that proposed by Chomsky (2000, 2001), agreement and case as reflexes of the same operation, Agree

- Accusative case in English: pronouns
 - (16) Tasneem saw her_{ACC}.
 - ▶ This is an instance of syntax–morphology mismatch.
 - All Agree(V, OBJ) takes place at the Syntactic component, but there is no morphological correlate in the probe—there is no object agreement in English.
- Accusative case in English: other DPs
 - (17) Tasneem saw Faatu_{ACC}.
 - ▶ This is another example of syntax–morphology mismatch: while pronouns in English have a case distinction, this is not true of other DPs.
 - *▶ Faatu*, for instance, has the same morpheme, irrespective of the case it is assigned.



EXERCISE 2

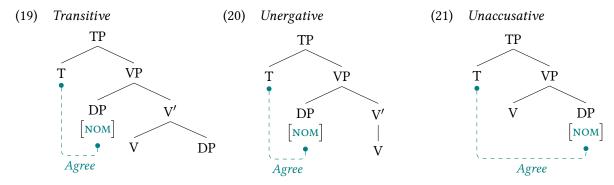
Propose a derivation for the Khanty sentence below. Assume AgrOP and AgrSP projections for object and subject agreement, respectively.

(18) ma tam kalaŋ-ət we:l-sə-l-am. (Khanty)
1SG.NOM this reindeer-PL kill-PST-3PL.O-1SG.S
'I killed these reindeer.'

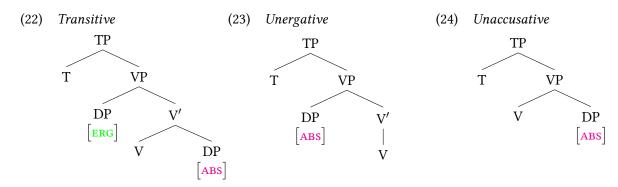
3.1 Ergative alignment under an Agree theory

- Discussion so far: case assignment as a byproduct of Agree illustrated with languages with accusative alignment.
- · How does a theory of case assignment based on Agree account for ergative alignment?

• Focusing on NOM, T Agrees with DPs that occupy different argument positions:



- This is possible because the finite T targets the highest DP in all types of predicates—in intransitive predicates, there is just one DP.
- However, this is not true of absolutive case in ergative languages.



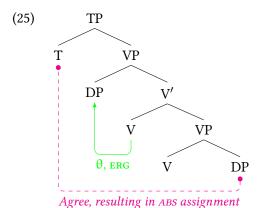
• In these languages, there would have to be a head that singles out the lower DP in transitives (across the subject) and the sole argument in intransitives.



EXERCISE 3

Hypothetically, if T were the probe that assigned ABS, which condition imposed on Agree would be violated in the transitive structure?

- Legate's (2008) solution: ergative is a type of lexical case assigned to the subject by the transitive verb along with a θ -role.
- T then assigns absolutive case to the remainder DP. It can skip over the DP that has been assigned inherent case.



Exercise 4

Assuming that T, under this analysis, is specifically looking for an ABS goal, would Minimality be an issue in (25)? Recall that Minimality is only relevant when there is competition.

Analogize Agree with what happens in multiple *Wh*-questions:

(26) a. *What did who bring __?

Wh-object cannot cross Wh-subject

b. What did Tasneem bring __?

Wh-object can cross non-Wh subject

- In intransitives, there is just one DP, so T can assign ABS to it without any problems.
- Coming up: discussion of the merits of proposing that ERG is a type of inherent or lexical case.

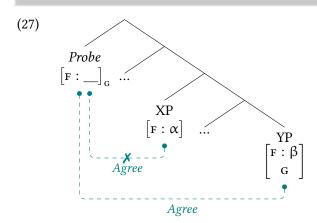
3.2 Omnivorous agreement



DEFINITION 4

Omnivorous agreement: when the probe is "hyperspecific," so that it searches for a goal that has a very specific combination of features $[F]_G$. It bypasses or skips over any node that bears [F], but which lacks [G] or is not of the G type.

