

Phi-feature resolution under coordination is extra- grammatical

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Workshop: Agreement in Multivaluation Constructions (AMC 2021)

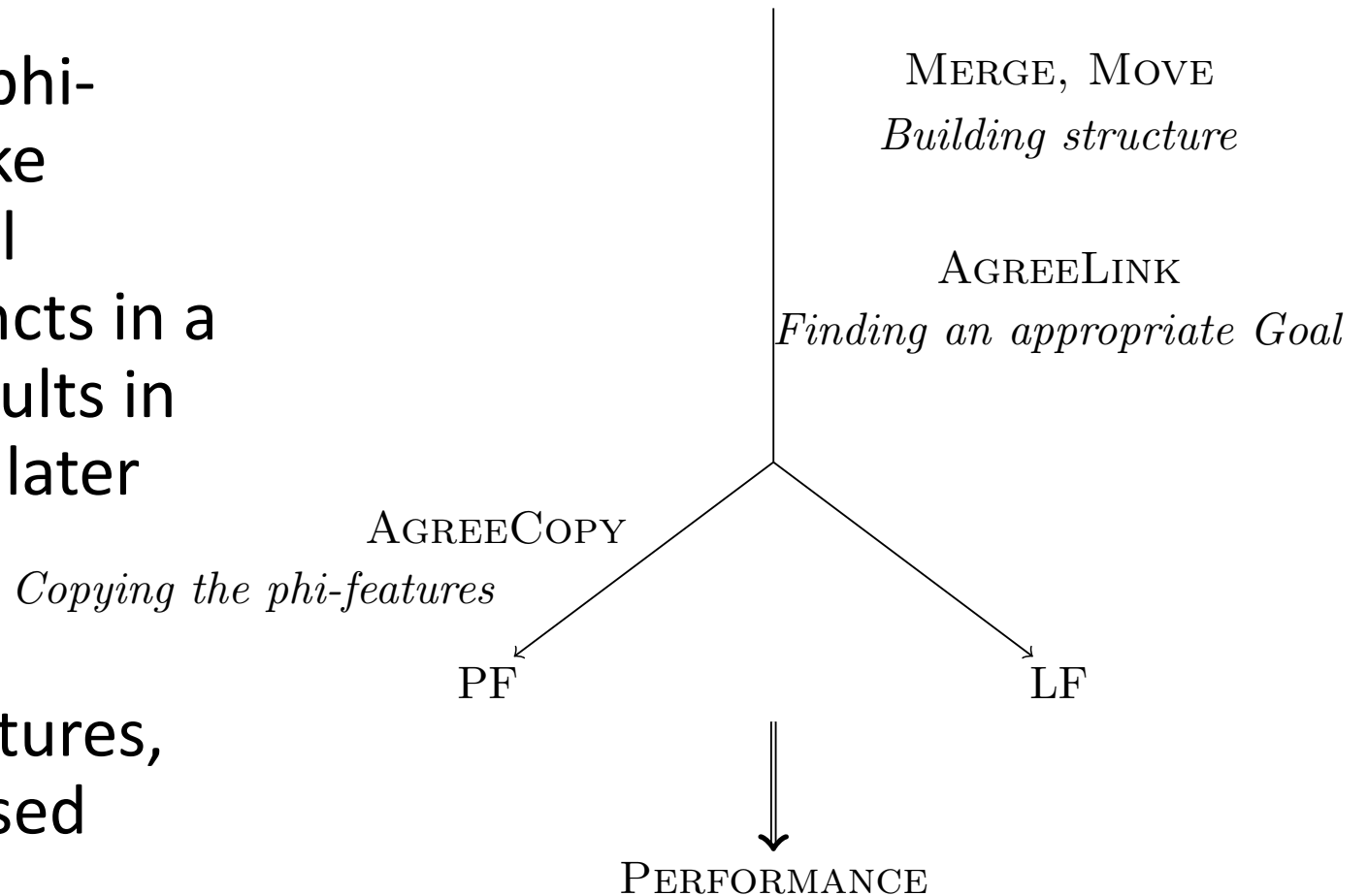
Main claim

*SpongeBob and Gary are/*is/*am swimming.*

- Commonly assumed to involve fully grammar-internal operations/relations:
 - Coordination
 - Phi-features
 - Agreement
 - Resolution
- **Phi-feature resolution under coordination is grammar-external (extra-grammatical)**

