Günther Grewendorf Goethe-Universität Frankfurt Workshop *Syntactic Cartography* June 7-9, 2012, University of Geneva

Double fronting and parasitic gaps in Bavarian

1. The phenomenon: double fronting

- A constituent (argument or adjunct) is moved from a fronted adverbial or argumental clause to a position immediately preceding that clause (*Bavarian extraction* (BE)):
- bsuffa. (1) [De Massli drink], bin [wenn i t_{i} no this if drink am liter I still Ι drunk 'If I still drink this Mass, I will be drunk.'
- (2) Hans]i [ob wähl], woaß [An i ned. t_i no amoi the once Hans if Ι more vote know I not 'I don't know if I will vote for Hans again.'
- (3) [Wegn an Hansli [dass a t_i kimmt], hätt ned denkt. because of the Hans that he comes had Ι thought not 'I would not have thought that he was going to come because of Hans.'

2. Crucial properties of BE

- (P1) <u>BE LICENSES A GAP IN THE MATRIX CLAUSE</u> (see examples in (4))¹
- (4) a. [**Den**]_i [wenn i t_i dawisch], daschlog i e_i him if I catch kill I 'If I catch him, I will kill him.'
 - b. [An **Pfarrer**]_i [statt d'Arbat dass i t_i bsuach], loss e_i liaba the priest instead that I visit let the-work rather selber macha. himself

'Instead of visiting the priest, I rather let him do the work himself.'

(P2) BE REQUIRES CLAUSAL FRONTING

(5)

*I bin (5) bsuffa, [de Mass_{li} wenn i t_i no drink]. Ι am drunk this liter if I still drink

*I woaß Hansl (6) ned, [an [ob i amoi wähl]. t_{i} no Ι I know not the Hans_{ACC} if once more vote

1

¹ While the extraction illustrated in (1) and (2) is possible with adverbial as well as argument clauses, the construction with an additional gap in the matrix clause is only possible with (a certain kind of) *wenn* ('if')-clauses but not with 'strong' complementizers in the sense of Reis (1985) such as *weil* ('because'), *obwohl* ('although'), *nachdem* ('after') (see Felix 1985). The kind of *wenn* ('if')-clauses involved concerns "central adverbial" *if*-clauses in the sense of Haegeman (2002).

- If the dependent clause is not located in the left periphery, extraction is licensed if the extracted element occupies a position in front of the matrix clause, and if the clause from which extraction takes place is an argument:
- (7) [An Hans]i woaß ned, [ob i t_i no amoi wähl]. if Ι the Hans_{ACC} know not once more vote
- If the dependent clause is adverbial, extraction to the front of the matrix clause is not possible:
- (8) *[De Mass]; bsuffa, drink]. bin i wenn i t_i no this liter am I drunk if I still drink
- No BE in (7) but successive cyclic movement into the matrix clause: ungrammaticality of (8) due to the islandhood of adjuncts.
- Property (P2) captures the fact that BE is possible from clauses that occur in the left periphery of a verb second complement (Lutz 1993, Weiß 1998):
- (9) Da Sepp glaabd, [an Hans]_i, [wenn a t_i dawischt], daschlogt a e_i . the Sepp believes the Hans if he catches kills he
- (P3) BE IS POSSIBLE FROM WH-CLAUSES NOT INTRODUCED BY A COMPLEX WH-ELEMENT:
- (10) [An Sepp]_i [wer (dass) t_i gseng hod], woaß i ned. the Sepp who that seen has know I not
- *[Den (11)Kaas]_i, [welcher Lehrer vazapft hod], mecht dass t_{i} i the cheese which teacher that told has would I wissen.

like-to-know

'I would like to know which teacher has told that nonsense.'

- To the extent that Bavarian has free relatives, BE appears not to be possible with free relatives:
- a. [Wos a (12)hod], is a Schmarrn. gsogt what he said has is a nonsense b. $*[\mathbf{Da} \ \mathbf{Sepp}]_i[\mathbf{wos} \ t_i]$ gsogt hodl, is a Schmarrn. the Sepp what said has is a nonsense
- There are no constraints on the elements that can undergo BE. Arguments as well as adjuncts can be extracted.

