

The Morphosyntax of Upward Agreement and Downward Agreement

Introduction, Part III: Differences between Upward Agreement and Downward Agreement

Anke Himmelreich

`himmelreich@lingua.uni-frankfurt.de`

EGG 2021

August 04, 2021

Table of Contents

- 1 Summary of Part II
- 2 Cases of Agreement

- 3 Possibilities for Analyzing Instances of Agreement
- 4 Choosing between the Possibilities

1 Summary of Part II

Chomsky (2000)

Direction Condition

The probe has to c-command the goal.

Argument:

- *Hindi*: Potential goals for verbal agreement that are higher than the probe do not trigger agreement.

Zeijlstra (2012), Bjorkman and Zeijlstra (2014), Bjorkman and Zeijlstra (2019)

Direction Condition

The goal has to c-command the probe.

Argument:

- There are cases where the agreement target is lower in the structure than the agreement controller.

Downward for Upward Agree

Pesetsky and Torrego (2007), Bošković (2011), Heck and Himmelreich (2017)

Direction Condition

The probe (valued) c-commands the goal (unvalued).

Arguments:

- Even in cases of superficial upward agreement, we can maintain Downward Agree.

Upward and Downward Agree

Baker (2008)

Direction Condition

In some languages, ...

- a. ... the goal has to c-command the probe.
- b. ... the probe has to c-command the goal.
- c. ... the goal can c-command the probe or the probe can c-command the goal.

Arguments:

- Agreement is always due to Agree in all languages.
- Languages show overt variation in comparable configurations of agreement as to where the goal for Agree is located.

Himmelreich (2017), cf. Béjar and Řezáč (2009)

Direction Condition

It must be the case that the goal c-commands the probe or the probe c-commands the goal.

Argument:

- Case Matching is due to Agree in all languages.
- There is not only variation across languages but also within one language.

2 Cases of Agreement

- Cases of Downward Agreement
- Cases of Upward Agreement
- Cases of Bidirectional Agreement
- Comparison of the Cases

2 Cases of Agreement

- Cases of Downward Agreement
- Cases of Upward Agreement
- Cases of Bidirectional Agreement
- Comparison of the Cases

Hindi (Bhatt (2005:775), Boeckx (2004:26))

- (1) a. Vivek-ne kitaab parh-nii chaah-ii.
Vivek-ERG book.F.SG read-INF.F.SG want-PERF.F.SG
'Vivek wanted to read the book.'
- b. Mona kuttō-ko dekh-naa/*nii chaah-tii
Mona dog.M.PL-ACC see-INF/*INF.F.SG want-HAB.F.SG
thii.
be-PAST.F.SG
'Mona wanted to see the dogs.'

2 Cases of Agreement

- Cases of Downward Agreement
- **Cases of Upward Agreement**
- Cases of Bidirectional Agreement
- Comparison of the Cases

Negative Concord

- (2) a. ?John didn't eat nothing.
b. ??Nobody didn't eat.

Blanchette (2016), Zeijlstra (2004)

Tense Concord

- (3) a. John said Mary was ill
b. Jan zei dat Marie ziek was
John said that Mary ill was
'John said Mary was ill'

Zeijlstra (2012)

Binding and Co-Reference

- (4)
- a. She likes herself.
 - b. He likes himself.
 - c. She likes her.
 - d. You like yourself.
 - e. They like themselves..
- (5) A: I met the most fascinating woman yesterday.
B: Oh yeah? Who was she/*he?

Preminger and Polinsky (2015)

2 Cases of Agreement

- Cases of Downward Agreement
- Cases of Upward Agreement
- **Cases of Bidirectional Agreement**
- Comparison of the Cases

Agreement Asymmetries between verbs, nouns, and adjectives (*Swahili*, (Baker 2008:1f))

- (6)
- a. Ni-li-kuwa ni-ki-som-a.
1SS-PAST-be 1SS-CONT-read-FV
'I was reading.'
 - b. Ni- \emptyset m-refu.
1SS-be CL1-tall
'I am tall.'
 - c. Ni-li-po-kuwa ki-jana ... sasa ni-li-po
1SS-PAST-when-be CL7-child now 1SS-be-when CL1-man
m-tu m-zima, ...
CL1-whole
'When I was a child ... Now that I am a man ...'

