

A copy-raising analysis of proleptic *wie*-clauses in German

Adverbial clauses between subordination and coordination, 20.-21.05.2022, University of Cologne

Andreas Pankau • Free University of Berlin • Andreas.Pankau@fu-berlin.de

1 The phenomenon

- Three ways to express the clausal complement of a verb of perception in German

- (1) a. *Peter sieht, dass Maria die Tür aufmacht.* (dass-clause)
Peter sees that Maria the door opens
'Peter sees that Maria opens the door.'
b. *Peter sieht Maria die Tür aufmachen.* (raising/ACI/ECM)
c. *Peter sieht, wie Maria die Tür aufmacht.* (eventive *wie*-clause)

- There is yet a fourth way, usually only mentioned in passing in the literature

- (1) d. *Peter sieht Maria, wie sie die Tür aufmacht.*

- I will call such clauses PROLEPTIC *WIE*-CLAUSES, because the subject of the *wie*-clause is anticipated as the direct object of the perception verb
- All analyses for proleptic *wie*-clauses agree that the direct object of the perception verb is a plain direct object


(2) Analyses for proleptic *wie*-clauses

- a. perception verb + direct object + adverbial *wie*-clause
(Zimmermann 1991: 119, Thurmair 2001: 87, Umbach et al. 2022: 314)
b. perception verb + direct object + eventive *wie*-clause (Hinterhölzl to app.)
c. perception verb + [direct object + adverbial *wie*-clause]
(Vater 1975: 218; Zimmermann 1991: 119)

- At the same time, many analyses have noted the functional similarity between ACI/ECM clauses and proleptic *wie*-clauses (Vater 1975, Zimmermann 1991)

- Claims of this talk

- Proleptic *wie*-clauses involve COPY RAISING (raising of a subject out of a finite clause) to the direct object position of the perception verb
→ the direct object of the perception verb is a *derived* direct object

- (3) *Peter sieht Maria [wie ~~Maria~~ die Tür aufmacht]*


- Raising in general is subject to pragmatic restrictions typical for eventive *wie*-clauses
→ Copy Raising can only target a finite *wie*-clause in German
- Roadmap
 - problems for previous analysis
 - arguments in favor of raising
 - copy raising analysis
 - pragmatics of raising, *wie*-clauses, and proleptic *wie*-clauses
 - status of proleptic *wie*-clauses: adverbial, complement, neither, both ...?

2 Problems for previous analyses

2.1 Proleptic *wie*-clauses ≠ adverbial *wie*-clauses

- Proleptic *wie*-clauses are very often equated with adverbial *wie*-clauses

- (4) a. *Peter sieht Maria, wie sie die Tür aufmacht.* (proleptic *wie*-clause)
Peter sees Maria how she the door opens
'Peter sees that Maria opens the door.'
b. *Peter sieht Maria, wie die Tür aufgeht.* (adverbial *wie*-clause)
Peter sees Maria how the door opens
'Peter sees Maria as the door opens.'

- At least two arguments speak against such an equation
 - First, since adverbial *wie*-clauses are temporal clauses indicating simultaneity, the tenses of the matrix clause and the adverbial clause match

- (5) a. *Peter hat Maria gesehen, wie die Tür aufging.*
Peter has Maria seen how the door open.PRET
'Peter saw Maria as the door opened.'
b. **Peter hat Maria gesehen, wie die Tür aufgeht.*
Peter has Maria seen how the door open.PRES
'Peter saw Maria as the door opens.'

- However, no such restriction holds in proleptic *wie*-clauses: the tense can match, but it need not: default present tense is always possible

- (6) a. *Peter hat Maria gesehen, wie sie die Tür aufgemacht hat.*
Peter has Maria seen how she the door opened has
b. *Peter hat Maria gesehen, wie sie die Tür aufmacht.*
Peter has Maria seen how she the door opens
'Peter saw that Maria opened the door.'

- Based on this first difference, a second difference can be observed: adverbial *wie*-clauses can be moved to the prefield (the position in front of the finite verb in matrix clauses in German), whereas proleptic *wie*-clauses cannot (Eggs 2006: 488)

- (7) a. *Wie die Tür aufging, hat Peter Maria gesehen.*
how the door opened has Peter Maria seen
'As the door opened, Peter saw Maria.'
b. **Wie sie die Tür aufmacht, hat Peter Maria gesehen.*
how she the door opens has Peter Maria seen
'Peter saw that Maria opened the door.'

