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On the adverbial origin of German modal particles

International Workshop on Discourse Particles
University of the Basque Country (UPV/EHU)
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Outline

- Introduction
- Grammaticalization and donor lexemes of German modal particles
- What are genuine donor lexemes? Some empirical facts
- Syntactic analysis of the grammaticalization of modal particles
- Conclusions

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Modal particles – properties

- (1) Hast du sie **denn** angerufen?
have you her PRT called
'Did you (really/finally) call her?'

- **Phonology and prosody:** MPs are unstressed and prosodically integrated.
 - **Semantics and pragmatics:** MPs have no propositional meaning; they express the speaker's attitude; they modify the illocutionary force of the utterance (Jacobs 1986).
 - **Syntax:** MPs only occur in the middle field (2a); they cannot be modified (2b) (see Thurmair 1989, Müller 2018).
- (2) a. < ***denn** > hast du sie < **denn** > angerufen < ***denn** > ?
PRT have you her PRT called PRT
- b. Hast du sie (***sehr**) **denn** angerufen?
have you her very PRT called

I-particles vs. C-particles

- In this talk, only MPs are investigated, namely prosodically and syntactically integrated particles that typically occur in the middle field (**I-particles**) (cf. Thurmair 1989):
 - (3) Hast du sie **denn** angerufen?
have you her PRT called
'Did you (really/finally) call her?'
- In German, there are also prosodically and syntactically integrated (phrasal or adverbial) particles that occur in the prefield (**C-particles**) and are therefore not the subject of this investigation, such as *ein Glück* 'a fortune', *kein Wunder* 'no wonder', *klar* 'of course', etc. (see also Frey 2004):
 - (4) **Klar** hast du eine Meinung!
PRT have you an opinion
'Of course you have an opinion!'

Origin of German modal particles

Donor lexemes of German MPs according to Burkhardt (1994: 138ff):

- **conjunctions:** *aber, doch, etc.*
- **temporal adverbs:** *denn, eben, einmal, etwa, halt, ja, jetzt, mal, noch, schon, etc.*
- **sentence adverbs:** *eigentlich, gefälligst, schließlich, vielleicht, etc.*
- **„genuine“ adverbs:** *einfach, fein, hübsch, irgendwie, langsam, schlicht, zufällig, etc.*
- **predicatives:** *dreist[†], ruhig, etc.*
- **degree particles:** *bloß, nur, etc.*

† today uncommon

See also Hentschel (1986), Abraham (1991a), Diewald (1997), Molnár (2002), etc.

Questions

- What is the **origin** of German MPs? Do they really originate from heterogeneous classes of “donor lexemes”?
- What kind of **grammaticalization paths** do they follow?
- To what extent can the **diachronic facts** explain the **synchronic syntactic properties of the MPs**? E.g., how can their distribution in the middle field be explained or the impossibility of appearing in the pre- and postfield?

Synchronic hypotheses

*Vielleicht sollte man also besser von
Abtönungsadverbien sprechen.
(Burkhardt 1994: 148)*

- Cardinaletti (2011) analyzes MPs as **weak sentence adverbs** (cf. Grosz 2005, Coniglio 2005, 2011):

“[...] we don’t need a new syntactic category ‘particle’ because modal particles are (deficient) sentential adverbs [...]”.

(Cardinaletti 2011: 494)

- In a synchronic perspective, Cardinaletti (2007: 100) shows that MPs exhibit **typical properties of weak elements**, because:
 - they are not accented;
 - they have a limited syntactic distribution;
 - they don’t have a lexical meaning.

Diachronic hypotheses

- If – **synchronically** – MPs are **weak sentence adverbs**, then – **diachronically** – they must have developed **from strong adverbs** (see Cardinaletti 2011).
- They can therefore **only** be traced **back to adverbs** (and **not to other word classes**).
- If other word classes are involved as possible donor lexemes, an **adverbial intermediate stage** must always be assumed (cf. Abraham 1991a, Diewald 1997, 2011, Petrova 2017).

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Time of origin

- Supposed **time of origin of German MPs*** (from Burkhardt 1994: 140, see also Hentschel 1986, Diwald 1997, Ormelius-Sandblom 1997a, 1997b, Molnár 2002: 23, Autenrieth 2002, etc.)

OHG	MHG	16 th c.	17 th c.	18 th c.	19 th c.	20 th c.
denn	da	dreist [†]	allerdings	einfach	bloß	irgendwie
doch	halt	eben	aber	erst	eh	dabei
		eigentlich	auch	fein	gefälligst	langsam
		freilich	einmal	gleich	noch	schlicht
		man	etwa	hübsch	nochmal	zufällig
		ja	natürlich	immerhin	ruhig	
		je*	schon	jedenfalls	schließlich	
		jetzt	wenigstens	mal	schön	
		nämlich		ohnehin	vielleicht	
		nicht		so		
		nur		sowieso		
		wohl		überhaupt		
				übrigens		

Table 1. Origin of German MPs (from Burkhardt 1994: 140)

Grammaticalization path

- Various **grammaticalization paths** have been proposed for the MPs (cf. Hentschel 1986, Burkhardt 1994, Molnár 2002, etc.).
- **Abraham's** (1991a: 373) grammaticalization path probably best describes grammaticalization processes:

(5) localistic > temporal > logical > illocutive/discourse functional

(Abraham 1991a: 373)
- **Diewald** has the same intuition (2011: 377ff). Based on this, she recognizes an **adverbial origin of the MPs**. In the end, however, she leaves open – like Abraham – the possibility that MPs also originate from adjectives, degree particles and conjunctions (see also Diewald 1997: 73ff, 99).
- At this point, I intend to formulate a **stronger hypothesis...**

Possible donor lexemes?

Donor lexemes for the MPs according to Burkhardt (1994: 138ff):

- **conjunctions:** *aber, doch, etc.*
- **temporal adverbs:** *denn, eben, einmal, etwa, halt, ja, jetzt, mal, noch, schon, etc.*
- **sentence adverbs:** *eigentlich, gefälligst, schließlich, vielleicht, etc.*
- **„genuine“ adverbs:** *einfach, fein, hübsch, irgendwie, langsam, schlicht, zufällig, etc.*
- **predicatives:** *dreist[†], ruhig, etc.*
- **degree particles:** *bloß, nur, etc.*



Hypothesis: All MPs can be traced back to (lower) adverbs/adverbials.

Clarifications

Hypothesis: All MPs can be traced back to (lower) adverbs/adverbials.

- MPs are not (directly) derived from adjectives.
- MPs are derived neither from conjunctions nor from degree particles.
- Sentence adverbs are rather the result of the grammaticalization process than the donor lexemes.
- Temporal adverbs can only become donor lexemes after a “logical” intermediate stage à la Abraham (1991a), in which they lose their temporal meaning through metaphorical processes.

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Assumptions

- If we assume that MPs are – **synchronically** – **weak(ened) adverbs**,
- if we prove that all MP – **diachronically** – grammaticalized at a time when the corresponding **adverbs** were **(still) present**,
- then it is legitimate to **assume** that MPs originated **from (strong) adverbs**.