(Baker 2008:215)

(7) **The Direction of Agreement Parameter**

- a. F agrees with DP/NP only if DP/NP asymmetrically c-commands F, or
- b. F agrees with DP/NP only if F c-commands DP/NP, or
- c. F agrees with DP/NP only if F c-commands DP/NP or vice versa.

Parametrization II

- (8) a. On the table were/*was (put) some peanuts.
b. On the table was/*were (put) a peanut.

(*Kinande*, Baker (2003))

- (9) a. Omo-mulongo mw-a-hik-a mukali.
LOC.18-village.3 18S-T-arrive-FV woman.1
'At the village arrived a woman.'
b. Oko-mesa kw-a-hir-aw-a ehilanga.
LOC.17-table 17S-T-put-pass-FV peanuts.19
'On the table were put peanuts.'


(*Burushaski*, Willson (1996:3))

- (10) a. Dasín há-e le mó-yan-umo.
girl(ABS) house-OBL in 3SO.F-sleep-3SS.F/PAST
'The girl slept in the house.'
b. Dasín há-e le huruT-umo.
girl(ABS) house-OBL in sit-3SS.F/PAST
'The girl sat in the house.'

Case matching effects I


Parasitic gap (cf. Fanselow (1993); Kathol (2001))

- (11) weil Hans *der_{dat}/*die_{acc} Frau [anstatt zu helfen_{dat}] behinderte_{acc}
because Hans the woman instead.of to help hampered
'because Hans hampered the woman instead of helping her'

- (12) because Hans the_{acc} woman [\emptyset _{dat} instead.of helping_{dat}] hampered_{acc}
- 

Free relative (cf. Pittner (1995); Vogel (2001))

- (13) Hans mag_{acc} [*wen_{acc}/✓wem_{dat} (auch immer) Maria vertraut_{dat}].
Hans like who ever Maria trusts
'Hans likes whoever Maria trusts.'

- (14) Hans likes_{acc} \emptyset _{acc} [who_{dat} (ever) Maria trusts_{dat}]
- 

Case matching effects II

Polish (Citko (2013))

- (15) a. To jest dziewczyna, *której_{dat}/✓która_{acc} Jan lubił_{acc} [zanim zaczął
this is girl which Jan liked before started
pomagać_{dat}].
help
- b. Jan lubi_{acc} [*kogokolwiek_{acc}/*komukolwiek_{dat} dokucza_{dat}].
Jan likes whoever teases

Greek (Daskalaki (2011), Artemis Alexiadou (p.c.))

- (16) a. *piou giatrou_{gen}/*pion giatro_{acc} voithise_{acc} [horis na dosi_{gen}
which doctor helped without to give
hrimata]
money
- b. Efχarístisa_{acc} [*ópji_{nom}/✓ópjus_{acc} me voíθisan_{nom}.]
I thanked who me helped

Observations

Observation II

In one and the same language, parasitic gaps and free relatives can differ with respect to case matching effects.

Observation III

Across languages, parasitic gaps and free relatives can differ with respect to case matching effects.

(17) *Pattern: Mismatching of case*

	<i>Greek</i>	<i>Polish</i>
<i>Parasitic gaps</i>	(Agree) *	(no Agree)
<i>Free relatives</i>	(no Agree) ✓	(Agree) *

Problems

Problem I

A unidirectional Downward Agree model forces us to model parasitic gaps and free relatives differently in different languages.

Problem II





The distribution of case matching effects is coincidental and does not follow systematically.