QUESTIONS:

- Q1: Is the target position of BE in the embedded or in the matrix clause?
- O2: What are the properties of the gap in the matrix clause and how is this gap licensed?
- Q3: What motivates BE and why is clausal fronting required?
- Q4: Why is BE from wh-clauses with complex wh-elements disallowed?

3. Question Q1: the target position of BE

EVIDENCE FOR TARGET POSITION IN THE MATRIX CLAUSE:

- **1. argument**: licensing of the gap in the matrix clause (examples in (4)) (Stechow/Sternefeld 1988)
- **2. argument:** preposed quantifier phrase (Lutz 1992)
- (13)[Koa Hund]_i, [wenn g'schlogn wead], si' traut t_i beaten himself no if is dares dog no amoal Tür nei'. zur once more through the door
- (13) cannot be interpreted as (14a) but must be interpreted as (14b):
- (14)a. [Wennkein Hund geschlagen wird], traut kein Hund/er sich beaten if no dog is dears no dog/he himself noch einmal zur Tiir herein. through the door once more
 - er geschlagen b. [Wenn wird], traut sich kein Hund noch if he beaten is dares himself no dog once einmal herein. zur Tür through the door more
- Against this argument: (13) does not constitute an instance of BE.:
- (15) ?a person who_i people that talk to e_i usually end up fascinated with t_i (Kayne 1983: 169)
- [der_i [wenn e_i gschlogn werd], t_i nimma (16)des is a Hund, hoam this is a dog which if beaten is home never kummt] comes
- As expected, in sentences like (16) it is the gap in the *wenn*-clause rather than the gap in the matrix clause that can be resumed by a personal pronoun:
- (17)a. des is a Hund, gschlogn werd], nimma [der wenn er this is a dog which if he beaten is never hoam kummt] home comes b. *des is a Hund, [der wenn gschlogn werd], er nimma this is a dog which if beaten is he never kummt] hoam home comes

EVIDENCE FOR TARGET POSITION IN THE EMBEDDED CLAUSE:

<u>Generalization:</u> the left periphery of the German clause cannot be occupied by more than two overt phrasal elements (SpecTopP, SpecFinP, no overt focus fronting)

- (18) a. [Den Studenten] **hat** Maria gestern geküsst. the student_{ACC} has Maria-NOM yesterday kissed
 - b. [Gestern] **hat** Maria den Studenten geküsst. yesterday has Maria_{NOM} the student_{ACC} kissed
 - c. [Den Studenden], [den] **hat** Maria gestern geküsst. the student_{ACC} him has Maria_{NOM} yesterday kissed
 - d. *[Den Studenten], [gestern] [den] **hat** Maria geküsst. the student_{ACC} yesterday him has Maria_{NOM} kissed
 - e. *[Den Studenten], [den] [gestern] **hat** Maria geküsst. the student_{ACC} him yesterday has Maria_{NOM} kissed
- **1. argument**: the interaction of left dislocation and movement to the prefield (SpecFinP) in the embedded and the matrix clause of BE
- (19) $[_{1}$ **An** Ratzinger $]_{i}$ $[_{2}$ dass t_{i} nehman $]_{j}$, $[_{3}$ des $]_{j}$ hätt i ned denkt. the ratzinger that they-accept this had I not thought
- 2. argument: no multiple left dislocation in German (Altmann 1981)
- *[Die Gretel]_i, (20)Hans]_i, schon noch [den die wird deni the Gretel_{NOM} the Hans_{ACC} will him yet still she überzeugen. convince
- (21)[Am Hans]_i [dass a t_i Computer schenkt]_i dem_i hod a des_i an the Hans_{DAT} that he a computer gives him has he this vasprocha. promised
- **3. argument:** BE of wh-element
- (22) *[Wer]_i [seit t_i do is], lafft ois besser? who since here is goes everything better
- 4. argument: constituency
- (23)a. Da Peter glaabd [[de Mass_i wenn er t_i no drinkt], is a bsuffa]. the Peter thinks is he drunk this liter if he still drinks b. [De Mass_i wenn er t_i no drinkt] glaabd da Peter, [t_i is a bsuffa. this liter he still drinks thinks the Peter is he drunk if