Corpora, archives and dictionaries used

- DTA** **Deutsches Textarchiv.** Grundlage für ein Referenzkorpus der neuhochdeutschen Sprache. Herausgegeben von der Berlin-Brandenburgischen Akademie der Wissenschaften, Berlin 2020. URL: <http://www.deutschestextarchiv.de/>.
- DWB** **Deutsches Wörterbuch von Jacob Grimm und Wilhelm Grimm**, 16 Bde. in 32 Teilbänden. Leipzig 1854-1961. Quellenverzeichnis Leipzig 1971. Online: <http://dwb.uni-trier.de/de/>.
- FnhdC** **Das Bonner Frühneuhochdeutsch-Korpus**, Korpora.org, <http://www.korpora.org/FnhdC/>.
- MWB** **Mittelhochdeutsches Wörterbuch online.** Mainzer Akademie der Wissenschaften und der Literatur und Akademie der Wissenschaften zu Göttingen. <http://www.mhdwb-online.de/>.
- ReA** **Referenzkorpus Altdeutsch.** Donhauser, Karin; Gippert, Jost; Lühr, Rosemarie (2018). Deutsch Diachron Digital - Version 1.1. Humboldt-Universität zu Berlin. Homepage: <http://www.deutschdiachrondigital.de/>.
- ReM** **Referenzkorpus Mittelhochdeutsch (1050–1350).** Klein, Thomas; Wegera, Klaus-Peter; Dipper, Stefanie; Wich-Reif, Claudia (2016). Version 1.0. <https://www.linguistics.ruhr-uni-bochum.de/rem/>. ISLRN 332-536-136-099-5.

Representative examples

- | | |
|-----------------------|-------------------------------|
| 1. „genuine“ adverbs: | <i>einfach</i> |
| 2. predicatives: | <i>ruhig</i> |
| 3. sentence adverbs: | <i>eigentlich, vielleicht</i> |
| 4. temporal adverbs: | <i>denn</i> |
| 5. degree particles: | <i>nur</i> |
| 6. conjunctions: | <i>aber</i> |

See other lexemes recognized as MPs according to traditional classifications **in the appendix.**

1. „genuine“ adverbs? → yes!

Einfach (lit. ‘simply, in a simple way’)

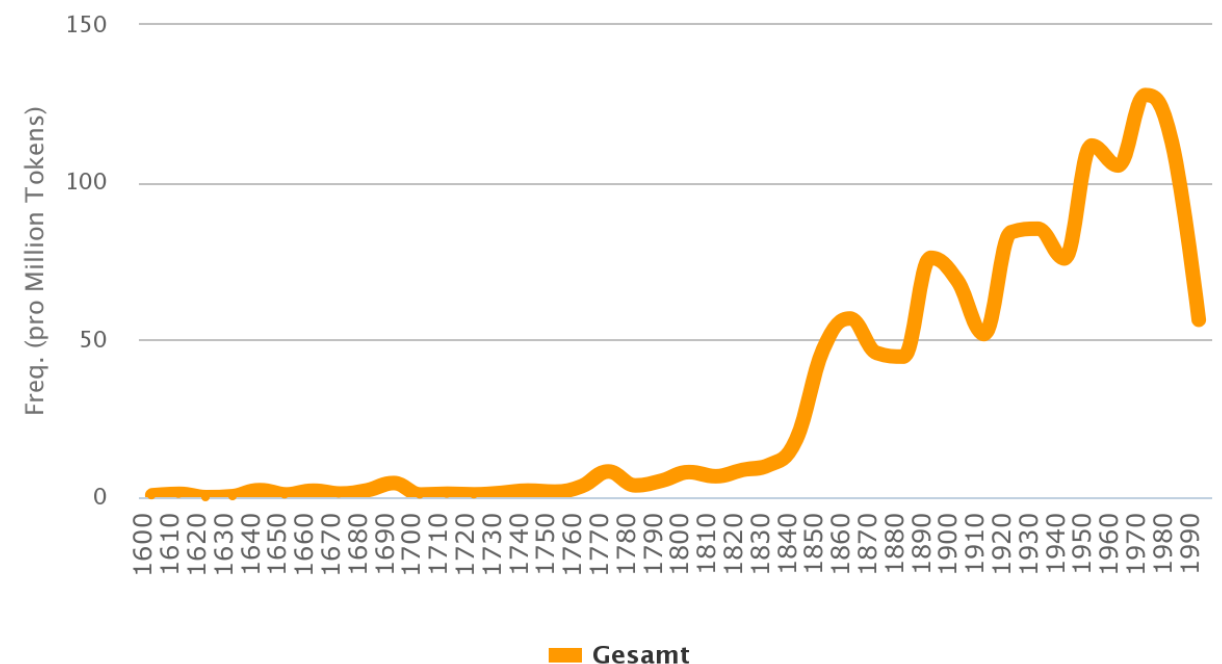
- actually an adjective at its origin;
adverbial use relatively late attested
 (‘just once, not many times’)
 (cf. Autenrieth 2002):

(6) Was er **einfach** ausgegeben / Kommt ihm über
 Haupt und Glieder Oftt mit reichem Wucher
 wieder. (1704, Abschatz, DTA)
 ‘What he has spent only once often returns to
 him with rich usury over head and limbs.’

- In DTA, first possible **MP interpretations** only in the 19th century:

(7) [...] so dass man versucht sein kann anzunehmen, der Künstler habe **einfach** ein kleines Erzbild copirt
 von der Art der clipeati, [...]. (1853, Brunn, DTA)
 ‘[...] so that one can be tempted to assume that the artist simply copied a small (mineral) stone
 sculpture in the style of the clipeati, [...]’

Verlauf: (*‘einfach’ WITH \$p=‘ADV’*) #ASC_BY_DATE; relative
 Häufigkeit: 50.07 Vorkommen pro 1 Mio. Tokens



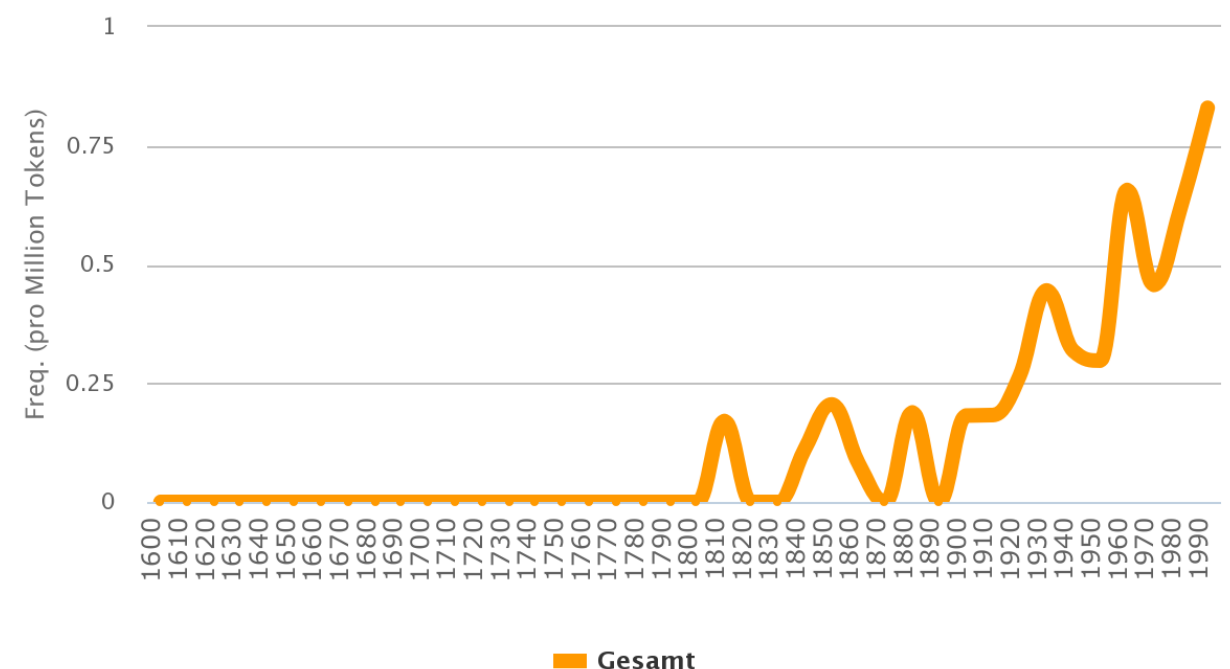
2. Predicatives → yes, because used adverbially

