Syntactic Agreement

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Class 1

EGG in Lagodekhi

Today's Overview

1. Syllabus
2. Agreement
3. Features

Syllabus

- **Day 1.**What is agreement? (Features/ agreement as a rule/ agreement as a dependency/ agreement as an operation, categories and agreement)
- **Day 2.** A short history of Agree (from PSR, to Spec-Head, to Agree)
- **Day 3.** The locus of agreement (Syntactic vs morphological agreement/PF vs NS agreement/agreement domains and syntax-PF mapping/ PIC (in)sensitivity)
- **Day 4.** The “timing” of agreement (Long-distance agreement, intervention effects, parasitic agreement)
- **Day 5.** The “direction” of agreement (Spec-Head, Agree, Multiple Agree, Reverse Agree)

1. INTRODUCTION

(1)*L**a*** *bell**a*** *cas**a*** *ross**a*** *antic**a***

the-F.SG beautiful-F.SG house-F.SG red-F.SG old-F.SG

'The beautiful red old house'

- DEFINITION 1. Agreement obtains when two items carry the same ending

(2) *La* *bella* *casa* *imponente*

the-F.SG beautiful-F.SG house-F.SG stately-F.SG

'The beautiful stately house'

INTRODUCTION

(3) *The beautiful flowers grow in the garden*

Same ending?

DEFINITION 2. 'The term *agreement* commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another'

(Steele 1978: 610)

DEFINITION 2A. Agreement is a special syntactic relation 'cross-linking' two or more elements. This relation is very often made explicit by means of a marker of some kind on one or all the elements between which it is established.

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1.1. Agreement as co-variance

(5) *Valeri**us*** *puell**am*** *ama**t*** [Latin]
Valerius-M.SG.NOM girl-F.SG.ACC love-3RD.SG.PRES
'Valerius loves the girl'

(6) *Valeri**us*** *puell**ae*** *favet*
Valerius-M.SG.NOM girl-F.SG.DAT favour-3RD.SG.PRES
'Valerius favours the girl'

Is agreement co-variance?
How would you check it?

1.1. Agreement as co-variance

(7)* *Valeri**us***	*puell**ae***	*ama**t***		[Latin]
Valerius-M.SG.NOM	girl-F.SG.DAT	love-3RD.SG.PRES		
(8) **L**a***	*bell**o***	*cas**a***	*ross**a***	*antic**a*** [Italian]
the-F.SG	beautiful-F.SG	house-F.SG	red-F.SG	old-F.SG

(9) *Discipulus* *magistram* *ama**t***
student-M.SG.NOM teacher-F.SG.ACC love-3RD.SG.PRES
'The student loves his teacher'

(10) *Discipul**i*** *magistram* *ama**nt***
student-M.**PL**.NOM teacher-F.SG.ACC love-3RD.**PL**.PRES
'Students love their teacher'

(11) *Discipulus* *magistras* *amat*
student-m.sg.nom teacher-f.pl.acc love-3rd.sg.pres
'The student loves his teachers'

1.1. Agreement as dependency

- DEFINITION 3. Agreement is a special syntactic DEPENDENCY relation 'cross-linking' two or more elements. This relation is very often made explicit by means of a marker of some kind on one or all the elements between which it is established.

- The core element, which determines the ending on the other element, is called the **CONTROLLER.** The element undergoing this control is usually called the **TARGET.**

Food for thought

(12)*Vettem* *egy piros autó**t*** [Hungarian]
bought-1.SG a red car.ACC
'I bought a red car'

(13)*Régóta* *gyűjtök* *egy autóra.*
for-long save-1.SG a car-for
Ma *vettem* *egy* *pirosa**t*** ___
today bought-1.SG a red-ACC
'I have been saving up for a car for long. Today I bought a red one'

(Lipták 2010:2,10)

1.2. Head-marking and dependent-marking languages

- **Head-marking languages** are those languages which morphologically mark the agreement relation on the **HEAD of the phrase.**

  (do you know what a head of a phrase is?)

- Tzutujil, a Mayan language spoken in Guatemala:

(16) jar aak'aalaa7 x-0-kee-k'aq aab'aj
the boys COMP-**3SG.3PL**.throw rock
pa rwi7 ja jaay
on top.of the house

- 'The boys threw rock(s) on top of the house'

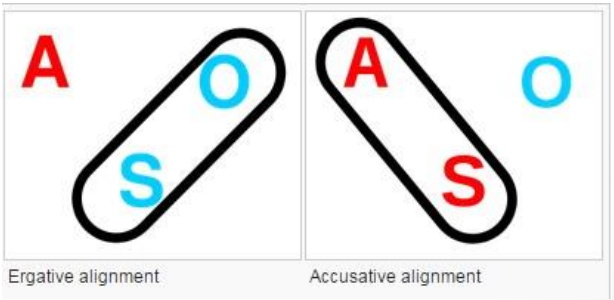
1.2. Head-marking and dependent-marking languages

Dependent marking is the morphological marking of the agreement relation on the **dependent elements** but not on the head.

