Agreement: a crash-course
(DAY 1)

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0. Preliminaries

- My name is Omer Preminger.
- I'm an Assistant Professor at the University of Maryland.
- You should call me "Omer."
  - If you can't bring yourself to be comfortable with that, then use "Professor Preminger"; I really don't like any of the other possible combinations.
- What I was asked to do here is give a crash-course on agreement.
  - This means that, at times, we will be going rather quickly.
  - Nevertheless, it's quite pointless for me to be plowing forward if I have lost you and am talking mostly to myself.
  - Sometimes, people in an audience (not only students!) have a tendency to assume that if they don't understand something, they're the only ones—and everybody else is following everything.
  - In reality, it's almost always the opposite: if you don't understand something, there's a better-than-fair chance that your neighbors don't, either.

    ⇒ Do everyone a favor: ***when you don't understand something, ask.***
  - In case there's any doubt, this also includes things like, "You just used the term 'thingamajig'—what does that mean?"
- **Lecture notes:** I will post the notes from each lecture, after the lecture, on my website. (Look under "Updates.")

1. The basics

1.1. Defining 'agreement'

- One attempt:

(1) "Any instance in which the form of one morphosyntactic element is conditioned by another morphosyntactic element elsewhere in the structure."

  - This definition fails because it is too broad; it includes:
    - instance of selection, e.g.: *depend—on/*to*, *have—been/*being*
    - instances of (what used to be called) government: *I expect them/*they to be here.*
  - What's missing in this definition is the notion of **covariance**

- A second attempt:

(2) "Any instance in which the form of one morphosyntactic element **covaries** with that of another morphosyntactic element elsewhere in the structure."

  - This definition is closer to what we want. But it is still a bit too broad.
  - Consider:

(3) a. It is possible that John will win.
b. It is possible for John to win.
c. * It is possible that John to win.
d. * It is possible for John will win.

  - This certainly looks like covariance —

    (There are other things that *will* can be replaced with without altering the paradigm; but none of them are *to*, and so this is still an instance of covariance.)

    — but *pace* Pesetsky & Torrego 2001, 2007, we probably don't want to call this 'agreement'

➻ *What went wrong? i.e., why is covariance not sufficient?*

Two possibilities:

(i) We need to further narrow down by **the elements participating in the relation**.
- such that, e.g., a $<C^0,T^0>$ pair does not qualify

(ii) We need to further narrow down by **the features which are in a covariance relation**.[1]
- such that, e.g., [finiteness] does not qualify

[1] Or, more accurately, we need to further narrow down by the features *whose morphophonological representations* are in a covariance relation.

- At the outset, I suggest we impose both of these restrictions
  - *Why? After all, when we theorize, we usually want the least powerful theory that still works (i.e., fewest postulates/restrictions).*

  ↦ The issue here is different. We are not (yet) building a theory of anything; we are choosing a slice of the empirical pie to investigate.
  - And for these kind of choices, it often makes sense to start from the most restricted, narrowly defined domain.
    - cf. *Intro to Semantics* courses, which often focus almost exclusively on quantifiers—an extremely narrow corner of natural language meaning
  - This massively increases the chances that the facts we observe will be uniform in their underlying nature
    - or, at least, that they will form a natural class.

⇒ I therefore suggest we adopt the following working definition:

(4) AGREEMENT: A WORKING DEFINITION
Covariance in φ-features between a verbal element (verb, auxiliary, tense/aspect marker) and a nominal element.[2]

1.2. Types of theories of agreement

- While they go by a variety of names, there are (as best I can tell) really only two kinds of agreement theories:

  I. verificational theories
  - this includes, e.g., the "Unification" mechanism in GPSG/HPSG/LFG, but also the "checking" versions of GB & Minimalism
  - the idea here is that the grammar is a machine that can, in principle, generate a whole bunch of things
    - i.e., this is the "throw everything against the wall and see what sticks" approach to grammar

  ⇒ agreement works as a verification procedure
    - e.g., if we're looking at a language like Hebrew:

    "The φ-features on your finite verb better match those on the subject—or else I'm disqualifying this sentence!"

  II. dynamic valuation theories
  - the idea here is that, in the course of generating a sentence, certain elements (try to) "pull" feature values from other elements
    - this "pulling" is what we call *valuation*
  - on this view, agreement isn't a verification procedure that filters "agreement-compliant" sentences from among other possible sentences that we could have, in principle, generated
  - instead, valuation is part of what happens *in the course of generating an utterance*

    ⇒ thus, you can no more avoid agreement than you can, e.g., avoid having the rules of phonology apply to your utterance

- If we have time, we will see an empirical argument against verificational theories of agreement, and in favor of dynamic valuation.
- In the meantime, I'll be phrasing everything in dynamic-valuation terms, as a matter of convenience
  - but I'll let you know when we reach a point where it matters
    - i.e., where it becomes more than an expository choice, and verificational theories won't cut it

2. Search

2.1. The c-command condition

↦ *So what does agreement look like from a dynamic-valuation perspective?*

- Certain nodes (e.g. finite T^0/$Infl^0$) come into the derivation with a "need"
  - which is met when the node acquires φ-feature values from a nominal

⇒ Which nominal?
  - Or, more generally: how do we go from "I have a need" to "here's a nominal that can satisfy that need"?

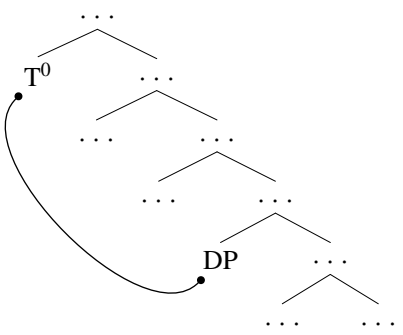
[2] Where 'φ-features' is some nonempty subset of {PERSON, NUMBER, GENDER/NOUN-CLASS}.