These are all cases of **Adjektivadverbien** ‘adjective-adverbs’, i.e. adjectives that also occur in adverbial use (adverb(ial)s of manner).

Ruhig (lit. ‘quietly’)

- Very late (18th century) attested in **adverbial use** (‘without movement, quietly’)
- (8) Was du befestiget haft, laß **ruhig** darinnen stecken. (1724, Fleming, DTA)
‘What you fastened, leave it inside (without moving it).’
- Unambiguous **MP uses** only in the 19th century (cf. Italian *tranquillamente*):
- (9) Geht **ruhig** nach Hause und kommt wieder in ein Paar Stunden! (1822, Holbergs Lustspiele)
‘(Don’t worry!/Relax!) Go home and come back in a few hours!’

Verlauf: (*‘ruhig’ WITH \$p=‘ADV’*) #ASC_BY_DATE; relative Häufigkeit: 0.20 Vorkommen pro 1 Mio. Tokens

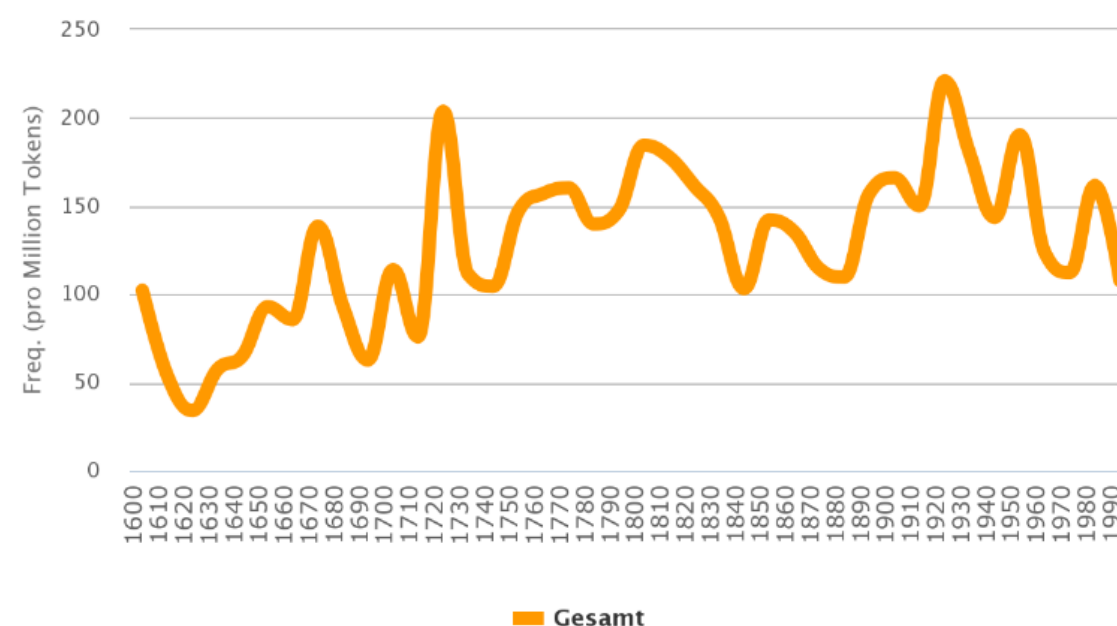


3. Sentence adverbs? → result of the process

Eigentlich (lit. 'actually')

- **Adverb of manner** ('in a proper way')
(originating from an adjective)
 - This adverbial function is documented **starting from the 13th century** (and is still very common later):
- (10) Hie redet der gedültige Hiob aus eigener erfahrung gar **eigentlich** [...] (1585, Braun, DTA)
'Here the patient Job talks from his own experience in a really good/proper way [...]'
- In **ENHG** (16th c.), first cases of *eigentlich* used as a **MP** can be found:
- (11) Diser Span / meines einfältigē verstandts / erhebt sich **aygentlich** nicht vber dieser Frag (1557, Jacob Andreae, FnhdC)
'This tension of my obtuse mind does not really rise above this question'

Verlauf: ('eigentlich' WITH \$p='ADV') #ASC_BY_DATE, relative
Häufigkeit: 142.63 Vorkommen pro 1 Mio. Tokens



3. Sentence adverbs? → result of the process

Vielleicht (lit. ‘maybe, perhaps’)

(10) Er ist **vielleicht** frech! ‘He is really impertinent!’

- **Common assumption:** The MP originated **very late (in the 19th c.?)** from the sentence adverb *vielleicht* (‘maybe, perhaps’).

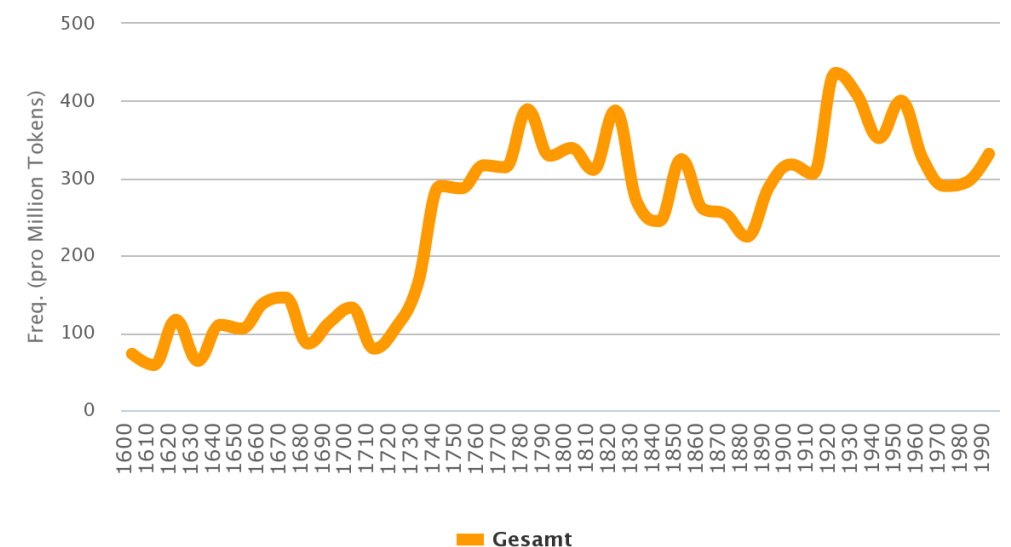
- Where does the “**assertive**” function of the MP come from? → Much more probable is the origin of MP from the **MHG adverbial phrase *vil lîhte(r)*** (‘very easily’, figuratively: ‘with certainty’, etc.):

(13) [...] daz tuot mir nû **vil lîhte** wê. (12th c., Reinmar der Alte, MWB)
‘[...] this hurts me now very easily.’

