

GIST: Generative Initiatives in Syntactic Theory

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The diachrony of complementizer agreement

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Outline of the talk

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- III Diachrony of WC**
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2. The Wackernagel complex

In his famous paper *Über ein Gesetz der indogermanischen Wortstellung*, the Swiss Indo-Europeanist Jacob Wackernagel showed that clitic elements tend to appear in second position in the sentence (or near it, “an zweiter oder möglichst nahe bei der zweiten Stelle”, Wackernagel 1892: 343).

As the Latin examples in (1) demonstrate, second position could mean the position after the first constituent (1a) or after the first word (1b) (vgl. Noel 2008):

- (1)
- a. *Di deaeque te ament*
Gods goddesses-and you love
 - b. *Di te deaeque ament*
Gods you goddesses-and love

2. The Wackernagel complex

The Wackernagel position (**WP**) in Continental West-Germanic languages is defined in a third sense:

WP = the position after the second constituent, that is the position following immediately after the finite verb in root sentences (2a) or the complementizer in embedded clauses (2b):

- (2) a. *Gesdan han-e-da-n geem* (Bavarian)
 yesterday have-I-you-him given
 b. *warum dass-e-da-n geem han*
 why that-I-you-him given have

⇒ WP = position immediately after C° (or the Left Sentence Bracket)

2. The Wackernagel complex

There are four syntactic features which occur in or in association with the WP and which constitute what I will call the Wackernagel complex (WC). As will become clear in the following, the features of the WC go far beyond the original scope of Wackernagel's law.

- 2.1 Pronominal clitics
- 2.2 Double Agreement (DA)
- 2.3 Complementizer Agreement (CA)
- 2.4 partial *pro*-drop

2. The Wackernagel complex

2.1 Pronominal clitics

Pronominal subjects and objects occur as clitics in the WP

- (3) a. *Gesdan han-e-da-n geem* (Bavarian)
yesterday have-I-you-him given
b. *hudərnij sa:d lo:fe* (Thuringian)
have-you-him-not see run

2. The Wackernagel complex

2.2 Double Agreement (DA)

Verbs may carry another inflectional marker in C° than in their base position. The appearance of the C-agreement (CA) inflectional marker is governed either

- a) by the position of the pronominal subject, or
- b) by the position of the finite verb

2. The Wackernagel complex

2.2 Double Agreement (DA)

DA I: the verb shows its **regular suffix** in embedded clauses and subject-initial main clauses, while in main clauses with subject-verb inversion it displays the **CA morpheme**

- (4) a. *datte wij speult/*e* (East Netherlandic)
that-1PL we play
b. *Wy speult/*e*
c. *Waar speule/*t wij?*
Where play we
- (5) a. *wî / jû make* (Samland, East Prussia, Fischer 1896)
we / you make
b. *wat mak we / je*
what make we / you

2. The Wackernagel complex

2.2 Double Agreement (DA)

DA II: **regular ending** is only possible in embedded clauses, while in main clauses the verb bears the **CA morpheme**, that is the inflectional morphology depends on the position of the verb

- (5) a. *dasma mia aaf Minga fahrⁿ/*^{ma}* (Central Bavarian)
that-1PL we to Munich go
b. *mia fahr^{ma}/*ⁿ aaf Minga*
c. *fahr^{ma}/*ⁿ mia aaf Minga?*
- (6) a. *wents neat tiets ā tepā wāe^t* (Sangerberg, Pfalz 1918, 18)
if-2PL not you too with were
b. *weits iwet pruk khum^t, se^atses wīetshaus*
when-2PL over-the bridge come, see-2PL-the pub

2. The Wackernagel complex

2.3 Complementizer Agreement (CA)

In CWG dialects, the complementizer, in addition to the verb, may agree with the subject as well.