- The facts:

(5) The node with the need(=the *probe*) always **c-commands** the nominal(=the *goal*) at the stage of the derivation where the need is fulfilled.

  - example:

(6)



- Note: This does not mean that the probe will c-command the goal *on the surface*
  - any more than, e.g., the VP-Internal Subject Hypothesis means all subjects will be VP-internal *on the surface*
  - in fact, one of the central lessons of transformational grammar in general has been that *structural conditions ≠ surface generalizations*

- You may have also heard of a series of proposals recently to reverse the c-command condition in (5) —
  - some examples: Bjorkman & Zeijlstra 2014, 2015, Wurmbrand 2011, 2012, 2014, Zeijlstra 2012
  - these analyses are looking at a much broader (and, likely, heterogeneous) set of phenomena
  - more importantly, it has been demonstrated repeatedly that such proposals simply don't work when it comes to agreement in the strict sense (4)
    - see Preminger 2013, 2015, Preminger & Polinsky 2015

- Finally, note that (5) follows naturally in a dynamic-valuation approach to agreement:
  - syntactic structure is built from the bottom up

  ⇒ when a new node $\mathcal{P}$ is introduced into the structure, all it can see is what's already in the structure

  = its sister, and everything contained within its sister

  = $\mathcal{P}$'s c-command domain.

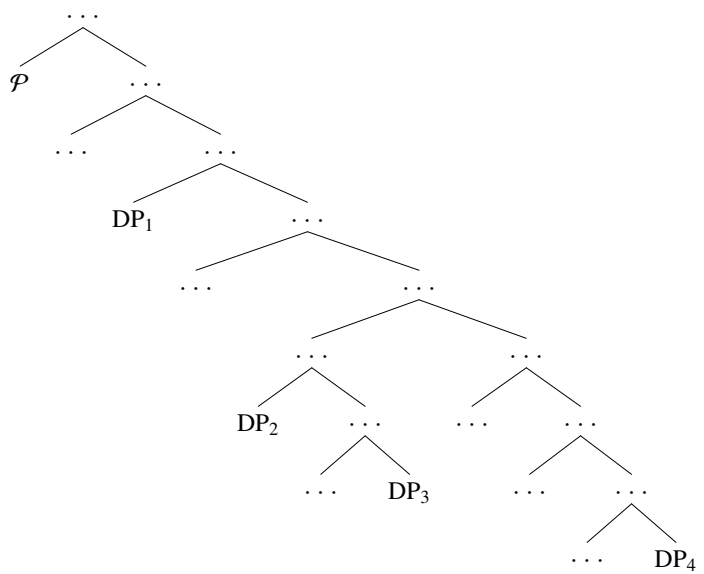
2.2. Iterative Downward Search

- Okay, so our newly-inserted probe $\mathcal{P}$ can "see" its entire c-command domain;

↦ *But how does a search for a goal (=a nominal with φ-feature values, capable of satisfying $\mathcal{P}$'s need) proceed?*

- Saying "$\mathcal{P}$ searches its c-command domain" underdetermines how the search will proceed
  - there could be many φ-feature-bearing nodes inside this domain; for example:

(7)



  - can $\mathcal{P}$ agree freely with any of them? if not, which one "wins" and why?

↦ **Iterative Downward Search (IDS)**:

(8) a. Let $\mathcal{P}$ be a syntactic probe, and let XP be $\mathcal{P}$'s sister
b. QUERY: Is XP a viable goal?
If so, **halt with "XP" as the search result**
c. For every specifier ZP of XP, QUERY: Is ZP a viable goal?
If so, **halt with "ZP" as the search result**
d. QUERY: Is XP a phase?
If so, **halt with no goal**
e. QUERY: Does X^0 have a complement?
If not, **halt with no goal**
f. Return to step **(b)**, using the constituent in [Compl,X] as the new "XP"

. . . . . .

- If you're curious about (8d–e), that cuts to the core of why dynamic-valuation theories are necessary to capture the facts of agreement
  - again, if we have time to talk about this, we'll delve into it in more detail.

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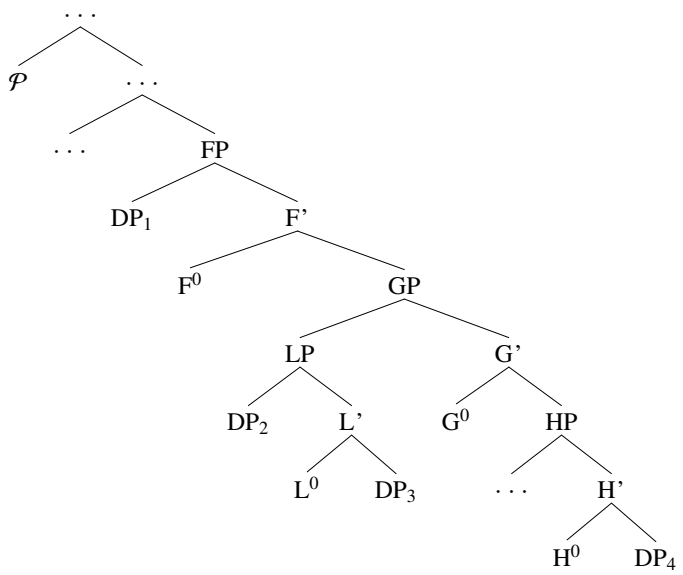
An example:

(9)



  - consider how (8) would apply to an example like (9)
  - now consider how (8) would apply to the same example *if DP_1 was not there*

⇒ IDS goes beyond merely "search your c-command domain":

(i) IDS imposes an order upon the nodes that it is in principle capable of reaching
  - specifically, for any two nodes DP_X and DP_Y that IDS is in principle capable of reaching —
    - the algorithm determines unambiguously which of the two will be inspected first

(ii) There can be things that will never be found by IDS, even though they are within $\mathcal{P}$'s c-command domain
  - e.g. a specifier-of-a-specifier of XP, even if it has φ-feature values, will still never be found by IDS
    - this, even though a specifier-of-a-specifier of XP is inside $\mathcal{P}$'s c-command domain

↦ Importantly, it turns out that both (i) and (ii) are empirically supported

  - let's start with (i):

(10) (Icelandic)

a. það finnst(/*finnast) [einhverjum stúdent]$_{DAT}$ [$_{SC}$ tölvurnar ljótar].
EXPL find.SG/*find.PL some student.SG.DAT computers.the.PL.NOM ugly
'Some student finds the computers ugly.'