(18) *Pattern: Mismatching of case*

	<i>Greek</i>	<i>Polish</i>
<i>Parasitic gaps</i>	(Agree) *	(no Agree) ✓
<i>Free relatives</i>	(no Agree) ✓	(Agree) *

Position of the probe causes variation

(19)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha \dots V_{acc} \dots [\emptyset \dots V_{gen}]$ 	$\alpha \dots V_{acc} \dots [\emptyset \dots V_{dat}]$ 
<i>Free Relatives</i>	$\dots V_{nom} \dots \emptyset [\alpha \dots V_{acc}]$ 	$\dots V_{acc} \dots \emptyset [\alpha \dots V_{dat}]$ 


Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha \dots V_{\text{acc}} \dots [\emptyset \dots V_{\text{gen}}]$	$\alpha \dots V_{\text{acc}} \dots [\emptyset \dots V_{\text{dat}}]$
<i>Free Relatives</i>	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha \dots V_{\text{nom}}]$	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha \dots V_{\text{dat}}]$


Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	α ...V _{acc} .. [\emptyset gen...V _{gen}] 	α ...V _{acc} ...[\emptyset ...V _{dat}]
<i>Free Relatives</i>	...V _{acc} ... \emptyset [α ...V _{nom}]	...V _{acc} ... \emptyset [α ...V _{dat}]

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{\text{acc}} \dots V_{\text{acc}} \dots [\emptyset_{\text{gen}} \dots V_{\text{gen}}]$ 	$\alpha \dots V_{\text{acc}} \dots [\emptyset \dots V_{\text{dat}}]$
<i>Free Relatives</i>	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha \dots V_{\text{nom}}]$	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha \dots V_{\text{dat}}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha \dots V_{acc} \dots [\emptyset \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{nom}]$	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{nom}]$	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{nom}]$	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{nom}]$	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{\text{acc}} \dots V_{\text{acc}} \dots [\emptyset_{\text{gen}} \dots V_{\text{gen}}]$ 	$\alpha_{\text{acc}} \dots V_{\text{acc}} \dots [\emptyset_{\text{dat}} \dots V_{\text{dat}}]$
<i>Free Relatives</i>	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha_{\text{nom}} \dots V_{\text{nom}}]$ 	$\dots V_{\text{acc}} \dots \emptyset \quad [\alpha \dots V_{\text{dat}}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset \quad [\alpha_{nom} \dots V_{nom}]$ 	$\dots V_{acc} \dots \emptyset \quad [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{nom} \dots V_{nom}]$ 	$\dots V_{acc} \dots \emptyset [\alpha \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{nom} \dots V_{nom}]$ 	$\dots V_{acc} \dots \emptyset [\alpha_{dat} \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{nom} \dots V_{nom}]$ 	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{dat} \dots V_{dat}]$

Derivation of the patterns by ordering operations

(20)

	<i>Greek</i> (α)	<i>Polish</i> (\emptyset)
<i>Parasitic Gaps</i>	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{gen} \dots V_{gen}]$ 	$\alpha_{acc} \dots V_{acc} \dots [\emptyset_{dat} \dots V_{dat}]$
<i>Free Relatives</i>	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{nom} \dots V_{nom}]$ 	$\dots V_{acc} \dots \emptyset_{acc} [\alpha_{dat} \dots V_{dat}]$

Consequences

- The bidirectional Agree operation allows for more agreement configurations than a unidirectional Agree operation.
- The preference for Downward Agree that comes with the bottom-up nature of derivations will rule out a lot of unwanted configurations.
- In principle, Downward and Upward Agree should not differ with respect to locality: Non-local Agree can be ruled out with absolute locality constraints like the Phase Impenetrability Condition (PIC, Chomsky (2001)).

2 Cases of Agreement

- Cases of Downward Agreement
- Cases of Upward Agreement
- Cases of Bidirectional Agreement
- **Comparison of the Cases**

Possible Differences between Upward and Downward Agree

Type of Feature

Downward Agree	Upward Agree
ϕ	$\phi(?)$
	case
	tense
	negation
	indices(?)