4. Question Q2: what are the properties of the gap in the matrix clause and how is this gap licensed?

THE TRUE GAP IS IN THE EMBEDDED CLAUSE:

- Semantic argument:
- a. [Wegn Hans dass ned denkt. (24)an a kimmt], hätt because of the Hans that comes had I not thought he
 - b. [Heit wenn a fehlt], werd a was dalebn. today if he is-absent will he something experience
- Unlike the gap in the matrix clause, the gap in the embedded clause cannot be replaced with a resumptive pronoun:
- (25) a. $*[Den]_i$ [wenn i' \mathbf{n}_i dawisch], daschlog i e_i . him if I-him catch kill I
 - b. $[Den]_i$ [wenn i t_i dawisch], daschlog i' \mathbf{n}_i . him if I catch kill I-him

QUESTION: Is the gap in the matrix clause a parasitic gap?

PROPERTIES TYPICALLY ASSOCIATED WITH PARASITIC GAPS:

- parasitic gaps tend to appear in positions that are inaccessible to movement (Chomsky 1982)
- (26) a. Here is the influential professor that John sent his book to t in order to impress e.
 - b. He is a man whom everyone who meets e admires t.
- (27) a. *Here is the influential professor that John went to college in order to impress e.
 - b. *He is a man whom everyone who meets e is sorry.
- (28) a. Which girl did you send a picture of e to e?
 - b. Which girl did you send a picture of John to e?
 - c. Which girl did you send a picture of e to John? (from Engdahl 1983)
- parasitic gaps are not well-formed in finite clauses (Emonds 2001):
- (29) a. Which students did she criticize t after introducing e to the professor?
 - b. *Which students did she criticize t after the boss had introduced e to the professor?
- (30) a. ?a person that they spoke to because they admired
 - b. ?a person who people that talk to usually end up fascinated with (Kayne 1983: 166, 169)
 - c. an article that John read __ [before Mary glanced at __]
 - d. Who did John visit __ [without claiming that he knew __] (Nissenbaum 2000: 33)

- position of an empty parasitic operator in Bavarian extraction if the gap in the matrix clause were the parasitic gap?
- (31) $[CP Den_i]$ wenn i t_i dawisch, \emptyset_i [C] daschlog i e_i]].
- Preposed *wenn* ('if')-clauses in German do not necessarily occupy the SpecFinP position (König/van der Auwera 1988, von Fintel 1994, Günthner 1999; for Italian and Northern Italian dialects see also Munaro 2009).
- (32) a. [Wennich noch ein Bier trinke], [dann] **bin** ich betrunken. if I one more beer drink then am I drunk 'If I drink one more beer, then I will be drunk.'
 - b. [Wenn er sich weigern würdel. [die] würden ihn glatt ins if he Refl. refuse would they would him even into Gefängnis stecken.. prison put 'If he refused, they would even put him into prison.'

5. Question Q3: what motivates BE and why is clausal fronting required?

assumptions:

- (i) German left clausal periphery: only two positions overtly filled (SpecTopP, SpecFinP)
- (ii) SpecCP/SpecFinP ("prefield") neutral w.r.t. discourse-semantic properties (Roberts 1999)
- (iii) BE can involve a Topic or a Focus:
- (33) a. Wos hom-s g'sagt, wia-s an Xaver wieder g'seng hom? what have-they said as-they the Xaver again seen have 'What did they say when they saw Xaver again?'
 - b. An Xaver wie-s g'seng hom hom-sa-se recht g'freit. 'As for Xaver, when they saw him they were really happy.'
- (34) a. Wos fir-a Notn host gmoant dass-st kriagst? what for-a grade have-you thought that-you get 'Which grade did you think you would get?'
 - b. An Oanser dass-e kriag how-e g'moant. a one that-I get have-I thought 'Grade one I thought I would get.' (Bayer 2001: 20)