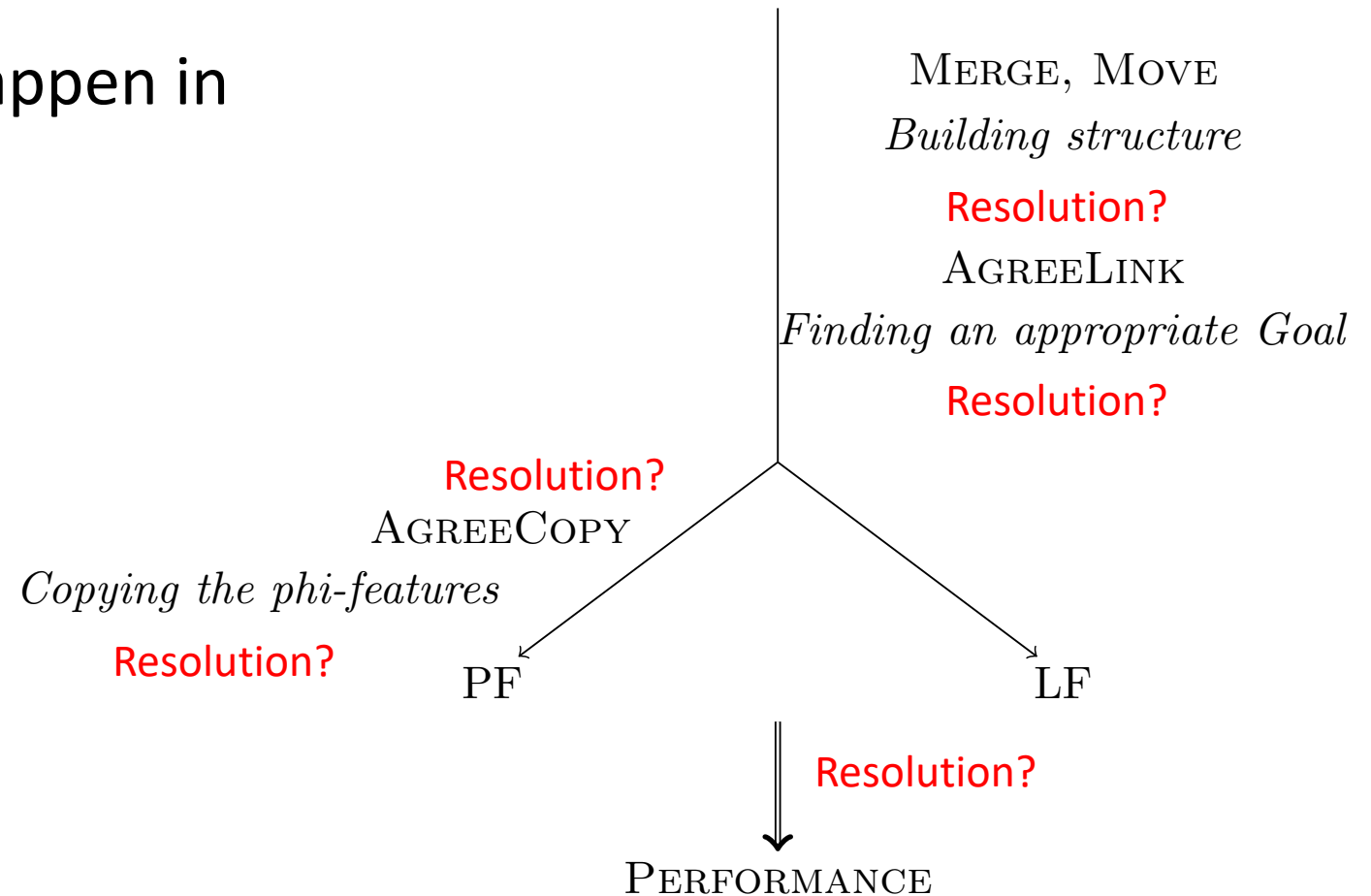
Resolution (working definition)

- Resolution: Computation of phi-features (nominal features like person, number, grammatical gender/noun class) of conjuncts in a coordinate structure that results in one set of phi-features to be later expounded as an agreement morpheme.
- coordinate structure, phi-features, agreement = all grammar based



Locating resolution

- Question: does resolution happen in the grammar or elsewhere?