- Thus, the **MP** is probably **much older** than supposed:

(14) [...], „sinnelôser Thêodâ,/ dû bist **vil lîhte** âne vernunst,/ ein tumber esel, âne kunst./ [...]“ (around 1220, Rudolf von Ems, MWB)
‘Foolish Theoda, you are really deprived of reason, a stupid donkey, without any knowledge.’

Verlauf: ‘vielleicht’ #ASC_BY_DATE; relative Häufigkeit: 282.14
Vorkommen pro 1 Mio. Tokens



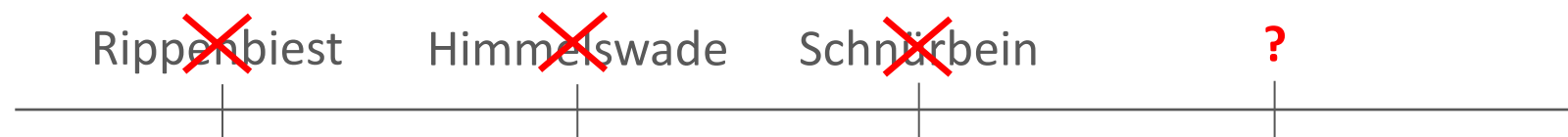
4. Temporal adverbs? → yes, after reinterpretation

- Donor lexemes are **lower “aspectual” adverbs** in the sense of Cinque (1999). They have meanings like “before” (cf. *eh*, *halt?*), “thereafter” (*denn*), “already” (*schon*), “just” (*eben*), etc.
- MPs emerged by means of the **reinterpretation from temporal to logical relations** (see Diewald’s 1997 “categorical metaphor”).
- E.g.: **temporal adverb *denn* → logical-connective adverb *denn***

(15) [Question to Rumpelstiltskin:]

Wenn du nicht Rippenbiest, Hammelswade, Schnürbein heißt, wie heißt du **DENN**?

‘If you are not called Rippenbiest, Hammelswade, Schnürbein, what is your name then?’



temporal relation = logical relation

4. Temporal adverbs? → yes, after reinterpretation

Denn (lit. ‘then’)

- The donor lexeme for the MP is the **temporal adverb** (OHG *thanne/thenni* ‘thereupon, after that, then’, see Diewald 1997: 88).
 - The MP does **not** originate **from the conjunction** (meaning “because”), as Molnár (2002: 54), for example, assumes. → **anachronistic**: *dann/denn* is hardly used as a conjunction before the 15th c. (Ebert et al. 1993: 473).
 - *denn* ist **one of the oldest MPs** (cf. Burkhardt 1994: 140, Wegener 2002, Molnár 2002, Bayer 2012, etc. and van Kemenade & Links 2020 on the OE equivalent *ponne*):
- (16) Thiu ógun sie imo búntun [...] / joh frágetun ginúagi, wer ínan **thanne** slúagi
‘they blindfolded him and asked (often enough) who had beaten him’
(9th c., Otfrid IV, 19, 73, cited in Burkhardt 1994: 143)
- (17) Wio meg ih wízzan **thanne**, thaz uns kínd werde? (9th c., Otfrid I, 4, 55, ReA)
‘How am I supposed to know that we are going to have a child?’

5. Conjunctions? → no!

Aber (lit. 'but, however')

(see also *doch* in the appendix)

- It is often assumed that this MP is derived **from the adversative conjunction**. See Diewald (1997: 80), but also Burkhardt (1994), Molnár (2002), etc. (cf. Italian *tuttavia*):

(18) Germ. comparative of *ab* 'off, away'

> OHG iterative adverb⁺ *afur/abur* 'again, over again, in turn'

⁺ up to the 18th c.!

> OHG adversative adverb* 'however, though'

* until today

> OHG adversative conjunction* 'but, however'

> MHG modal particle*

5. Conjunctions? → no!

Aber (continued)

- The **grammaticalization from a conjunction** to an adverbial element is **unlikely**, not only because this would be syntactically problematic (**lowering**), but also because it would represent a case of **degrammaticalization**.
- Its origin **much more likely** lies **in the adversative adverb**, which is most commonly used in OHG.

	8 th -9 th c.	11 th c.
iterative adverb	33,2 %	2,0 %
adversative adverb	62,5 %	59,1 %
adversative conjunction	4,2 %	38,8 %

Table 2. Lemma *afar* in ReA

5. Conjunctions? → no!

Aber (continued)

- **First attestations** of this MP in MHG? (much earlier than in Burkhardt 1994)

(19) da gibeste, herre, den saligen dich selben ze lone [...] da mendent sich **auer** die sele und daz fleisk.
(12th c., Gebete einer Frau 383 D., adapted from Diwald 1997: 81)
'you, Lord, give yourself as a reward to the blessed ones [...] The soul and the flesh do rejoice.'

- Possible **very early evidence** for this MP in OHG?

(20) [...] zi themo hohen hímilriche, In hoho gúallichi, theist **avur** thaz hímilrichi; [...] (9th c., O I, 28, 12ff., ReA)
'[...] to the high heavenly kingdom. In great glory. This is indeed the heavenly kingdom; [...]'

(21) [Neuer section] Sed tempus est inquit medicinę quam querelę. Nû íst **áber dóh** mēr zît. láchennis tánne chlágo. (11th c., N Consolatio I, 12, 29)
'But now it is the time for the medicine rather than the lament.'

6. Degree particles? → no!

Nur (lit. 'only')

(see *bloß* in the appendix, cf. also Italian *pure*)

- *nur* is mostly traced back to the degree particle (Burkhardt 1994, Diwald 1997: 97), which in turn is derived **from the OHG locution *ni wâri*** ('were it not', MHG *ne wære*).
- However, at the supposed time of origin of the MP, *nur* could **also** be used as **an adverb**. This use is **still attested today**:
 - (22) Er ist sehr intelligent. **Nur** kann er sich nicht konzentrieren. / Er kann sich **nur** nicht konzentrieren.
'He is very intelligent. He just cannot concentrate.'
 - In historical examples, the adverb *nur* could even be **modified by degree particles** (so 'so', *ganz* 'fully', etc.):
- (23) Dies ist das Verhältniß aller Zeit. [...] So **nur** giebt es in der Zeit eine Vergangenheit und Zukunft, die sich selbst nicht widersprechen; [...] (1799, Schlegel, DTA)
'This is the relation of the whole time. [...] But, in the time, there is a past and a future, which do not contradict themselves; [...]'