<u>Conclusion:</u> a focus or a topic (a "salient element") in SpecFinP must be licensed by an Agree relation with a corresponding feature of a higher head in the left periphery

<u>Crucial claim</u>: Agree of BE-element must be with a head in the left periphery of the matrix clause, and it is the necessity of this Agree relation that motivates fronting of the embedded clause.

WHAT MOTIVATES BE?

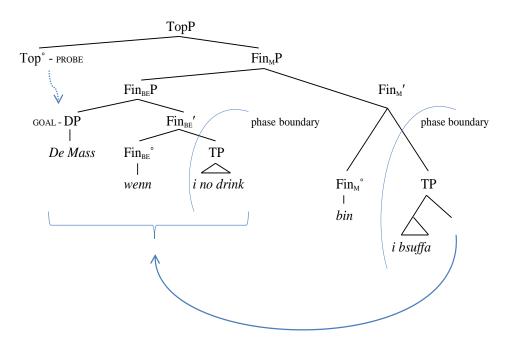
Assumption on movement: an element X in the domain of a phase head that bears an uninterpretable feature π moves to the edge of this phase head (otherwise PIC-violation); in other words, syntactic objects with unsatisfied feature requirements must move out of their phase (can be considered as part of the Transfer operation)

WHAT TRIGGERS OBLIGATORY FRONTING OF THE EMBEDDED CLAUSE?

Answer: assumption on movement

(35) [De Mass_i wenn i t_i no drink], bin i bsuffa. this liter if I still drink am I drunk

(36)

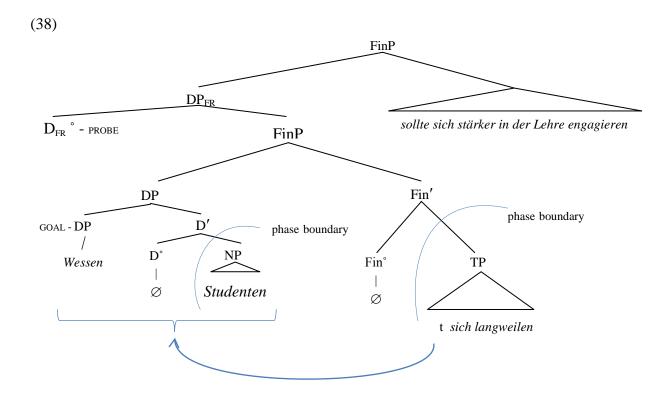


QUESTION: Is the specifier of a specifier accessible to a higher probe?

<u>Independent evidence:</u> free relatives with wessen-NPs (Fuß/Grewendorf/Groat 2012)

langweilen_{pl}], sollte_{sg} (37)[[Wessen_{sg} Studenten]_{pl} sich sich stärker in der whose students Refl get bored should Refl stronger in engagieren. Lehre teaching involve

'Whoever's students get bored, should be more involved in teaching.'



For "deep search":

- Chomsky (2012) on embedded wh-interrogatives
- M. Richards (2012): Whatever hasn't undergone Transfer is accessible; therefore, everything in the Spec of a phase head is accessible.

LICENSING OF THE GAP IN THE MATRIX CLAUSE:

<u>Problem</u>: neither the gap nor the empty operator is c-commanded by the antecedent in the "overt" syntax (not necessarily a problem for parasitic gap).

