

The interaction between competence and performance in building (un)grammatical structures

Competition, cooperation and licensed rule violation

1. Grammar, Cognition, Interaction
 - 1.1 Economy as a cognitive strategy
 - 1.2 Competence/Grammar
 - 1.3 Performance/Pragmatics
 - 1.4 Examples
 - 1.4.1 weil-V2-clauses in German
 - 1.4.2 Implicative UND-constructions in German
 - 1.4.3 V1-declaratives
2. Diachrony
 - 2.1 Functionally motivated reanalyses
 - 2.2 Non-functionally motivated reanalyses
3. Does performance license rule violations?
 - 3.1 Grammaticality and acceptability
 - 3.1.1 Acceptance of irregular structures for the lack of alternatives (cf. Haider 2011)
 - 3.1.2 Intermediate conclusion
 - 3.2 Exceptional occupation of the German prefield
 - 3.2.1 Verbal particles
 - 3.2.2 Multiple occupation of the prefield
 - 3.2.3 PP-extraction to the prefield
 - 3.3 Further cases
 - 3.3.1 Wh-coordination
 - 3.3.2 Obligatoriness and optionality of correlatives
 - 3.3.3 Pragmatics licensing subordinate clauses without a matrix
4. Conclusion
5. References

1. Grammar, Cognition, Interaction

1.1 Economy as a cognitive strategy

- There are principles of economy in competition. These principles constrain both the grammar and the lexicon, and also the performance.

(1) **Principles of Cognitive Economy**

(cf. Öhl 2009: 420)

- a. Structures are minimal with respect to the generative expense.
- b. Structures are sufficiently specified with respect to the conceptual interpretation.

where *concept* is understood as interpretable features put into relation in the structural description.

- Cognitive Strategies:

(2) **Minimal Effort in Computation (MEC)**

Use just as many operations as are necessary to design a structure converging with the features to encode.

(3) **Maximal Explicitness (MEX)**

Find the sufficient amount of features converging with a consistent interpretation of a structural description.

⇒ **ease and efficiency** (cf. Hawkins 2011: 253; *to appear*)

(4) **Maxim of Cognitive Economy**

(cf. Öhl 2009: 420)

Generate minimal structures converging with a sufficient specification of conceptual information.

1.2 Competence/Grammar

- Grammar must be flexible AND must provide constraints.

MEC: "avoid movement"

MEX: "enable movement"

- Grammar doesn't do anything unnecessary. \Rightarrow Movement must be motivated.

E.g. *functional features*:

- (5) a. [_{IP} Everyone_i [_I will [_{VP} someday [_V be fed up with football on TV]...]] .
 b. [_{IP} Everyone_i [_I is_v [_{VP} _{t_i} [_V fed up with football on TV]...]] .

E.g. *discourse semantics* (interfacing with pragmatics)¹:

- (6) A: Was weißt Du über Wuppertal?

(cf. Öhl 2010: 266f)

"What do you know about Wuppertal?"

B: Ich weiß, dass eine Olympiade_i dort [_{VP} noch keine _{t_i} stattgefunden] hat. Sie haben aber

I know that an Olympic-games there still no taken-place has they have but

schon einmal ein Schwebebahnrennen gemacht.

(→ contrast)

already once a suspension-railway-race made

"I know that the Olympic games have not yet taken place there. However, they have arranged a suspended railway race, already."

1.3 Performance/Pragmatics

- There is a choice between options provided by the grammar.
- Structure building operations interact, co-operate but also compete with each other.

MEC: *ease of processing* ("least effort processing"; cf. Hawkins 2011: 251; *to appear*)

E.g. *verbal particles in English*: the heavier an object-DP, the less probably it precedes the particle (Hawkins 2011, 255: *minimize domains*).

- (7) a. They lifted the child up.
 b. They lifted up [the little child with blonde dreadlocks].

MEX: *ease of meaning assignment* (abstracted from Hawkins, *to appear*)

E.g. *verbal particles in English*: if a particle verb does not have compositional meaning, the object-DP less probably precedes the particle. (Hawkins 2011, 257: *lexical dependency domain*).

- (8) a. They looked ?(up) the number ?(up).
 b. They washed ?(up) the dishes ?(up).

E.g. *asyndetic relative clauses in English*: statistics show that relativiser-drop is more probable if a restrictive relative clause is predictable (Hawkins 2011: 252)

⇒ Performance observes the constraints based on the competence but makes use of its options in an economical and efficient way.

¹ A list of discourse semantic factors triggering syntactic precedence can be found in Öhl (2010: 270).

1.4 Examples

1.4.1 *weil-V2-clauses in German*

- (9) a. Ich sag sowas nicht, weil man *darf* das nicht sagen.
b. Ich sag sowas nicht, weil man das nicht sagen *darf*. (Antomo & Steinbach 2010: 2)

"Movement of the verb to second position unfolds assertive illocution potential." (ibd.)