(based on Nevins 2011)



4 A CONFIGURATIONAL VIEW OF CASE ASSIGNMENT

- Dependent case theory: case is not assigned as a consequence of Agree. Rather, it is a function of the relationship between DPs within a given syntactic domain.
- Proposed by Marantz (1991), though there are ealier precedents.
- The assignment of case follows this algorithm:

DEFINITION 5

- (28) Disjunctive Case Hierarchy
 - 1. Assign idiosyncratic lexical cases.
 - 2. Take the remaining DPs in the smallest finite TP that have not been assigned case yet. If DP α c-commands DP β , assign dependent case:
 - \triangleright ERG to DP α ("upwards dependent case") or
 - \triangleright Accto DP β ("downwards dependent case").
 - 3. If a DP was not assigned case in the previous two steps, then assign it unmarked case (ABS or NOM).
- Terminology: the DPs in the smallest finite TP that have not been assigned any case are said to be case competitors.
 - ▶ If the conditions imposed by the Disjunctive Case Hierarchy in Definition 5 are met, one of the case competitors is assigned a dependent case, viz. ERG or ACC.
- The algorithm in Definition 5 is disjunctive because, as soon as a DP is assigned any case (viz. lexical, dependent, or unmarked), it is no longer considered by the algorithm.
 - → A DP that has been assigned any case is no longer a viable case competitor for another DP.
- One of the main empirical motivations behind dependent case is the fact that, given the right level of abstractness, the same generalization holds of both ACC and ERG cases:

DEFINITION 6

(29) Burzio's generalization

ACC is only available when there is a subject.

DEFINITION 7

- (30) Ergative generalization

 ERG is only available when there is an object.
- ▶ What there is in common between these generalizations is that there is some case that is only assigned to some DP (viz. ACC or ERG) in the presence of another DP (viz. a subject or object, respectively).
 - See (6b) and (7b) again.

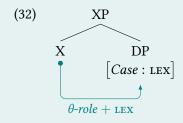
▶ These generalizations are built into the definition of dependent case, which the whole theory is named after.

4.1 ACCUSATIVE ALIGNMENT

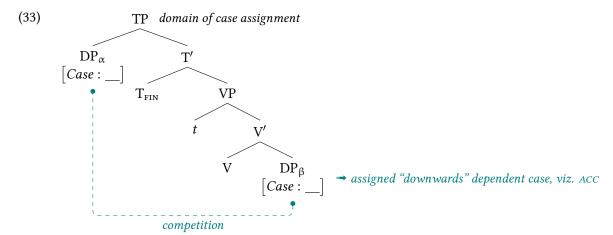
- Case assignment in a language with accusative alignment:
 - 1. Assign lexical and inherent cases.
 - (31) $\left[PP/VP/XP \ P/V/X \ DP_{\left[Case: Lex \right]} \right]$

DEFINITION 8

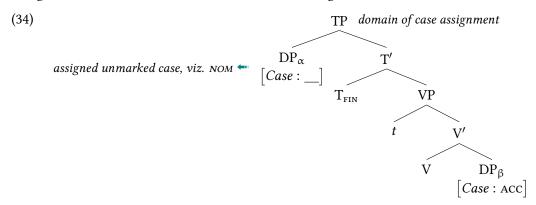
Lexical case is a case assigned by some lexical head X along with a θ -role as an idiosyncratic specification of X. Usually, lexical case is some type of oblique case, e.g. dative, instrumental, or genitive case.



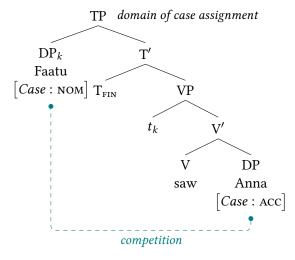
2. Assign dependent case.



3. Assign unmarked case to DPs that have not been assigned case so far.



- A concrete example:
 - (35) Faatu/She saw Anna/her.



EXERCISE 5

Explain how a Dependent Case theory of case assignment explains the alignment that we see in languages with accusative alignment, e.g. Mongolian.

(36) a. Tujaa jav-san. (Mongolian) Tujaa.NOM go-PST

'Tujaa went.'

b. Bi Bold-ig khar-san.
I.NOM Bold-ACC see-PST
'I saw Bold.'

