G9ST-6, Gent, October 17, 2012

Demystifying Bavarian complementizer agreement

Josef Bayer, Konstanz

Josef.bayer@uni-konstanz.de

0. Introduction

Complementizer inflection and complementizer agreement (CA) is at first sight something utterly strange. There seems to be no reason why the agree-relation between T and the subject should be extended to C and T, or to C and the subject. Among the languages of the world, CA is marginal (s. Zwart, 2006). Among the West-Germanic languages in which CA occurs, it seems to be limited to spoken varieties (dialects).

Where CA occurs, it seems to be a highly robust phenomenon though (s. Zwart, 2006). In Bavarian, where CA occurs in 2SG and 2PL, missing CA turns the sentence invariably ungrammatical.

- (1) ob-st du des ned spuin kon-st 2SG if -2SG you-2SG this not play can-2SG "if you cannot play this"
- (2) *ob du des ned spuin kon-st
- (3) ob-ts es des ned spuin ken-ts 2PL if -2PL you-2PL this not play can-2PL "if you cannot play this"
- (4) *ob es des ned spuin ken-ts

The variety of Bavarian from which these data are drawn shows perfect parallelism of agreement between C and T in 2^{nd} person. The overt subject pronouns du and es (or ihr) are weak and can be dropped. Since AGR co-occurs with a pronoun, the child learning this language can hardly avoid concluding that C is inflected for 2^{nd} person.

Nevertheless, it remains an open question what status one should attribute to CA from the perspective of UG. Is CA a property which has a status like T-Subject agreement (TA), or is it the result of certain more or less idiosyncratic conditions. Limiting myself to the situation in Bavarian, I will argue that CA emerges in grammar as a side effect of cliticization and familiar processes of reductive reanalysis, and that there is little reason to attribute more to it.

Roadmap of the talk: 1. Double agreement and formal asymmetry. 2. Survey of the clitic system. 3. The host of agreement, the host of cliticization. 4. Comparatives and comparative ellipsis. 5. Remarks on 1st conjunct agreement. 6. Independence from clause structure: the interjection gell. 7. The case of the discourse particle denn. A conclusion will follow in 8.

1. Double agreement and formal asymmetry

The symmetry between 2nd person verbal agreement and 2nd person comp agreement seen in (1) and (3) is disrupted in certain varieties of Bavarian. Lower/Middle Bavarian includes 1st person plural, and the dialect of Gmunden (Upper Austria) lacks the symmetry of 2PL.

(5) dass-ma mia noch Minga fahr -n / *fahr-ma 1PL (Lower/Middle Bavarian) that-1PL we to Munich drive-1PL 1PL "that we drive to Munich"

(6) ob-s es des mocha kin-ts 2PL (Gmunden Bavarian) if -2PL you that do can-2PL "if you can do that"

Neither of these forms can be identified with verbal agreement. The forms are rather transparently clitics. Nevertheless, they co-occur with overt pronouns. Thus, they must have undergone the same kind of process that the parallel forms have been subject to. In other words, formal identity with TA cannot be the criterion of presence of CA.

[A complete paradigm of CA and doubling is found in Lapscheure Dutch, Haegeman (1992); a complete paradigm of TA and doubling is found in Cimbro, cf. Schmeller (1834)]

2. The Bavarian pronominal clitics

The fact that CA in Bavarian derives from cliticization is undisputed (cf. Fuß, 2005; Weiß (2005). Fuß suggests reanalysis by which the clitic raised to C starts being perceived as an agreement marker; ¹ its theta is transferred to pro or to a full pronoun, respectively.

(7)
$$[_{CP} XP [_{C}, C+V+pronoun_{j} [_{TP} [t_{j}]_{i} [_{T}, T [_{vP} t_{i} ... \rightarrow [_{CP} XP [_{C}, C+V+Agr [_{TP} T [_{vP} pro ...]$$

Cliticization as such does not explain the CA-facts. The clitic must have been affected by a process of erosion that does not only extend to its phonology and morpho-syntax but also to its semantics. In Bavarian, -st, -(t)s have been deprived of their referential capacity or assignability of a theta role, and the same thing has happened to -ma in certain sub-dialects of Bavarian. The clitics have - in the minds of the speakers - turned into agreement markers.