Paman, an Australian language:

(17) wutpu-nku uma-0 ute-n
old.man-ERG firewood-ABS pick.up-PST
'The old man picked up some firewood'

(do you know what erg means?)



1.2. Head-marking and dependent-marking languages

So what type is this?

☺

(18)Si ___ vis pacem para bellum [Latin]

if *pro*-2.SG you-want peace-F.ACC prepare war-N.ACC

'If you want peace, prepare a war'

WALS: out of 236 languages, 71 are head marking, 63 are dependent marking, 58 are double marking (i.e. they mark agreement both on head and dependents), 42 have no marking, and 2 show a different pattern.

Some facts

- Head marking is more common in the Americas and in Australia-New Guinea. It is quite rare elsewhere.
- Dependent marking is common is Eurasia and in northern Africa, and in some South American and Australian languages.
- Double marking is present in the Americas, in Australia-New Guinea and in the Caucasus and Himalayan.
- Zero marking is instead attested mainly in Asia, but also in Africa and Central and South America.

2. FEATURES

Jakobson & Halle (1956) **Every phoneme is identifiable by means of binary features**

1. vocalic/non-vocalic
2. consonantal/non-consonantal
3. compact/diffuse
4. grave/ acute
5. flat/plain
6. nasal/oral
7. tense/lax
8. continuant/interrupted
9. strident/mellow

Jakobson (1958): Case

- Franks (2005:4): “The three necessary and sufficient features proposed in Jakobson (1958) for describing the Russian case system were [±quantified] (*obëmnyj*), [±directional] (*napravlennyj*) and [±marginal] (*periferijnyj*). Jakobson (1958, 179) defines these "semantic marks" as "focusing upon the extent to which the entity takes part in the message," "signalizing the goal of an event" and "assigning to the entity an accessory place in the message," respectively”. Jakobson classified Russian case as follows:

- nominative = [–marg, –quant, –dir]
- accusative = [–marg, –quant, +dir]
- genitive = [–marg, +quant, –dir]
- instrumental = [+marg, –quant, –dir]
- dative = [+marg, –quant, +dir]
- locative = [+marg, +quant, –dir]

Binary features

[–marg, +quant, +dir] and [+marg, +quant, +dir] ?