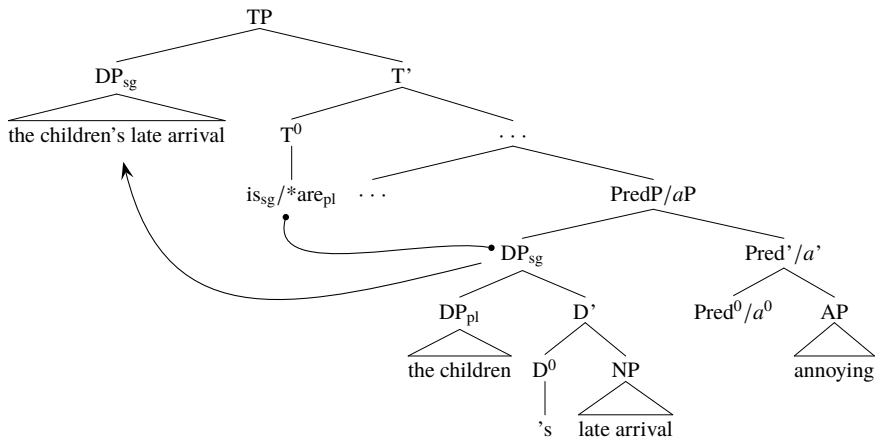
b. [Einhverjum stúdent]$_1$ finnast $\mathbf{t_1}$ [$_{SC}$ tölvurnar ljótar].
some student.SG.DAT find.PL computers.the.PL.NOM ugly
'Some student finds the computers ugly.'

[*Holmberg & Hróarsdóttir 2003:999-1006*]

  - moving on to (ii):

(11) a. The children's late arrival is/*are annoying.
b. $\big[$[The children]$_{pl}$'s late arrival$\big]_{sg}$ is$_{sg}$/*are$_{pl}$ *t* annoying.

(12)



– this is one example where an agreement target contained in the c-command domain of the probe, but deemed inaccessible by IDS, is indeed inaccessible (empirically speaking)

– it takes more than just this one example to show that the cut made by IDS between *accessible* and *inaccessible* is, empirically, the correct cut

· and we don't have time to show the full range of relevant data

⇒ for now, let's just observe that not everything in the c-command domain of the probe is accessible for agreement

· and that IDS looks like a good candidate to explain why[3]

3. φ-features

- We've now seen what happens when a node with a "need" for φ-feature values enters the derivation
  - and how that node goes about finding a nominal that bears the kind of features that meet this need

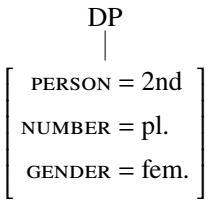
↦ *What is the nature of the features themselves, which are involved in this process?*

[3]Note that 'phases' (Chomsky 2001, *et seq.*) will <u>not</u> explain these data, since the plural DP in (11–12) is at the edge of its enclosing phase (the larger DP, [*… 's late arrival*]). The plural DP would therefore be accessible, if not for IDS.

3.1. In the beginning…

- The view was that φ-features are something like an "attribute-value matrix":

(13)



  - in particular: PERSON, NUMBER, and GENDER/NOUN-CLASS were seen as "switches" that could each be set to one of several predefined values
    – for example:[4]
      · PERSON: 1st / 2nd / 3rd
      · NUMBER: sg. / pl.
      · GENDER: …
  - see Gazdar et al. (1985) and Pollard & Sag (1994), *a.o.*

- This is also consistent with what you learned, e.g., in grade school
- It is also <u>demonstrably wrong</u>.

. . . . . .

I am going to do something non-Socratic here, and tell you the result first—and only then survey the evidence in support of it.

. . . . . .

[4]Of course, there are more than three possible features for PERSON, and more than two possible features for NUMBER; see below for further discussion.

3.2. The structure of φ-features

- φ-features are privative.
  - consider, for example, the opposition between <singular> and <plural>:
    - there is really no such thing as "−plural" and "+plural" (or "−singular" and "+singular");
      - there is just plural and numberless(=devoid of number features)[5] (abstracting away, for now, from <dual> and <paucal>)
  - similarly:
    - there is really no such thing as "(+)3rd person features"
      - there a feature shared by all 1st/2nd person expressions, and other expressions are simply personless(=devoid of person features)

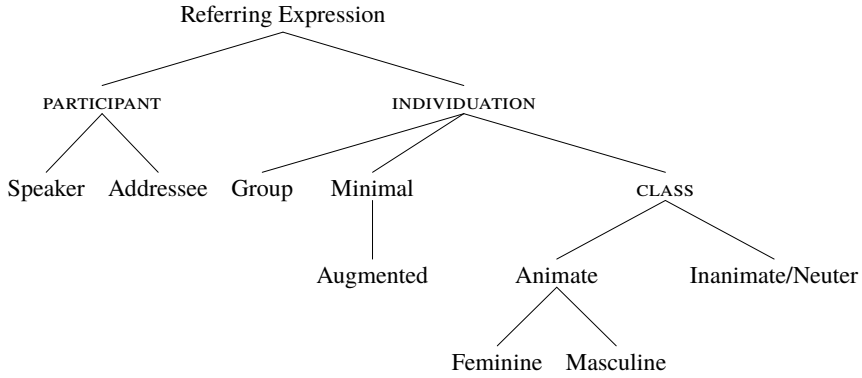
NB: Nevins (2007) claims that the privative view, while correct for NUMBER, is incorrect for PERSON. If we have time, we will discuss his evidence, and we will see that—contrary to Nevins' claim—his data is at best an argument against the privativity of PERSON in morphology (i.e., PERSON is still clearly privative in syntax).