6. Degree particles? → no!

Nur (continued)

- In the DTA, unambiguous **first evidence of the MP** can be found in the 17th c. (see also Diewald 1997: 97):

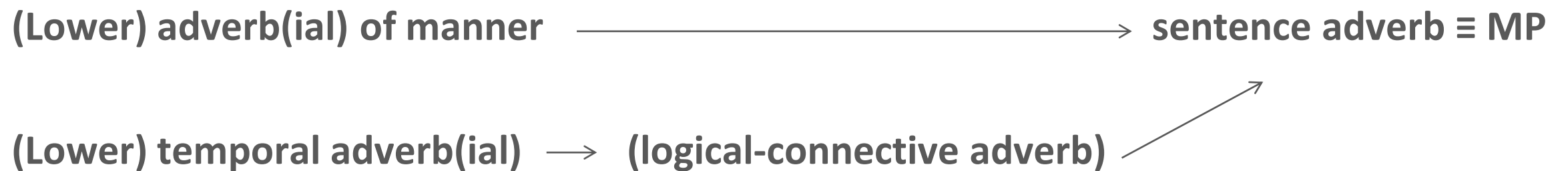
(24) ach sehet **nur**, wie hat sie so ein glatte stirn! (1669, Simplic. 1, 75, 7, DWB)
'Oh, look how smooth her forehead is!'

- Interestingly, there is also an often neglected use of **nur** as a **temporal adverb** with the meaning 'just (now)' ("ein *nur* gebohren [...] töchterlein, [...] " 'a newly born little daughter', DWB), which is attested **until the 19th c.** and which may have played a role in the grammaticalization of the MP:

(25) Wenn wir **nur** geboren werden / Jammer gnug find sich auf Erden. (1681, Birken, DTA)
'When we are just born, there is enough misery on earth.'

Interim conclusion

- Grammaticalization path:



- **Stronger assumption** than previously found in the literature (see Abraham 1991a, Cardinaletti 2011, Diwald 2011, Petrova 2017): **only lower adverbs/adverbials** and **no lexemes from other word classes** are possible donor lexemes.
- This stronger assumption can make **better predictions** than analyses according to which there are several donor lexeme types, and can be explained **more elegantly in syntactic-theoretical terms...**

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Theoretical assumptions

- MPs derive **from lower adverbs/adverbials** in the sense of Cinque (1999), which in the course of the grammaticalization process...
 - ... were reanalyzed as **higher adverbs** (see Roberts & Roussou 2003, van Gelderen 2004)
 - ... and - in contrast to other sentence adverbs - became **weak adverbs** in the sense of Cardinaletti (2007, 2011) (cf. Coniglio 2005, 2011, Grosz 2015).

Theoretical interpretation

Syntactic operation

Early Merge

+ (possible) movement
to the Mood/Mod-Layer

reanalysis

Late Merge

Syntactic status of the adverb

= Lower adverb(ial)

(= possibly: **logical-connective adverb**)

= **MP / sentence adverb**

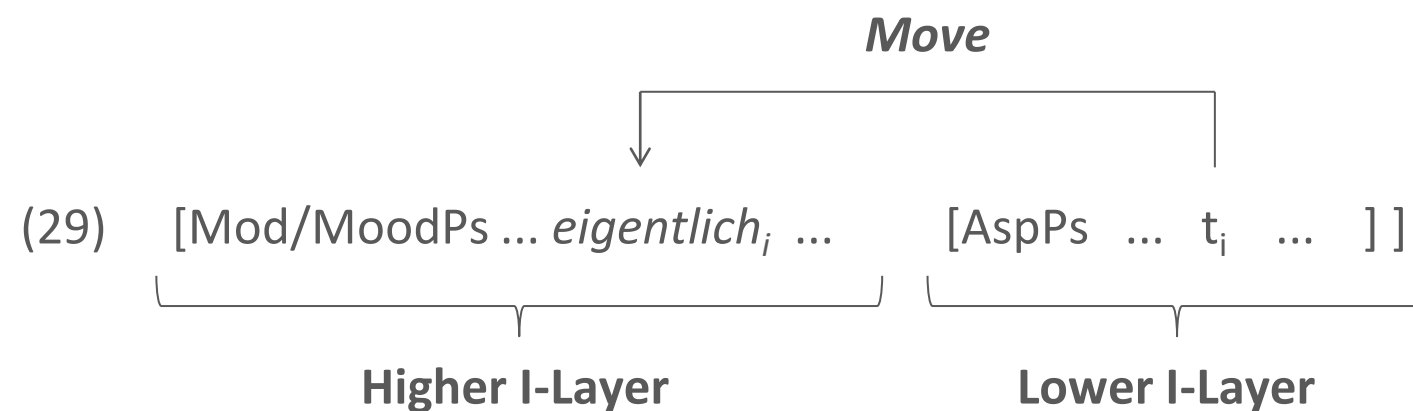
(See Axel-Tober & Müller 2017, Müller 2019 for a similar analysis of evidential adverbs)

Early Merge + Movement

- The adverbial donor lexeme is merged in a **(low) base position**.
- (26) Da der König anhielt / sagt er / er könnt dasselb nicht **eigentlich** sagen. (1605, Melander DTA)
'When the king stopped, he said that he could not say that exactly.'
- As a strong adverb it is **syntactically more flexible** and – for information- or discourse-structural reasons – can be moved **to higher positions in the I-domain** (e.g. to a position preceding the negation particle) or, under certain circumstances, **even to the C-domain**:
- (27) [...] ob sie aber alle geritten / oder etliche zu fusse gangen / hätte sie so **eigentlich** nicht acht gehabt. (1659, Bucholtz, DTA)
'[...] but whether they had all ridden or some had gone on foot, she would not have paid such close attention.'
- (28) So gar **eigentlich** weiß ich davon nicht zuberichten [...]. (1659, Bucholtz, DTA)
'I can't tell you about it in a really proper way [...].'

Move

- This movement can reach the highest part of Cinque's (1999) projection cascade, where mainly **mood and modality projections** are found:



(See Axel-Tober & Müller 2017, Müller 2019 for a similar analysis of evidential adverbs.
 Cf. also van Gelderen 2011 on English)

Cinque's (1999) hierarchy

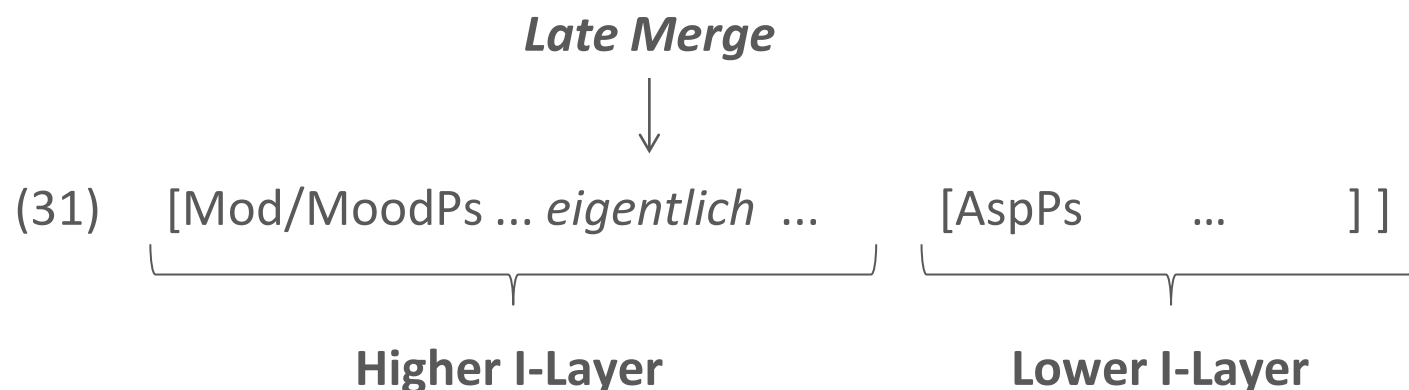
Universal hierarchy of the functional projections of the clause

