Agreement in cognition, discourse, and syntax

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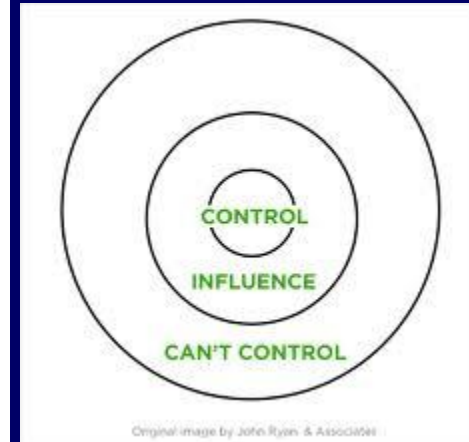**aakibrik@gmail.com**

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Strangeness of agreement

- Does this resemble the common linguistic understanding of the term "agreement"?

Agreement as formal control

- "There is <...> a strong intuition, captured in the controller-target terminology, that agreement is asymmetric" (Corbett 2006: 115)

- Psycholinguistics: inflectional or control theory of agreement

Origin of the dominant linguistic usage

- Hermann Paul, 1880

   Prinzipien der Sprachgeschichte, chapter "On concord"

- "die Tendenz Wörter, die in einer Beziehung zueinander stehen <…> in formelle Übereinstimmung miteinander zu setzen. Hierher gehört die Kongruenz in Genus, Numerus, Kasus, Person, wie sie zwischen einem Subst. und einem dazu gehörigen Präd. oder Attribut oder einem dasselbe vertretenden Pron. oder Adj. besteht <…> "

- *Principles of the history of language,* edition 1891

- "There exists a tendency to place words related in a way <…> in formal correspondence with each other. Thus is explained the concord in gender, number, case, and person, which subsists between a substantive and its predicate or attribute, or a pronoun or adjective representing the latter <…>"

Formal control agreement is derivative from parallel agreement

- ”Den Ausgangspunkt für die Entstehung der Kongruenz haben solche Fälle gebildet, in denen die formelle Übereinstimmung eines Wortes mit einem andern nicht durch Rücksichtnahme auf dasselbe herbeigeführt, sondern nur durch die Gleichheit der Beziehung bedingt ist.”

- "The starting-point for the origin of concord was afforded by cases in which the formal correspondence of a word with another was produced not by any regard for the latter, but merely by the identity of their relation."

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Formal control agreement terminology in Paul 1880

- "Namentlich entsteht eine Verlegenheit des Sprechenden da, wo eine grammatische Kongruenz zwischen zwei Satzteilen dem Sinne nach nicht möglich ist und dazu ein dritter Satzteil tritt, von dem man gewohnt ist, dass er mit beiden kongruiert. Man muss sich für einen von den beiden entscheiden <…>"

- "The speaker is especially apt to feel perplexity in cases where a grammatical concord is from the sense impossible, and a third clause comes in which custom has led us to expect to agree with both. We have to decide in favor of one or the other <…>"

- *It was my orders*

- *Das sind zwei verschiedene Dinge.*"

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Formal control-style understanding of agreement

- Formal control-style understanding dominates in modern linguistics and psycholinguistics
- This has a consequence: desire to narrow down the notion of agreement
- Kibrik 2011 – narrow, syntactic understanding of agreement
  - In the domain of argument-predicate agreement, primarily the Germanic pattern, most remote from discourse reference
- However, in the context of this workshop I allow a broader, discourse-oriented understanding of the term "agreement"
- In order to do that we will need to lift the formal-control requirement towards agreement

Agreement and reference

- Agreement has much in common with reduced reference

- Person agreement on the verb goes back to reduced reference (pronouns) (Paul 1880/1891: 348-349; Siewierska 2004)

- The same often applies to attributive agreement
  - Russian

    bel-yj   <   běl-ъ=jь   *lit.* 'white he'
    white-M.Sg.Nom   white-M.Sg.Nom=3M.Sg.Nom

    bel-aja   <   běl-a=ja   *lit.* 'white she'
    white-F.Sg.Nom   white-F.Sg.Nom=3F.Sg.Nom