Two arguments today

- **Contrasting** resolution of phi-features under coordination to other phenomena that require phi-featural information reduction (e.g., omnivorous agreement)
- **Non-systematicity** of resolution in world's languages

Contrast with other phenomena

- Other phenomena besides resolution where an overabundance of features needs to be reduced
 - Omnivorous agreement (Nevins 2011, a.o.)
 - Person Case Constraint effects (Perlmutter 1971, a.o.)
 - Specificational Copular Clauses (Moro 1992, a.o.)
 - Conjunction vs. disjunction
- If (at some level of abstraction) they share a key ingredient, we have reasons to predict that they should behave in the same way (at least within a language)

Contrast with other phenomena: omnivorous agreement in Kaqchikel

- Agreement that doesn't care about a position of an argument (subject or object) but about its phi-features:
 - Agree with any argument in a clause, whichever is higher on the scale
 - E.g., 1/2 > 3pl > 3sg
 - But morphologically expone only one argument!

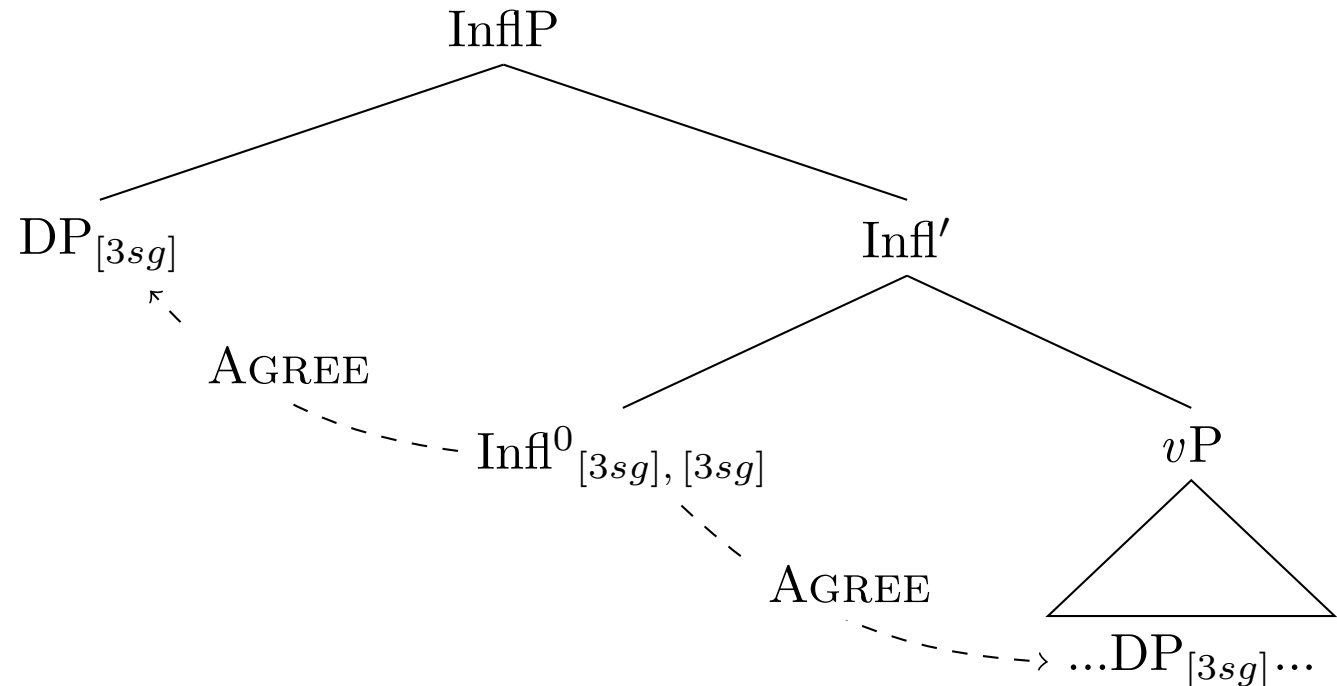
<i>Ja</i>	<i>ri</i>	<i>a</i>	<i>Lu'</i>	<i>x-∅-tz'et'ö</i>	<i>rja'</i>
FOC	the	Mr.	Lu	PRF- 3SG -see	3SG
'It was Lu who saw him.'					(Kaqchikel)