- (39) a. ?Which senator₁ did you persuade ____1 to borrow *which car*₂ [after getting an opponent of ___pg_1 to put a bomb in ___pg_2]?
 - b. ?Which kid₁ did you give *which candy bar*₂ to ____1 [without first telling a parent of ____pg_1 about the ingredients in ___pg_2]?
 - c. ?Which book₁ did you give __ to *which student* [without first showing __ to friends of __]?
 (Nissenbaum 2000: 116, 130)

<u>Implication</u>: empty operator in SpecFinP of the matrix clause (the gap in the matrix clause) is licensed by Agree with the left peripheral head ("salience") that licenses the BE element.

<u>Independent evidence for the presence of an empty operator:</u>

• licensing of the matrix gap (the empty prononominal) is no longer possible if SpecFinP of the matrix clause is occupied by another constituent (in that case, the matrix gap has to be lexicalized by a resumptive pronoun, cf. the contrast in (40) and (41):

- (40)e_i mi'm Hacke. a. [An Hansi wenn dawisch] daschlog i the Hans-ACC if I catch kill with the ax b. *[An Hans_i wenn i t_i dawisch], mi'm Hacke daschlog i e_i. the Hans-ACC if Ι catch with the ax kill I c. [An Hans dawisch], mi'm Hacke daschlog i'n_i. wenn i t_i the Hans-ACC if I catch with the ax kill I-him
- (41) a. [Den_i wenn i t_i dawisch], daschlog i e_i. him if Ι catch kill b. *[Den_i wenn i dann daschlog i t_i dawisch], e_i. him if catch then kill c. [Deni wenn i t_{i} dawisch], daschlog i'n_i. dann him if I catch then kill I-him
- fronting of argument clauses (to SpecFinP) combined with BE
- (42)a. *[An Seppi wer dass bschissn hod], hob **e**_i gfrogt. cheated the Sepp-ACC who that has have I asked b. *[Am Seppi wer dass ghoifa hod], hob i \mathbf{e}_{i} gsogd. the Sepp-DAT who that helped has have I told
- interaction of BE with Weak Crossover effects
- (44) Den Studenten_i hat sein_i Professor kritisiert. the student_{ACC} has his professor_{NOM} criticized
- (45) *[An Hans_i, wenn's t_i nausschmeißn], werd sei $_i$ Vata e_i daschlogn. the Hans_{ACC} if-they throw-out will his father_{NOM} kill 'Intended: If they throw out Hans, his father will kill him.'
- nauschmeißn], (46)wenn's Vata ned [An Hans_i, werd seii traurig father not throw-out the Hans_{ACC} if-they will his sad sei. he 'If they throw out Hans, his father will not be unhappy.'

NEW ANALYSIS: TOPIC DROP RATHER THAN PARASITIC GAP²

Main characteristics of (German) topic drop (Trutkowski 2011)

- Possible with PPs (unlike parasitic gaps, see Cinque 1990)
- (47) a. Neapel liegt am Meer_{PP}.

 Naples lies by the sea

 b. [e]_{PP} Liegt Ostia auch.

 lies Ostia as well

_

² Thanks to Erich Groat for drawing my attention to topic drop.

- $(48) \quad a. \quad [[Mit \ da \quad Susi]_i \ wenn-a \quad t_i \quad aufgwachsen \ is], \ is-a \quad a \quad e_i \quad verwandt.$ with the Susi if-he grown-up is is-he also related 'If he grew up with Susi, he is related to her.'
 - b. $[[Nach Minga]_i$ wenn's mi t_i eilodn], geh i sofort e_i . to Munich if-they me invite go I immediately 'If they invite me to Munich, I will come immediately.'
- Only salient discourse entities can be dropped
- Restricted to the position in front of the finite verb in V2 clauses
- (49)a. *[Den_i wenn i t_i dawisch], [dass i e_i daschlog], hob i am Hans gsogt. him if I catch that I kill have I to Hans told
 - b. *[Den_i wenn i dawisch], hob i am Hans gsogt, [dass i e_i daschlog]. him if I catch have I to Hans told that I kill
 - c. [Den_i wenn i t_i dawisch], glabd da Hans, [daschlog i e_i]. him if I catch, thinks the Hans kill I
- Possible with adverbials:
- (50) [Do_i wenn-a t_i arbatn mecht], muaß-a a e_i wohna. there if-he work wants must-he also live 'If he wants to have a position there, he should also live there.'