- Possibly a third difference: nuclear stress?

- (8) *Und dann?*
'And then?'

- a. *Dann habe ich PETER gesehen, wie er Fußball spielt.*
then have I Peter seen how he football plays
- a'. *Dann habe ich Peter gesehen, wie er FUßBALL spielt.*
then have I Peter seen how he football plays
'Then I saw that Peter played football.'
- b. *Dann habe ich PETER gesehen, wie Maria Fußball gespielt hat.*
then have I Peter seen how Maria football played has
- b'.?? *Dann habe ich Peter gesehen, wie Maria FUßBALL gespielt hat.*
then have I Peter seen how Maria football played has
'Then I saw Peter as Maria way playing football.'

2.2 Proleptic *wie*-clauses ≠ eventive *wie*-clauses

- Hinterhölzl (to app.) analyzes proleptic *wie*-clauses as a variant of eventive *wie*-clauses

- (9) a. *Peter sieht Maria, wie sie die Tür aufmacht.* (proleptic *wie*-clause)
Peter sees Maria how she the door opens
'Peter sees that Maria opens the door.'
- b. *Peter sieht, wie Maria die Tür aufmacht.* (eventive *wie*-clause)

- This simple equation of proleptic and eventive *wie*-clauses faces three problems
 - First, eventive *wie*-clauses can be moved to the prefield, contrary to proleptic *wie*-clauses

- (10) a. *Wie Maria die Tür aufmacht, hat Peter gesehen.*
how Maria the door opened has Peter seen
'As the door opened, Peter saw Maria.'
- b. **Wie sie die Tür aufmacht, hat Peter Maria gesehen.*
how she the door opens has Peter Maria seen
'Peter saw that Maria opened the door.'

- Second, eventive *wie*-clauses can be substituted for by *etwas* 'something' or *das* 'that', whereas proleptic *wie*-clauses strictly disallow this

- (11) a. *Peter sieht etwas. Nämlich wie Maria die Tür aufmacht.*
Peter sees something namely how Maria the door opens
'Peter sees something, namely that Maria opens the door.'
- a'. *Peter sieht das. Also wie Maria die Tür aufmacht.*
Peter sees that hence how Maria the door opens
'Peter sees it. That is, that Maria opens the door.'
- b. **Peter sieht Maria etwas. Nämlich wie sie die Tür aufmacht.*
Peter sees Maria something namely how she the door opens
intended: 'Peter sees something, namely that Maria opens the door.'
- b'. **Peter sieht Maria das. Also wie sie die Tür aufmacht.*
Peter sees Maria that hence how she the door opens
intended: 'Peter sees it. That is, that Maria opens the door.'

- Third, connected to the second difference, one can ask for eventive *wie*-clauses, but not ask for proleptic *wie*-clauses

- (12) a. Q: *Was siehst du?*
 what see you
 'What do you see?'
 A: *Wie Peter die Tür aufmacht?*
 how Peter the door opens
 'That she opens the door.'
- b. Q: **Was siehst du Peter?*
 what see you Peter
 * 'What do you see Peter?'
 A: *Wie er die Tür aufmacht?*
 how he the door opens
 'That he opens the door.'

2.3 Proleptic *wie*-clauses \neq DP-internal clauses

- A third analysis for proleptic *wie*-clauses is that they are DP-internal adjunct clauses

- (13) a. *Peter sieht Maria, wie sie die Tür aufmacht.* (proleptic *wie*-clause)
 Peter sees Maria how she the door opens
 'Peter sees that Maria opens the door.'
- b. *Peter sieht* [_{DP} *Maria, die die Tür aufmacht*]. (adverbial *wie*-clause)
 Peter sees Maria who the door opens
 'Peter sees Maria, who opens the door.'
- c. *Peter sieht* [_{DP} *Maria, wie sie die Tür aufmacht*].