- (10) a. Ich kenne einen Linguisten, der *kann* nicht lesen.
b. Ich kenne einen Linguisten, der nicht lesen *kann*.

- (11) a. Hans glaubt, Peter *hat* geraucht.
 b. Hans glaubt, dass Peter geraucht *hat*.

V2-subordinate clauses are generally excluded in presupposition contexts (*ibid.* 7); they are not part of the *common ground* (*ibid.* 23).

- (12) A: Du gehst in die Oper, obwohl dein Ex-Freund zu Besuch kommt?
B: Ich gehe in die Oper, WEIL mein Ex-Freund (*kommt) zu Besuch *(kommt).

The distinction is systematic, both syntactically and pragmatically:

- (weil-)V2 clauses are not syntactically integrated:

- (13) Niemand₁ war verärgert, weil er₁ (*wurde) nicht eingeladen *(wurde). (ibd. 11)

- weil-V2-clauses do not supply *propositional* reasoning but *epistemic* or *speech act oriented* reasoning about the *propositional attitude*. (Antomo & Steinbach 2010: 16ff.; Uhmann 1998: 116ff.)

MEX: Disintegrated clauses constitute a further pragmatic processing unit (Antomo & Steinbach 2010: 26); thus, *weil*-V2-clauses offer an additional option of causal clauses that are efficient for interaction.

- Similarly, disintegrated conditional clauses are interpreted in relation to the speech act:

- (15) Wenn Du Hunger hast, im Kühlschrank gibt es frische Büffelmilchmozzarella.

1.4.2 Implicative UND-constructions in German

- (16) a. Hans war so nett und besuchte sie.
 b. Hans war so nett, sie zu besuchen

1. Normally, coordinated conjuncts are not only syntactically, but also semantically independent. (Reis 1993: 204)

2. Why does a coordinate structure (IUC) enter a competition with the implicative infinitival complement construction (IIC) at all?

- *Communicative weight*: IUC und IIC are *semantically* equivalent; however, only the IUC contains two independent informational units (and thus also focus domains), whereas implicative matrix predicates are interpreted presuppositionally (Reis 1993: 244f.)

- (17) a. *Hans war so nett, sie zu besuchen.
 b. Hans war so nett und besuchte sie

MEX: The IUC was conventionalised, because only there, both clauses keep their communicative weight within the same semantic constellation (Reis 1993: 246).

1.4.3 V1-declaratives

- Contrary to wide spread thinking they do not share the context with thetic sentences:

- (18) a. (Was gibt's Neues?) Harry kommt. (Önnerfors 1997: 93)
 b. (Was gibt's Neues?) #Kommt Harry.
- (19) a. Kamen wieder diese zwei Studenten ins Zimmer. Fragte mich der eine: (...)
 b. *Es kamen wieder diese zwei Studenten ins Zimmer. Es fragte mich der eine: (...)

⇒ V1-declaratives are not fully rhematic; however, they are characterised by the absence of the topic-comment-arrangement.

- Particular functional types can be identified (cf. Önnerfors 1997: 100ff.):

- (20) a. *Kommt* ein Kumpel, das Kirchenblatt hat er mir gebracht: (...) (narrative)
 b. Die Bundesrepublik wird (...) mit leeren Händen dastehen. *Bleibt* die Hoffnung auf eine Entspannung (...). (enumerating alignment)
 c. Immer will er weg von der Insel. *Soll* er doch gehen! (deontic modality)
 d. Ich begab mich auch nicht sehr gern ins Lehrerzimmer, *wusste* ich doch, wie Rolf dort den Ton angab. (reasoning about the content)
 e. *Bin* ich froh, wenn ich die Uni nimmer seh, du! (exclamation)

⇒ Certain (illocutive) functions are supported by the linear precedence of the finite verb together with the absence of a topic-comment-structure (Önnerfors 1997: 97;184).

MEX: Employment of the synchronically marked verb position in suitable pragmatically marked contexts.

2. Diachrony

2.1 Functionally motivated reanalyses

- Changes of the core grammar are often initialised by *functional variation at the fringe*. (Öhl to appear1)

'Cline': *usage based* (UB) and *acquisition based* (AB) *changes* and *reanalyses* (Öhl to appear1)

- (21) lexical word in untypical functional contexts (UB) > functional word (AB) > functional word in grammatical context (UB) > AUX/PTC (AB) > clitic by phonological reduction (UB) > affix (AB)

Bsp.: *Periphrasis vs. analytic inflection* (Öhl, to appear 2)

- (22) a. Das Buch ist auf dem Weg *zu erscheinen*.
 the – book – is – on – the – way – to – appear-INF
 b. %Er ist sein Fahrrad *am reparieren*.
 he – is – his – bicycle – PTC – repair-INF
 'He is repairing his bicycle.'
- (23) a. *Das Buch ist auf dem Weg, *gelesen zu werden*.
 the – book – is – on – the – way – read.PII² – to – AUX(PASS)
 b. *Das Buch_i ist [PP am [[DP x_i] *gelesen werden*]].
 the – book – is – at.DEF – read.PII – AUX(PASS)

² Note that we gloss both the past participle and the passive participle as PII (second participle); this is because they are homonymous anyway and very often polyfunctional or ambiguous.