Locality

Downward Agree	Upward Agree
	within phrase (spec-head)
within clause	within clause
long-distance	long-distance

Categories of Probe and Goal

Downward Agree	Upward Agree
verbal	verbal
	nominal

3 Possibilities for Analyzing Instances of Agreement

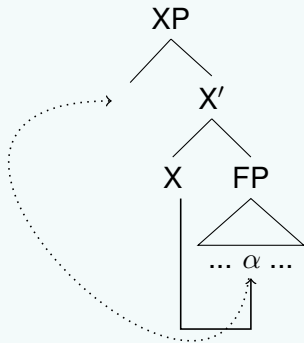
- Interaction of Movement and Agreement
- Indirect Agreement
- No Agreement

3 Possibilities for Analyzing Instances of Agreement

- Interaction of Movement and Agreement
- Indirect Agreement
- No Agreement

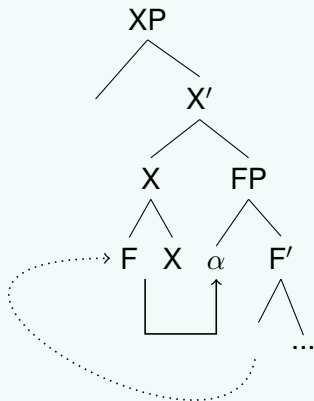
Change the position of the goal

(21)



Change the position of the probe

(22)



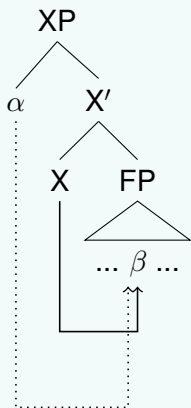
(see Preminger and Polinsky (2015))

3 Possibilities for Analyzing Instances of Agreement

- Interaction of Movement and Agreement
- Indirect Agreement
- No Agreement

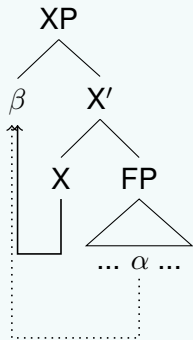
Agree with lower element

(23)



Agree with higher element

(24)



3 Possibilities for Analyzing Instances of Agreement

- Interaction of Movement and Agreement
- Indirect Agreement
- No Agreement

Matching is due to process other than Agree

- What are alternative processes?
- In what sense are they different?

4 Choosing between the Possibilities

- Yes to Downward Agreement
- Yes to Upward Agreement
- No to Upward Agreement
- No to Downward Agreement
- Choosing the Right Version of the Direction Condition

4 Choosing between the Possibilities

- Yes to Downward Agreement
- Yes to Upward Agreement
- No to Upward Agreement
- No to Downward Agreement
- Choosing the Right Version of the Direction Condition

- (25) a. Eni-r [uži ϕ -āy-ru-ti] ϕ -iy-xo.
mother-DAT boy.I.ABS i-arrive-PST.PRT-NMZL I-know-PRES
'The mother knows that as for the boy, he arrived.'
- b. Eni-r [u \check{z} -ā magalu b-āc'-ru-ti]
mother-DAT boy-ERG bread.III.ABS III-eat-PST.PRT-NMZL
b-iy-xo.
III-know-PRES
'The mother knows that as for the bread, the boy ate it.'

Question

Can this be upward agreement?:

→ Yes, if Agree is defined respectively (see Bjorkman and Zeijlstra (2019))

Can this not be agreement?:

→ Yes, e.g. movement of matrix verb from embedded to matrix clause (see Börjesson and Müller (2017))

Polinsky and Potsdam (2001); Preminger and Polinsky (2015)

4 Choosing between the Possibilities

- Yes to Downward Agreement
- **Yes to Upward Agreement**
- No to Upward Agreement
- No to Downward Agreement
- Choosing the Right Version of the Direction Condition

Sequence of Tense

- (26) a. John said Mary was ill
b. Jan zei dat Marie ziek was
John said that Mary ill was
'John said Mary was ill'

Zeijlstra (2012)

Question

Can this be downward agreement?