Your analysis must account for how the transitive and intransitive subjects are aligned together, both being assigned unmarked NOM.

4.1.1 What if there is lexical case?

• So far, the discussion included dependent and unmarked case, but not lexical case.

- Background: Condition C and c-command
 - (37) a. ... He_k criticized $Farhat_k$.
 - b. ... This tell-all book about him_k claims that $Farhat_k$ was not a good boss.
 - c. ... His_k former employees claim that $Farhat_k$ was not a good boss.
 - ▶ What is the difference between (37a) and {(37b), (37c)} that is rendering (37a) ungrammatical?
 - The pronoun he c-commands Farhat in (37a)).
 - ▷ Generalization: a pronoun cannot c-command a proper name it is coindexed with.
 - (38) Condition C of Binding Theory

An R-expression (e.g. a proper name like *Farhat* or a definite description like *the student with turquoise hair*) cannot be bound.

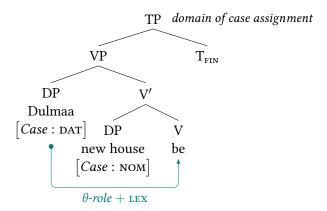
- $\mathbf{\xi}$ (39) α binds β *iff* α and β are coindexed and α c-commands β.
- Against this background, consider Mongolian:
 - (40) Possessive constructions in Mongolian
 - a. Dulmaa-d shine baishin baigaa.

 Dulmaa-dat new house.Nom cop.pres

 'Dulmaa has a new house.'
 - b. Tüün-d*_{i/j} Dorj-iin_i nom baigaa.
 3sg-dat Dorj-gen book.nom cop.pres
 'He/She has Dorj's book.'
 - c. Sharlovan / *Sharlovan-g Bat-id baigaa. carrot.NOM / *carrot-ACC Bat-DAT COP.PRES 'Bat has a carrot.'
 - ▷ Given the generalization from the previous slide, the dative pronoun *tüün-d* must c-command *Dorj*, which is contained in the nominative possessum *Dorj-iin nom*.
 - ▶ Properties of possessive constructions in Mongolian:
 - Possessor: marked with DAT.
 - o Possessum: morphologically unmarked, necessarily (*ACC).
 - Possessor c-commands possessum.
- Derivation:
 - (41) Dulmaa-d shine baishin baigaa.

 Dulmaa-dat new house.Nom cop.pres

 'Dulmaa has a new house.'



- ▶ First, lexical case (viz. DAT) is assigned. After that, there is no context for dependent case because one of the DPs has already been assigned case. It is thus "kicked out" of the Disjunctive Case Hierarchy.
- ▶ This leaves *new house* with the third option, unmarked case (viz. NOM).
- Dependent case actually provides a neat solution as to why objects are usually accusative in Mongolian,¹ but the possessum is unmarked/nominative.



EXERCISE 6

Explain why this is the case, based on the following data:

(42) a. Bi Bold-ig khar-san. (Mongolian)
I.NOM Bold-ACC see-PST

'I saw Bold.'

b. Sharlovan / *Sharlovan-g Bat-id baigaa. carrot.Nom / *carrot-ACC Bat-DAT COP.PRES 'Bat has a carrot.'

4.2 Ergative alignment

- One advantage of Dependent Case is that it provides a straightforward way to account for linguistic variation regarding alignment.
- The case assignment rules is the same in both languages. They only differ in the "directionality" of dependent case assignment.
- We now turn to how the Disjunctive Case Hierarchy (Definition 5) works in language with ergative alignment.

¹The facts are a bit more complex than that because Mongolian has Differential Object Marking, which we will leave aside in this seminar.

(43) γəm-nan t-ə-nu-ne-w ?əvən?-u. (Koryak) 1sG-ERG 1sG.s/A-EP-eat-3.0-3PL berry-ABs.PL

 $\begin{array}{c|c} & TP & \textit{domain of case assignment} \\ \hline DP_k & T' \\ I \\ \hline [\textit{Case}: ERG] & T_{FIN} & VP \\ \hline & V & DP \\ & ate & berries \\ \hline & [\textit{Case}: ABS] \\ \hline & & \\ & &$



Exercise 7

'I ate berries.'