2.1 Why subject agreement?

If so, what is the status of CA's subject agreement? Since clitics drift to C, C being the closest c-commanding functional head, what could explain the privilege of subject agreement over, say, object agreement? German being a scrambling language, couldn't there be a situation in which reanalysis affects the object clitic rather than the subject clitic? The fact about Bavarian clitics is that they are rigidly ordered according to (8) and as seen in (9).

¹ As Helmut Weiß's contribution to this workshop makes clear, the -*s* of 2SG –*st* has been around much earlier than the-*t*, which originates from OHG *thu* ("you").

(8) SU < IO < DO ...

(9) a.	ob-a -ma-n ned zoagt	SU < IO < DO
	if -he-me -him not shows	
	"if he will not show him to me"	
b.	?ob-a-n-ma ned zoagt	SU < DO < IO
c.	*ob-ma-n-a ned zoagt	IO < DO < SU
d.	*ob-n-a-ma ned zoagt	DO < SU < IO
e.	*ob-ma-?a-n ned zoagt	IO < SU < DO

While IO/DO scrambling may be a limited option, IO/DO scrambling over SU is totally impossible. Thus, whenever a subject clitic is involved, this element will be adjacent to C^2 Given that the overwhelming majority of sentences with a clitic subject will have this subject in the first position after C, it is natural to expect the emergence of pronoun_{SU} \rightarrow AGR_{SU} rather than pronoun_{IO} \rightarrow AGR_{IO} or pronoun_{DO} \rightarrow AGR_{DO}.

If I am right, the privilege of subject CA is a consequence of the clitic ordering in (8). Apart from this, the subject has no privilege.

2.2 Adjacency

As pointed out by various researchers (Pfalz, 1918; Fuß, 2005, Gruber 2008), the overt subject does not have to be adjacent to the agreeing C. Here an example with clitic intervention.

(10) wia-sd -n du gseng ho -st as -2SG-him you seen have-2SG "As you saw him"

Unlike in various other dialects which require strict adjacency between C+Agr and the following subject, Bavarian does not require that. The strength of the pronoun does not play a role. Du in (10) can be contrastively stressed but clearly does not need to be.

3. The host of agreement, the host of cliticization

One of the most obvious problems for the theory of CA was the host of the AGR-morpheme. The problem has been noticed and has been discussed already in Bayer (1984), see for relevant discussion also Gruber (2008).

As pointed out by Zwicky and Pullum (1983), clitics generally exhibit a low degree of selectivity with respect to the syntactic category of their hosts, while inflectional suffixes do not.

(i) ob mir schlecht geworden ist "if I felt nauseated" if me-DAT bad become is

It is unclear to me whether in dialects that integrate 1PL into CA, dative doubling as in (ii) would be possible due to homophony of *mir/-ma* between 1SG,DAT and 1PL,NOM.

(ii) ob-ma mir schlecht woan is if me-DAT me-DAT bad become is

I have no evidence; to my ears, the example sound awkward but not downright ungrammatical.

² There are sentences with quirky subjects like

Verbal inflections do not attach to [-V] stems whereas clitics attach to X° (or even XP) across heterogeneous categories.

- (11) schau-st, hör-st, mal-st, e-mail-st, down-load-st look-2SG hear-2SG paint-2SG, e-mail-2SG, down-load-2SG
- (12) *lamp(e)-st, *teller-st, *oft-st *heute-st *da-st lamp-2SG plate-2SG often-2SG today-2SG there-2SG

The data in various previous publications, including Bayer (1984), suggest that the CA-suffix, instead, can attach to almost any category and even to maximal phrases. The empirical basis of this assumption is quite shaky. As traditional descriptions claim, and as recent experimental findings (Bayer, in press) suggest, *bona fide* maximal phrases seem to be incapable of being the host of CA.

- (13) *?I woass scho, wos fia Schua-st (du) õ:zong ho -st I know already what for shoes-2SG you_{SG} on-put have-2SG "I already know what kind of shoes you have put on"
- (14) *?I woass scho, wia oft -ts (es) g'fäit hab -ts
 I know already how often -2PL you_{PL} be-absent were-2PL
 "I already know how often you(pl) have been absent"

These examples are rescued by comp-insertion.