Contrast with other phenomena: omnivorous agreement in Kaqchikel

- Assumption: some Agree probes have a property of Feature Gluttony (Coon and Keine 2020)

<i>Ja</i>	<i>ri</i>	<i>a</i>	<i>Lu'</i>	<i>x-{\emptyset/*e}-tz'et'ö</i>	<i>rja'</i>
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'It was Lu who saw him.'

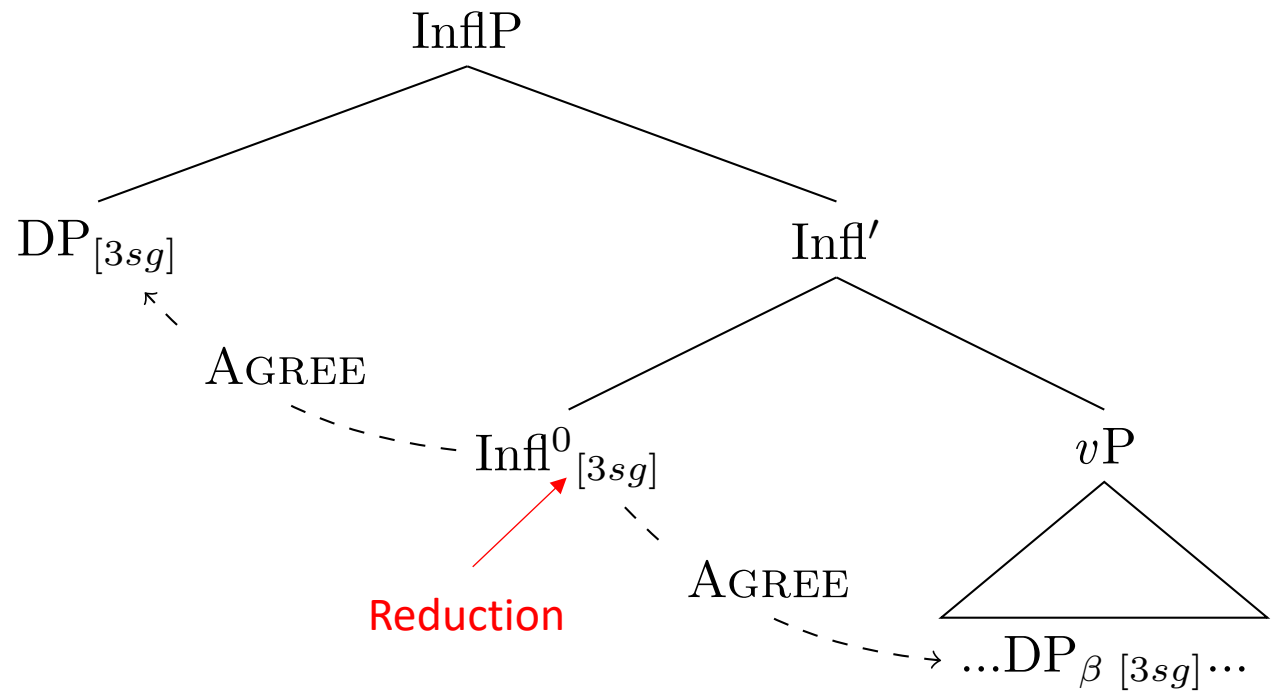


Contrast with other phenomena: omnivorous agreement in Kaqchikel

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<i>Ja</i>	<i>ri</i>	<i>a</i>	<i>Lu'</i>	<i>x-{\emptyset/*e}-tz'et'ö</i>	<i>rja'</i>
FOC	the	Mr.	Lu	PRF- {3SG/*3PL} -see	3SG

'It was Lu who saw him.'