Corbett (2006: 49): “Remarkable enough there is good evidence that complementizers can agree. The best evidence to date comes from West Flemish, a dialect spoken in rural West Flanders”

- (7) a. *dán d'Láit häien* (North Bavarian, Egerland)
that-3PL the people hear
- b. *dan Valère en Pol morgen goan* (West Flemish)
that-3PL V. and P. tomorrow go

Note that in these examples CA is independent of the cliticization of pronominal subjects!

2. The Wackernagel complex

2.3 Complementizer Agreement (CA)

Complete CA paradigms exist, e.g., in West Flemish dialects like the dialect of Lapscheure (see 8). As is often the case (cf. Hoekstra and Smits 1998, 6), the paradigm is defective on the surface, since only 1SG, 3SG masculine and the 3PL have visible CA, whereas in the other cases it is assumed that the agreement morphemes are deleted through phonological processes like assimilation or truncation (cf. de Vogelaer et al. 2002).

Lapscheure (West-Flanders, Haegeman 1992, Zwart 1993)

- | | | | |
|-----|----|----------------------------------|-----|
| (8) | a. | <i>dan-k morgen goan</i> | |
| | | that-1SG-I go | |
| | b. | <i>daØ-j morgen goat</i> | 2SG |
| | c. | <i>daØ-se/da-t-j morgen goat</i> | 3SG |
| | d. | <i>daØ-me morgen goan</i> | 1PL |
| | e. | <i>daØ-je morgen goat</i> | 2PL |
| | f. | <i>dan-ze morgen goan</i> | 3PL |

2. The Wackernagel complex

2.3 Complementizer Agreement (CA)

As is less known, such complete paradigms also exist in German dialects, especially in Eastern Middle and High German dialects. As an example I have chosen the dialect of the well-known Sechsämterland (at least to readers of Henscheid), a variety of North Bavarian, which lacks overt inflectional markers only in the 1 and 3SG – just like modal verbs!

Sechsämterisch (Rowley 1994)

(9)	a.	<i>wá/st (du)</i>	<i>2SG</i>
		because-2SG (you)	
	b.	<i>wá/n mer</i>	<i>1PL</i>
	c.	<i>wá/ts diets</i>	<i>2PL</i>
	d.	<i>wá/n si</i>	<i>3PL</i>

2. The Wackernagel complex

2.4 partial *pro*-drop

- (10) a. *wennsd pro mogsd* (Central Bavarian, likewise
if-2SG like-2SG North Bavarian, and East
b. *wennds pro megds* Franconian)
if-2PL like-2PL
- (11) a. *waaln *(mer) graad besamn senn* (East Franconian)
because-1PL we at the moment together are-1PL
b. *waaln *(se) graad besamn senn*
because-3PL they at the moment together are-3PL

2. The Wackernagel complex

2.4 partial *pro*-drop

- (12)
- a **mornɡ bin pro wieda ɡsund*
tomorrow am again healthy
 - b *mornɡ bist pro wieda ɡsund*
 - c **mornɡ is pro wieda ɡsund*
 - d *mornɡ sama pro wieda ɡsund*
 - e *mornɡ sads pro wieda ɡsund*
 - f **mornɡ san pro wieda ɡsund*

Central Bavarian

✓	2SG – 1PL – 2PL	(CA is pronominal)
*	1SG – 3SG – 3PL	(CA is non-pronominal)

3. The diachrony of WC

3.1 potential diagnostics

These four syntactic properties allow us to propose diagnostics which can be employed in diachronic investigations to decide whether the WC was already present or not.