- Classic agreement features are all referential: person, number, gender

Terminology (person agreement)

	Free word	Necessary local antecedent	Example	'they arrive'
		broadest agreement		
Free pronoun	+	−	Lyélé (Gur)	bè yi
Bound pronoun	−	−	Latin	veni-unt
		broader agreement		
Narrow agreement marker	−	+	German	sie komm-en

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Terminology (person agreement)

reduced reference	Free word	Necessary local antecedent	Example	'they arrive'
Free pronoun	+	_	Lyélé (Gur)	bè yi
Bound pronoun	_	_	Latin	veni-unt
Narrow agreement marker	_	+	German	sie komm-en

extended reduced reference

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Reduced reference and agreement

- In the broadest understanding of both, the extent of the included phenomena may almost coincide
  - There are some unusual agreement features (see Corbett 2006 on tense agreement, also cf. Paul 1880), but let us focus on major features
- But the notions still remain distinct
  - Reduced reference is a functional notion: the process of rendering activated referents in discourse
  - Agreement is a linguist's observation about the covariance of discourse constituents

Reference: the process of mentioning mental entities (referents) in discourse by means of referential expressions

The Victorian house that Ms. Johnson is inspecting has been deemed unsafe by town officials. But she asks a workman toting the bricks from the lawn to give her a boost through an open first-floor window. Once inside, she spends nearly four hours Ø measuring and diagramming each room in the 80-year-old house, Ø gathering enough information to Ø estimate what it would cost to rebuild it. She snaps photos of the buckled floors and the plaster that has fallen away from the walls.

Referential choice

- Activation in working memory => reduced referential device. Else use a full device
  - E.g. if the referent 'Ms. Johnson' is highly activated, use a pronoun

- How are different referential expressions, such as the eight mentions of 'Ms. Johnson', related to each other?

- Clearly no formal control (different syntactic domains)

- One can speak about agreement between them (in person, number, gender), but
  - such agreement is clearly an epiphenomenon of the individual mappings "referent □ referential expression"
  - referential expressions just happen to be in agreement or concord with each other

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Syntactic anaphora?

- Reference and referential choice are fundamentally discourse-based, cognitively-driven processes
- Is there something like syntactic anaphora?
  - A mother and her child   NP
  - I gave John his ticket   Clause
  - I promised John to give him his ticket Closely connected clauses
- To account for such syntactic usages, one can still employ a full-scale cognitively based explanation
- But it may be sometimes more economical to account for syntactic usages with the help of simple and automatic rules
- Including in terms of formal control from the antecedent
- Antecedent functions as a placeholder, formal representative of the usual cognitive controller

- Syntactic anaphora is grammaticalization or routinization of

Discourse use of broader agreement (bound pronouns)

- Latin (Horace, Satires 1.5: 65 ff.)

- Cicirrus, Sarmentus

Bound tenacious pronouns

- rogaba-t   denique   cur   umquam fugisse-t,
  ask.Impf-3Sg finally   why   sometime flee.Plpf.Conj-3Sg

- cui   satis   una   farr-is libra   fore-t,
  who.Dat   enough   one   flour-Gen.Sg pound be.Impf.Conj-
                                                                                        3Sg

'Finally he [=Cicirrus] asked why he [= Sarmentus] had ever fled, to whom one pound of flour would have been enough'

Polypersonal broader agreement (Navajo)

- wónáásóó shį́į́   bimá   hadah ha-b-í-ʔ-chʼ-íí-yil
  finally   Ptcl   his.mother   down   up.out-3.Obl-against-
                                         Pref-4.Nom-Pfv-push
  'Finally, it appears, his mother pushed him out (of the nest)'