- (24) a. Le livre est en train d'être lu.
the – book – is – in – move – of – be-INF – read.PII

b. The book is being read.

⇒ *Grammaticalisation*: Speakers vary the ways of expression within the frame of the rules and the lexical material at their disposal, in order to be efficient and explicit (**MEX**). Variants may be regularised in language acquisition, when children reanalyse them on the search for functional categories (also **MEX**).

2.2 Non-functionally motivated reanalyses

! Not all usage based changes are functionally motivated.

E.g. Old English: V2 und SOV; Middle Eng. (from mid 12th ct.): SVO (Lightfoot 1991)

- Lightfoot (1991: 19): Triggering is "presumably a function of saliency and frequency".
- The child acquiring a language is confronted with very much redundant information that cannot be managed without filtering. (⇒ 'cues', Lightfoot 1999: 144ff; 'degree-Ø-learnability'; Lightfoot 1991: 22ff)

⇒ Children acquire the word order from main clauses.

- Indicators for OV in main clauses:

- (25) a. *þa sticode him mon þa eagon ut* (Orosius 168,4; from Lightfoot 1991: 61)
da – stach – ihm – wer – die – Augen – aus (*verbal particles*)
- b. *swa sceal geong guma gode gewyrecean* (Beowulf 20; aus Lightfoot 1991: 62)
so – soll – junger – mann – gut – handeln (*infinite verb forms*)

- Abweichungen von SOV in Ae. Hauptsätzen:

- (26) a. Stephanus *up-astah þurh his blod gewulderbeagod* (Homilies I, 56; ibd. 61)
St. – auf-erstand – durch – sein – Blut – ruhmbedeckt (*particle raising*)
- b. *nime he upp his mæg* (Ancient Laws I,296,10; ibd.)
nehme – er – auf – seine – Verwandten (*particle raising or extraposition*)
- c. *þy ilcan geare was gicoren* Æbelheard abbud to biscop (AS chronicle 790; ibd. 58)
dem – gleichen – Jahre – war – gewählt – AE. – Abt – zum – Bischof (*extraposition*)

- Eindeutige Abfolge in Ae. Nebensätzen:

- (27) . . . þæt hie mid þæm þæt folc *ut* aloccoden (Orosius 222,3; ibd. 61)
dass – sie – mit – dem – das – Volk – aus – PFTV-lock-PRÄT.3^{pl}
'. . . dass sie damit das Volk herauslockten.'

- ! Until the 12th ct. there is constant decrease of main clauses with unambiguous OV order in the sources. Only then, when there was no more robust input triggering OV, this order disappeared also from subordinate clauses. (cf. Lightfoot 1991: 63ff)
- ⇒ Speakers had the crucial means to manipulate the order in main clauses, which was more and more conventionalised. At last, this triggered the abrupt change of the parameter determining the verbal position. (→ **MEC**: *avoid movement*)
- ⇒ In speech production, **MEC** may lead to structural simplification, whereas **MEX** may lead to creative use of linguistic means (e.g. *lexical* elements implying *functional* meaning). In language acquisition **MEC** may also lead to structural simplification, **MEX**, however, may lead to assignment of functional features to lexical elements by language learners. This means it is not just structural economy but also the informational potential of the input that is factorial for language acquisition and, following from

that, for grammatical change. The input is in turn subject both to **MEC** and to **MEX** through the speaker's options of manipulation when using the language. (Öhl, *to appear* 1)

3. Does performance license rule violations?

3.1 Grammaticality and acceptability

An acceptability judgement alone must not be taken as sufficient to take a phenomenon as grammatical and to be forced to derive a possibly bizarre and grammatically inconsistent structure by grammatical rules.

(Haider 2011: 225; tr. PÖ)

- *objective*: regularity (= *based on rules*); "grammaticality"; → absolute values
- *subjective*: uniformity; "acceptability"; → relative values; tolerance

⇒ How much does the "ideal speaker/hearer" understand about his grammaticality judgements?