- (15) I woass scho, wos fia Schua daß-st (du) õ:zong ho-st I know already what for shoes that-2SG you_{SG} on-put have-2SG
- (16) I woass scho, wia oft daß -ts (es) g'fäit hab -ts I know already how often that-2PL you_{PL} be-absent were-2PL

On the other hand, CA appears with a host of syntactic categories (see also Gruber, 2005). Here some examples with 2SG agreement, in (17a) wh-words, in (17b) prepositional complementizers:

- (17) a. wer-st, wo-st, wann-st, wia-st, warum-st who-2SG where-2SG when-2SG how-2SG why-2SG
 - b. seit-st, bevor-st, boi-st since-2SG before-2SG as-soon-as-2SG

The proper generalization seems to be that all these wh-words and prepositions are instantiations of the functional head C, and that CA appears on C no matter which lexical category fills C.

The restriction to the functional head as a host is standard for clitics. So-called "phrasal" clitics, cf. *the king of England's horses*) are by and large out in Bavarian, despite frequent claims to the contrary.

Un-reanalyzed clitics behave the same way. They attach to functional heads but only marginally so to full-fledged XPs. A test is consonantal epenthesis. The emerging segment in [1]. Epenthesis is a process that applies in certain phonological contexts in order to avoid hiatus.

Notice that in (18) the underlying form of the clitic's host is Wia (German $Wi\theta$, "as" or "how"). It contains no /r. Consider now the 1SG clitic $-\theta$. It is not an agreement marker, and it does not allow for doubling.

(18) Wia-r -e hinte schau sich-e an Sepp. as -R-I back look see -I the Joseph "As I look back, I see Joseph"

Cliticization to XP is inhibited. The target *Schua* ("shoes") can be expected to trigger *r*-epenthesis, but it does not. The rescuing strategy for cliticization is again comp-insertion.

- (19) a. ?*Sog-ma [wos fia Schua]-r -e õ:ziang soi tell-me what for shoes -R -I on-put should "Tell me which shoes I should put on"
 - b. Sog-ma [wos fia Schua] dass-e õ:ziang soi tell -me what for shoes that-I on-put should

Result: CA and clitics appear to have exactly the same distribution. (i) Both attach to the functional head C; (ii) both attach to C no matter of which primary syntactic category C is made of. Ergo: non-selectivity of the head, typical for clitics!

4. Comparatives and comparative ellipsis

As observed in Bayer (1984), comparative clauses shows CA but comparative ellipsis never does. (see also Gruber, 2008)

- (20) a. Da Pollini spuit besser ois wia-st du spui-st the Pollini plays better that how-2SG you play-2SG "Maurizio Pollini plays better than you do"
 - b. Da Pollini spuit besser ois wia (*-st) du the Pollini plays better that how-2SG you

Observation 1: If CA is an autonomous agree-relation between C and the subject, the impossibility of CA in the ellipsis case (20b) is unexpected.

Observation 2: Comparative ellipsis has nothing to do with CA in particular. The restriction holds in the same way for object clitics, for example; see (21b).

- (21) a. Da Pollini spuit d'Appassionata₁ vui schneller ois wia -s₁ da Brendel spuit the Pollini plays the Appassionata much faster than what-it the Brendel plays "Maurizio Pollini plays the "Appassionata" much faster than Alfred Brendel does"
 - b. Da Pollini spuit d'Appassionata₁ vui schneller ois wia(*-\$₁) da Brendel the Pollini plays the Appassionata much faster than what-it the Brendel

Again, CA and clitics behave like elements of a natural class. Whatever account of comparative ellipsis one has, ellipsis must grab CA and clitics in the same way. The subject has no privileged status.

5. Remarks on C- and T-agreement

So far, CA in Bavarian seems to result from subject cliticization to C plus reanalysis as an agreement marker. Since the subject (clitic) agrees with T, by transitivity we expect C-agreement with T. Although there cannot be direct C-with-T agreement, the language facts produce a situation in which C agrees with T, albeit only by means of the clitic and finally reanalyzed subject.

Recent work on CA suggests, however, that CA is independent of TA in a more dramatic fashion. The data concern 1st conjunct agreement in Dutch dialects as well as in Bavarian and possessor agreement in West-Flemish Dutch dialects.

5.1 First conjunct agreement in Bavarian

- (22) a. dass-st [du und d'Maria] an Hauptpreis gwunna hab-ts that-2SG you-SG and the-Maria] the first-prize won have-2PL "that you and Mary won the first prize"
 - b. dass-ts [du und d'Maria] an Hauptpreis gwunna hab-ts that-2PL you-SG and the-Maria] the first-prize won have-2PL "that you and Mary won the first prize"

Van Koppen (2005: 43) suggests that C is a probe which checks phi-features in two goals, namely in SpecTP and in SpecCoP (the specifier of the conjoined noun phrase).