Contrast with other phenomena: resolution under coordination in Kaqchikel

Jeb'el x-e'-etz'an ri a Lolmay chuqa' ri a Lu'.
good PRF-**3PL**-play the Mr. Lolmay and the Mr. Lu'
'Mr. Lolmay and Mr. Lu played well.' (Kaqchikel, Brown et al. 2006)

Contrast with other phenomena: resolution under coordination

- Assumption: Infl^0 is multivalued with phi-features of all conjuncts
 - There is no &P layer
 - Therefore: If resolution was to happen in the grammar, it would need to take place on Infl^0 (and not on &P)
- Particularly straightforward in one type of underlyingly-clausal-conjuncts approach to coordination: parallel structures by Goodall 1987

Contrast with other phenomena: resolution under coordination

- Coordination is underlyingly clausal: evidence from lexeme selection
 - Semantically null prepositions lexeme-selected by some e.g., verbs or nouns (Merchant 2019)

*I pride myself {on/*in} this soup.*

*I take pride {in/*on} this soup.*

- Same restrictions under coordination

*I pride myself {on/*in} this soup and {on/*in} this cake.*

*I take pride {in/*on} this soup and {in/*on} this cake.*

Contrast with other phenomena: resolution under coordination

- Coordination is underlyingly clausal: evidence from lexeme selection
 - If there is any optionality in I-selection of such prepositions, they can mismatch under coordination

*my concern for/about/*in grammar and typos*

my concern for grammar and about typos

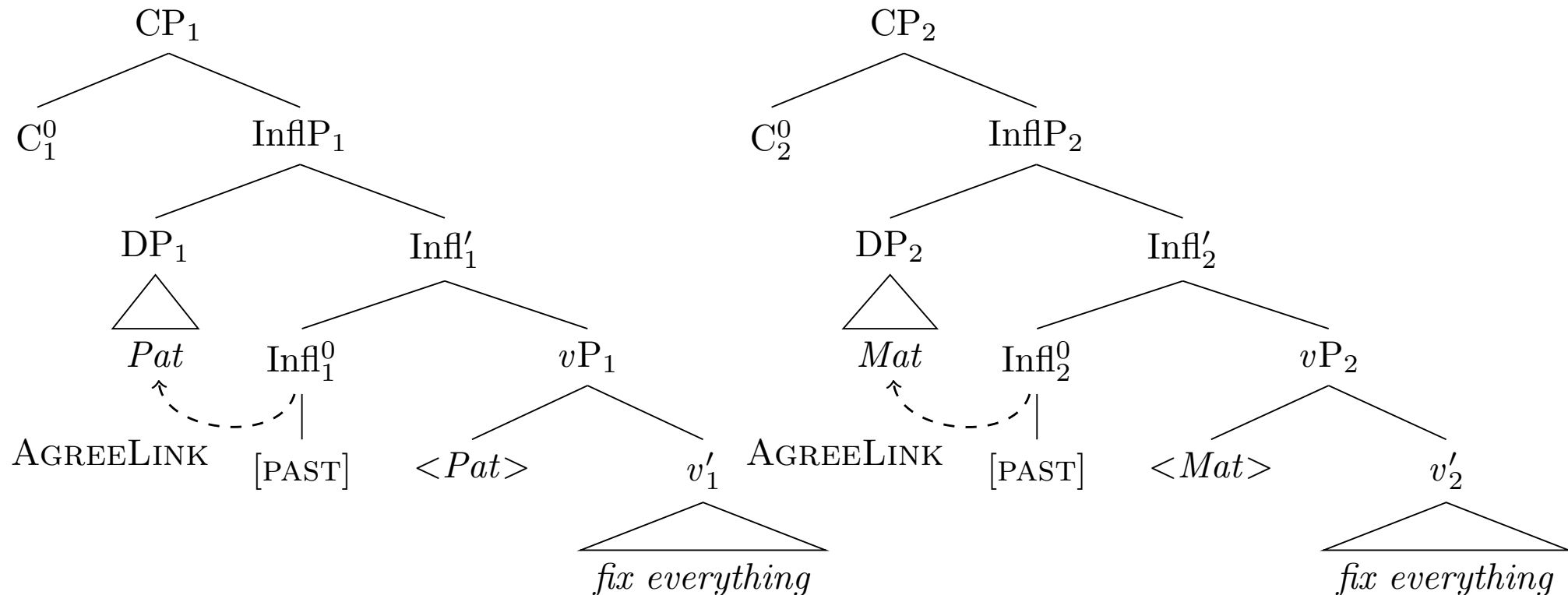
Contrast with other phenomena: resolution under coordination