- There are dependencies among different φ-features
  - in particular, certain privative features cannot be present (i.e., 'on') unless another designated feature is present (i.e., 'on')
    - for example: certain languages lack a <singular>-<plural> distinction, but no language has a <dual> unless it also has <singular> and <plural>

↦ Taken together, these observations suggest a **tree structure** for φ-features and their interdependencies
  - similar to, and inspired by, certain proposals in autosegmental phonology (Archangeli 1988, Clements 1985, Sagey 1986, *a.o.*)

- Harley & Ritter (2002): (cf. Noyer 1992)

(14)



  - let's run through an example, from Harley & Ritter (2002:490–491):

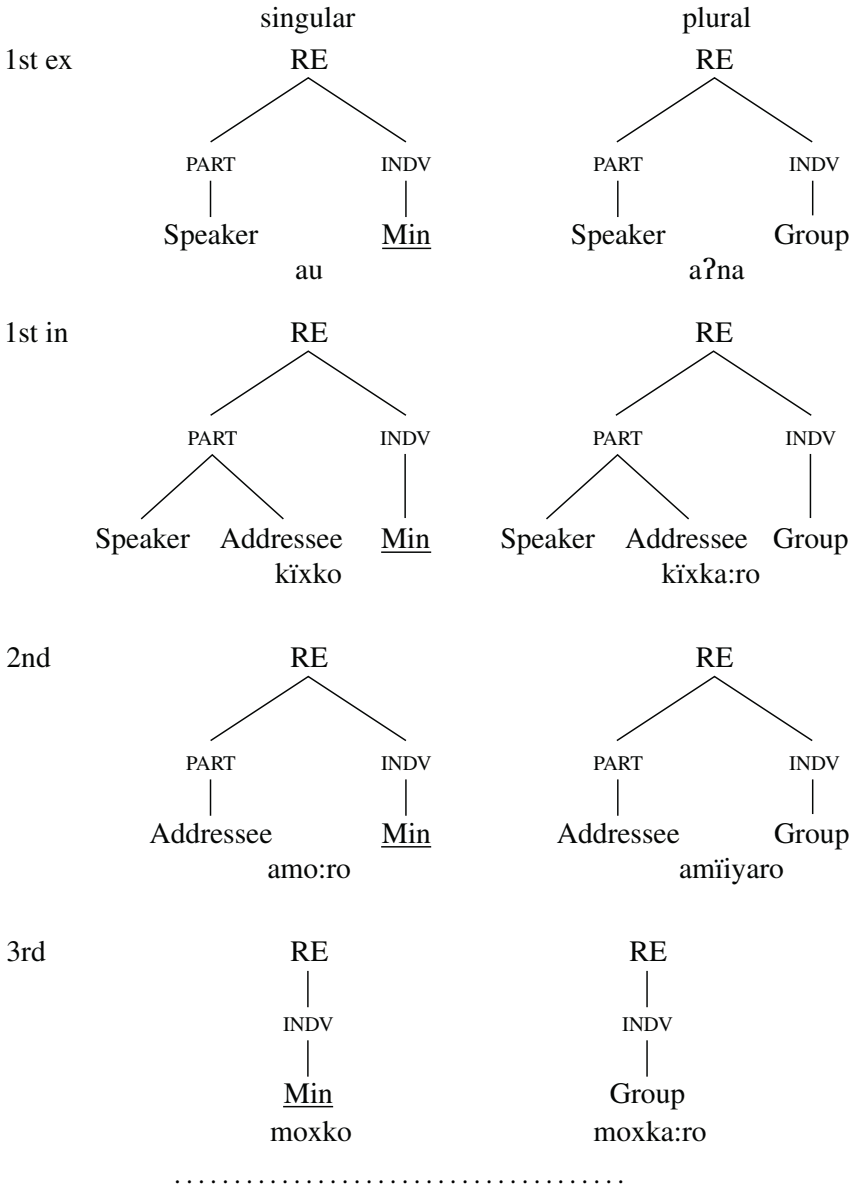
(15)

	SINGULAR	PLURAL
1st ex	au	aʔna
1st in	kïxko	kïxka:ro
2nd	amo:ro	amïiyaro
3rd	moxko	moxka:ro

TABLE 4. Kalihna pronouns (Hoff 1968:277).

[5] A prominent view in contemporary semantic literature holds that it is <singular> that is the semantically contentful member of the <singular>-<plural> opposition, and that <plural> is semantically vacuous (see, e.g., Sauerland 2003). Crucially, our current discussion is about morphosyntax, with an emphasis on syntax in particular. This leaves two options: either the aforementioned approach to the semantics of number is mistaken, or the syntax-semantics mapping for number is fundamentally mismatched (with <singular> being vacuous in syntax but <plural> being vacuous in the semantics). See Bale et al. (2011) for further discussion of these matters.