(23)
$$\left[\operatorname{CP} \operatorname{C^{\circ}}_{[Uphi]} \left[\operatorname{TP} \left[\operatorname{CoP[2PL]} \left[\operatorname{DP[2SG]} \& \operatorname{DP} \right] \right] \right] \right] \right]$$

The suggestion is that both features, 2SG and 2PL, are equally specific, and that the probe can choose which goal to select. My own assessment of these data is that they should first of all not be taken at face value.³ (22b) is only grammatical if the CoP is separated by a pause.

(24) dass-ts # [du und d'Maria] # an Hauptpreis gwunna hab-ts that-2PL you-SG and the-Maria] the first-prize won have-2PL

With a phonological phrasing like (*dass-ts du und d'Maria*) or (*dass-ts du*) (*und d'Maria*), (22b) crashes. This suggests that the actual CA is not with the CoP but with a pluralic pro subject, and that the CoP is added as a coindexed semantic specification of pro. Consider the following paraphrase.

(25) dass-ts es₁ # [du und d'Maria]₁ # an Hauptpreis gwunna hab-ts that-2PL you-PL you-SG and the-Maria] the first-prize won have-2PL

According to van Koppen (2005:47), example (26) is degraded.

³ See various footnotes in van Koppen (2005) which indicate that speakers had problems with these data.

(26) ?dass-ts [d' Maria und du] an Hauptpreis gwunna hab-ts that-2PL the-Maria and you-SG the first-prize won have-2PL

Under the p-phrasing (*dass-ts d'Maria*) (...), (26) crashes. But as before there is an alternative analysis in which there is either a plural pronoun or a corresponding pro. In that case, the CoP is flanked by pauses, and the example turns out to be perfect:

(27) dass-ts {es / pro} # [d' Maria und du] # an Hauptpreis gwunna hab-ts that-2PL you-2PL the-Maria and you-SG the first-prize won have-2PL

This analysis does not apply to (22a) because pro would be 2SG whereas CoP is pluralic. The pause in (22a) appears after du. According to my intuitions, the phonological phrasing is $(dass-st\ du)$ ($und\ d'Maria$). How can this be made compatible with 2PL T-agreement? It can if we concede that (22a) may be a case of anacoluthon. The speaker starts with a singular subject and then shifts gears by integrating a 2^{nd} conjunct. The stage which is achieved after the repair is then responsible for the continuation with 2PL T-agreement.

5.2 C-agreement with a possessor in West Flemish

An explanation along these lines seems to be also viable for C-agreement with a pluralic possessor in West-Flemish (s. Haegeman & van Koppen, 2012):

- (28) {omda-n /*omdat} [André en Valère] toen juste [underen computer] kapot was because-PL/ because André and Valère then just their computer broken was "because just then André and Valère's computer was broken"
- (29) {*omda-n / omdat} [André en Valère underen computer] kapot was because-PL/ because André and Valère their computer broken was "because André and Valère's computer was broken"

In (28), plural-agreement holds with the pluralic possessor that has split off from the subject-DP. Although this case may be standard in the dialect, it is formally identical to an anacoluthon. After the singular DP *underen computer* is accessed, agreement is shifted to singular. In (29) no such agreement is found because the possessor remains part of the singular DP.

If my assessment of the data is right, one can – at least for Bavarian – not derive any conclusion about CA that goes beyond what subject cliticization to C predicts, and what by transitivity pertains to agreement with T.

7

⁴ For discussion of "patching up" in grammar see Morgan (1973) and Reis (1974), who deals with "change of identity" sentences.

6. <u>Independence from clause structure</u>

Various German dialects have the interjection *gell*, derived from *gelten*, "to be true" (s. Grimm, 1831: 762). *Gell* (sometimes also *gelt*) is comparable to a tag which turns a root declarative into a question. It has a pragmatic function of reassurance. *Gell* follows the clause but can as well precede it. In the latter case it is in addition used to call the attention of the interlocutor.