- As (13c) shows, this predicts that *Maria wie sie die Tür aufmacht* is a DP
 → I return to this analysis in § 3.2 and show that its predictions do not hold

2.4 Direct objects with proleptic *wie*-clauses \neq plain direct objects

- Ingredient of all analyses: the status of the perception verb's direct object is independent of the presence of a proleptic *wie*-clause, that is, the underlined DPs in (14) are identical

- (14) a. *Peter sieht Maria, wie sie die Tür aufmacht.*
 Peter sees Maria how she the door opens
 'Peter sees that Maria opens the door.'
- b. *Peter sieht Maria.*
 'Peter sees Maria'

- Two arguments speak against this equation
 - First, this analysis runs into troubles with entailment relations

- (15) *Ich sehe Maria in der Küche.*
 'I see Maria in the kitchen.'
 entails: *Ich sehe Maria.*
 'I see Maria.'

- But no such entailment relation as in (15) holds as soon as a proleptic *wie*-clause is present

- (16) a. *Ich sehe jeden, wie er sich versteckt hält.*
 I see everyone how he SELF hidden keeps
 'I see that everyone remains hidden.'
 does not entail: *Ich sehe jeden.*
 'I see everyone.'
- b. pointing at a screen where one sees flight AA 11 hitting WTC 1
Hier sehen Sie Mohammed Atta, wie er ins WTC fliegt.
 here see they Mohammed Atta how he in.the WTC flies
 'Here you can see Mohammed Atta flying into WTC 1.'
 does not entail: *Hier sehen Sie Mohammed Atta.*
 here see they Mohammed Atta
 'Here you see Mohammed Atta.'
- Second, the direct object can be a DP whose referent is invisible
- (17) a. *Ich sehe das Gift, wie es wirkt.*
 I see the poison how it works
 'I see that the poison works.'
 does not entail: *Ich sehe das Gift.*
 'I see the poison.'
- b. *Ich habe den Frühling gesehen, wie er sich ganz zögerlich anschleicht.*
 I have the spring seen how it self very slowly approaches
 'I saw that the spring approached slowly.'
 does not entail: *Ich habe den Frühling gesehen.*
 I have the spring seen
 'I have seen the spring.'

3 Arguments in favor subject-to-object copy raising

- In this section, I argue that proleptic *wie*-clauses involve subject-to-object raising that leaves behind a pronominal copy in subject position
 - The first set of arguments shows that the direct object of the perception verb is an initial subject of the *wie*-clause
 - The second set of arguments shows that the direct object of the perception verb and the *wie*-clause formed a clausal constituent at some stage in the derivation

3.1 Arguments for initial subjecthood of the perception verb's direct object

- No independent subject licensed

- (18) a. *Maria hat den Mann gesehen, wie er die Tür aufmacht.*
 Maria has the man seen how he the door opens
 'Maria saw that the man opened the door.'
- b. **Maria hat den Mann gesehen, wie ich die Tür aufmache.*
 Maria has the man seen how I the door open
 * 'Maria saw the man that I open the door.'

- Only subjects can be co-referential with the direct object of the perception verb

- (19) a. *Maria hat den Mann gesehen, wie er mich begrüßt.*
 Maria has the man seen how he me greets
 'Maria saw that man greeted me.'
- b. **Maria hat den Mann gesehen, wie ich ihn begrüße.*
 Maria has the man seen how I him greet
 'Maria saw the man that I greet him.'

- Subject idiom chunks are licensed (idioms are underlined)

- (20) a. *Ich höre die Spatzen, wie sie es von den Dächern pfeifen.*
 I hear the sparrows how they it from the roofs whistle
 'I hear that everyone knows it.'
 (die Spatzen pfeifen es von den Dächern = everyone knows it)
- b. *Ich sehe die Felle, wie sie mir davon schwimmen.*
 I see the furs how they me off swim
 'I see that it dashes my hopes.'
 (die Felle schwimmen jemandem davon = to dash someone's hopes)
- c. *Ich sehe die Wut, wie sie ihn packt.*
 I see the anger how it him catches
 'I see that he gets angry.'
 (die Wut packt jemanden = someone gets angry)