Position: left edge of the middle field

⇒ Adjacency to the rightmost C-element (= weak evidence)

root sentences: finite verb

embedded sentence: complementizer, w-/d-words

3. The diachrony of W C

3.1 potential diagnostics

Cluster effects

- Adjacency: all Wackernagel elements (WE) must be adjacent and nothing should intervene (= weak evidence)
- Serialization: $S > IO > DO$ (= weak evidence, because phonological aspects may play a role for ordering)
- Phonological-prosodic interactions of the WE with one another or/and with the C-host (like reduction, elision, assimilation) (= strong evidence)

3. The diachrony of WC

3.1 potential diagnostics

Cluster effects

- Grammaticalization/syntactization processes
- ⇒
- double agreement (= strong evidence)
 - complementizer agreement (= strong evidence)

3. The diachrony of WC

3.2 Diachronic evidence: Otfrid's *Evangelienbuch*

In Otfrid's *Evangelienbuch* we can observe a phenomenon relevant for our purpose. Otfrid applies a poetical figure called synaloepha.

Synaloepha = elision of the final vowel before a following vowel-initial word (Somers Wicka 2009: 72)

As a poetical figure to avoid hiatus it could in principal occur everywhere in a sentence, if the poetical metre requires (or allows for) it.

3. Diachrony of WC

3.2 Diachronic evidence: Otfrid's *Evangelienbuch*

In hiatus sequences there are three forms attested:

- 1) Short forms with elision of the final vowel

Typ: *hort er* < *horta er* – *want er* < *wanta er*

- 2) Forms with subitem: the final vowel is marked with a subitem

Typen *horta er* – *wanta er*

- 3) Full forms without elision of the final vowel

Typ: *horta er* – *wanta er*

3. Diachronic evidence

3.2 Diachronic evidence: Otfrid's *Evangelienbuch*

The following table shows the numbers according to the study of de Boor (1928). He distinguishes four contexts:

Bysyllabic vs. trisyllabic verbs followed either by a pronominal subject or an adverb (with an initial vowel).

	Short forms	Forms with subitem	Long forms
Horta er	143/138	1/5	10/7
Sageta er	13/11	6/15	28/18
Horta io	14/16	10/31	75/47
Sageta io	4/1	3/10	36/31

3. Diachrony of WC

3.2 Diachronic evidence: Otfrid's *Evangelienbuch*

The numbers show interesting differences:

- The difference between by- and trisyllabic verbs show that metrical requirements do play a role. Elision occurs significantly less frequent after trisyllabic verbs.

	Short forms	Forms with subitem	Long forms
Horta er	143/138	1/5	10/7
Sageta er	13/11	6/15	28/18
Horta io	14/16	10/31	75/47
Sageta io	4/1	3/10	36/31

3. Diachrony of WC

3.2 Diachronic evidence: Otfrid's *Evangelienbuch*

- There is a significant difference between bysyllabic verbs followed by a subject or an adverb: though the adverb begins with a vowel too, the final vowel of the preceding verb is mostly preserved, whereas it is elided in the overwhelmingly number of cases when the following word is a pronominal subject.

⇒ Synaloepha mostly applies in a Wackernagel constellation

	Short forms	Forms with subitem	Long forms
Horta er	143/138	1/5	10/7
Sageta er	13/11	6/15	28/18
Horta io	14/16	10/31	75/47
Sageta io	4/1	3/10	36/31

3. Diachrony of WC

3.3 Assimilation

When a pronominal subject or object follows the verb in C, it can trigger **Umlaut** (Somers Wicka 2009: 11)

- | | | | |
|------|----|----------------------------|-------------------------|
| (13) | a. | <i>géb imo</i> (II 13, 30) | vs. <i>gáb imo</i> (3x) |
| | | give him | |
| | b. | <i>drénk ih</i> (II 8,52) | vs. <i>dránk ih</i> |
| | | drank I | |
| | c. | <i>wés iz</i> (II 1,8) | vs. <i>wás iz</i> (2x) |
| | | was it | |

The Umlaut-phenomenon demonstrates that the sequence verb plus pronominal clitic forms a phonological unit and its occasional occurrence may be evidence for its existence in spoken Old High German.