- Coordination is underlyingly clausal
 - Many well-known issues with conjunction reduction approach
 - Alternative: parallel structures by Goodall (1987)
 - A version of clausal conjunction using multivaluation

Contrast with other phenomena: sample derivation

Pat and Mat fix everything.

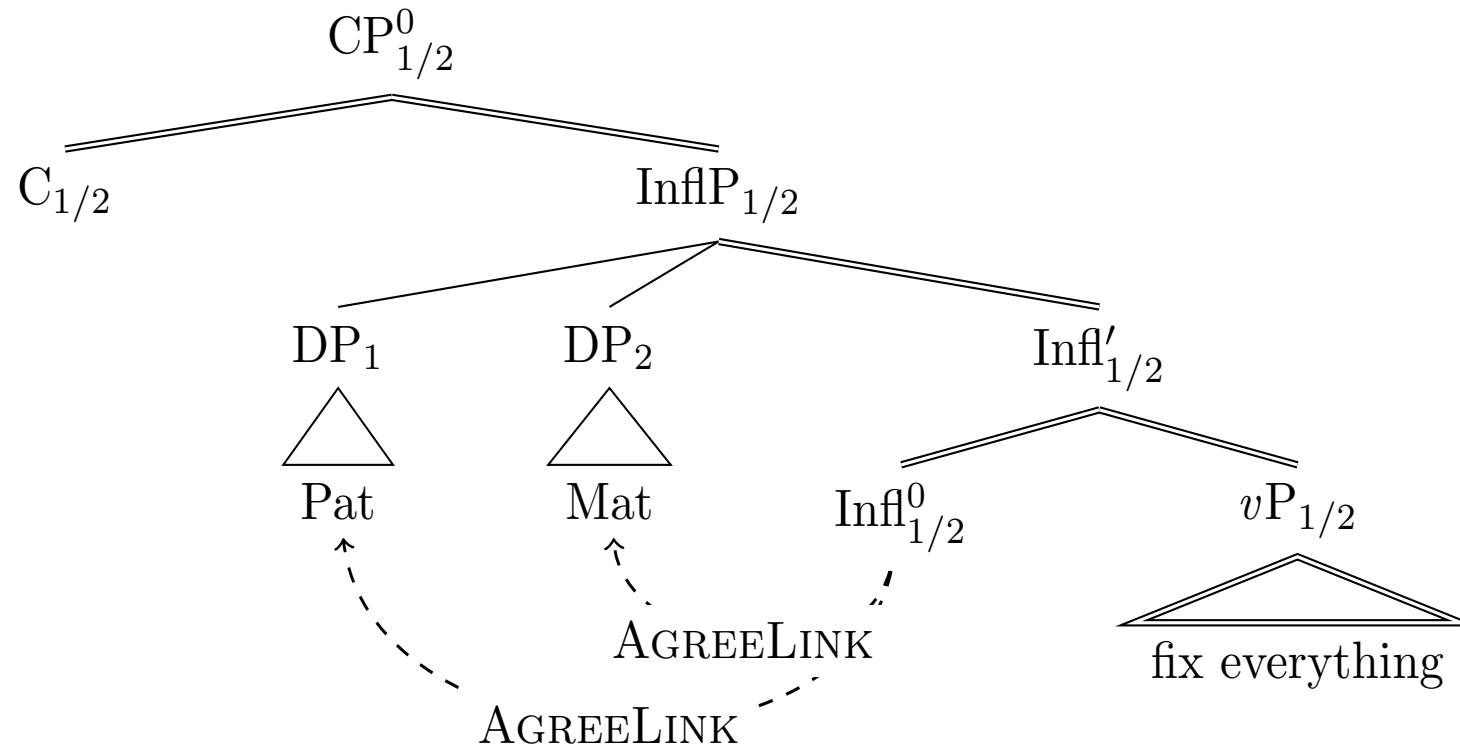
- *Pat fix everything*
- *Mat fix everything.*



Contrast with other phenomena: sample derivation

Pat and Mat fix everything.