- Compare this with object idiom chunks, which are impossible

- (21) a. **Ich sehe die Schnauze, wie du sie voll hast.*
 I see the snout how you it full have
 'I see that you are fed up.'
 (die Schnauze voll haben = to be fed up with something)
- b. **Ich sehe die Krone, wie du sie dem Ganzen aufsetzt.*
 I see the crown how you it the whole puts on
 'I see that you cap it all off.'
 (dem Ganzen die Krone aufsetzen = to cap it all off)
- c. **Ich sehe den Sack, wie du ihn zumachst.*
 I see the bag how you it close
 'I see that you put the lid on.'
 (den Sack zumachen = to put the lid on)

- NB: not any subject idiom chunk is licensed, but only those that can be pronominalized

3.2 The perception verb's direct object and the *wie*-clause are a clausal constituent

- Structure of the examples:
 - a-examples: some process x is licensed for clausal constituents
 - b-examples: x treats the combination of a perception verb's direct object and the *wie*-clause as a clausal constituent
 - c-examples: x is does not treat the combination of a perception verb's direct object and an adverbial *wie*-clause as a clausal constituent

- Clausal proforms

- (22) a. *Peter sieht, wie Maria die Tür aufmacht. Das sehe ich auch.*
 Peter sees how Maria the door opens that see I also
 'Peter sees that Maria opens the door. I see that, too.'
- b. *Peter sieht Maria, wie sie die Tür aufmacht. Das sehe ich auch.*
 Peter sees Maria how she the door opens that see I too
 'Peter sees that Maria opens the door. I see that, too.'
- c. **Peter sieht Maria, wie die Tür aufgeht. Das sehe ich auch.*
 Peter sees Maria how the door opens that see I too
 'Peter sees Maria as the opens. I see that, too.'

- Substitution by *etwas* 'something' and *das* 'that'

- (23) a. *Peter sieht etwas. (Nämlich: wie Maria die Tür aufmacht.)*
 Peter sees something namely how Maria the door opens
 'Peter sees something. (Namely, that Maria opens the door.)'
- b. *Peter sieht etwas. (Nämlich: Maria, wie sie die Tür aufmacht.)*
 Peter sees something namely Maria how she the door opens
 'Peter sees something. (Namely, that Maria opens the door.)'
- c. **Peter sieht etwas. (Nämlich: Maria, wie die Tür aufgeht.)*
 Peter sees something namely Maria how the door opens
 Peter sees something. (Namely, Maria as the door opens.)

- (24) a. *Peter sieht das. (Also wie Maria die Tür aufmacht.)*
 Peter sees that hence how Maria the door opens
 'Peter sees it. (That is, that Maria opens the door.)'
- b. *Peter sieht das. (Also Maria, wie sie die Tür aufmacht.)*
 Peter sees that hence Maria how she the door opens
 'Peter sees it. (That is, that Maria opens the door.)'
- c. **Peter sieht das. (Also Maria, wie die Tür aufgeht.)*
 Peter sees that hence Maria how the door opens
 'Peter sees it. (That is, Maria as the door opens.)'

- Question formation

- (25) Was sieht Peter?
 what sees Peter
 'What does Peter see?'
- a. *Er sieht, wie Maria die Tür aufmacht.*
 he sees how Maria the door opens
 'He sees that Maria opens the door.'
- b. *Er sieht Maria, wie sie die Tür aufmacht.*
 he sees Maria how she the door opens
 'He sees that Maria opens the door.'
- c. **Er sieht Maria, wie die Tür aufgeht.*
 he sees Maria how the door opens
 'He sees Maria as the door opens.'

- Clefting

- (26) a. *Es ist wie Maria die Tür aufmacht, was / das ich sehe.*
 it is how Maria the door opens what that I see
 'It is that Maria opens the door that I see.'
- b. *Es ist Maria, wie sie die Tür aufmacht, was / das ich sehe.*
 it is Maria how she the door opens what that I see
 'It is that Maria opens the door that I see.'
- c. **Es ist Maria, wie die Tür aufgeht, was / das ich sehe.*
 it is Maria how the door opens what that I see
 'It is Maria as the door opens that I see.'

- Pseudo-Clefting

- (27) a. *Was ich sehe, ist, wie Maria die Tür aufmacht.*
 what I see is how Maria the door opens
 'What I see is that Maria opens the door.'
- b. *Was ich sehe, ist Maria, wie sie die Tür aufmacht.*
 what I see is Maria how she the door opens
 'What I see is that Maria opens the door.'
- c. **Was ich sehe, ist Maria, wie die Tür aufgeht.*
 what I see is Maria how the door opens
 'What I see is Maria as the door opens.'