- (30) Gell Du bist einverstanden, dass ich diesen Part übernehme? GELL you are agreeing that I this part over-take "You agree that I take over this part, right?" http://www.leichteins.de/MeineWahrheit/Wahrnehmung.htm
- (31) Hallo Matthias, gell Du bist Elektriker
 Hello Matthias GELL you are electrician
 "Hi Matthias, you are an electrician, right?"
 http://www.pooldoktor.net/forum/fragen-zur-verrohrung-t16442.html
- (32) damals wusste man noch, wie man das macht, gell ...? then knew one still how one that does GELL "In those days one still knew how to do that, right?" http://missmargerite.blogspot.de/2011/08/aus-alt-mach-neu.html
- (33) tja jetzt müsste man Bildung haben gell well now must-SUBJ one education have GELL "Well, now one should be educated, right?" http://www.youtube.com/all_comments?v=IfFkJK5h1vA&page=1

In Bavarian, gell shows agreement morphology for 2^{nd} person in the honorific form, and for 2^{nd} person plural in the non-honorific form.

- (34) Das haben Sie sich wohl alles ein wengerl zu leicht vorgstellt, gell -ns?⁵ this have you-HON REF well all a bit too easy imagined GELL-2HON "You thought all of this was a bit too easy, didn't you?" http://www.a-e-m-gmbh.com/wessely/fabendwn.htm
- (35) Pflicht ist es ja net, gell -ts?
 obligation is it JA not GELL-2PL
 "It's not obligatory, right?"
 http://www.parents.at/forum/showthread.php?t=738290&page=12#.UGynSa63PIw
- (36) (Bauer: freut sich über das Erstaunen der beiden) (farmer: enchanted about the stupefaction of the two ...) Gell -ts, da schau-ts!⁶
 GELL-2PL there look -2PL
 "Hey, now you are surprised!?"
 http://www.dtver.de/downloads/leseprobe/2947.pdf

⁵ From Austrian author Elfriede Jelinek, *Präsident Abendwind*, Dramolett.

⁶ Hans Lellis, *Der Liebesroboter*, Lustspiel in drei Akten.

(37) Gell -ts Mädels zum Glück gib -t -s uns GELL-2PL girls for luck give-3SG-it us "Hey girls, luckily there's still us, right?!" http://www.webheimat.at/forum/Ausfluege-und-Reisen/Die-schoenste-Stadt-der-Welt.html

Whatever gell is, one can exclude the possibility that it is complementizer. Nevertheless it shows traces of the same agreement morphology that characterizes CA in Bavarian. Being an interjection, gell cannot be expected to agree with the subject of a following or preceding clause. The forms -ns and -ts are more plausibly explained as residues of following vocatives as in $Hey\ you!$ etc. If so, it is interesting to see that the "agreement morphology" on gell has managed to emerge with neither a relation to an agreeing subject nor a relation to an agreeing T.

7. A parallel case: the discourse particle denn

The German discourse particle *denn* (related to "then") appears in root wh-questions as well as in polar questions. In this function it refers to some common ground that the speaker assumes he or she shares with the addressee. Consider the following minimal pair:

- (38) Wo wohnst du? where live you "Where do you live?"
- (39) Wo wohnst du denn? where live you DENN "Where do you live, (I'm wondering)?"

While (38) is a straight search for information that can occur "out-of-the blue", in (39) the speaker is in some special state of wondering that derives from the fact that there is a discourse context or common ground to which the question relates: 'Given the known circumstances X, where do you live?'

In many Bavarian varieties, the particle denn occurs as a clitic with the truncated form -n. This element cliticizes to the finite verb in C. Unlike denn, it can never follow a non-clitic, and it strictly follows pronominal clitics in case there are any.

- (40) Wo wohnst-n du? where live -N you "Where do you live?"
- (41) Wo host -n du damals gwohnt? where have-N you then lived "Where did you live in those days?"

(i) Waar woon je? "Where do you live?"

⁷ The distinction seems to hold in Dutch as well:

⁽ii) Waar woon je dan? "Where do you live then?"

- (42) *Wo host du-n damals gwohnt?
- (43) *Wo host du damals-n gwohnt?
- (44) Wo host -ma -s-n hī:glegt? where have-me-DAT -it-N down-put "Where did you deposit it for me?"
- (45) *Wo host-n ma-s hī:glegt?
- (46) *Wo host-ma-n-s hī:glegt?