- tsʼídá shį́į́   naʔahóóhai   b-a-ʔ-í-ltsood
  just   Ptcl   chicken   3.Obl-to-Indef.Acc-Pfv-were.fed
  'Probably at that time the chickens were fed' (*lit.* ' something
                                              was fed to the chickens')

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- The more a language has of broad agreement, the less that
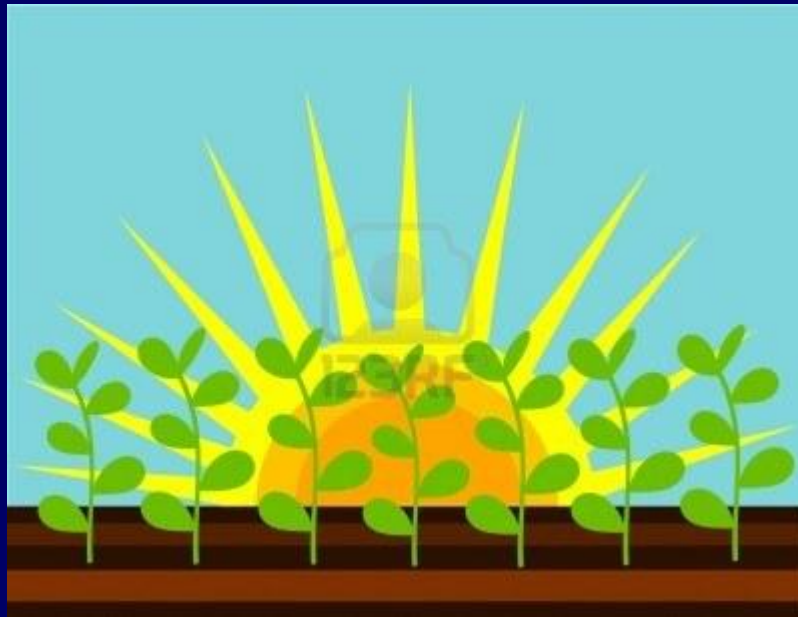
Broader agreement

- Clearly the same principles of operation as in more familiar reduced reference by free pronouns

- Control from the cognitive system

- Formal control treatment is ruled out (distinct syntactic domains)

- Parallel referential mapping leads to parallel agreement

- Related approaches
  - Agreement and anaphora – Bosch 1983, Barlow 1992
  - Semantic agreement – Dowty and Jacobson 1989
  - Constraint approach – Pollard and Sag 1994, Vigliocco et al. 1996, Vigliocco and Hartsuiker 2005

Cooccurrence does not mean cause-effect or control relationship

Controller-target relationship?

Narrow agreement

- Such as Germanic verbal person agreement

- Clearly related to broad agreement
  - Cf. German 3Sg present –t still identical to Latin (cognate)

- Can be viewed as grammaticalization of the discourse pattern (both diachronic and synchronic)

- The narrower the domain, the more appropriate is the formal control approach
  - Agreement Hierarchy (Corbett 1979, 2006; cf. Eberhard et al. 2006)

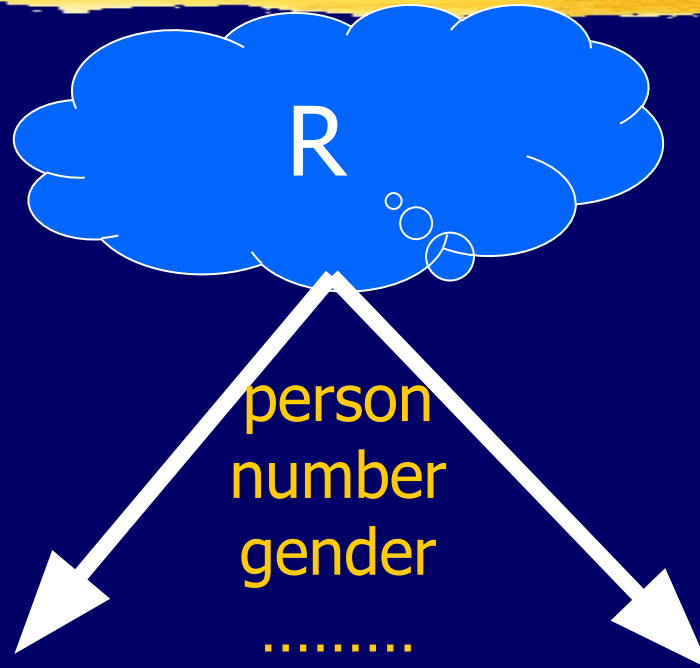attributive > predicate > relative pronoun > personal pronoun