OVERGENERATION PROBLEM

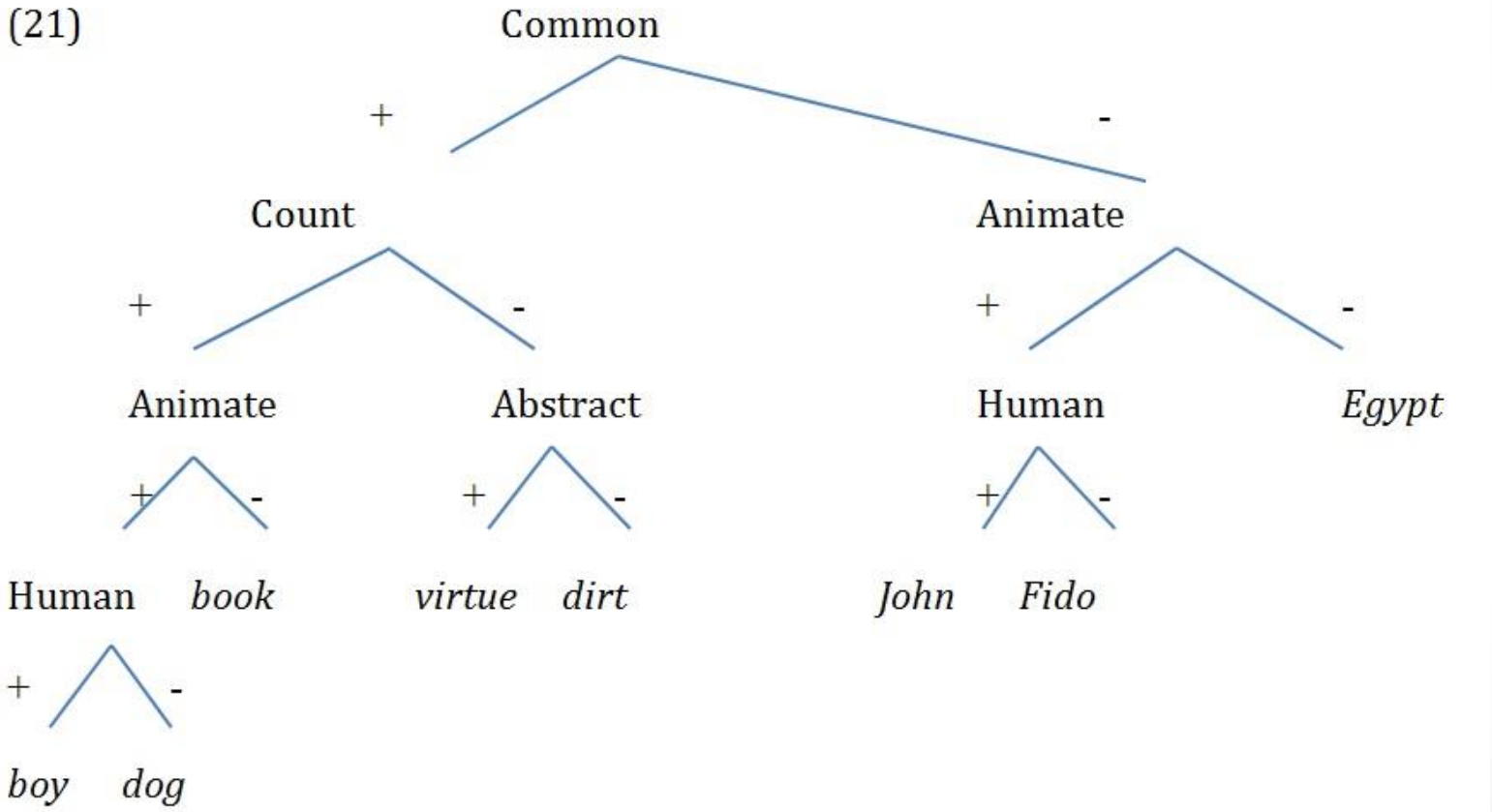
Why are features so important? What do they solve?

- Chomsky (1965): features are crucial for phonological operations.

Rules targeting only voiced consonants. We express voice as a feature. Each segment with a [voice] feature will be then easily selectable as a target for the rule.

Binary features

(21)



Binary features

A feature must be represented as [αF], where (α = + or -).

- This is called a **BINARY feature system**: we specify the characteristic of the element (whether a noun is countable, animate) and whether this characteristic is or is not found on a syntactic element.

Two specifications:

- the nature of the feature (animate/count/human etc.), often called DIMENSION or ATTRIBUTE
- the presence of the feature on a lexical item

Binary features

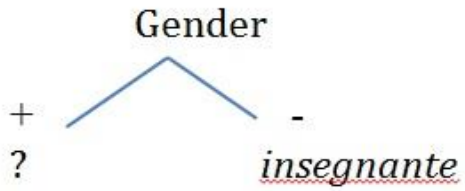
- Gender in Italian.

Ragazzo, ragazza, insegnante.

m.sg f.sg ?

What about the noun *insegnante*?

(22)



This first branch serves to tell us whether gender is expressed or not on a noun. So-called invariable nouns derived from former present participles, like *insegnante*, can be considered as not carrying any gender specification.

Alternatively, this noun could be considered as carrying two gender specifications at the same time, i.e. as being at the same time masculine and feminine. A feature which is specified as plus and minus at the same time is called DISJUNCTIVE,

(Wechsler & Zlatič 2001, D'Alessandro 2004, 2007)

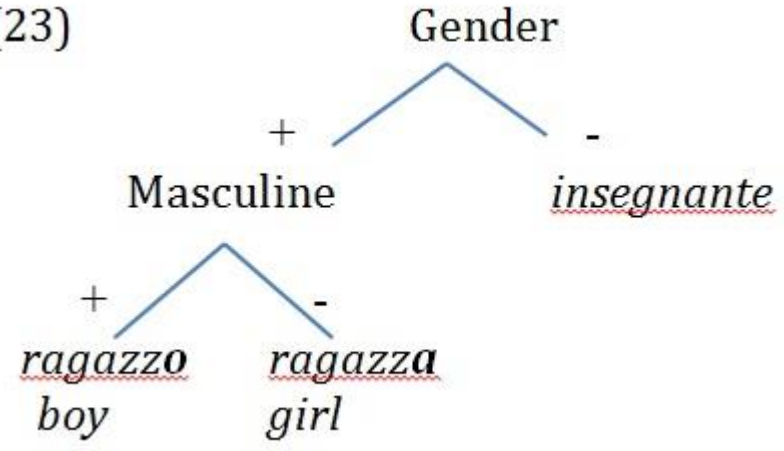
Markedness

Basic value: markedness. The choice of the basic value is usually determined to what morphologists call the UNMARKED value.