-n is a clitic that has no chance but gravitating toward C, i.e. to what is known as the "Wackernagel position". Interestingly in many Bavarian sub-dialects, this cliticization is accompanied by a loss of the semantics of *denn*. Whereas *denn* in the standard language is optional, and if selected, yields a clear semantic/pragmatic effect (reference to to some common ground), the clitic -n is a) OBLIGATORY in wh-questions and b) DEVOID OF THE SEMANTICS of *denn* ⁸

It cannot be overlooked that we are facing the same shift that has affected certain pronominal clitics and turned them into agreement markers.

(47) a.
$$\left[_{CP} \text{ wh } \right[_{C}, C+T\left[_{TP} \text{ ... } denn \text{ ... } \right[_{T}, T\left[_{vP} \text{ ... } \right]\right]$$

CLITICIZATION \rightarrow

b.
$$\left[{_{\mathrm{CP}}} \text{ wh } \right[_{\mathrm{C}}, \mathrm{C+T+} n_{_{\mathrm{I}}} \left[{_{\mathrm{TP}}} \text{ ... } \mathrm{t}_{_{\mathrm{I}}} \text{ ... } \left[{_{\mathrm{T}}}, \mathrm{T} \right[{_{\mathrm{vP}}} \text{ ...} \right]$$

REANALYSIS AS WH-AGREEMENT MARKER →

$$c. \qquad \left[_{CP} \text{ Wh } \right[_{C'} C + T + \left[_{whAGR} \textit{ II}\right] \left[_{TP} \text{ ... } \right[_{T'} T \left[_{\nu P} \text{ ...} \right]$$

Amalgamation of -n with the finite verb in C leads to spec-head agreement with the whoperator. -n has an unvalued wh-feature which is valued by wh:

(48)
$$\left[_{CP} \text{ wh } \left[_{C'} \text{C+T+} \left[_{whAGR} \textit{n}\right]_{uWh} \right]_{TP} \dots \right]_{T'} T \left[_{vP} \dots \right]_{T'} \left$$

In analogy to CA, where C predicts phi-features of the subject and allows it to be pro, agreement in (47c)/(48) predicts the wh-feature of the operator in spec. Therefore it comes as no surprise that Bavarian shows wh-drop, cf. Bayer (2010; in press).

(49) a. Wos is-n do los? what is-AGR here on "What's going on here?"

b. is-n do los?

_

⁸ Bayer (2012); Weiß (2002); also Hack (2008) on the particle *pa* in Rhaeto-Romance dialects in Northern Italy.

- (50) a. Wos dea-ts -n es do? what do -2PL-AGR you-2PL here "What are you doing here?"
 - b. <u>dea-ts-n es do?</u>

Notice that only WOS ("what") can be dropped. It is the unmarked wh-expression. All other wh-operators have additional features which the agreement marker -n cannot identify.

If the agreement marker -n is absent, wh-drop is ungrammatical:

- (51) a. * is do los?
 - b. *_ dea-ts es do?

8. Conclusions

The evidence from Bavarian CA which has been compiled here leads to the following conclusions.

- Complementizers as such have nothing to do with CA (s. also Brandner, 2011). Given that CA is a rare phenomenon among the languages of the world, this should be uncontroversial.
- o CA presupposes cliticization to C. In the West-Germanic standard languages, clitics are oppressed, but they flourish in dialects. Ergo, CA is typically seen in dialects.
- o CA has nothing intrinsically to do with the subject. Subject agreement is an epiphenomenon of subject cliticization. The subject plays no privileged role.
- o For CA to emerge, the clitic must undergo reanalysis.
- If reanalysis should make any sense, it must be seen as a process of grammaticalization in which phonological, syntactic and semantic structure is affected (usually: reduced) in parallel.
- The model of change that is compatible with our interpretation of the data from Bavarian is extremely plausible because it is extremely conservative: One and the same PF can be parsed according to stage n as well as according to a more advanced stage n+1. The change goes completely unnoticed in the mind of the learner.
- o Seen in this light, CA does not present us with a mystery.

.

⁹ Cf. Torrence (2012) on wh-questions and relative clauses in Wolof (Senegal). Unlike Bavarian, Wolof has also noun classifiers in C which allow further feature identification; thus, certain semantically restricted wh-operators ("who", "where", "with what" etc.) can also be dropped.