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increasing contribution of semantic factors

Formal control view of agreement

person
number
gender

....

- CONTROLLER   TARGET

- art   *nouveau*

- sie   *kommen*

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Discourse-based, parallel agreement
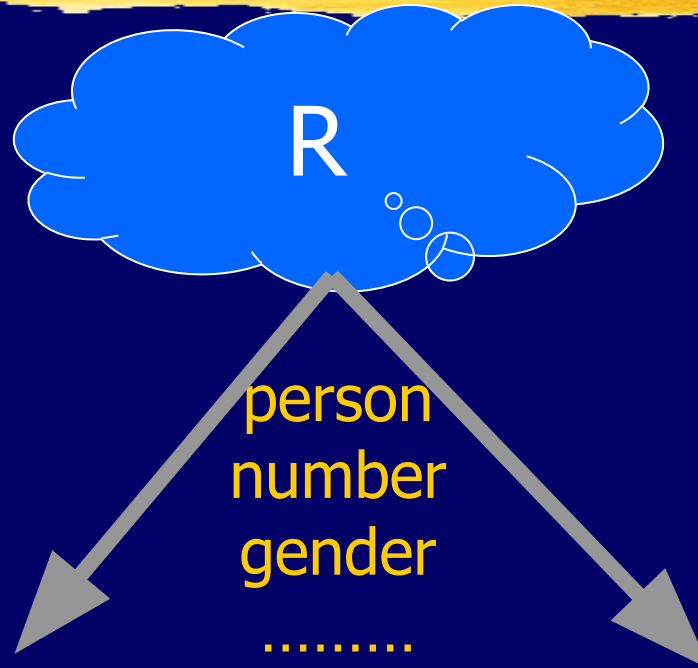
R

person
number
gender
....

- *art*   *nouveau*
- *sie*   *kommen*
- *quaereba**t***   *rogaba**t***

Grammaticalization of discourse-based agreement

R

person
number
gender

....

- CONTROLLER   TARGET
- *art*   *nouveau*
- *sie*   *kommen*

Disagreement

- But even in the narrow agreement there are multiple difficulties and mismatches

- Because of parallel, independent mapping from the cognitive structure?

- Errors (?)
  - In a conversational corpus *I says* occurs up to 50% of the time (Biber et al. 1999: 191)

- Attraction or proximity effect
  - *the key to the cabinets were missing* (Bock and Middleton 2011)

- "Committee contexts"

Inconsistency

- Turkic person agreement

- Tuvan
  [men]   keldim
  I   comePast1Sg
  'I came'

- [men] kelgen=men
  I   comePf=1Sg
  'I have come'

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Absence of explicit controller

mašina
(Fem.)
'car'

- Russian

- Ja   voz'm-u   krasn-uju
  I.Nom take.Pfv-Nonpast.1Sg red-F.Acc.Sg
  'I will take the red one'   25