- *Pat fix everything*
 - *Mat fix everything.*
- } Identical nodes “fuse”, non-identical nodes continue to exist in parallel planes until linearization



Contrast with other phenomena: sample derivation

- Result of AgreeLink:
 - Infl^0 {[Pat], [Mat]}
- Result of AgreeCopy:
 - Infl^0 {[3sg], [3sg]}
 - If resolution was grammar-internal, it would need to take place on Infl^0

Contrast with other phenomena: take-away

- The output of phi-featural reduction in omnivorous agreement is different than the output of phi-featural resolution under coordination (within the same language)

	Omnivorous agreement	Coordination
Sets of phi-features agreed with	[3sg], [3sg]	[3sg], [3sg]
Location of agreement probe	Infl ⁰	Infl ⁰
Result of featural reduction	[3sg]	[3pl]

- Construction specific rules for phi-featural reduction?
 - Or a grammar-external system for resolution under coordination?

Non-systematicity of resolution behavior

- Resolution is not as systematic as it is sometimes taken to be, starting with English, through German, French, Dutch, Russian, Polish, Bosnian-Serbian-Croatian, Greek, Xhosa, Chichewa, and possibly many more languages
 - Corbett (2006: 242): “person resolution is not quite as simple as [descriptive] grammars often imply.”
 - Examples of inter- and intra-speaker variability and ineffability
 - All features (person, number, noun classes/grammatical gender)

Non-systematicity of resolution behavior: Polish example

- (Traditional) Rule for grammatical gender resolution (Willim 2012):
 - When conjoining masculine human (MH) or virile (VIR), resolve to virile
 - Else: non-virile (NVIR)
- Exception 1 (Zieniukowa 1979):

Matka	i	niemowlę	patrzy{-ły/-li}	na	siebie	nawzajem.
mother(F)	&	newborn(N)	look- <small>{PST.NVIR/-PST.VIR}</small>	on	self	each.other

'A mother and a newborn baby were looking at each other.'

Non-systematicity of resolution behavior: Polish example

- Prazmowska (2016)'s proposal:
To revise the phi-feature system
& resolution rules

- Sacrificing parsimony
- Mixing syntactic & semantic features
- Introducing a new tool: eligibility (instead of deterministic function)

	INTERPR MASCULINE	INTERPR FEMININE	UNINTERP HUMAN	UNINTERP NON- HUMAN
INTERPRETABLE MASCULINE	virile	virile	virile	virile
INTERPRETABLE FEMININE		non- virile	virile non- virile	non- virile
UNINTERPRETABLE HUMAN			virile non- virile	virile non- virile
UNINTERPRETABLE NON-HUMAN				non- virile

Non-systematicity of resolution behavior: Polish example

Still not accounting for **all** variability
(Zieniukowa 1979):

- Exception 2 (Zieniukowa 1979):

Bratowa *i* *tort* *{były/byli}*
Sister-in-law & cake {were.NVIR/were.VIR}

już *w* *drodze.*
already on way

'A sister-in-law and a cake were already on their way.'

	INTERPR MASCULINE	INTERPR FEMININE	UNINTERP HUMAN	UNINTERP NON- HUMAN
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INTERPRETABLE FEMININE		non- virile	virile non- virile	non- virile
UNINTERPRETABLE HUMAN			virile non- virile	virile non- virile
UNINTERPRETABLE NON-HUMAN				non- virile

Non-systematicity of resolution behavior: Polish example

Not accounting for **ineffability**:

Czarodziej *i* *pięć* *czarownic*
wizard & five witches

przyleci- $\{??eli/*ały/*ało\}$ do zamku
flew- $\{??VIR/*NVIR/*3SG.N\}$ to castle

‘A wizard and five witches flew to the castle.’