→ Yes, by defining probes accordingly (cf. Pesetsky and Torrego (2007)).

Can this not be agreement?

→ Yes, past tense in embedded clause could simply be ignored by semantics (e.g. Abusch (1997), Sharvit (2018))

4 Choosing between the Possibilities

- Yes to Downward Agreement
- Yes to Upward Agreement
- **No to Upward Agreement**
- No to Downward Agreement
- Choosing the Right Version of the Direction Condition

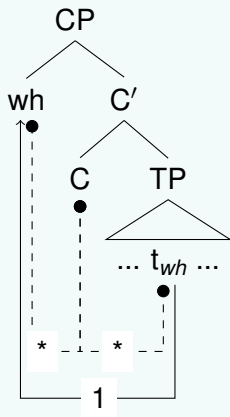
Anti-Agreement Effects in Berber I

- (27)
- a. zri-n imhdarn Mohand
saw-3PL students Mohand
'The students saw Mohand.'
 - b. man tamghart ay yzrin/*t-zra Mohand
which woman C see.PARTCP/3SG.FEM-saw Mohand
'Which woman saw Mohand?'
 - c. man tamghart ay nna-n qa t-zra Mohand
which woman C said-3PL that SG.FEM-saw Mohand
'Which woman did they say saw Mohand?'

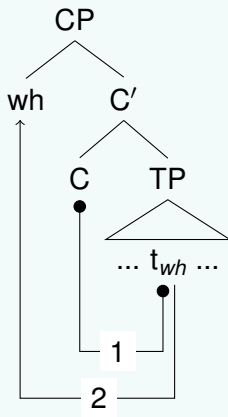
Ouhalla (1993), Georgi (2014)

(28)

a. **Matrix C**



b. **Embedded C**



Contra Movement? I

(29) *absence of island effects* (Elouazizi (2005:126))

- a. sqssa-n [ma y-wʃa
ask.PERF-3PL.MAASC whether 3SG.MASC-give.PERF
Jamal lktab i w-arba]
J. book to CS-boy
'They asked whether Jamal gave the book to the boy.'
- b. man lktab₂ ixef sqssa-n [ma D
which book about ask.PERF-3PL.MASC whether COP
Jamal₁ i (θ) y-wʃi-n t₁ t₂ i w-arba]
J. who it PRT-give.PERF-PRT to CS-boy
'Which book did they wonder whether it is Jamal who
gave it to the boy?'

Contra Movement? II

(30) *absence of weak crossover effects* (Elouazizi (2005:127))

(D) [ymas n kur arba] _j i g [_{VP} i-texsse-n
COP mother-his of every boy who PRT-love.IMPERF.PRT
t_j memi-s_j]
son-his/her

'It is the mother of every boy who loves her son.'

Contra Movement? III

(31) *absence of reconstruction* (Elouazizi (2005:127))

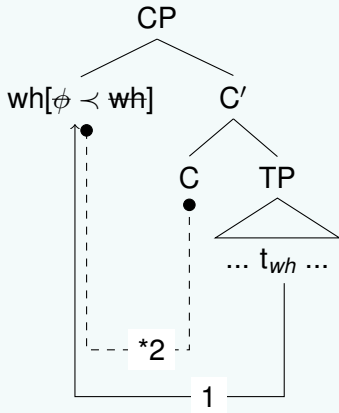
- a. δ ixefiness_{i/j} ixef y-siwrr Muhand_j ag
COP himself about 3SG.MASC-talk.PERF Muhand with
Omar_i
Omar
'It is himself that Muhand talked with Omar about.'
- b. δ Muhand_j i g y-siwrr-n ag Omar_i x
COP Muhand who PRT-talk.PERF-PRT with Omar about
ixefiness_{i/*j}
himself
'It is Muhand who talked with Omar about himself.'