3.1.1 Acceptance of irregular structures for the lack of alternatives (cf. Haider 2011)

(28) Wir hoffen, dass wir haben ^{1pl} helfen können.	(IPP, obligatory verb reordering)
(29) a. *Wir hoffen, helfen gekonnt zu haben.	(no IPP, no reordering)
b. *Wir hoffen, helfen können zu haben.	(IPP, but no reordering)
c. *Wir hoffen, helfen zu haben können.	(IPP, but irregular reordering with <i>zu</i>)
d. *Wir hoffen, zu haben helfen können.	(IPP, but irregular reordering with <i>zu</i>)
e. *Wir hoffen, haben helfen können zu.	(IPP and irregular position of <i>zu</i>)
(30) a. (?)Wir hoffen, geholfen haben zu können.	(cf. <i>dass wir geholfen haben können</i> ; epist.)
b. ?Wir hoffen, helfen haben zu können.	(cf. * <i>dass wir helfen [INF] haben [INF] können [1^b]</i>)
c. ?Wir hoffen, haben helfen zu können.	(cf. * <i>dass wir haben [INF] helfen [INF] können [1^b]</i>)
d. ??Wir hoffen, geholfen gehabt zu können.	(cf. * <i>dass wir geholfen gehabt können</i>)

3.1.2 Intermediate conclusion

- The less transparent the *rules*, the less speakers observe *regularity* when making acceptability judgements; often structures are accepted that are just "locally well formed but globally deviant" (Haider 2011).
- Speakers choose partial solutions as *last-resort*-option if missing an alternative (Haider 2011: 227).
- Whereas grammatical structures are generated building on the acquired language competence, ungrammatical structures may be *learned*. Their acceptance is based on other criteria (cf. Haider 2011: 238).
- It is obvious that marked constructions may be learned also for other motives but the *last-resort*-strategy.³
- What is performance allowed to do? Is there pragmatic manipulation of grammatical structures?

Hypothesis: Rule violations may be licensed in performance if possible, parsable and interpretable structures are build which are, moreover, efficient for communication.

⇒ Certain structures that are difficult to catch by a formal model of grammar because they are only 'relatively' acceptable (*grammatically marked* in more traditional terms) may become explainable in another systematic way.

³ Haider (2011: 239 ff.; 244) following Meinunger (2011: 375) discusses the haplological drop of pronouns for the sake of processing efficiency as another performance based motive (→ MEC).
i. lass uns (uns) dort treffen

3.2 Exceptional occupation of the German prefield

3.2.1 Verbal particles

Thesis: Real *verbal particles* are heads in the verbal complex that must not be moved to a SPEC-position. If apparent verbal particles appear in a non-base-position, they are in fact heads (postpositions, adverbs) of phrases functioning as adverbials.

- (31) a. dass [_{PP} diese Straße entlang] nach acht Uhr niemand alleine gehen würde.
 b. [_{AdvP} In diesen Briefkasten hinein] würde niemand einen Brief ?(ein).werfen.

! Speakers individually show more or less tolerance to accept constructions that cannot be generated by projection, if they can decode/interpret them locally.

- (32) a. ?Vor haben sie es nicht gehabt. (≈ Vorgehabt haben sie es nicht.)⁴
 b. *Auf ist ihm gar nichts gefallen. (≈ Aufgefallen ist ihm gar nichts.)
- (33) a. ?Ein haben sie das Heu geladen, aus das Stroh.
 b. *Ein haben sie die Banker geladen, aus die Lingisten.

- Phrases that cannot be projected occur in the prefield and in the middlefield:

- (34) a. ?[_{PP} Eben mal schnell an] schalten Sie bitte das Licht auch dann nicht, wenn . . .
 b. ?[_{PP} Endlich an] fing das Stück, als es schon dunkel war.
 c. ?[_{PP} Leider nicht steif genug] hat er die Sahne geschlagen.
- (35) a. Andrew Halsey ist auf dem Weg von Kalifornien nach Australien [_{PP} weit ab vom Kurs] gekommen. (Müller 2002: 96)
 b. Manchmal darf man die Partikel schon [_{PP} relativ weit weg vom Verb] bewegen.
 c. Mit Sicherheit ist [_{PP} auf dieses Feld hin] noch kein Stein gefallen.

- The latter phrases in the middlefield should be directional adverbials; they do not pass well established gängige tests as the *question proof* (cf. Jacobs 1994):

- (36) a. Wohin ist Andrew Halsey gekommen? – *Weit ab vom Kurs.
 b. Wohin darf man die Partikel bewegen? – *Relativ weit weg vom Verb.
 c. Wohin ist noch kein Stein gefallen? – *Auf dieses Feld hin.

- A further phenomenon: restricted movement to the prefield (Heine & al. 2010: 7ff.):

- (37) a. An fing alles am 2. Januar 1889, als . . . (ibd. 4)
 b. Kennen lernten sich die beiden Mitte der 80er Jahre (...)
 c. Richtig auf regt mich im Moment, wie der arme Gomez von den Medien fertig gemacht wird . . .

- The particles above do not occur in the prefield with analytic inflection:

- (38) a. *An hatte alles am 2. Januar 1889 gefangen, als . . .
 b. *Kennen haben sich die beiden Mitte der 80er Jahre (...) gelernt.
 c. *Richtig auf hat mich geregt, wie der arme Gomez von den Medien fertig gemacht wird.

- Markedness of particle positions may be interpreted by performance, however:

- (39) a. ?[_{PP} Kennen] hatte sie ihn 1980 gelernt, lieben schließlich 1985. (→ contrast)
 b. ?[_{PP} Aus] sind die Kinder gegangen, nach Hause die Eltern. (→ contrast)

⁴ Fanselow (2004: 25) discusses such cases as *pars-pro-toto-movement*.