[*frankly* Mood_{speech act} [*fortunately* Mood_{evaluative} [*allegedly* Mood_{evidential} [*probably* Mod_{epistemic}
 [*once* T(Past) [*then* T(Future) [*perhaps* Mood_{irrealis} [*necessarily* Mod_{necessity} [*possibly* Mod_{possibility}
 [*willingly* Mod_{volition} [*inevitably* Mod_{obligation} [*cleverly* Mod_{ability/permission} [*usually* Asp_{habitual}
 [*again* Asp_{repetitive(I)} [*often* Asp_{frequentative(I)} [*quickly* Asp_{celerative(I)} [*already* T(Anterior)
 [*no longer* Asp_{terminative} [*still* Asp_{continuative} [*always* Asp_{perfect} [*just* Asp_{retrospective} [*soon* Asp_{proximative}
 [*briefly* Asp_{durative} [*characteristically* Asp_{generic/progressive} [*almost* Asp_{prospective} [*completely* Asp_{SgCompletive(I)}
 [*tutto* Asp_{PlCompletive} [*well* Voice [*fast/early* Asp_{celerative(II)} [*again* Asp_{repetitive(II)} [*often* Asp_{frequentative(II)}
 [*completely* Asp_{completive(II)}

(Cinque 1999:106ff from Coniglio 2011: 105f)

Reanalysis

- Semantic Bleaching (+ *lexical split*) and *lexical to functional reanalysis*** (Roberts & Roussou 2003)
- (30) [...] aber das hat GOtt **eigentlich** nicht von dem steinern berg / oder der gezimmerten stadt gemeinet
 [...] (1700, Arnold, DTA)
 '[...] but God did not really mean that about the stone mountain or the timbered city [...]'
- Reanalysis and *syntactic climbing*** (Roberts & Roussou 2003: 71, van Gelderen 2004, Petrova 2017. Cf. Abraham 1991a: 372f and Lehmann's 1986 notion of "fixation"):



Distribution

Lowest position → between Cinque's (1999) **habitual** and **higher repetitive adverbs**:

$ja > \text{Mood}_{\text{speech act}} / \text{Mood}_{\text{speech act}} > ja$

- a. Der Attentäter ist *ja ehrlich gesagt* von der Polizei festgehalten worden.
- b. Der Attentäter ist *ehrlich gesagt ja* von der Polizei festgehalten worden.

$ja > \text{Mood}_{\text{evaluative}} / \text{Mood}_{\text{evaluative}} > ja$

- a. Der Attentäter ist *ja glücklicherweise* von der Polizei festgehalten worden.
- b. Der Attentäter ist *glücklicherweise ja* von der Polizei festgehalten worden.

$ja > \text{Asp}_{\text{habitual}} / \text{Asp}_{\text{habitual}} > ja$

- a. Der Attentäter wird *ja normalerweise* von der Polizei festgehalten.
- b. Der Attentäter wird *normalerweise ja* von der Polizei festgehalten.

$ja > \text{Asp}_{\text{repetitive(I)}} / * \text{Asp}_{\text{repetitive(I)}} > ja$

- a. Der Attentäter ist *ja nochmals* von der Polizei festgehalten worden.
- b. * Der Attentäter ist *nochmals ja* von der Polizei festgehalten worden.

Coniglio (2005, 2011: 108ff)

Modal particles as weak sentence adverbs

- Building on the proposal in Cardinaletti & Starke (1999) on the “**structural deficiency**” of pronouns, Cardinaletti (2007, 2011) pleads for a **tripartition of adverbs** (see also Grosz 2005, Coniglio 2005, 2011):

[illegible]

(adapted from Coniglio 2011: 102, fn. 50)

* In (sub-)standard German only the clitic form 'n (Wegener 2002, Grosz 2005, Bayer 2012).

(33) a. *Maria gli ha dato ~~gli~~ un libro ~~gli~~.* ← **clitic**
 b. *Maria ha dato loro un libro ~~loro~~.* ← **weak**
 c. *Maria ha dato un libro a loro.* ← **strong**

Mary to.him has given to.them a book to-them
 ‘Maria gave him / them a book.’

(adapted from Cardinaletti 2011: 502)

Minimise Structure (Cardinaletti & Starke 1999)

AdvP
|
Adv°
mal

Figure 1. Structural deficiency of MPs (Cardinaletti 2007: 79)

Or in a **more recent**
in-depth analysis:

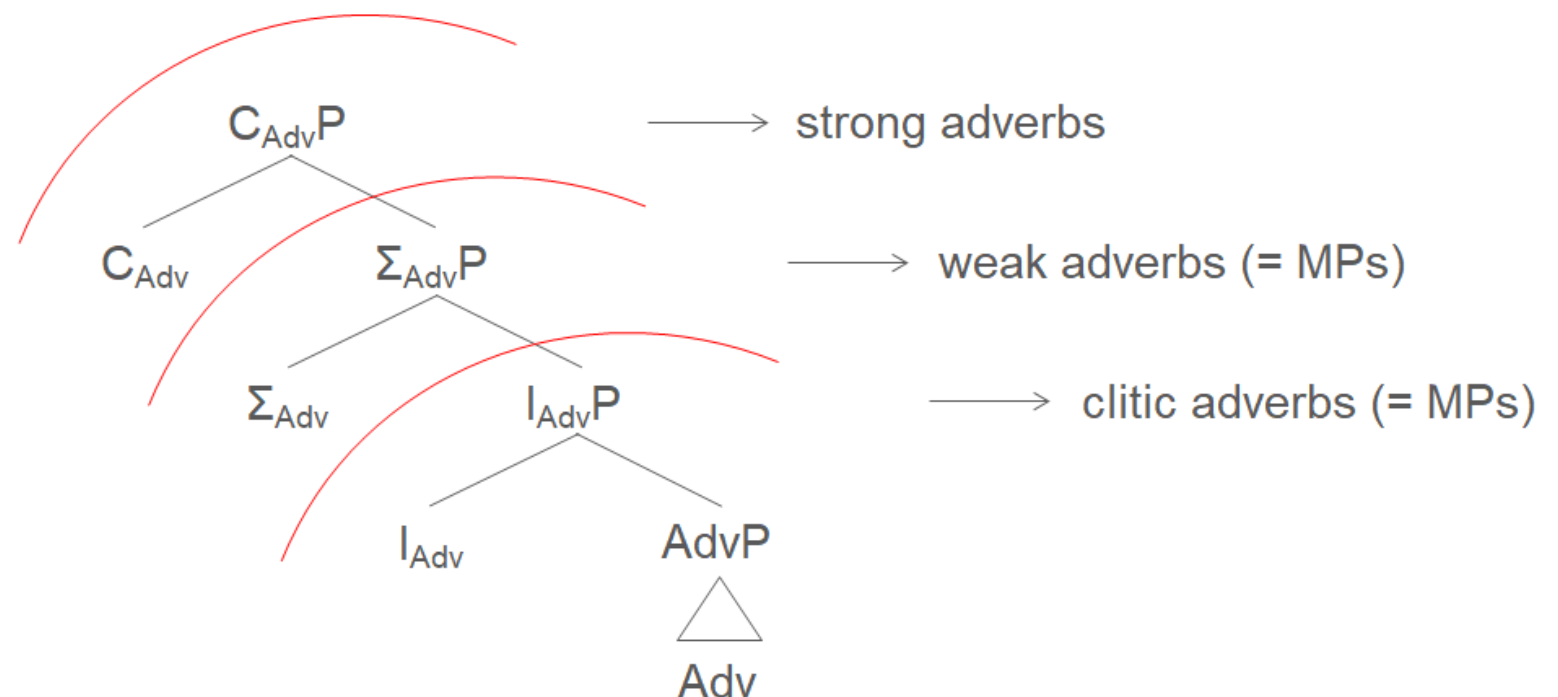


Figure 2. Minimize Structure (adapted from Cardinaletti 2011: 510)

Modal particles as weak sentence adverbs

- If, synchronically, MPs are to be analyzed as weak adverbs, then they must be diachronically derived **from strong adverbs that have been “weakened”**.
- Thus, MPs become **non-complex sentence adverbs** (Cardinaletti 2007). In contrast to strong sentence adverbs...
 - ... MPs **cannot be modified** (**so nur*, **gar eigentlich*, etc.).
 - ... MPs **cannot be moved** (cf. Abraham 1991a). Strong adverbs are integrated in Cinque’s hierarchy, but remain syntactically flexible, e.g. by being able to move to the C-domain. MPs, on the other hand, lose their syntactic flexibility and occupy **fixed positions in “specialized” mood projections in the I-domain** (Coniglio 2011: 108ff).
 - ... MPs develop a **stronger connection to the left periphery of the sentence** (cf. Abraham 1991b, Coniglio 2011, Bayer 2012) and acquire **new illocution-modifying functions (pragmatic enrichment, cf. Jacobs 1986, Thurmair 1989)**. → **AGREE with Force**.

Restrictions wrt. to sentence type and force

- The **compatibility with the sentence type** is crucial for the licensing of MPs. (cf. Thurmair 1989, 1993).

e.g. **bloß** = “imperative” particle (‘just, merely’)

- (34) Mach **bloß** die Tür auf!
‘Open the door!’

sentence type:
illocutionary force:

imperative
directive

- (35) * Du machst **bloß** die Tür auf (!)
‘You open the door!’

sentence type:
illocutionary force:

* declarative
directive

(cf. Coniglio & Zegrean 2012, Coniglio 2014)

Interaction with the illocutionary force

- MPs are modifiers of the illocutionary force of the utterance (cf. Jacobs 1986, 1991, Thurmair 1989, Coniglio 2011).

(36) $X + MP = X'$ (where X stands for illocutionary force)

(37) Ruf die Polizei! ('Call the police!')

a. Ruf **halt** die Polizei!

b. Ruf **mal** die Polizei!

c. Ruf **doch** die Polizei!

d. Ruf **JA** die Polizei!

bloß, nur, etc.



cogent order

Coniglio & Zegrean (2012: 233)

Licensing of the MPs in the C-Layer

MPs must check their compatibility with the sentence type like strong adverbs, but – in contrast to them – they function as modifiers of the illocutionary force
(cf. Thurmair 1989, 1993, Coniglio & Zegrean 2012: 248f).

- (34) a. ILL [*utype*] [] / [*iintent*] []
 > CT [*itype*] []
 > *Prt* [*utype*] [val] / [*uintent*][val]

AGREE →

- b. ILL [~~*utype*~~] [val] / [*iintent*] [val]
 > CT [*itype*] [val]
 > *Prt* [~~*utype*~~] [val] / [~~*uintent*~~][val]

← **intentionality valued**

← **clause type valued**

(Coniglio & Zegrean 2012: 248f)

Adverbial featural specification

	CT	ILL
Lower adverb	all	all
	∅	∅
(Strong) sentence adverb	declaratives	various
	[<i>u</i> type]	∅
MP	various	various
	[<i>u</i> type]	[<i>u</i> intent]

Outline

- Introduction
- Grammaticalization and donor lexemes of German modal particles
- What are genuine donor lexemes? Some empirical facts
- Syntactic analysis of the grammaticalization of modal particles
- Conclusions

Conclusions

- It was argued against the hypothesis that MPs originate from different types of donor lexemes and it was shown that all MPs are diachronically derived **from lower adverb(ial)s**.
- The adverbial donor lexemes have acquired further **meanings and functions** in the course of the grammaticalization process and have been syntactically reanalyzed as **higher adverbs, namely sentence adverbs**.
- The final step of the grammaticalization process consists in a modification of their internal structure. MPs have thus become **weak adverbs**. As weak elements in general, they are syntactically restricted to the **middle field**.
- It could be shown that the grammaticalization process of MPs can be explained very easily and elegantly **from a generative perspective**.

Thanks for your attention!

Appendices

Paradigm shift

- A paradigm shift seems to have taken place from OHG to Modern German:
- **In German, a C-particle system was gradually replaced by an I-particle system** (cf. Axel 2007: 27ff, Petrova 2017).
- (Sentence-integrated?) **C-particles** are **also found in older Germanic languages**, such as Gothic (cf. e.g. Ferraresi 2005), but also in non-Germanic ones.
- Axel (2007) claims that left-peripheral particles in OHG (and in other Germanic languages) are **the remnant of an older system** in which particles can mark the sentence type and trigger verb fronting.
- Petrova (2017) argues that OHG C-particles like *inu* and *ia* have **similarities to Modern German MPs** (in the sense of Coniglio & Zegrean 2012).

Structural and semantic scope

- According to Lehmann (2002: 128ff), grammaticalization is usually accompanied by a narrowing of the structural scope (**condensation**), since “[t]he reduction of structural scope is much more a condensation of a construction by a degradation to a lower level of constituent structure.” (Lehmann 2002: 131, see also Diewald 1997: 75).
- This syntactic process is typically associated with the narrowing of the semantic scope, but as Lehmann also admits, the **extension of the semantic scope** is also frequent “in the case of tense, aspect and mood operators.” (Lehmann 2002: 129).
- Indeed, Molnár (2002: 19) emphasizes that the MPs do not undergo narrowing of the semantic scope. Their **syntactic scope** is even **extended** as a result of the grammaticalization process (at least in the sense of Roberts & Roussou 2003: 71).

Pragmaticalization

- Pragmaticalization = **Grammaticalization of discourse functions** (Diewald 2011).
- According to Diewald (1997: 78), the sentence containing a modal particle is the result of the inclusion and compression of the “**pragmatic pretext**” in the current utterance (see also Borst 1985: 24ff, Foolen 1989: 312f, Abraham 1991a: 333).

pragmatic pretext	Jemand denkt, das ist nett von dir. 'Someone thinks it's nice of you.'
relevant situation	Ich denke, das ist nicht nett von dir. 'I don't think that's nice of you.'
→ utterance:	<i>Das ist aber nicht nett von dir!</i> ' 'That's not nice of you!'