(16) Kalihna geometries



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Now that you've seen a little bit of how this works, let's discuss (some of) the evidence for this view of φ-features…

- Morphology:
  - *3rd person is not a person* (Harley & Ritter 2002:486–488)

(17) a. 3rd person agreement is often zero, 1st/2nd person agreement is overt.
b. Many languages have no 3rd person pronoun—or at least no nominative form.
c. Many languages have distinct 1st & 2nd person pronouns only; for 3rd person they use demonstratives.
d. Closely related languages often have cognate 1st and 2nd person pronouns but 3rd person pronouns which are not obviously related.
e. 1st and 2nd person are often similar in form and inflection but dissimilar from that of 3rd person.
f. 3rd person is much more subject to objective subdivisions such as class, gender, and location. (Forchheimer 1953:6)

  - **CAVEAT EMPTOR:** morphology can be a treacherous ally, here —
    - morphology is able to make (exceptional) reference to the absence of a given feature in the representation
      - cf. *-s* (really, /-z/) on English main-verbs:

(18) a. We_{1pl}/Y'all_{2pl}/They_{3pl}/I_{1sg}/You_{2sg} run.
b. He_{3sg}/She_{3sg}/It_{3sg} run***s***.

⇒ *What we really want to look at is syntax…*

(19) OMNIVOROUS AGREEMENT (OA) [*Nevins 2011*]
An agreement marker x is an instance of "omnivorous agreement" **iff** x occurs whenever a given feature f is found on one or more members of the set of arguments S (for $|S| \geq 2$)

  - example:
    a marker that arises whenever the subject or the object (or both) are plural
  - while OA may seem "exotic" or unusual, it is really just an instantiation of *Relativized Minimality* (Rizzi 1990, 2001)
    - it is the subcase of RM where the features and goals involved are φ-features and nominals, respectively

↦ We can argue from OA to the structure of φ-features
- and, in particular, their privativity

- Let us start with a proof-of-concept from *outside* the domain of φ-features: *wh*-features
  - suppose someone asked you whether there is really such a thing as [+*wh*], contrasting with [−*wh*] —
    - or there is just [*wh*] vs. the absence thereof
  - to answer this, we could ask a related question:
    - can we find any instance where a syntactic probe demonstrably seeks all and only the [−*wh*]-bearing constituents in its domain?
  - the answer to this last question seems to be "no"
  - whereas the converse, a probe that seeks all and only the [+*wh*]-bearing constituents in its domain, is of course robustly attested (e.g. C^0 in *wh*-ex-situ languages)

NB: There is an auxiliary assumption here, namely that a probe $\mathcal{P}$ cannot probe for the absence of a given feature f on its (potential) targets
- without this assumption, the distinction between the two scenarios ([±f] vs. privative [f]) collapses
  - and there would be no way to account for the absence of probes-for-non-*wh*-elements

⇒ this suggests that this assumption is justified

- Now let's apply the same mode of argumentation in the domain of φ-features
  - i.e., let us ask questions like the following:
    - are there syntactic probes that look for all and only the [−group] constituents in their domain? how about [+group]?
    - are there syntactic probes that look for all and only the [−participant] constituents in their domain? how about [+participant]?
  - if you've been paying attention, you can probably guess what the answers to these questions are, once we look at the empirical landscape
    - ↦ there are probes that look for [+group] and [+participant], but there are no probes that look for [−group] and [−participant]
  - by the very nature of negative universals, I can't demonstrate to you the negative side of this generalization using any single snippet of data;
  - but let me show you what the positive side of the generalization looks like:[6]

(20) a. ja rat x-**at/*∅**-ax-an ri achin (Kaqchikel; *Agent-Focus*)
FOC you(sg.) COM-**2sg/*3sg.ABS**-hear-AF the man
'It was you(sg.) that heard the man.'

b. ja ri achin x-**at/*∅**-ax-an rat
FOC the man COM-**2sg/*3sg.ABS**-hear-AF you(sg.)
'It was the man that heard you(sg.).'

(21) a. ja rje' x-**e/*∅**-tz'et-ö rja'
FOC them COM-**3pl/*3sg.ABS**-see-AF him
'It was them who saw him.'

b. ja rja' x-**e/*∅**-tz'et-ö rje'
FOC him COM-**3pl/*3sg.ABS**-see-AF them
'It was him who saw them.'

The argument from these data goes as follows:
- recall that if nodes could probe for the absence of a given feature on their targets, we would have no explanation for why there are no "−*wh*" probes

⇒ given that probing for the absence of a feature is impossible:
- this pattern, just like its [*wh*] counterpart, is an argument for the privativity of the relevant φ-features

- In other words:
  - **there is no "[±group]" and "[±participant]"** (in syntax)
  - **there is only [group] and [participant], and the absence thereof** (in syntax)

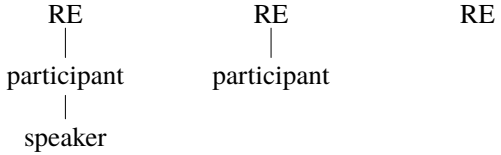
REMEMBER: This does not equate to the claim that the morphological expression of "3rd person" and "singular" is necessarily null in every language (though it certainly tends to be) —
- because the morphology of a given language may idiosyncratically have an elsewhere rule that inserts overt material (e.g. -*s* on English main-verbs)

[6] The behavior of plural agreement with inanimates in the Kaqchikel *Agent-Focus* construction follows a more complicated pattern, and appears at least in some cases to be optional. I therefore keep to animate arguments, here.