- Intuitively, an element is unmarked when it presents few exceptions.
- Greenberg (1966): markedness can be defined in terms of frequency of occurrence of a form: the form occurring more in a grammar is the unmarked one.
- Chomsky & Halle (1968): unmarked values are those that fall at the core of Universal Grammar, while the marked ones are those that are also found, but more rarely selected by grammars.

Gender

(23)



Is this formalization right?

“Neuter” on nouns

“Neuter” in Italian and in German: are they the same?

(24) a. (*der*) *Tag* [+ masc]
b. (*die*) *Welt* [- masc]
c. (*das*) *Buch*?

(25) a. *la* *brava* *insegnante*
the-F.SG good-F.SG teacher-F/M SG
b. *il* *bravo* *insegnante*
the-M.SG good-M.SG teacher-F/M SG

(26) a. ein neuer Tag
a-SG new-M.SG day-M.SG
b. eine neue Welt
a-F.SG new-F.SG world-F.SG
c. ein neues Buch
a-SG new-N.SG book-N.SG

Attribute: Value

- A different feature system: **ATTRIBUTE-VALUE**

  [attribute: value]

- For example, 1st person would be indicated as:

  [person: 1st]

At work!

Describe the verbal inflection of the present tense in Spanish and English

- *cant**o*** ('I sing')
- *cant**as***
- *cant**a***
- *cant**amos***
- *cant**àis***
- *cant**an***

- *I sing*
- *you sing*
- *(s)he/it sing**s***
- *we sing*
- *you sing*
- *they sing*

Φ features

Spanish

(31) *–o*

[person: 1st]
[number: singular]
[tense: present]
[mood: indicative]
[aspect: imperfective]

We call the first group of features, [person], [number] and also [gender] **Φ-FEATURES** ("formal" features). Φ-features can be defined as those features that undergo agreement.

2.2. Interpretable and uninterpretable features

- Interpretable features are those whose value does not depend on other elements. They are those features that are established, that are fixed in the lexicon, and as such interpretable at LF, which is the semantic/interpretation module of grammar.

- Is number interpretable?
- Is gender interpretable?

How do we find out?

[Pesetsky & Torrego 2004 → later on]