(40) *Licensing of Linguistic Structures*

(cf. Öhl 2013)

- a. competence based, by regular structure building operations or
 - b. performance based, by analogical matching with regularly formed patterns, if conflicts of decoding can be compensated locally

- The phenomenon of restricted movement to the prefield revisited:

- (41) a. weil wir das Licht vor allem Nachts anschalten
b. [VP Anschalten] werden wir das Licht vor allem nachts.
c. [AdvP An] schalten wir das Licht etwa genau so oft, wie aus.
d. [AdvP An] wird das Licht erst wieder geschaltet, wenn wir gar nichts mehr sehen!

- (42) a. weil 1998 alles anfing
b. [VP Anfangen] wird alles erst sehr viel später.
c. ?[P An] fing alles 1898.
d. *[AdvP An] hatte alles 1898 gefangen.

- 42c. is admittedly not locally well formed; however, the semantically opaque particle *an* can be at least be *locally interpreted* because of the adjacent verb *fing*. This is not possible in 42d.
 - ⇒ A case of *grammatical illusion* in the sense of Haider (2011)? Anyway, a pragmatically licensed rule violation, in our view.

3.2.2 Multiple occupation of the prefield

- (43) Kindern Bonbons gibt man besser nicht. (cf. Müller 2003; 2005)

Analysis: In the complex prefield is a VP containing two phrases and a trace as its head:

- (44) [VP Kindern Bonbons t_i] gibt_i man besser nicht.

Problem: The trace is not structurally licensed.

Our Solution: The VP in the prefield is locally well formed but globally deviant. A moderate rule violation that is apparently licensed by efficiency of the discourse semantic markedness (\rightarrow MEX).

- (45) a. Was hat er dem Peter gegeben? - # Dem Peter (TOP) das BUCH (FOK) hat er gegeben.
b. Wem hat er das Buch gegeben? - # Dem PETER (FOK) das Buch (TOP) hat er gegeben.
c. Wem hat er was gegeben? - Dem PETER (FOK) das BUCH (FOK) hat er gegeben.
d. Was hat er getan? - Dem PETER (FOK) das BUCH (FOK) hat er gegeben.
e. Hat er Peter das Buch gegeben? - Dem Peter (TOP) das Buch (TOP) hat er nicht gegeben, aber . . .
(→ Kontrast lizenziert zwei thematische Konstituenten im Vorfeld)

Grammatical restrictions that must be observed *locally* (examples adapted from Müller 2003; 2005):

- (46) a. *Die Polizei den Dieb hat gestern verhört. (subjects of transitive verbs are not in the VP)
b. *Bonbons Kindern gibt man besser nicht. (*AKK>DAT; AKK leaves the VP)
c. *Einem Arzt diesen Fehler kann man schlecht nachweisen. (definiteness effect)

⇒ Rule violations may be pragmatically motivated, but they still follow grammatical constraints.

Further pragmatic factors:

- (47) a. #Marie Peter stellt Max vor. (ungrammatical according to Müller 2005: 324)
 b. Die Marie dem Peter stellt der Max vor. (→ interpretability!)

- Multiple occupation of the prefield seems to be more acceptable if the predication following it is predictable (abstracted from Lühr 1985: 11).
- (48) a. Die Post ist gekommen. Unserer Mutter einen Blumenstrauß hat aber niemand geschickt.
 b. Der Mai ist gekommen. #Unserer Mutter einen Blumenstrauß hat aber niemand geschickt.

3.2.3 PP-extraction to the prefield

- apparent asymmetries (cf. Schmellentin 2006: 12)
- (49) a. [_{PP} Über die Antarktis], hat Rudi [_{DP} viele Berichte _{t_i}] gelesen. (contrast)
 b. [_{PP} Worüber], hat Rudi [_{DP} viele Berichte _{t_i}] gelesen? (wh-movement)
 c. Rudi hat [_{DP} viele Berichte _{t_i}] gelesen, [_{PP} über die Antarktis]. (exaposition)
- (50) a. [_{PP} Über die Antarktis], hat Rudi [_{DP} einen Bericht _{t_i}] *schließlich* gelesen. → The source-DP must be adjacent to V.
 b. [_{PP} Über die Antarktis], hat Rudi [_{DP} Ottos Bericht _{t_i}] gelesen. → The source-DP must be non-specific.
 c. [_{PP} Über die Antarktis], hat Rudi [_{DP} einen Bericht _{t_i}] *weggeschmissen*. → It does not work with all V.
- Syntactic explanation:* incorporation of compatible DPs into the predicate complex of verbs with specific semantics („abstract incorporation“ according to Müller 1991).
- (51) [_{PP} Über die Antarktis], hat Rudi schließlich _{t_i} [_{VK} [_{DP} *einen Bericht*] *gelesen*].
 ⇒ „read a report (about)“ can be a complex predicate, „throw away a report“ cannot.