Berber with Upward Agree (Himmelreich (2017))

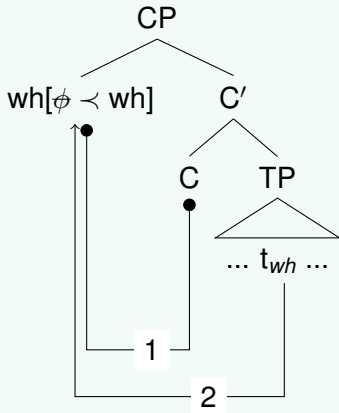
[ϕ] no longer available after [wh] is checked by C

(32)

a. **Matrix C**



b. **Embedded C**



Agreement optionally possible with negation

- (33) man tamghart ay ur t-ssn/y-ssn-n Mohand?
which woman C NEG 3SG.FEM- know/3SG.MASC-know-PART
'Which woman does not know Mohand?'

Ouhalla (1993:499)

4 Choosing between the Possibilities

- Yes to Downward Agreement
- Yes to Upward Agreement
- No to Upward Agreement
- **No to Downward Agreement**
- Choosing the Right Version of the Direction Condition

- (34) a. ?al-?awlaad-u naam-uu/*naam-a.
the-children-NOM slept-3PL/*slept-MASC.3SG
'The children slept.'
- b. naam-a/*naam-uu l-?awlaad-u.
slept-MASC.3SG/*slept-3PL the-children-NOM
'The children slept.'

Aoun et al. (1994), Bjorkman and Zeijlstra (2014)

(36) Partial Agreement in VS-structures

- a. [ate[π :_ < #:_ < gen:_] ... [Intervener student[π :3, #:pl, gen:fem]]]
- b. [ate[π :_ < #:_ < gen:_] ... [Intervener student[π :3, #:pl, gen:fem]]]
- c. [ate[π :_ < #:~_ < gen:_] ... [Intervener student[π :3, #:pl, gen:fem]]]
- d. [ate[π :_ < #:_ < gen:fem] ... [Intervener student[π :3, #:pl, gen:fem]]]
- e. [ate[π :def=3 < #:def=sg < gen:fem] ... [Intervener student[π :3, #:pl, gen:fem]]]

(37) Full Agreement in SV-structures

- a. [ate[$\pi:- \prec \#:- \prec \text{gen:-}$] ... [Intervener student[$\pi:3, \#:\text{pl}, \text{gen:fem}$]]]
- b. [ate[$\pi:- \prec \#:- \prec \text{gen:-}$] ... student[$\pi:3, \#:\text{pl}, \text{gen:fem}$] ... [Intervener t_{student}]]]
- c. [ate[$\pi:3 \prec \#:\text{pl} \prec \text{gen:fem}$] ... student[$\pi:3, \#:\text{pl}, \text{gen:fem}$] ... [Intervener t_{student}]]]
- d. [student[$\pi:3, \#:\text{pl}, \text{gen:fem}$] ate[$\pi:3 \prec \#:\text{pl} \prec \text{gen:fem}$] ... t'_{student} ... [Intervener t_{student}]]]

4 Choosing between the Possibilities

- Yes to Downward Agreement
- Yes to Upward Agreement
- No to Upward Agreement
- No to Downward Agreement
- Choosing the Right Version of the Direction Condition

Falsification

- A **major criteria** of theories is that they are falsifiable: A theory should be formulated in a way that it can easily be falsified.
- **Note:** Verification of theories is never possible!
- **Falsification:** Find one empirical phenomenon that the theory should cover, but does not cover.
- **Verification:** Test the theory on all empirical phenomena that it should cover.

Three versions of the direction condition I

- 1 **Downward Agree:** The probe has to c-command the goal.
 - *Falsified by:* A case where the goal c-commands the probe.
 - *Caveat:* Falsifying data can be reanalysed as an interaction of Move and Agree, with the goal starting out in the c-command domain of the goal and than moving up to a position higher than the goal.
 - *Caveat to Caveat:* Test whether movement plays a role.