Explain how a Dependent Case theory of case assignment explains the alignment that we see in languages with accusative alignment, e.g. Koryak.

(44) a. ?ət?-ə-n Ø-vi?-i. (Koryak) dog-EP-ABS 2/3.S/A.IND-die-AOR 'The dog died.'

b. yəm-nan t-ə-nu-ne-w ?əvən?-u.
1SG-ERG 1SG.S/A-EP-eat-3.O-3PL berry-ABS.PL
'I ate berries.'

Your analysis must account for how the transitive object and intransitive subjects are aligned together, both being assigned unmarked ABS.

4.2.1 What if there is lexical case?

D

Exercise 8

Describe the data below:

- (45) a. kajŋ-a Ø-peŋŋ-ə-nen ?əlve-?əl bear-ERG 2/3.s/A.IND-attack-EP-3sG.A>3.0 wild.reindeer-ABS.sG 'The bear attacked the wild reindeer.'
 - b. kajŋ-ə-n Ø-peŋŋ-e ?əlva-ŋ. bear-ep-abs.sg 2/3.s/a.ind-attack-aor wild.reindeer-dat 'The bear attacked the wild reindeer.'
 - c. * kajŋ-a Ø-peŋŋ-ə-nen ?əlva-ŋ. bear-erg 2/3.s/A.IND-attack-ep-3sg.A>3.0 wild.reindeer-dat Intended: 'The bear attacked the wild reindeer.'

Additionally, assuming a Dependent Case framework, explain why (45c) is ungrammatical.

To be continued ...

REFERENCES

Abramovitz, Rafael. "Successive-cyclic wh-movement feeds case competition in Koryak." Cambridge, MA: Massachusetts Institute of Technology, MS (2020). Available at:

https://lingbuzz.net/lingbuzz/005213.

Baker, Mark C., and Nadya Vinokurova (2010) "Two modalities of case assignment: Case in Sakha." *Natural Language & Linguistic Theory* 28, no. 3: 593-642.

Bobaljik, Jonathan David. "Where's φ? Agreement as a post-syntactic operation." *Phi-Theory: Phi features across interfaces and modules* (2008): 295–328.

Bobaljik, Jonathan David, and Idan Landau. "Icelandic control is not A-movement: The case from case." *Linguistic Inquiry* 40, no. 1 (2009): 113-132. DOI:

https://doi.org/10.1162/ling.2009.40.1.113.

Chomsky, Noam. 2000. "Minimalist inquiries: The framework'.' In: Martin, Roger, Michaels, David, & Uriagereka, Juan (eds), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. "Derivation by phase'.' Pages 1–52 of: Kenstowicz, Michael (ed), *Ken Hale: A life in language*. Cambridge, MA: MIT Press.

Deal, Amy Rose. "Current models of Agree." To appear in James Crippen, Rose-Marie Dechaine and Hermann Keupdjio (eds.), *Move and Agree: towards a formal typology.* John Benjamins. Available at: https://ling.auf.net/lingbuzz/006504.

Deal, Amy Rose. "Syntactic ergativity: Analysis and identification." *Annual Review of Linguistics 2* (2016): 165-185.

Legate, Julie Anne. "Morphological and abstract case." *Linguistic Inquiry* 39, no. 1 (2008): 55-101. DOI: https://doi.org/10.1162/ling.2008.39.1.55.

Marantz, Alec. "Evaluating case via Agree: quirky case." *Arguments and case: explaining Burzio's generalization* (1991): 11-30.

Nevins, Andrew. "Multiple agree with clitics: Person complementarity vs. omnivorous number." Natural Language & Linguistic Theory 29 (2011): 939-971. DOI:

https://doi.org/10.1007/s11049-011-9150-4.

Sigurðsson, Halldór Ármann. "The case of quirky subjects". *Department of Scandinavian Linguistics*, 1992. Sigurðsson, Halldór Ármann. "Minimalist C/case." *Linguistic Inquiry* 43, no. 1 (2012): 191-227. DOI: https://doi.org/10.1162/LING_a_00083.