- Left Dislocation

- (28) a. *Wie Maria die Tür aufmacht, das sehe ich.*
 how Maria the door opens that see I
 'That Maria opens the door, I see.'
- b. *Maria, wie sie die Tür aufmacht, das sehe ich.*
 Maria how she the door opens that see I
 'That Maria opens the door, I see.'
- c. **Maria, wie die Tür aufgeht, das sehe ich.*
 Maria how the door opens that see I
 'Maria as the door opens, I see.'

- Appositives

- (29) a. *Peter sieht, wie Maria die Tür aufmacht, was ich auch sehe.*
 Peter sees how Maria the door opens what I also see
 'Peter sees that Maria opens the door, which I see, too.'
- b. *Peter sieht Maria, wie sie die Tür aufmacht, was ich auch sehe.*
 Peter sees Maria how she the door opens what I also see
 'Peter sees that Maria opens the door, which I see, too.'
- c. **Peter sieht Maria, wie die Tür aufgeht, was ich auch sehe.*
 Peter sees Maria how the door opens what I also see
 'Peter sees Maria as the opens, which I see, too.'

- Recall the analysis that proleptic *wie*-clauses are part of a DP

(13) c. *Peter sieht* [_{DP} *Maria, wie sie die Tür aufmacht*].

- This predicts the combination of a perception verb's direct object and the *wie*-clause to behave like a DP with respect to the criteria, and to feature a proform agreeing with the head of the DP *Maria*, namely *sie/die* 'her' or *wen* 'who'

- (30) a. clausal proforms
Peter sieht Maria. Die sehe ich auch.
 Peter sees Maria she see I also
 'Peter sees Maria. I see her, too.'
- b. substitution by *etwas* 'something' and *das* 'that'
Peter sieht jemanden, nämlich Maria.
 'Peter sees someone, namely Maria.'
- b'. *Peter sieht sie, also Maria.*
 'Peter sees her, that is, Maria.'
- c. question formation
Wen sieht Peter? Maria.
 who sees Peter Maria
 'Who does Peter see? Maria.'
- d. clefting
Es ist Maria, die ich sehe.
 'It is Maria who I see.'
- e. pseudo-clefting
Wen ich sehe, ist Maria.
 'Who I see is Maria.'
- f. left dislocation
Die Maria, die sehe ich.
 the Maria her see I
 'Maria, I see.'
- g. appositives
Peter sieht Maria, die ich auch sehe.
 Peter sees Maria who I also see
 'Peter sees Maria, who I see, too.'

- But as the data in (31) show, substituting *die/wen* for *das/was* in the c-examples in (30) results in ungrammaticality

- (31) a. clausal proforms
 **Peter sieht Maria, wie sie die Tür aufmacht. Die sehe ich auch.*
 Peter sees Maria how she the door opens her see I too
 'Peter sees that Maria opens the door. I see her, too.'
- b. substitution by *etwas* 'something' and *das* 'that'
 **Peter sieht jemanden. (Nämlich: Maria, wie sie die Tür aufmacht.)*
 Peter sees someone namely Maria how she the door opens
 'Peter sees something. (Namely, that Maria opens the door.)'

- b'. *Peter sieht sie. (Also: Maria, wie sie die Tür aufmacht.)
Peter sees her hence Maria how she the door opens
'Peter sees it. (That is, that Maria opens the door.)'
- c. question formation
*Wen sieht Peter? Peter sieht Maria, wie sie die Tür aufmacht.
who sees Peter Peter sees Maria how she the door opens
'Who does Peter see? Peter sees that Maria opens the door.'
- d. clefting
*Es ist Maria, wie sie die Tür aufmacht, die ich sehe.
it is Maria how she the door opens her I see
'It is that Maria opens the door who I see.'
- e. pseudo-clefting
*Wen ich sehe, ist Maria, wie sie die Tür aufmacht.
who I see is Maria how she the door opens
'Who I see is that Maria opens the door.'
- f. left dislocation
*Die Maria, wie sie die Tür aufmacht, die sehe ich.
the Maria how she the door opens her see I
'That Maria opens the door, I see her.'
- g. appositives
*Peter sieht Maria, wie sie die Tür aufmacht, die ich auch sehe.
Peter sees Maria how she the door opens her I also see
'Peter sees Maria, who I see, too.'