Exceptions:

- (52) a. *Von Martin hat mich der Gesang gestört. (Schmellentin 2006: 144)
 b. ??Von MARTin hat mich der Gesang gestört, nicht von Daniel. (Kontrast)
- (53) a. *Über Chomsky hat Britt alle Bücher zerissen. (cf. Fanselow 1991: 185)
 b. Schau her, was Britt, Deine Tochter, mit meiner Biographiensammlung angestellt hat! Die Bücher sind zerissen, bemalt und mit Brei bekleckert! Zwei meiner Bände über Carnap sind entzweil! Drei meiner Biographien über Bloomfield sind zerfetzt und *über Chomsky hat sie sogar alle Bücher zerrissen*.

The grade of ungrammaticality is influenced by the surrounding context. (Schmellentin 2006: 164; tr. PÖ)

- ! In our view, those sentences display pragmatically licensed rule violations serving a discourse function, i.e. *contrasting*. Locally well formed sentences that, as a whole, do not fulfil all the requirements of well-formedness, are designed analogically to well formed patterns

3.3 Further cases

3.3.1 Wh-coordination

- (54) a. When and where are we meeting? (Haida & Repp, to appear: 9)
 b. I want to find out if and when Pete is coming tomorrow night.
- Marked/ungrammatical cases (Repp 2013: 4f):
- (55) a. The policewoman investigated what and when the baker ate.
 → eat (intransitive) & eat (transitive)
 b. The policewoman investigated when and what the baker swallowed.
 → swallow (transitive)
- (a) is more acceptable than (b)

Explanation: Sprouting, i.e. a repair strategy creating an object trace in the TP-ellipsis site if the antecedent does not contain one. Compare:

(56) [_{TP} John has eaten t_{what} in this place before.] but I don't know what ([_{TP} John has eaten t_{what}]).

- ! This presupposes that the verb in the antecedent clause has an *optional direct object*. Otherwise the antecedent would be ungrammatical.

Repairs: Sprouting respectively deletion of a trace in the first copy of the TP.

(57) a. The policewoman investigated what ([_{TP} the baker ate t_{what}]) and when the baker ate.

b. The policewoman investigated when ([_{TP} the baker ate t_{what}]) and what the baker ate.

- for (b) order matters: the sentence is more acceptable if *what* is in the right conjunct

(58) a. The policewoman investigated when ([_{TP} the baker swallowed t_{what}]) and what the baker swallowed t_{what} .

b. The policewoman investigated what ([_{TP} the baker swallowed t_{what}]) and when the baker swallowed (t_{what}).

(a): Only one syntactic violation – and it has a conceptual interpretation if the trace is treated as an indefinite. Compare:

(59) When did the baker swallow something and what did the baker swallow?

(b): Two costly repairs - sprouting creates the missing object in the antecedent that gets copied in the lower TP.

⇒ Ungrammatical structures can give rise to different acceptability ratings due to

- the number of violations
- different kinds of violations
- and the availability of repair mechanisms that must be applied to arrive at a meaningful interpretation.
(Repp 2013)

3.3.2 Obligatoriness and optionality of correlatives

- With a complement clause in the postfield, the correlative *es* is sometimes obligatory, with some verbs it seems to be optional.

(60) a. weil *(es) sich lohnt zu lernen.
b. weil *(es) ihr gut bekommt, dass sie ständig lernt.

(61) a. Mich beruhigt (es), dass ich genügend gelernt habe.
b. Ihn störte (es), dass ich ständig lernte.
c. Man hat (es) ausgeschlossen, dass ich genügend gelernt habe.

- Some verbs occur preferably without a correlative; use of a correlative may lead to information structural markedness:

(62) a. Ich weiß (es), dass ich genügend gelernt habe. (contrast?)
b. An dir mag ich (es), dass Du so fleißig bist. (contrast)

- Sometimes the acceptability judgements are context sensitive and vary gradually.

(63) a. weil sie ?(es) als gutes Zeichen ansah, dass er ständig lernte.
b. weil ?(es) mich überraschte, dass er ständig lernte.
c. weil sie ?(es) freundlich aufgenommen haben, dass er ständig lernt.
c. weil er ?(es) begrüßte, dass ich ständig lernte.

d. weil sie ?(es) bewiesen, dass ich nicht genügend gelernt hatte.

- Prosodic factors seem to play a role:

- (64) a. weil (es) mich ?(vor allem) enttäuschte, dass er ständig lernte.
 b. weil (es) ?(natürlich) stimmt, dass man nie auslernt.

- The verbal position also seems to play a role (cf. (61)):

- (65) a. weil ?(es) mich beruhigt, dass ich genügend gelernt habe.
 b. weil ?(es) ihn störte, dass ich ständig lernte.
 c. weil man ?(es) ausgeschlossen hat, dass ich genügend gelernt habe.