3.3. Further evidence: person-resolution in coordinations

- Recall the representation of "3rd person", "2nd person", and "1st person" (abstracting away from clusivity) in Harley & Ritter's (2002) system:

(22) a. "1st person" b. "2nd person" c. "3rd person"



- Now consider what happens to person features under coordination:

(23) a. 1 & 2 → 1: (Hebrew)
anaxnu ve-atem n-ipageʃ
1pl.NOM and-2pl.NOM 1pl-FUT.meet

b. 2 & 1 → 1:
atem ve-anaxnu n-ipageʃ
2pl.NOM and-1pl.NOM 1pl-FUT.meet

c. 1 & 3 → 1:
anaxnu ve-hem n-ipageʃ
1pl.NOM and-3pl.NOM 1pl-FUT.meet

d. 3 & 1 → 1:
hem ve-anaxnu n-ipageʃ
3pl.NOM and-1pl.NOM 1pl-FUT.meet

e. 2 & 3 → 2:
atem ve-hem t-ipagʃu
2pl.NOM and-3pl.NOM 2pl-FUT.meet-pl

f. 3 & 2 → 2:
hem ve-atem t-ipagʃu
3pl.NOM and-2pl.NOM 2pl-FUT.meet-pl

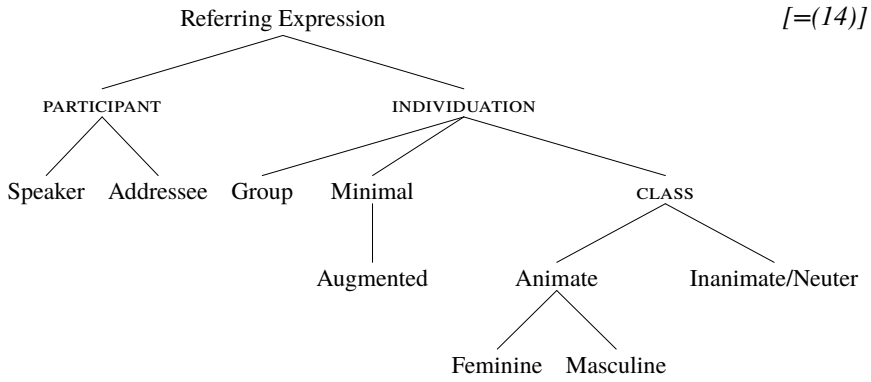
⇒ Coordination of "person features" is just…

UNION *over feature-geometric structures*

3.4. McGinnis' correction

- Recall the Harley & Ritter geometry once again:

(24) *[=(14)]*



- McGinnis (2005:700–701):
there are languages that (24) predicts should exist but are, in fact, unattested

(25)

	SINGULAR	DUAL	PLURAL
a.	it	they	
b.	X		Y

TABLE 1. Number contrasts predicted if [Group] and [Minimal] are equivalent.

(26)

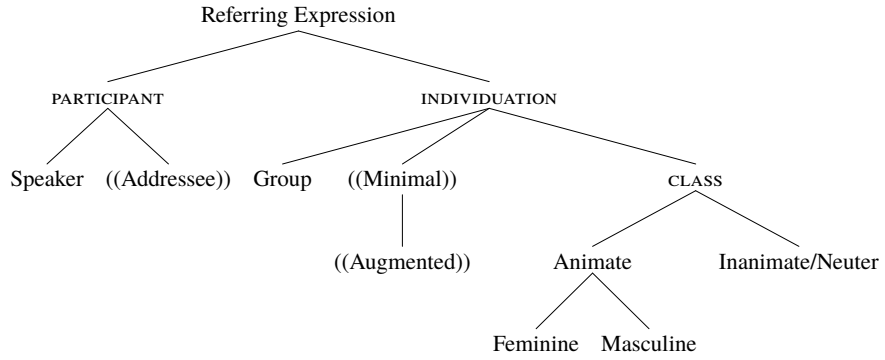
	1ST PERSON	INCLUSIVE	2ND PERSON
a.		we	you
b.	X		Y

TABLE 2. Participant contrasts predicted if [Speaker] and [Addressee] are equivalent.

- if [group] and [minimal] were freely available in any language, we would predict that the language in (25b) would be a possible language —
  - *but it is not.*
- similarly, if [speaker] and [addressee] were freely available in any language, we would predict that the language in (26b) would be a possible language —
  - *but it is not.*

⇒ CONCLUSION: [minimal] and [addressee] are marked features; the learner doesn't posit them as part of the feature geometry *unless their language has a dual-vs.-plural / 1sg.exclusive-vs.-1sg.inclusive distinction*

(27) φ-FEATURE GEOMETRY – WITH MCGINNIS' CORRECTION:



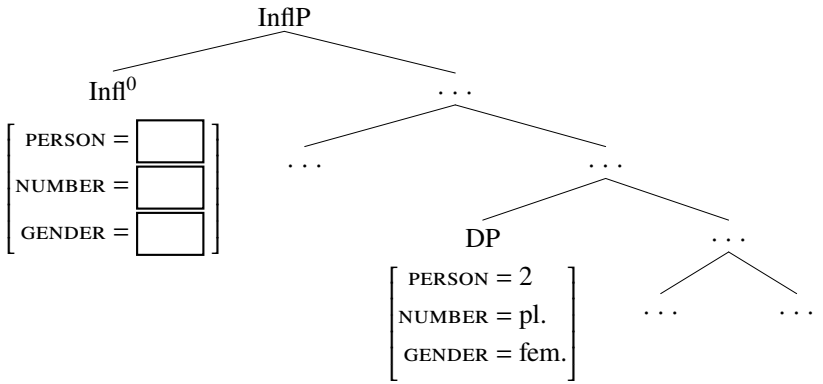
4. Structured valuation

- We have now abandoned the "attribute-value matrix" view of φ-features —
  - in favor of the empirically more adequate feature-geometric view

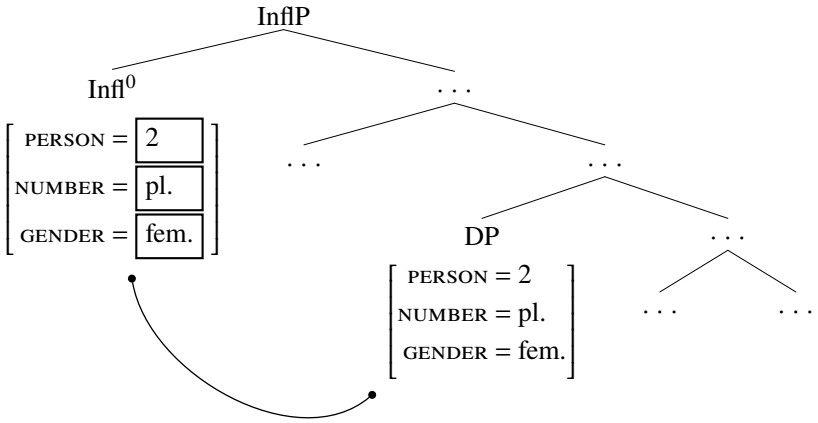
⇒ This means we have to reconsider what valuation means

  - before, it just meant copying feature-values from the goal into the designated slots in the probe's feature set:

(28) a.