4 A copy raising analysis of proleptic *wie*-clauses

- Results so far
 - proleptic *wie*-clauses are strange embedded clauses (§ 2.1-2.3)
 - the perception verb's direct object is a derived direct object (§ 2.4)
 - the perception verb's direct object is a former subject (§ 3.1)
 - the derived direct object and the proleptic *wie*-clause behave like a clause (§ 3.2)
- Analysis
 - proleptic *wie*-clauses are eventive *wie*-clauses
 - the subject is raised out of the eventive *wie*-clause to direct object position
 - raising leaves behind a pronominal copy of the subject

(32) a. *Peter sieht Maria, wie sie die Tür aufmacht.*

b. *Peter sieht* [_{CP} *wie Maria die Tür aufmacht*]

↓

Subject to Object Raising

*Peter sieht **Maria*** [_{CP} *wie _ die Tür aufmacht*]

↓

Copy Pronoun Insertion

Peter sieht Maria [_{CP} *wie **sie** die Tür aufmacht*]

- Benefits
 - derived objects ≠ base-generated direct objects → different entailments
 - the subject restrictions are captured
 - the clausal behavior of the derived direct object and the proleptic *wie*-clause reduces to the clausehood of the eventive *wie*-clause
- Two open questions (at least two)
 - Why can raising only target an eventive *wie*-clause, but never a regular *dass*-clause? (cf. 33)
 - Why do proleptic *wie*-clauses differ from eventive *wie*-clause? (cf. § 2.2)

(33) **Peter sieht Maria, dass sie die Tür aufmacht.*
 Peter sees Maria that she the door opens
 ‘Peter sees that Maria opens the door.’

5 The pragmatics of raising, eventive *wie*-clauses, and proleptic *wie*-clauses

5.1 Background: the pragmatics of raising

- Raising and non-raising structures are not fully synonymous (Postal 1974: chapter 11; Borkin 1974, 1984)

(34) a. *I believe that Alexander was a great statesman.*
 b. *I believe Alexander to have been a great statesman.*

- Postal’s analysis: raising involves PROPERTY P
 - the speaker has “perceptual experience” of the raised subject (Postal 1974: 357)
- Problem: non-referential DPs can be raised (expletives, idiom chunks) that generally bar perceptual experience (Steever 1977)

(35) a. *I believe there to be trouble in Iraq.*
 b. *Tom expects tabs to be kept on her movement.*

- Steever’s analysis: raising involves DIRECT ACCESS
 - “the perceptual relation between the underlying subject NP’s referent and the content of the clause is direct” (Steever 1977: 594)
 - = direct access to the content of the complement clause

5.2 The pragmatics of eventive *wie*-clauses

- Standardly, eventive *wie*-clauses are analyzed as complement clauses that highlight the eventive character of the complement clause’s content
- Hinterhölzl (to app.) notes that this insufficient to explain that (36b) implies that Peter directly witnessed Mary opening the door, whereas (36a) does not

(36) a. *Peter sieht, dass Maria die Tür aufmacht.* (dass-clause)
 Peter sees that Maria the door opens
 ‘Peter sees that Maria opens the door.’
 c. *Peter sieht, wie Maria die Tür aufmacht.* (eventive *wie*-clause)

- Hinterhölzl's analysis: eventive *wie*-clauses involve DIRECT PERCEPTION of the object
- My analysis: eventive *wie*-clauses involve DIRECT ACCESS à la Steever (1977)
 - both eventive *wie*-clauses and raising involve direct access to the content of the complement clause, not direct perception of the event
 - the perception part results from the relevant meaning component of the predicate (*sehen* 'to see', *hören* 'to hear', *riechen* 'to smell')
- Three differences between direct and indirect access
 - First, the context forces (in-)direct access

(37) Peter's father looks out of the window. Maria, the girl Peter dated tonight, and Peter say good bye. Maria kisses Peter. Peter's father sees it and smiles. His wife sees that and asks why he smiles. He says:

- Ich sehe, dass Maria unseren Sohn küsst.*
I see that Maria our son kisses
'I see that Maria loves our son.'
- Ich sehe, wie Maria unseren Sohn küsst.*
- Ich sehe Maria unseren Sohn küssen.*
→ direct access through seeing

(38) Peter returns happily from his first date with Maria. His father sees that and says:

- Ich sehe, dass Maria dich mag.*
I see that Maria you likes
'I see that Mary likes you.'
- **Ich sehe, wie Maria dich mag.*
- **Ich sehe Maria dich mögen.*
→ indirect access through Peter's the appearance

- Second, direct access bars embedded preterite under matrix present (Hinterhölzl to app.)

- (39) a. *Ich sehe, dass Maria dich geküsst hat.*
I see that Maria you kissed has
'I see that Maria kissed you.'
- **Ich sehe, wie Maria dich geküsst hat.*
 - **Ich sehe Maria dich geküsst haben.*

- Third, direct access allows embedded present under matrix preterite

(40) What did you just see?

- Ich habe gesehen, dass Maria Klaus küsst.*
I have seen that Maria Klaus kisses
'I saw that Maria kissed Klaus.'
- Ich habe gesehen, wie Maria Klaus küsst.*
- Ich habe Maria Klaus küssen sehen.*

- That only direct access is required but not direct perception is suggested by examples involving eventive *wie*-clauses embedded under non-perception verbs, for they behave identically

- First, the context forces (in-)direct access
- (41) Peter and his wife watch a movie. All of a sudden, she smiles, although the content of the movie is rather sad. He asks why she smiles. She says:
- a. *Ich erinnere mich grad daran, dass die Bäume blühen.*
I remember SELF just on it that the trees blossom
'I just remember that the trees leaf out.'
 - b. *Ich erinnere mich grad daran, wie die Bäume blühen.*
→ direct access to the memory
- (42) Peter comes in, totally covered in pollen. His wife looks puzzled, but then normal again. He asks her why she was puzzled. She says:
- a. *Ich erinnere mich grad daran, dass die Bäume blühen.*
I remember SELF just on it that the trees blossom
'I just remember that the trees leaf out.'
 - b. **Ich erinnere mich grad daran, wie die Bäume blühen.*
→ indirect access through Peter's appearance
- Second, direct access bars embedded preterite under matrix present
- (43) same context as in (42)
- a. *Ich erinnere mich grad daran, dass die Bäume geblüht haben.*
I remember SELF just on it that the trees blossomed have
'I just remember that the trees leafed out.'
 - b. **Ich erinnere mich grad daran, wie die Bäume geblüht haben.*
- Third, direct access allows embedded present under matrix preterite
- (44) same context as in (41)
- a. *Ich habe mich grad daran erinnert, dass die Bäume ausschlagen.*
I have SELF just on it remembered that the trees blossomed
'I just remembered that the trees leafed out.'
 - b. *Ich habe mich grad daran erinnert, wie die Bäume ausschlagen.*

5.3 The pragmatics of proleptic *wie*-clauses

- Proleptic *wie*-clauses behave like eventive *wie*-clauses and raising structures: they require direct access
 - First, the context forces (in-)direct access
- (45) Peter's father looks out of the window. Maria, the girl Peter dated tonight, and Peter say good bye. Maria kisses Peter. Peter's father sees it and smiles. His wife sees that and asks why he smiles. He says:
- Ich sehe Maria, wie sie unseren Sohn küsst.*
I see Maria how she our son kisses
'I see that Maria kisses our son.'
→ direct access through seeing

(46) Peter returns happily from his first date with Maria. His father sees that and says:
**Ich sehe Maria, wie sie dich mag.*
 I see Maria how she you likes
 → indirect access through Peter's appearance

- Second, direct access bars embedded preterite under matrix present

(47) What do you see?
**Ich sehe Maria, wie sie dich geküsst hat.*
 I see Maria how she you kissed has
 'I see that Maria kissed you.'

- Third, direct access allows embedded present under matrix preterite

(48) What did you just see?
Ich habe Maria gesehen, wie sie Klaus küsst.
 I have Maria seen how she Klaus kisses
 'I saw that Maria kissed Klaus.'