3. Diachrony of WC

3.4 merged forms

The complementizer *thaz* (or probably the older form *the*, cf. Schreiber 2010) may merge with *ih/iz* yielding *theih/theiz*:

- (14) a. *ni wáne theih thir gélbo* (O I 23,64)
not think that-I you deceive
- b. *ál theih iu gibíete* (O V 16,22)
all that-I you-PL command
- c. *theiz ein gidróg wari* (O III 8,24)
that-it a ghost was

Note however, that there are also attested contracted forms of the demonstrative pronoun *thaz* and the finite auxiliary *ist* (> *theist*) (Somers Wicka 2009)

3. Diachrony of WC

3.4 merged forms

The contracted form *theiz* (which was used by Otfrid much more than the full form *thaz iz*, cf. Somers Wicka 2009: 56) is still attested in the Middle High German of Wolfram von Eschenbach:

- (15) a. *do er hôrt deiz frouwen stimme was* (IX 437,3)
when he heard that-it woman's voice was
- b. *deiz gar zebrast* (IX 444,29)
that-it completely burst

3. Diachrony of WC

3.5 reanalyzed forms

Subject pronouns in inverted order could get reanalyzed and thus became part of the inflection. The most prominent case is the 2SG, whose original ending consisted only of an *-s* to which then was added a *-t* (< *thu, du* ‘you-sg’) – see (16a, b).

- (16) a. *daz thu thes kiscephes* (Sam 13)
that you that scoop
- b. *biwaz kerost thu* (Sam 7)
why demand you

The same happened in Bavarian with the 2PL where an *-s* (< *ös* ‘you-pl’) was added to the original ending resulting in the new form *-ds* (Weiß 2005).

3. Diachrony of WC

3.6 summary

There is good evidence that some kind of WC already existed in OHG times!

4. Emergence of CA: A new explanation

The most prominent features of the WC are DA and CA. As we have seen, DA has emerged from cliticization of pronominal subjects onto the verb in second position where then a special verbal agreement morpheme arose from phonological processes such as assimilation, fusion, or truncation.

On the other hand, as noted above, CA is in some cases independent of the presences of subject clitics.

How did CA emerge then?

4. Emergence of CA: A new explanation

Weise (1907) attributed the emergence of complementizer inflection to analogical extension. Recently, also Goeman (2000), Kathol (2001), and Zwart (2006) proposed an analogical-extension approach. For instance, Zwart's (2006) proposal is based on the analogical schema in (18):

(18) *kunt : kunnə :: dat : dattə*

This means “that complementizer agreement originates as an analogical extension of the morphology of the verb in verb—clitic constructions to the complementizer in complementizer—clitic constructions” (Zwart 2006: 67).

4. Emergence of CA: A new explanation

I will also assume a kind of analogical extension, but in a different form. In those cases where the verb developed new inflection which differs from the standard inflectional marker, children acquiring the language may have associated the new inflection with the position (i.e. C°) rather than with the verb itself. They may then have produced inflection on the complementizer as well.

Not that the schema in (18) is somewhat mis-constructed since the relation of the first and the second position in both members of comparison is not the same: While *kunt* and *kunnə* represent positional variants, i.e. V-end vs. verb second, *dat* and *dattə* cannot figure in the same relation because there exists no position for *dat* comparable to the verb-end position.

4. Emergence of CA: A new explanation

Hypothesis

The emergence of CA involved three steps:

(19) Subject clitics > DA > CA

The analogical extension of inflection to complementizers had its origin in subject clitics which got reanalyzed as (part of the) inflection thus producing double agreement. Children learning a DA dialect could probably get the impression that the special inflectional morphology appearing on verbs in C° was connected with the syntactic slot as such irrespective of whether the lexical item occupying the slot is a verb or a complementizer.