Three versions of the direction condition II

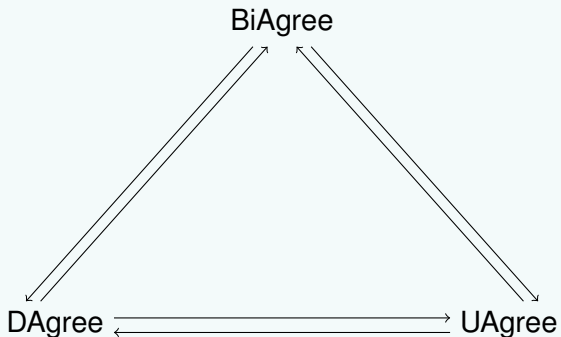
- 2 **Upward Agree:** The goal has to c-command the probe.
 - *Falsified by:* A case where the probe c-commands the goal.
 - *Caveat:* Falsifying data can be reanalysed as agreement between the probe and another (perhaps mediating) element that is higher than the probe.
 - *Caveat to Caveat:* Test whether there is reason to propose such a mediator.

Three versions of the direction condition III

- ③ **Bidirectional Agree:** It must be the case that the probe c-commands the goal or the goal c-commands the probe.
 - *Falsified by:* A case where c-command between probe and goal is given but no Agree applies.
 - *Caveat:* Falsifying data can be reanalysed as a conspiracy of other (language-specific) factors that rule out Agree.
 - *Caveat to Caveat:* Test whether the factors are relevant.

Construing arguments

(38)



References I

- Abusch, Dorit (1997): 'Sequence of Tense and Temporal De Re', *Linguistics and Philosophy* **20**, 1–50.
- Aoun, Joseph, Elabbas Benmamoun and Dominique Sportiche (1994): 'Agreement, Word Order, and Conjunction in Some Varieties of Arabic', *Linguistic Inquiry* **25**, 195–220.
- Baker, Mark (2003): Agreement, dislocation, and partial configurationality. In: A. Carnie, H. Harley and M. A. Willie, eds, *Formal approaches to function in grammar*. Amsterdam edn, John Benjamins, pp. 107–134.
- Baker, Mark C. (2008): *The Syntax of Agreement and Concord*. Cambridge University Press.
- Béjar, Susana and Milan Āezáč (2009): 'Cyclic Agree', *Linguistic Inquiry* **40**(1), 35–73.
- Benmamoun, Elabbas and Heidi Lorimor (2006): 'Featureless expressions: when morphophonological markers are absent.', *Linguistic Inquiry* **37**, 1–23.
- Bhatt, Rajesh (2005): 'Long distance agreement in Hindi-Urdu', *Natural Language and Linguistic Theory* **23**, 757–807.
- Bjorkman, Bronwyn and Hedde Zeijlstra (2014): Upward Agree is superior. Ms., lingbuzz/002350.
- Bjorkman, Bronwyn and Hedde Zeijlstra (2019): 'Checking Up on (Phi-)Agree', *Linguistic Inquiry* **50**, 527–569.
- Blanchette, Frances (2016): 'Subject-Object Asymmetries in English Sentences with Two Negatives', *Penn Working Papers in Linguistics* **22**(1), 41–50.
- Boeckx, Cedric (2004): 'Long-distance agreement in Hindi: some theoretical implications', *Studia Linguistics* **58**, 23–36.
- Bošković, Željko (2011): On unvalued uninterpretable features. In: *Proceeding of NELS 39*. pp. 109–120.
- Börjesson, Kristin and Gereon Müller (2017): Long-Distance Agreement and Locality: A Reprojection Approach. Ms. Universität Leipzig. To appear in Katharina Hartmann, Johannes Mursell & Peter Smith (eds.), Agreement Volume. Language Science Press: Open Generative Syntax.
- Chomsky, Noam (2000): Minimalist Inquiries: The Framework. In: R. Martin, D. Michaels and J. Uriagereka, eds, *Step by Step. Papers in Minimalist Syntax in Honor of Howard Lasnik*. MIT Press, Cambridge, chapter 3, pp. 89–155.
- Chomsky, Noam (2001): Derivation by Phase. In: M. Kenstowicz, ed., *Ken Hale: A Life in Language*. MIT Press, Cambridge, Massachusetts, pp. 1–52.
- Citko, Barbara (2013): Size Matters: Multidominance and DP Structure in Polish. Talk at the 44th Poznan Linguistic Meeting.