6. Question Q4: why is BE from wh-clauses with complex wh-elements disallowed?

Problem: BE out of wh-interrogatives

- - b. $[[Da \ Hans]_i \ warum \ (dass) \ sie \ t_i \ umbracht \ hod], \ mecht \ i \ wissen.$ the Hans why that himself killed has want I know 'I would like to know why Hans has committed suicide.'
- (52) a. [Den Hans]_i wer hat den_i gesehen? the Hans_{ACC} who has him seen 'As for Hans, who has seen him?'
 - b. *Den Hans, wer hat gesehen? the Hans_{ACC} who has seen

QUESTION: Why can the fronted XPs in (51) occur on the left of the wh-element although they are not resumed by a D-pronoun?

- (53)[Da Hans]i mecht i wissen, [warum (dass) t_i sie umbracht hod]. the Hans want I know why that himself killed has
- (54)[An hot]_i, des_i woaß i ned. Sepp_i wer dass gseng the $Sepp_{ACC}$ who that seen has this know I not

Two possible answers:

- (a) wh-element does not occupy SpecFinP in embedded clauses
- (b) BE targets TopP

Evidence for (b):

- BE from wh-clauses not possible with quantifiers (unlike "standard" cases of BE, see (55)) (same reason that prevents quantifiers from undergoing left dislocation)
- (55) [[Neamd]_i [wenn t_i kimmt], bin i a zfriedn. nobody if comes am I also satisfied
- (56)*[Neamd_i wer (dass) gseng ti hod], mecht wissen. nobody_{ACC} who that seen has want know b. *[Koa Geld_i verlorn hod]. hod a gfrogd. wer (dass) t_{i} lost has he asked no money_{ACC} who that has
- BE elements in wh-clauses can only function as topics
- (57)a. [Wen_i woaßt [wer_i dass hod]]? ned t_i gseng whom know-you not who that seen has b. ??[An Hansi hod], woaß i wer dass ti gseng ned. the Hans_{ACC} who that has know I not seen
- dass' (58)a. [Wen_i mechst wissen, warum t_i umbracht ham]]? whom want-you know why that-they killed have b. ??[An Hansi warum dass' t_i umbracht ham], mecht i wissen. Hans_{ACC} why the that-they killed have want I know
- (59) a. *[Da Sepp_i welche Buam dass t_i vadroschn hod], woaß i ned. the Sepp which boys that beaten has know I not 'I don't know which boys Sepp has beaten.'
 - b. *[Den welcher Kaas: Lehrer dass vazapft hodl, mecht i cheese which told I the teacher that has would wissen.

like-to-know

'I would like to know which teacher has told that nonsense.'

account of (59): If complex wh-phrases require licensing by a Top-head (see Rizzi 2001, Grewendorf 2012) and if the BE-element extracted from wh-clauses necessarily functions as a Topic as well, the ungrammaticality of (59) might be attributed to a minimality effect.

References

Altmann H. (1981), Formen der "Herausstellung" im Deutschen, Tübingen: Niemeyer Bayer J. (2001), "Asymmetry in Emphatic Topicalization." In: C.Féry/W.Sternefeld (eds.), Audiatur Vox Sapientiae. A Festschrift for Arnim von Stechow, Berlin: Akademie-Verlag, 15-47