4. Emergence of CA: A new explanation

DA originated from phonological processes. However, this system must have been somehow grammaticalized, because in some German dialects there are cases attested where in the inversion structure the normal ending in the 1 and 2PL was substituted by a form taken from another tense or mood (Höhle 1997). This system has been broadly attested for Low German dialects since the Middle Low German period – as well as for Old English and Dutch (dialects). It is presumably no chance that there was already an ‘Einheitsplural’ in Old Saxon (Gallee 1993), where the 2PL ending -ð/d also intruded into the 1 and 3PL. As a consequence, at least in the 1PL presence indicative, the speakers could no longer connect the inflectional difference to its phonological motivation. From this point on it was a syntactic rule.

And that was presumably the general way CA emerged.

4. Emergence of CA: A new explanation

Two Types of CA dialects

1) CA depends on subject cliticization

Dialects with a partial CA paradigm where the CA morphemes are pronominal (in the sense defined above)

Central Bavarian

(20)	a	wennsd	2SG
	b	wemma	1PL
	c	wemmts	2PL

4. Emergence of CA: A new explanation

Two Types of CA dialects

2) CA is independent of subject cliticization

Dialects with a complete CA paradigm where at least some CA morphemes are verbal, i.e non-pronominal (in the sense defined above).

Sechsämterisch (Rowley 1994)

(21)	a.	<i>wál</i> Ø <i>i</i>	1SG
	b.	<i>wál</i> st (du)	2SG
	c.	<i>wál</i> Ø <i>si</i>	3SG
	b.	<i>wál</i> n mer	1PL
	c.	<i>wál</i> ts diets	2PL
	d.	<i>wál</i> n si	3PL

5. Diachrony of CA

According to the explanation given here, it was presumably in late OHG or early MHG times when the system of CA have developed, because subject clitisization and DA were already present at that time.

“Weise (1907: 202f.) suspects that it must be quite old. He argues that the fact that this phenomenon occurs in the language of the Transylvanian Saxons strongly suggests that inflected complementisers must have existed as early as in the 12th century. As it is very unlikely that complementiser inflection developed spontaneously when the emigrants were already in their new homeland, Transylvania, they must have brought this peculiarity with them from the Luxemburgian-Mosel-Franconian dialect. The majority of people already emigrated in the 12th century under the reign of king Geysa II (1141–1161). This is why Weise concludes that at that period there was already complementiser inflection in the 2nd singular and plural as it is still the case in Noesnarian, a variety spoken in Transylvanian Saxony, and in Mosel-Franconian.”
(Axel/Weiß 2011)

5. Diachrony of CA

However, the first examples attested in written language showed up only centuries later.

The oldest unambiguous example of an inflected complementizer known to me is from 1618 and can be found in the carnival play *Ein kurtzweilig Faßnachtspill* (ed. HARTMANN 1895), cf. (22).

- (22) Ja! **wanst** mir wolst var liegn [vorlügen]
Yes, if-2SG me want-2SG to-lie

5. Diachrony of CA

However, nearly one century earlier Hans Sachs uses forms of the complementizer – as *dast* or *weilt* – which look a little bit like inflected complementizers.

- (23)
- a **Dast** uns so weit fuerst aus der stat (Sachs, FNS 244 V.152)
that-2SG us so far lead out the town
 - b **dast** in habst verlorn (Sachs, FNS 172 V.127)
that-2SG him have lost
 - c **dast** ein zygeuner seist (Sachs, ML 126 V.211)
that-2SG a gipsy are
 - d **weilt** mir warst versprochen (Sachs, ML 109 V. 126)
because-2SG me were promised

Note that the combination of the complementizer *dass* with the enclitic form of *du* would rather result in a form like *dastu* (also frequently attested at that time).

6. Conclusions

- CA is result of a historical ‘accident’ (which would explain why CA is typologically extremely rare being presumably present only in Continental West Germanic languages/dialects)
(→ CA is no evidence for Agr features in C° in general)
- Diachronically, it all started with subject clitisization to C°
- Synchronically, there are two types of CA (pronominal, verbal)

Thank
You very much
for your attention