⇒ Obviously, non-grammatical factors influence the acceptance of correlative drop. We think this is only possible since there are regular patterns without correlatives like in (62).

3.3.3 Pragmatics licensing subordinate clauses without a matrix

- (66) a. Ob der sowas liest?
 b. Dass der sowas liest!

- There is no reason to assume ellipsis of a matrix proposition if there is a pragmatic choice *dependent clause* as an efficient way of differentiating marked illocutions of certain clause moods (→ MEX).
- Compare the discussion of unembedded conditionals (and also declaratives) with the subjunctive as optative sentences (Rosengren 1992: 42ff.)

- (67) a. Wäre ich doch nie hingegangen!
 b. Wenn Du mich nur wieder einmal besuchen würdest!
 c. Dass ich mir sowas auch mal leisten könnte!

What the optative sentence shares with the imperative is its relatedness to the volitive attitude. However, it is distinct by the lack of a clause modal operator, which is a precondition for the demand function. On the other hand, like the exclamative, the optative is characterised by a direct relatedness to the emotional system.

(Rosengren 1992: 54; tr. PÖ)

- „Independent conditional character“ (resp. dependent assertion) ±*irrealis* serve the marking of relatedness to the emotional system without, in contrast to clause mood, marking the respective (modalised) illocution directly by means of the grammar.

MEX: Pragmatics motivate the use of markers not licensed by the grammar.

4. Conclusion

Central thesis 1: Not only the rules of grammar play a role for grammaticality judgements, but also subjective strategies belonging to performance. This is especially relevant, if regular structure building operations are in a way opaque.

- Infinitive complements with the perfect tense of modal verbs: *maximal intransparency* – there isn't any valid combination of rules. Thus, performance may choose ‘the least evil’.
- 'Verbal particles' in the prefield: actually they should not move there; eventually, the judgements of speakers seem to vary, when they can be treated like constituents. And, *discourse semantic markedness* seems to allow certain rule violations serving its communicative emphasis.
- Multiple occupation of the prefield/ PP-extraction: *discourse semantic markedness* also seems to allow certain rule violations.

- Further evidence for pragmatically motivated manipulation of rule based structure building is given by phenomena like marked correlate drop and non-structural licensing of subordinate clauses.
- Another criterial role, performance has in the change of grammar, since it may change the input for language acquisition in a way that this leads to the change of the grammatical structure of a language.

Central thesis 2: Performance makes use of the existing options in an efficient way, by targeted choice of marked variants. It also influences grammatical structures indirectly, both from a synchronic and from a diachronic point of view. This may suggest that performance may be factorial and constitutive for grammatical structures. However, we still think that “pragmatic circumstances are always funded by grammar and not the other way round” (Reis 1993: 208; tr. PÖ).