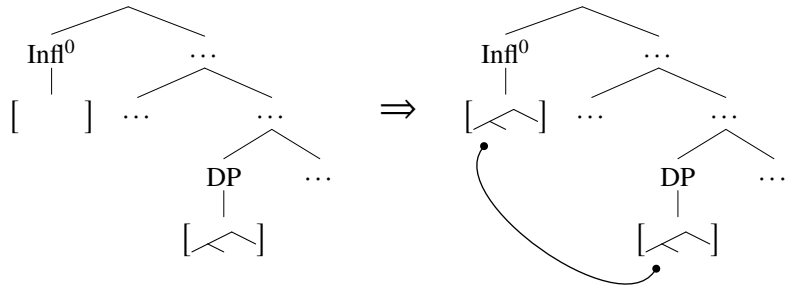
b.



↦ *but what does this look like when feature-values are structured objects of the type shown in (27)?*

- **Proposal:** What gets probed for, and copied from the goal to the probe, are feature-geometric trees

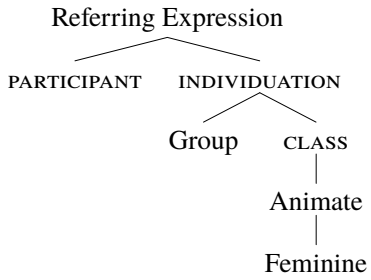
(29) FEATURE-GEOMETRIC VALUATION



  - whatever geometric representation the DP in (29) bears will be copied onto the probe H^0

– e.g. if the DP carries the geometric representation in (30), then after valuation, the probe H^0 will carry the same representation

(30)



– we can say that "2nd person plural feminine" got copied from the goal to the probe, but that is epiphenomenal —

· what actually got copied is the structure in (30)

- This model extends naturally to the "omnivorous agreement" patterns we saw earlier (§3.2)
  - in the general case ((29), above), the probe H^0 searches for the feature [RE] (Referring Expression), the root of the φ-feature geometry
  - this has two consequences:
    - **(i)** since every DP bears the [RE] feature, every DP is a viable target for the probe in (29)
    - **(ii)** when such a target is found, the entire geometry—rooted in [RE]—gets copied to the probe

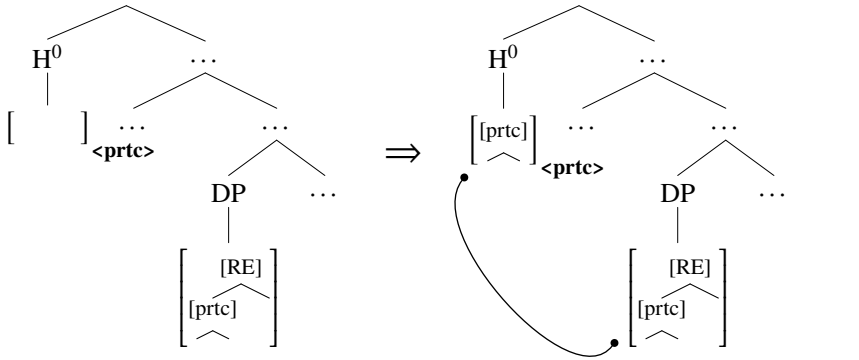
↦ However, we know that different heads can probe for different features

– e.g. interrogative C^0 does not probe for the same features as finite T^0

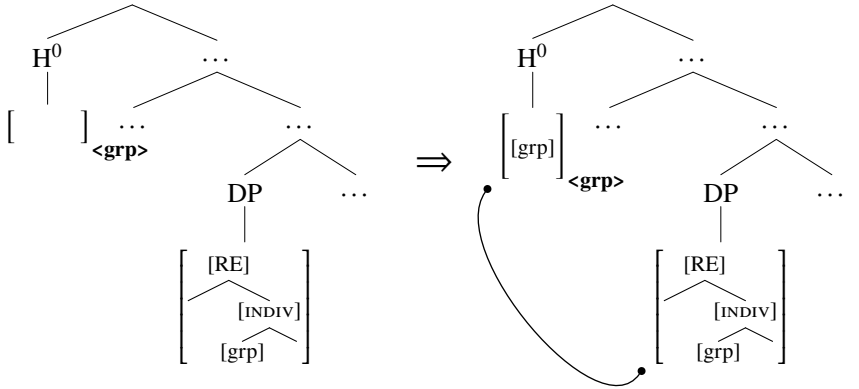
⇒ if we had a probe that searched for, e.g., [participant] or [group] —

– only DPs bearing that more specific feature would be viable targets for the probe

(31) "OMNIVOROUS PERSON" ([prtc] = [participant])



(32) "OMNIVOROUS NUMBER" ([grp] = [group])



References

Archangeli, Diana. 1988. Underspecification in phonology. *Phonology* 5:183–207, DOI: <10.1017/S0952675700002268>.

Bale, Alan, Michaël Gagnon & Hrayr Khanjian. 2011. On the relationship between morphological and semantic markedness. *Morphology* 21:197–221, DOI: <10.1007/s11525-010-9158-1>.