Pulaar-Fulfulde

- Detailed gender system allows easy substantivization of adjectives and participles into nouns (Koval 2006)

root gloss	subst. adj./part.	gloss	class	source phrase	gloss
newborn	*badd-o*	newborn calf	O	*suka badd-o*	child newborn
newborn	*mbaddi-ri*	newborn calf	NDI	*ngaar-i mbaddi-ri*	bull newborn
newborn	*wadd-e*	newborn heifer	NGE	*nyal-e wadd-e*	heifer newborn
white-bellied	*saaj-e*	white-bellied cow	NGE	*nagg-e saaj-e*	cow white-bellied
be dry	*yoor-nge*	milkless cow	NGE	*nagg-e yoor-nge*	cow dry

gender suffix on noun

agreement suffix

First and second person problem

- Even hard-core syntacticians usually do not consider 1, 2 person reference a case of anaphora (formal control from the antecedent)
  - John lost his wallet   ANAPHORA
  - I lost my wallet   DEIXIS
  - John lost my wallet   DEIXIS

  Each pronominal element is produced independently

- Are we more inclined to see agreement in Germanic 1, 2 person verbal inflection?
  - Ich sprech-e   AGREEMENT OR DEIXIS?
  - Could this be an intuitive borderline between "reference as such" and "agreement as such"?

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Multiple agreement marking

- Persistent indication of an activated referent in a clause

- Particularly gender, sometimes in unexpected loci

- Tariana (Aikhenvald 2000: 204)

ha-dapana   pa-dapana   na-tape-dapana   na-ya-dapana
Dem.Inan-Cl_house one-Cl_house 3Pl-medicine-Cl_house   3Pl-Poss-Cl_house

hanu-dapana   heku   na-ni-ni-dapana-mahka
big-Cl_house   wood   3Pl-make-Topadv-Cl_house-Recpast.Nvis
'This one big hospital of theirs has been made of wood'

- Possibly, the overprotective strategy of reference (Kibrik 2011) entrenched in grammar

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Conclusions

- In terms of the extent of relevant evidence, broadly understood agreement is close to broadly understood reduced reference

- The broad understanding of agreement makes us lift the formal control view

- Manifestation of referential features in discourse is controlled by the cognitive structure: mapping

- Observed identity of features on constituents is a result of this cognitive mapping: parallel agreement

Conclusions

- Syntactic (narrow) agreement, compatible with the formal control view, is grammaticalization of the more general discourse-cognitive process

- The tighter the constituent, the more likely is such grammaticalization, and this explains the Agreement Hierarchy

- Frequent mismatches can be explained by independent mapping onto different constituents

- These mismatches and difficulties betray the derivative character of agreement

- Agreement phenomena are a periphery of the underlying process of discourse reference
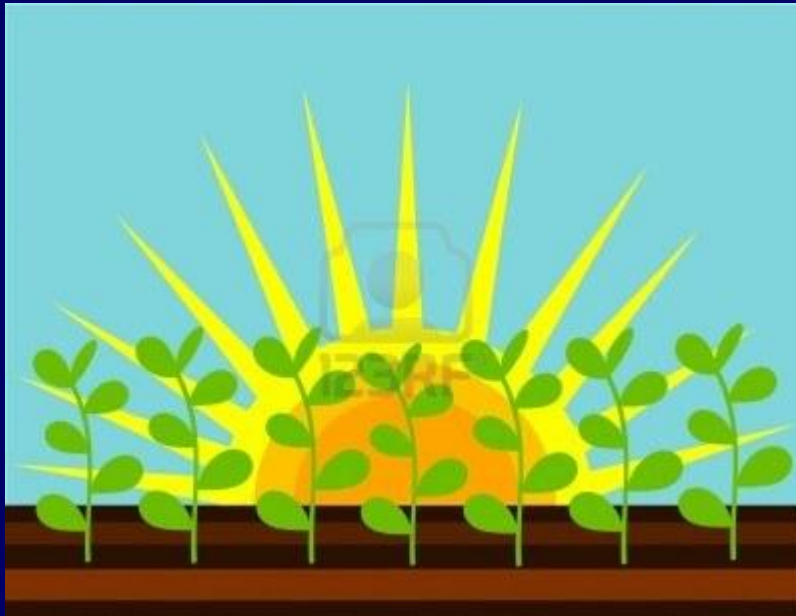
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References

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- Koval 2006
- Paul 1880/1891
- Pollard and Sag 1994
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