5. References

1. Antomo, Mailin/ Steinbach, Markus (2010): Desintegration und Interpretation. Weil-V2-Sätze an der Schnittstelle zwischen Syntax, Semantik und Pragmatik. In: Zeitschrift für Sprachwissenschaft 29, 1-37.
2. Fanselow, Gisbert (1991): Minimale Syntax – Untersuchungen zur Sprachfähigkeit. *GAGL* 32.
3. Fanselow, Gisbert (2004): Cyclic Phonology-Syntax-Interaction: Movement to First Position in German In S. Ishihara & al. (eds.), *Interdisciplinary Studies on Information Structure*.). Potsdam: Universität Potsdam. 1-42.
4. Haida, Andreas/ Repp, Sophie (to appear): Locality restrictions on sideward movement: An investigation of parasitic gaps, ATB constructions and question word coordinations. Balasz Suranyi (ed.), *Minimalist Approaches to Syntactic Locality*. Cambridge: Cambridge University Press.
5. Haider, Hubert (2011): Grammatische Illusionen. Lokal wohlgeformt - global deviant. *Zeitschrift für Sprachwissenschaft* 30: 223 - 257.
6. Hawkins, J. A. (2011): Discontinuous dependencies in corpus selections: Particle verbs and their relevance for current issues in language processing. In: J. Arnold & E. Bender, eds., *Readings in Cognitive Science*, CSLI Publications, Stanford, California, 269–291.
7. Hawkins, J. A. (to appear): Patterns in competing motivations and the interaction of principles. In: E. Moravcsik, B. MacWhinney & A. Malchukov, eds., *Competing Motivations*, Oxford University Press, Oxford.
8. Heine, Antje/ Jacobs, Joachim/ Külpmann, Robert (2010): Quer zu den Feldern. Zur Topologie von Partikelverben. *Linguistische Berichte* 221, 37-60.
9. Jacobs, Joachim (1994). *Kontra Valenz*. Trier: WVT Wiss. Verl.
10. Lightfoot, David (1991): *How to set Parameters. Arguments from Language Change*. Cambridge, London: MIT Press.
11. Lightfoot, David (1999): *The development of language : acquisition, change, and evolution*. Malden, Mass. [u.a.]: Blackwell.
12. Lühr, Rosemarie (1985): Sonderfälle der Vorfeldbesetzung im heutigen Deutsch. *Deutsche Sprache*, Heft 1, 1-23.
13. Meinunger, André (2011): Das ist was ziemlich Komisches ist das! - The syntax of apokoinu-constructions in colloquial German and other langages. In Eva Breindl, Gisella Ferraresi & Anna Volodina (eds.), *Satzverknüpfung – Zur Interaktion von Form, Bedeutung und Diskursfunktion8*. Berlin: De Gruyter. 351-37
14. Müller, Gereon (1991): Abstrakte Inkorporation. In Olsen, Susan / Fanselow, Gisbert (Hgg.), *DET, COMP und INFL. Zur Syntax funktionaler Kategorien und grammatischer Funktionen*. Tübingen: Niemeyer. 155-202.
15. Müller, Stefan (2002): *Complex Predicates: Verbal Complexes, Resultative Constructions, and Particle Verbs in German*. Stanford: CSLI Publications. (Studies in Constraint-Based Lexicalism 13)
16. Müller, Stefan (2003): Mehrfache Vorfeldbesetzung. *Deutsche Sprache* 31(1), Seiten 29–62.
17. Müller, Stefan (2005): Zur Analyse der scheinbar mehrfachen Vorfeldbesetzung. *Linguistische Berichte* 203, Seiten 29–62.
18. Öhl, Peter (2006): Über Sinn und Nutzen einer Generativen Grammatiktheorie. In: Kozmová, Ružena (Hrsg.): *Sprache und Sprachen im Mitteleuropäischen Raum. Vorträge der Internationalen Linguistik-Tage Trnava 2005*. Trnava: Univerzita sv. Cyrila a Metoda. 229-43.
19. Öhl, Peter (2009): Sprachwandel und kognitive Ökonomie: Zur Grammatikalisierung und Substitution von Satzkonnektoren. *Linguistische Berichte* 220, 393-438.
20. Öhl, Peter (2010): Formal and Functional Constraints on Constituent Order and their Universality. In: Carsten Breul & Edward Göbbel (eds.), *Comparative and Contrastive Studies of Information Structure*. Amsterdam: Benjamins (Linguistik Aktuell 165). 231-275.
21. Öhl, Peter (2013): Was heißt hier eigentlich regulär? Beispiele aus Morphologie und Syntax in Theorie und Anwendung. Martin Lachout (Hg.), *Aktuelle Tendenzen der Sprachwissenschaft*. Hamburg: Kovač. (Beiträge zu den 20. GeSuS- Linguistiktagen an der Metropolitan Universität Prag, Bd. II).
22. Öhl, Peter (to appear1): Acquisition Based and Usage Based Explanations of Grammaticalisation – an Integrative Approach. Sylvie Hancil & al. (eds.) (in prep.), *Grammaticalization: Theory and Data* (working title). Amsterdam: Benjamins. (*Iconicity in Language and Literature*)
23. Öhl, Peter (to appear2): Periphrasis as precursor of analytic inflection. BE and HAVE in the (pre-)history of German. Rolf Kailuweit & Malte Rosemeyer (eds.) (in Vorb.), *Auxiliary selection - Gradience and Gradualness*. Berlin: de Gruyter. (*Linguae & Litterae* 15)
24. Öhl, Peter / Falk, Simone (2011): Syntactic Competence and Performance Based Variation: The Case of German Particle Verbs. *Leuvense Bijdragen* 97. (Theme issue on the *Syntax and Semantics of Germanic Prefix and Particle Verbs*, guest edited by Michael Putnam).
25. Önnerfors, Olaf (1997): *Verb-erst-Deklarativsätze. Grammatik und Pragmatik*. Stockholm: Almqvist & Wiksell.
26. Reis, Marga (1993): Satzfügung und kommunikative Gewichtung. Zur Grammatik und Pragmatik von Neben- vs. Unterordnung am Beispiel 'implikative' und-Konstruktionen im Deutschen. In: Marga Reis (Hg.), *Wortstellung und Informationsstruktur*. (Linguistische Arbeiten 306). Tübingen: Niemeyer. 203-249.
27. Repp, Sophie (2013): Gradient acceptability of ungrammatical structures(presentation). Workshop Understanding Acceptability Judgments, University of Potsdam, 11 September 2013.
28. Rosengren, Inger (1992): Zur Grammatik und Pragmatik des Imperativsatzes. Mit einem Anhang: Zum sogenannten Wunschsatz. *Sprache und Pragmatik* 28.
29. Schmellentin, Claudia (2006): *PP-Extraktionen. Eine Untersuchung zum Verhältnis von Grammatik und Pragmatik*. Tübingen: Niemeyer.
30. Uhmann, Susanne (1998): Verbstellungsvariation in weil- Sätzen: Lexikalische Differenzierung mit grammatischen Folgen. *Zeitschrift für Sprachwissenschaft* 17.1, 92-139.