Bjorkman, Bronwyn & Hedde Zeijlstra. 2014. *Upward Agree is superior*. Ms., Toronto, ON & Göttingen: University of Toronto & Georg-August-Universität Göttingen. URL: <https://ling.auf.net/lingbuzz/002350>.

Bjorkman, Bronwyn & Hedde Zeijlstra. 2015. *Upward Agree is superior*. Poster presented at the 33rd West Coast Conference on Formal Linguistics (WCCFL 33). URL: <http://post.queensu.ca/~bb86/talks.html>.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: a life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.

Clements, George N. 1985. The geometry of phonological features. *Phonology Yearbook* 2:225–252.

Forchheimer, Paul. 1953. *The category of person in language*. Berlin: Walter de Gruyter.

Gazdar, Gerald, Ewan Klein, Geoffrey K. Pullum & Ivan A. Sag. 1985. *Generalized Phrase Structure Grammar*. Cambridge, MA: Harvard University Press.

Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78:482–526, DOI: <10.1353/lan.2002.0158>.

Holmberg, Anders & Þorbjörg Hróarsdóttir. 2003. Agreement and movement in Icelandic raising constructions. *Lingua* 113:997–1019, DOI: <10.1016/S0024-3841(02)00162-6>.

McGinnis, Martha. 2005. On markedness asymmetries in person and number. *Language* 81:699–718, DOI: <10.1353/lan.2005.0141>.

Nevins, Andrew Ira. 2007. The representation of third person and its consequences for Person-Case effects. *Natural Language & Linguistic Theory* 25:273–313, DOI: <10.1007/s11049-006-9017-2>.

Nevins, Andrew Ira. 2011. Multiple Agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29:939–971, DOI: <10.1007/s11049-011-9150-4>.

Noyer, Rolf. 1992. *Features, positions, and affixes in autonomous morphological structure*. Doctoral dissertation, Cambridge, MA: MIT. Revised and republished as Noyer 1997.

Noyer, Rolf. 1997. *Features, positions, and affixes in autonomous morphological structure*. New York, NY: Garland Publishing.

Pesetsky, David & Esther Torrego. 2001. T-to-C movement: causes and consequences. In *Ken Hale: a life in language*, ed. Michael Kenstowicz, 355–426. Cambridge, MA: MIT Press.

Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture: syntactic derivation and interpretation, In honor of Joseph E. Emonds*, eds. Simin Karimi, Vida Samiian & Wendy Wilkins, 262–294. Amsterdam: John Benjamins.

Pollard, Carl & Ivan A. Sag. 1994. *Head-driven Phrase Structure Grammar*. Chicago, IL: University of Chicago Press.

Preminger, Omer. 2011a. *Agreement as a fallible operation*. Doctoral dissertation, Cambridge, MA: MIT.

Preminger, Omer. 2011b. Asymmetries between person and number in syntax: a commentary on Baker's SCOPA. *Natural Language & Linguistic Theory* 29:917–937, DOI: <10.1007/s11049-011-9155-z>.

Preminger, Omer. 2013. That's not how you agree: a reply to Zeijlstra. *The Linguistic Review* 30:491–500, DOI: <10.1515/tlr-2013-0015>.

Preminger, Omer. 2014. *Agreement and its failures*. Linguistic Inquiry Monographs 68, Cambridge, MA: MIT Press, DOI: <10.7551/mitpress/9780262027403.001.0001>.

Preminger, Omer. 2015. *Upwards and onwards*. Paper presented at the University of Connecticut Linguistics Colloquium, Storrs, CT. URL: <http://omer.lingsite.org/files/Preminger---Upwards-and-onwards.pdf>.

Preminger, Omer & Maria Polinsky. 2015. *Agreement and semantic concord: a spurious unification*. Ms. URL: <https://ling.auf.net/lingbuzz/002363>.

Ritter, Elizabeth. 1991. Two functional categories in noun phrases: evidence from Modern Hebrew. In *Perspectives on phrase structure: heads and licensing*, ed. Susan D. Rothstein, 37–62. San Diego, CA: Academic Press.

Ritter, Elizabeth. 1992. Cross-linguistic evidence for number phrase. *Canadian Journal of Linguistics* 37:197–218.

Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.

Rizzi, Luigi. 2001. Relativized minimality effects. In *The handbook of contemporary syntactic theory*, eds. Mark R. Baltin & Chris Collins, 89–110. Oxford: Blackwell, DOI: <10.1002/9780470756416.ch4>.

Sagey, Elizabeth. 1986. *The representation of features and relations in non-linear phonology*. Doctoral dissertation, Cambridge, MA: MIT.

Sauerland, Uli. 2003. A new semantics for *number*. In *Proceedings of the 13th Semantics and Linguistics Theory conference (SALT 13)*, eds. Robert B. Young & Yuping Zhou, Ithaca, NY: CLC Publications, 258–275, DOI: <10.3765/salt.v13i0.2898>.

Wurmbrand, Susi. 2011. *The syntax of valuation in auxiliary-participle constructions*. Paper presented at the 29th West Coast Conference on Formal Linguistics (WCCFL 29).

Wurmbrand, Susi. 2012. Parasitic participles in Germanic: evidence for the theory of verb clusters. *Taal en Tongval* 64:129–156.

Wurmbrand, Susi. 2014. The Merge condition: a syntactic approach to selection. In *Minimalism and beyond: radicalizing the interfaces*, eds. Peter Kosta, Steven L. Franks, Teodora Radeva-Bork & Lilia Schürcks, 139–177. Amsterdam: John Benjamins.

Zeijlstra, Hedde. 2012. There is only one way to agree. *The Linguistic Review* 29:491–539, DOI: <10.1515/tlr-2012-0017>.

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