- This provides the explanation why only eventive *wie*-clauses, but not *dass*-clauses, can be targeted by copy raising
 → *only the eventive wie-clause is compatible with the pragmatics of raising*

6 The status of proleptic *wie*-clauses

- Recall that proleptic *wie*-clauses are eventive *wie*-clauses out of which the subject was copy raised to direct object position
- This obviously clashes with the evidence adduced in § 2.2 that proleptic *wie*-clauses differ from eventive *wie*-clauses
 - eventive *wie*-clauses can be moved to the prefield, proleptic *wie*-clauses cannot
 - eventive *wie*-clauses can be substituted for by proforms, proleptic *wie*-clauses cannot
 - eventive *wie*-clauses can be asked for, proleptic *wie*-clauses cannot
- Suggestion: proleptic *wie*-clauses are 'dead' eventive *wie*-clauses (terminology taken from Johnson & Postal 1980: 338)
 - Raising in Relational Grammar
 - a DP bearing GF_x is raised out of a complement clause bearing GF_y
 - the raised DP loses its original GF_x and acquires GF_y of the complement clause
 - the complement clause is put *in chômage*: it acquires the GF *Dead*, and becomes invisible for most syntactic processes
 - Translation into standard GG
 - raising destroys the integrity of the complement clause
 - it is frozen with respect to most syntactic operations
 - Possible analysis
 - proleptic *wie*-clauses behave syntactically like non-integrated adverbial clauses (cf. Frey 2011, 2012 for properties of non-integrated adverbial clause)
 - but proleptic *wie*-clauses start out as integrated clauses
 - idea: raising turns proleptic *wie*-clauses into non-integrated clauses
 → they start out as integrated clauses but turn into non-integrated clauses

7 Open issues

- Why is there copy raising at all in German?
- Why is *wie* chosen as a direct access marker?
- Why does raising go along with derived non-integrity of the eventive *wie*-clause?
- How is the distinction direct vs. indirect access expressed in other languages?

8 References

- Borkin, Ann. 1974. *Raising to object position*. PhD thesis, University of Michigan.
- Borkin, Ann. 1984. *Problems in form and function*. Norwood, NJ: Ablex.
- Eggs, Frederike. 2006. *Die Grammatik von als und wie*. Tübingen: Gunter Narr.
- Frey, Werner. 2011. Peripheral adverbial clauses, their licensing and the prefield in German. In: Eva Breindl, Gisella Ferraresi & Anna Volodina (eds.), *Satzverknüpfung: Zur Interaktion von Form, Bedeutung und Diskursfunktion*. Berlin: de Gruyter, 41-77.
- Frey, Werner. 2012. On two types of adverbial clauses allowing root-phenomena. In: Aelbrecht, Lobke, Liliane Haegeman & Rachel Nye (eds.), *Main Clause Phenomena. New Horizons*. Amsterdam: Benjamins, 405-429.
- Hinterhölzl, Roland. to appear. *On perceptive evidential wie-clauses in German: a situation-based approach*.
- Johnson, David & Paul Postal. 1980. *Arc Pair Grammar*. Princeton: Princeton University Press.
- Postal, Paul. 1974. *On raising*. Cambridge (Mass.): MIT Press.
- Steevers, Sanford B. 1977. Raising, Meaning, and Conversational Implicature. *CLS* 13: 590-602.
- Thurmair, Maria. 2001. *Vergleiche und Vergleichen. Eine Studie zu Form und Funktion der Vergleichsstrukturen im Deutschen*. Tübingen: Niemeyer.
- Umbach, Carla, Stefan Hinterwimmer, Helmar Gust. German *wie*-complements. *Natural Language and Linguistic Theory* 40(1): 307-343.
- Vater, Heinz. 1975. Wie-Sätze. In: Kurt Braunmüller & Wilfried Kürschner (eds.), *Grammatik. Akten des 10. Linguistischen Kolloquiums 2*. Tübingen: Niemeyer, 209–222.
- Zimmermann, Ilse. 1991. Die subordinierende Konjunktion *wie*. In: Marga Reis & Inger Rosengren (eds.), *Fragesätze und Fragen*. Tübingen: Niemeyer, 113-122.