	INTERPR MASCULINE	INTERPR FEMININE	UNINTERP HUMAN	UNINTERP NON- HUMAN
INTERPRETABLE MASCULINE	virile	virile	virile	virile
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Non-systematicity of resolution behavior: take-away

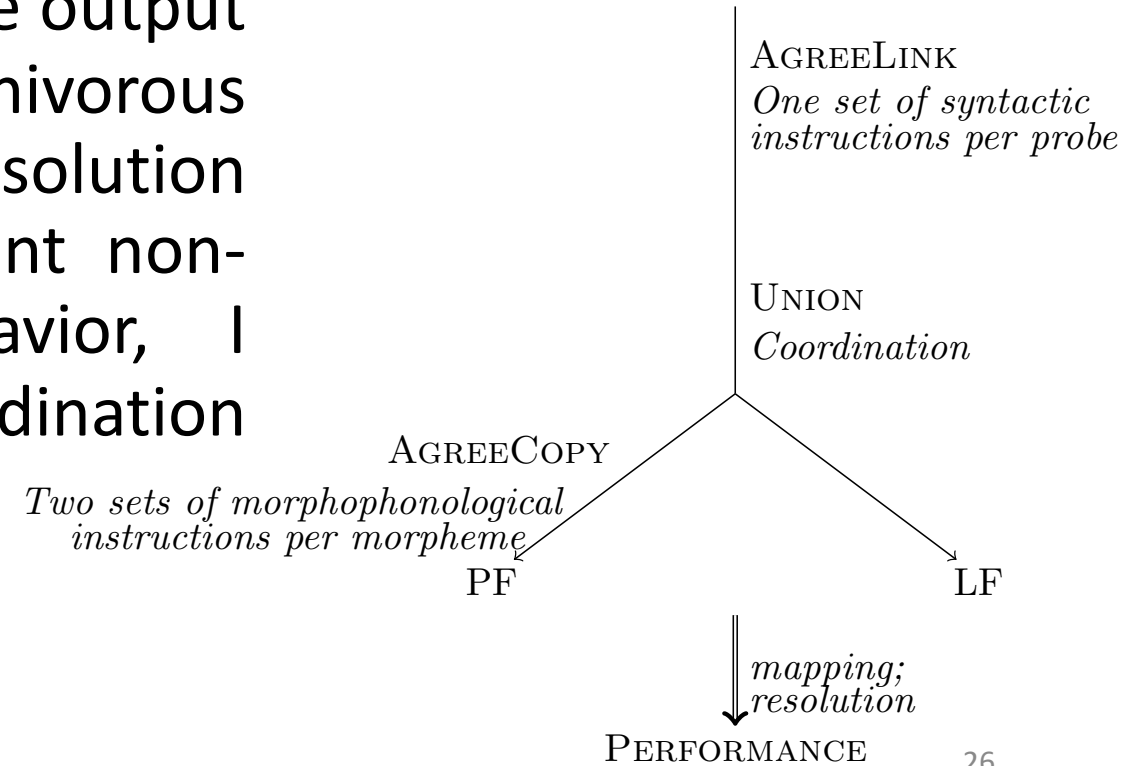
- There are many exceptions to simple rules of resolution under coordination that need to be explained
- The best alternative, but still grammar-internal, proposals require addition of non-trivial tools and still do not account for all the data
- If resolution is **grammar-external**, it explains the need for non-traditional tools and the non-systematic behavior

Main claim

- Phi-feature resolution under coordination is grammar-external
 - Convention?
- Advantages:
 - Removing hi-tech tools and stipulations from the grammatical toolkit
 - Avenue for exploring the power of convention and its interaction with grammar

Summary

- I laid the ground for the analysis of coordination as involving multivaluation
- Based on (i) the contrast between the output of phi-feature reduction in omnivorous agreement and the output of resolution under coordination, and (ii) rampant non-systematicity of resolution behavior, I proposed that resolution under coordination is grammar-external.



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