References II

- Daskalaki, Evangelia (2011): 'Case Mis-Matching as Case Stranding', *University of Pennsylvania Working Papers in Linguistics* (Proceedings of the 34th Annual Penn Linguistics Colloquium) **17**(1), 77–86.
- Elouazizi, Nouredine (2005): Anti-Agreement Effects as (Anti-)connectivity. Proceedings of WCCFL 24.
- Fanselow, Gisbert (1993): 'Die Rückkehr der Basisgenerierer', *Groninger Arbeiten zur germanistischen Linguistik* **36**, 1–74.
- Georgi, Doreen (2014): Opaque Interactions of Merge and Agree: On the Nature and Order of Elementary Operations. PhD thesis, Universität Leipzig, Leipzig.
- Heck, Fabian and Anke Himmelreich (2017): 'Opaque Intervention', *Linguistic Inquiry* **48**, 47–97.
- Himmelreich, Anke (2017): Case Matching Effects in Free Relatives and Parasitic Gaps: A Study on the Properties of Agree. PhD thesis, Universität Leipzig.
- Kathol, Andreas (2001): Nonexistence of Parasitic Gaps in German. In: P. Culicover and P. Postal, eds, *Parasitic Gaps*. MIT Press, Cambridge, Massachusetts, pp. 315–338.
- Ouhalla, Jamal (1993): 'Subject-Extraction, Negation and the Antiagreement Effect', *Natural Language and Linguistic Theory* **11**, 477–518.
- Pesetsky, David and Esther Torrego (2007): The Syntax of Valuation and the Interpretability of Features. In: S. Karimi, V. Samiian and W. K. Wilkins, eds, *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*. Benjamins, Amsterdam, pp. 262–294.
- Pittner, Karin (1995): 'Regeln für die Bildung von freien Relativsätzen', *Deutsch als Fremdsprache* **32**(4), 195–200.
- Polinsky, Maria and Eric Potsdam (2001): 'Long-Distance Agreement and Topic in Tsez', *Natural Language and Linguistic Theory* **19**, 583–646.
- Preminger, Omer (2015): Upwards and onwards: On the direction of valuation in phi-feature agreement. Talk at New York University.
- Preminger, Omer and Maria Polinsky (2015): Agreement and semantic concord: a spurious unification. Ms., lingbuzz/002363.
- Sharvit, Yael (2018): Sequence of Tense: Syntax, Semantics, Pragmatics. In: P. Patel-Grosz, P. G. Grosz and S. Zobel, eds, *Pronouns in embedded contexts at the syntax-semantics interface*. Springer, Berlin, pp. 215–247.

References III

- Vogel, Ralf (2001): Case Conflict in German Free-Relative Constructions: An Optimality-Theoretic Treatment. *In: G. Müller and W. Sternefeld, eds, *Competition in Syntax*. Mouton de Gruyter, Berlin, pp. 341–375.*
- Willson, Stephen (1996): 'Verb agreement and case marking in Burushaski', *Work Papers of the Summer Institute of Linguistics North Dakota* **40**, 1–71.
- Zeijlstra, Hedde (2004): Sentential negation and negative concord. PhD thesis, University of Amsterdam.
- Zeijlstra, Hedde (2012): 'There is only one way to agree', *The Linguistic Review* **29**, 491–539.