References

- Bayer, Josef (1984) COMP in Bavarian syntax. The Linguistic Review 3. 209-274.
- -- (2010) Wh-drop and recoverability. In: Zwart, Jan-Wouter & de Vries, Marc (eds.) *Structure Preserved:* Studies in Syntax for Jan Koster. Amsterdam. John Benjamins. 31-39.
- -- (2012) From modal particle to interrogative marker: a study of German *denn*. In: Brugè, Laura, Cardinaletti, Anna, Giusti, Giuliana, Munaro, Nicola and Poletto, Cecilia (eds.): *Functional Heads. The Cartography of Syntactic Structures*. vol.7. Oxford. Oxford University Press. 13-28.
- -- (in press). W-Frage, Fragepartikel und W-drop im Bairischen. In: Rüdiger Harnisch, Sigrid Graßl & Rosemarie Spannbauer-Pollmann (eds.) *Strömungen in der Entwicklung der Dialekte und ihrer Erforschung.* Beiträge zur 11. Bayerisch-Österreichischen Dialektologentagung in Passau, September 2010. Regensburg. Edition Vulpes.
- -- (subm.) Doubly-Filled Comp, wh head-movement, and derivational economy. ms. University of Konstanz.
- -- & Ellen Brandner (2008) On wh-head-movement and the Doubly-Filled-Comp Filter. In: Chang C. B. & H. J. Haynie (eds.) *Proceedings of the 26th West Coast Conference on Formal Linguistics*. Somerville: Cascadilla Proceedings Project, 87-95.
- Brandner, Ellen (2011) On the Universality of Complementizer Agreement. ms. University of Wuppertal & University of Konstanz.
- Fuß, Eric. 2005. The rise of agreement: A formal approach to the syntax and grammaticalization of verbal inflection. Amsterdam: Benjamins.
- Grimm, Jacob (1831), Deutsche Grammatik. Dritter Theil. Göttingen, bei Dieterich.
- Gruber, Bettina (2008) Complementizer Agreement: New Evidence from the Upper Austrian Variant of Gmunden. Master thesis. University of Vienna.
- Hack, Franziska (2009) *Syntactic Variation in Interrogatives in Romance Languages and Dialects*. Master thesis. University of Konstanz.
- Haegeman, Liliane (1992) *Theory and Description in Generative Syntax: A Case Study in West Flemish*. Cambridge. Cambridge University Press.
- -- & Marjo van Koppen (2012) Complementizer Agreement and the relation between C° and T°. *Linguistic Inquiry* 43. 441–454.
- Koppen, Marjo van (2005) *One probe Two Goals: Aspects of Agreement in Dutch Dialects*. Doctoral dissertation, University of Leiden. LOT Publications 105.
- Morgan, Jerry L. (1973) Verb Agreement as a Rule of English. In P. Peranteau, J. Levi & G. Phares (eds.), *Papers From the Eighth Regional Meeting*. Chicago Linguistic Society, April 14-16, 1972. Ill., Chicago. 278-286.
- Reis, Marga (1974) Patching up with counterparts. Foundations of Language 12. 157-176
- Schmeller, Johann A. (1834) Über die sogenannten Cimbern der VII und XIII Communen auf den Venedischen Alpen und ihre Sprache. In *Abhandlungen der Philosophisch-Philologischen Classe der königlichen Bayerischen Akademie der Wissenschaften*. vol. II. Munich: Lindauer'sche Hofdruckerey.
- Torrence, Harold (2012) The morpho-syntax of silent wh-expressions in Wolof. *Natural Language and Linguis- tic Theory* 30. 1147-1184
- Weiß, Helmut (2002) Three types of negation: a case study in Bavarian. In: S. Barbiers, L. Cornips & S. van der Kleij (eds), *Syntactic Microvariation*. Meertens Institute Electronic Publications in Linguistics. 305-332.
- -- 2005. Inflected Complementizers in Continental West Germanic Dialects. *Zeitschrift für Dialektologie und Linguistik* 72. 148-166.
- Zwart, Jan-Wouter (2006) Complementizer Agreement and dependency marking typology'. In: Marjo von Koppen, Frank Landsbergen, Mika Poss & Jenneke van der Wal (eds.), *Special issue of Leiden Working Papers in Linguistics* 3.2. 53-72.
- Zwicky, Arnold M., and Geoffrey K. Pullum. 1983. Cliticization vs. inflection: English *n't. Language* 59. 502-513.