- Bayer J. (2006), "A Note on targets of A'-Movement in the left periphery of German Sentences". In: P.Brandt/E.Fuss (eds.), Form, Structure, and Grammar. A Festschrift to Günther Grewendorf on Occasion of His 60th Birthday, Berlin: Akademie Verlag, 119-128
- Büring D. (2005), Binding Theory, Cambridge: Cambridge University Press
- Chomsky N. (1982), Some Concepts and Consequences of the Theory of Government and Binding, Cambridge Mass.: The MIT Press
- Chomsky N. (2012), "Problems of projection", Lingua, forthcoming
- Cinque G. (1990), Types of A'-dependencies, Cambridge Mass.: MIT-Press
- Engdahl E. (1983), "Parasitic gaps", Linguistics and Philosophy 6, 5-34
- Felix S. (1985), "Parasitic gaps in German." In: W.Abraham (ed.), *Erklärende Syntax des Deutschen*, Tübingen: Gunter Narr, 173-200
- Fintel K. v. (1994), *Restrictions on quantifier domains*, PhD diss., University of Amherst Fuss E./Grewendorf G./Groat E. (2012), *Free Relatives*, ms. University of Frankfurt
- Grewendorf G. (2010), "On the typology of verb second". In: T.Hanneforth/G.Fanselow (eds.), *Language and Logos*, Berlin: Akademie-Verlag, 72-96
- Grewendorf G. (2012), "Wh-movement as topic movement". Forthcoming in: L.Brugè et al. (eds.), *Functional Heads*, Oxford: Oxford University Press
- Grohmann K. (2003), Prolific Domains, Amsterdam: John Benjamins
- Günthner S. (1999), "Wenn-Sätze im Vor-Vorfeld: Ihre Formen und Funktionen in der gesprochenen Sprache", InList 11 (Interaction and Lingistic Structures), Konstanz, 1-33
- Haegeman L. (2002), "Anchoring to speaker, adverbial clauses and the structure of CP", *Georgetown University Working Papers in Theoretical Linguistics* 2, 117-180
- Kayne R.S. (1983), Connectedness and Binary Branching, Dordrecht: Foris
- König E./Van der Auwera J. (1988), "Clause integration in German and Dutch conditionals, concessive conditionals and concessives". In: J.Haiman/S.A.Thompson (eds.), *Clause Combining in Grammar and Discourse*, Amsterdam: John Benjamins, 101-133
- Lutz U. (1992), "Zur Extraktion aus Adjunktsätzen im Deutschen". In: F.-J, d'Avis/S.Beck/U.Lutz/J.Pafel/S.Trissler (eds.), *Extraktion im Deutschen I*. Arbeitspapiere des Sonderforschungsbereichs 340, Nr. 34, Universität Tübingen, 133-189
- Munaro N. (2009), "Towards a hierarchy of clause types", *Working Papers in Linguistics* 19, University of Venice, 175-223
- Nissenbaum J.W. (2000), *Investigations of Covert Phrase Movement*, MIT Working Papers in Linguistics, Cambridge Mass.
- Reis M. (1985), "Satzeinleitende Strukturen im Deutschen. Über COMP, Haupt- und Nebensätze, w-Bewegung und die Doppelkopfanalyse." In: W.Abraham (ed.), *Erklärende Syntax des Deutschen*, Tübingen: Gunter Narr, 271-311
- Richards M. (2012), "No phase is an island(?): an attempt to constrain internal 'Free Merge' via the Edge Feature", ms. University of Frankfurt
- Rizzi L. (1997), "The fine structure of the left periphery". In: L. Haegeman (eds.), *Elements of Grammar*, Dordrecht: Kluwer, 281-337
- Rizzi L. (2001), "Reconstruction, weak island sensitivity and agreement". In: C.Cecchetto/G.Chierchia/M.-T.Guasti (eds.), *Semantic Interfaces*, Stanford: CSLI
- Roberts I. (1999), "The C-system in Brythonic Celtic languages, V2 and the EPP", Ms, University of Cambridge
- Stechow A.v./Sternefeld W. (1988), *Bausteine syntaktischen Wissens*, Opladen: Westdeutscher Verlag
- Trutkowski E. (2011), "Topic drop at the syntax-semantics-pragmatics interface", ms. University of Potsdam
- Weiß H. (1998), Syntax des Bairischen, Tübingen: Niemeyer