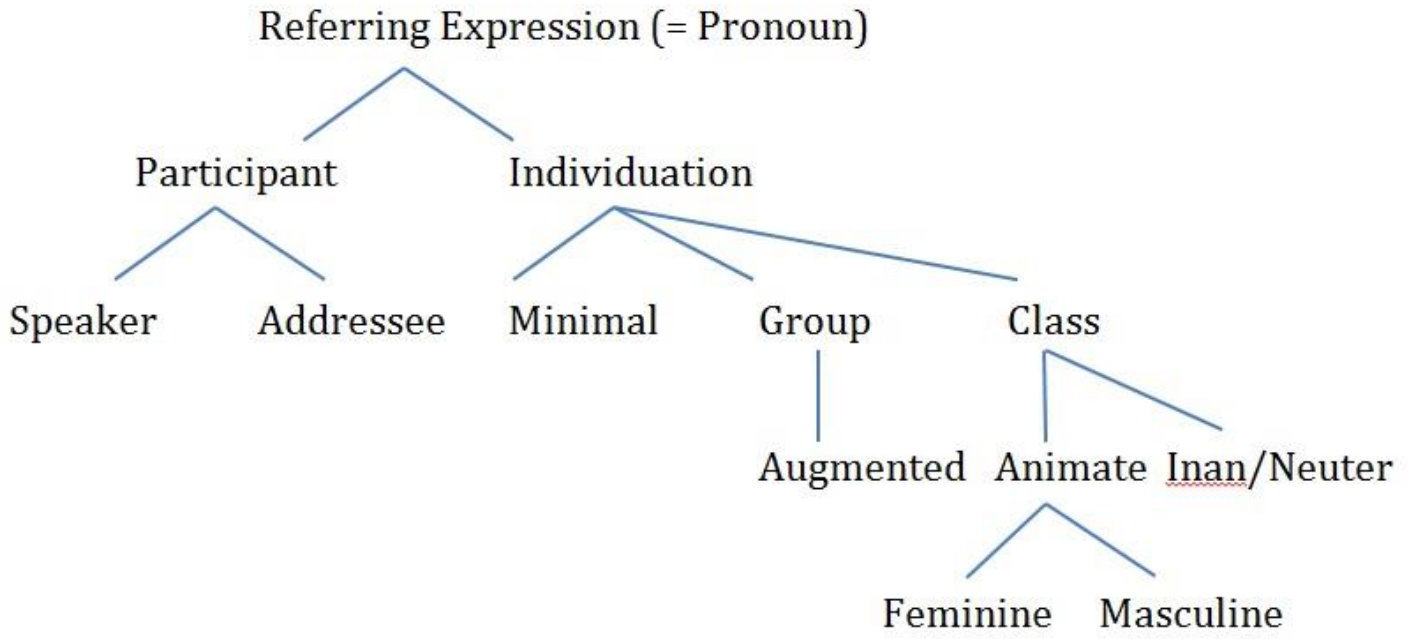
Feature geometry

GREENBERG (1966)

- UNIVERSAL 32: Whenever the verb agrees with a nominal subject or object in gender it also agrees in number.
- UNIVERSAL 36: If a language has the category of gender, it always has the category of number.
- UNIVERSAL 37: A language never has more gender categories in nonsingular numbers than in the singular.
- UNIVERSAL 45: If there are any gender distinctions in the plural of the pronoun, there are some gender distinctions in the singular also.

Feature geometry

(33)



(from Harley & Ritter 2002:8)

Feature geometry

- Hanson (1999) has detected the following pattern for the acquisition of pronouns:

- a. the first pronoun to emerge is either 1st sg. or 3rd sg. neuter/inanimate
- b. the relative order of acquisition of 2nd person and 3rd (non-neuter) and
- singular and plural, varies considerably

AT WORK!

- Rephrase Greenberg's universals in Harley & Ritter's system

2.4. Syntactic categories

- Chomsky (1957): lexical categories described in terms of feature. Each category can be analyzed through PSR transforming it into a COMPLEX SYMBOL, which includes a feature reproducing the category, and other information. For example, a noun can be represented as in (34), a verb as in (35):

- **N** → [+N, ±Common]
- **V** → [+V, ± Transitive]

- How does this look?
- WHY?

Categories

- *We might just as well eliminate the distinction of feature and category, and regard all symbols of the grammar as sets of features* (my *italics*).

- Chomsky (1981): list of all lexical categories with the categorial features identifying them:

- [±N] [±V]: Categorial distinctive features characterizing the four main lexical categories N(oun), V(erb), A(djective), P(reposition)
-
- A = +N, +V
- N = **+N, -V**
- V = **-N**, +V
- P = **-N**, -V

Readings

- Ashton, E. (1949). *Swahili grammar*.New York: Longmans.
- Baker, M. (2008). *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Béjar, S. (2008). 'Conditions on Phi-Agree'. In Harbour, Adger & Béjar (eds), *Phi Theory*. Oxford University Press.
- Corbett, G. (2006). *Agreement*. Cambridge Textbooks in Linguistics. CUP.
- Elouazizi, N. (2005). 'Anti-agreement Effects as (Anti)-connectivity'. In: *Proceedings of the 24th West Coast Conference on Formal Linguistics*, ed. John Alderete et al., 120-128. Somerville, MA: Cascadilla Proceedings Project
- Fuβ, E. (2003). 'Diachronic clues to synchronic syntax: *pro*-drop and complementizer agreement in Bavarian', Ms, University of Cologne.
- Lipták, A. (2010). 'Ellipsis in nominal phrases'. Talk delivered at the LUCL colloquium, Leiden University, December 2010.
- Reid, N. (1997).'Class and classifier in Ngan'gityemmeri'. In: Harvey & Reid (eds), *Nominal Classification in Aboriginal Australia.* Amsterdam: Benjamins.
- Schütze, C. (1997). *Infl in child and adult language: agreement, case and licensing.*PhD dissertation, MIT.
- Steele, S. (1978). ' Word order variation: a typological study'. In Greenberg *et al., Universals of human language IV: Syntax.* Stanford: Stanford University Press.
- Vitale, A. (1981). *Swahili Syntax*. Dordrecht: Foris.
- Wunderlich, D. & M. Krämer (1999). 'Transitivity alternations in Yucatec, and the correlation between aspect and argument roles'. *Linguistics* 37: 431-79.