Table 3. Description of the relational function of the MP *aber* (Diewald 1997: 78)

Bloß ‘just’

- *bloß* (< OHG/MHG *blôz* ‘naked, unveiled’) is often used in adverbial use until the 19th century. This supports the hypothesis that the MP does not originate from the degree particle (as suggested by Diewald 1997: 87), but rather **from the (adjective-)adverb**.
 - (i) [...] jene aber [...] hat die Natur verborgen / daß sie nicht so **bloß** sol verschwendet werden. (1699, Abel, DTA)
‘[...] but nature has hidden that, so that it should not be so merely wasted.’
 - (ii) Er bat sie, so ganz **bloß** als unbekannter Mahler, sie möchte sich nur völlig frey ihrem Wesen überlassen, [...] (1787, Ardinghello, DTA).
‘He asked her quite simply as an unknown painter that she only leaves herself completely free to her own nature, [...]’
- **At the same time** (19th c.?), the **MP** also grammaticalized (see Diewald 1997: 87):
 - (iii) Meine Briefe gieb **blos** irgend einem herfahrenden Passagier mit. (1802, Paul, DTA [1960])
‘Just give my letters to any passenger on the way.’

Doch ‘but, however’

- Originally an adverbial of the manner (**pau-h*), *thoh/doh* was already used in OHG as a **conjunction** (“but”), an **adversative adverb** (“however, nevertheless”) and a **concessive adverb** (“though, nevertheless”) and as a **MP** (Diewald 1997: 90). See also Hentschel (1986: 87ff).
- (i) [...] inti batun inan thaz sie **thoh** tradon sinis qiuuates ruortin [...]

“and asked him that they touch a thread of his garment”

(9th c. Tatian 82,1, adapted from Diewald 1997: 91)

- Its **origin in the adversative conjunction** is **improbable** (*pace* Burkhardt 1994). The adverbial use is much more frequent in OHG.

	8 th -9 th c.	11 th c.
adverb	69,7 %	73,6 %
conjunction	30,3 %	26,4 %

Table 4. Lemma *doh* in ReA

Other particles – a quick overview

- auch*** (lit. ‘also’) < OHG *ouh* (< IE *au-*), adversative-iterative (“again”, “aber”), then augmentative meaning („in addition“). MP since 17th c.? (Diewald 1997: 83f).
- eben*** (lit. ‘flat’) < OHG *eban(i)* ‘flat’. Adjective-adverb > temporal adverb > focus particle. MP (in the 16th c.?) originating from the temporal adverb or from the focus particle (according to DWB, Hentschel 1986, Diewald 1997). The latter is chronologically possible, but against the hypothesis presented here (see also Autenrieth 2002 and Molnár 2002).
- eh*** < OHG *ē(r)* ‘earlier, before’. Temporal adverb > logical-connective adverb (“Glaub *eh* das er vns zu ſchaden Mit Gift / ſey gen Ephira gfaren” ‘Believe that he went to Ephira to harm us with poison.’, 1561, Sachs, DTA). The MP developed from it (in the 19th c.?).

Other particles – a quick overview

- etwa*** (lit. ‘approximately’) < OHG *edde(s)(h)wār* “somewhere”. Localistic, then temporal and logic. The MP originated from it in the 17th c.(?).
- halt*** < OHG *halt(o)* “more, rather” (Germ. **haldiz* “more, rather”, comparative, cf. Got. *haldis*). Already in OHG temporal adverb „fast, immediate, earlier“ and adverb of manner „rather, (more) preferably“ (Diewald 1997: 93). The MP developed from it in MHG. See also Hentschel (1986) and Abraham (1991a: 366f).
- ja*** (lit. ‘yes’) < OHG *ia* (C-particle)? Evidence that it grammaticalized from the temporal adverb *je* ‘ever’ (or from a contamination with this adverb) in the 16th c. (see Meibauer 1994 following Paul, Molnár 2002, Petrova 2017).
- mal*** Temporal adverb (“once”), MP in the 18th c.

Other particles – a quick overview

schon (lit. ‘already’) < OHG *scōno* “in a beautiful way” (< adj. *scōni*), adverb of manner > in MHG temporal adverb “earlier than expected” > degree particle (Molnár 2002: 77f). Molnár leaves it open whether the MP originated from the temporal adverb or from the degree particle. The temporal origin is defended by Meibauer (1994) and Ormelius-Sandblom (1997a, 1997b). MP since the 17th c.?

sowieso (‘anyway’) adverbial of manner. MP since the 18th c.?

wohl (lit. ‘well’) < OHG *wola* “well” (Germ. **welō-* < IE **uel* “wanted, (as) desired”, DWDS). Adverb of manner. MP since the 16th c.(?). Cf. Molnár (2002) on the possible grammaticalization steps.

External syntax – general principles

Syntactic Climbing

- Central idea of **Roberts & Roussou's** (2003) syntactic approach to grammaticalization:
“Since movement is always local and upward, categorial reanalysis is also local and upward.” (Roberts & Roussou 2003: 71)

Fixation

- An important grammaticalization parameter is called “fixation” by Lehmann (1986: 8) and is defined as “**loss of syntagmatic variability**”. “The grammaticalized sign tends to occupy a fixed syntactic, then a morphological position and becomes a slot filler.”

Reanalysis of *abur*

- The donor lexemes are reanalyzed as weak adverbs, which are **base-generated in the highest part of the I-domain** (Abraham 1991a: 372f, cf. Lehmann's (1986: 8) notion of fixation).

- (i) iterative adverb *abur*: [MoodP ... *abur*_i ... [Asp_{repetitive}^P ... t_i ...]] → reanalysis
 adversative adverb and MP *abur*: [MoodP ... *abur* ... [Asp_{repetitive}^P ...]]

OHG iterative and adversative adverb

- (ii) Ther thuruh thurst githénkit, thaz thésses brunnen drínkit, nist lág zi themo thínge, nub **ávur** nan thurst githúinge; Ther **ávur** untar mánnon niuzit mínan brunnon, then íh imo thánne gibu zi drínkane: Thurst then mer ni thúíngit, [...] (9th c., O II, 14, 37ff, ReA)
- “If a man is thirsty enough to drink from this well, it will not be long before the thirst overcomes him again; however, who among men uses my well, from which I then give him to drink, the thirst no longer overcomes him.”

Modal particles as weak sentence adverbs

- Building on the proposal in Cardinaletti & Starke (1999) on the “**structural deficiency**” of pronouns, Cardinaletti (2007, 2011) pleads for a **tripartition of adverbs** (see also Grosz 2005, Coniglio 2005, 2011).
- In this scheme, the tripartition is extended **to include adverbials** (and the corresponding full DPs):

- (i) clitic MPs (clitic adverbs) < MPs (weak adverbs) < (strong) adverbs < adverbials
 clitic pronouns < weak pronouns < strong pronouns < full DPs

(Coniglio 2011: 102, fn. 50)

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