

Ways of grammaticalizing modal particles: a German-Italian comparative perspective*

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Abstract

By building upon recent research on German modal particles, the present paper intends to investigate the hypothesis that, like in German, modal particles in Italian only grammaticalized from certain classes of adverbs. It compares their origin in both languages and especially emphasizes syntactic similarities in the changes in the internal and external syntax of these elements. In particular, it is argued that modal particles are grammaticalized via the morphosyntactic weakening of strong adverbs and that they are derived from lower adverbs through specific syntactic constraints.

1 Introduction

While modal particles (henceforth MPs) constitute a class of well-investigated elements in German (cf. Thurmair 1989; Coniglio 2011; Müller 2018), there is no systematic investigation on Italian MPs, for which a similar word class has been only recently assumed (cf. Coniglio 2008). Very insightful surveys are available only for individual MPs in Standard Italian and Italian varieties (cf. Holtus/Radtke 1985; Bazzanella 1995; Obenauer/Poletto 2000; Munaro/Poletto 2004; Coniglio 2008, 2011: 27–34; Cardinaletti 2011; Cognola/Schifano 2018a, b; Schifano/Cognola 2020; Cognola/Cruschina 2021; Cruschina/Cognola 2021, etc.).¹ However, while there is quite a large consensus on which elements can be considered MPs in German, something similar is missing for Italian due to the lack of exhaustive investigation (but also consider Favaro 2023, which was published after this work had been prepared).² Potential MP candidates

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¹ Cognola/Moroni (2022) is the first systematic comparative work on Italian and German MPs. See also the general classification of Romance discourse and pragmatic markers in Remberger (2020).

² According to Thurmair (1989: 21), the following particles should be included in this class in German: *aber, auch, bloß, denn, doch, eben, eigentlich, einfach, etwa, halt, ja, mal, nur, ruhig, schon, vielleicht, wohl*.

in Italian that have been proposed in the literature are for example *ben*, *mai*, *mica*, *poi*, *pur(e)*, *sì*, *tranquillamente*, etc.

The typical properties used to describe MPs in German can be applied to identify similar items in Italian as well (cf. Coniglio 2008). These include, for instance, their lack of stress and prosodic integration, their failure to contribute to the propositional meaning given that they express the speaker's attitude and modify the illocutionary force of the utterance (cf. a. o. Jacobs 1986; Modicom 2012; Schoonjans 2018; and at the interface with syntax Bayer/Hinterhölzl/Trotzke 2015; but cf. Trotzke 2026 for a different view).³ For instance, in the following sentence, the MP *poi* is used to indicate that “the speaker is not able to find an answer, nor is the hearer, according to the speaker's assumptions” (Coniglio 2008: 111):

- (1) Cosa avrà **poi** detto di male?
 what will.have PRT said of evil
 ‘What did (s)he say wrong?’

Also from a syntactic point of view – on which the present paper will mainly focus – Italian MPs show the typical peculiar properties already observed for German (cf. Thurmair 1989; Coniglio 2011, 2022; Gutzmann/Turgay 2016; Müller 2018; Cognola/Moroni 2022 etc.). As illustrated by the following examples for Italian *poi*, MPs only occur in what could be considered to be the (left) middle field in Italian (2a), i. e. a position between the two parts of a complex predicate; MPs can be combined with each other (2b), but they can be neither coordinated – for instance, by means of *e* ‘and’ in (2c) – nor modified – e. g. by *molto* ‘very, much’ in (2d):⁴

- (2) a. <#poi> cosa <*poi> avrà <poi> fatto <#?poi> di male <#poi>?
 PRT what PRT will.have PRT done PRT of evil PRT
 b. Cosa avrà poi mai fatto di male?
 what will.have PRT PRT done of evil
 c. *Cosa avrà poi e mai fatto di male?
 what will.have PRT and PRT done of evil
 d. *Cosa avrà molto poi fatto di male?
 what will.have very PRT done of evil
 ‘What did (s)he do wrong?’

In general, MPs are syntactically characterized by being typical “weak” elements – if we follow the idea of structural deficiency proposed in Cardinaletti/Starke (1999) –, since they are typically unaccented, have a limited syntactic distribution and no clear propositional content (cf. Cardinaletti 2007: 100). Coniglio (2005, 2011, 2022), Grosz (2005) and Cardinaletti (2007, 2011) thus analyze MPs as weak sentence adverbs occurring in the

³ Note that, by “speaker”, I also mean the “potential” speaker, who often corresponds to the subject of matrix sentences in case the particles occur in subordinate sentences (cf. Coniglio 2011: 60, 137f., 144; elaborating on Haegeman 2002: 159f.).

⁴ Notice that the elements marked by # or * in example (2a) do not get a MP interpretation in my northeast variety. An anonymous reviewer points out to me that some varieties of Italian possibly allow for *poi* to occur in a position following the *wh*-element. This would make it similar to *mai*, which is notoriously possible in that position even in my variety (also cf. Obenauer/Poletto 2000, Coniglio 2011: 79–83). In this case, a direct modification of the *wh*-element has to be assumed (cf. Coniglio 2011: 82).

I-domain. In particular, Cardinaletti (2011: 494) claims that we do not need to consider MPs as an independent word class since they can be better analyzed as a special group of “deficient sentential adverbs”.

In this paper, the hypothesis will be put to test that, besides being synchronically a subclass of adverbs, namely weak adverbs, MPs are – also diachronically – “weakened” adverbs, i. e. that they are all adverbs at their origin, which in the course of the grammaticalization process lost some of the properties typical for other adverbs. While Coniglio (2022) proved this for German MPs, this paper intends to comparatively show that a similar grammaticalization process also holds for Italian MPs.

More precisely, a very common assumption is that the origin of MPs has to be traced back to several sources or *Spenderlexeme* ‘donor lexemes’ (cf. Hentschel 1986; Abraham 1991a; Diewald 1997; Molnár 2002, etc.). As argued in Coniglio (2022), a similar view can be dismissed for German. The underlying idea is that MPs are weak sentence adverbs that have historically developed from strong adverbs (cf. Cardinaletti 2011). As argued in Coniglio (2022), all MPs can be traced back to adverbs and to no other word classes. Independently of their origin and development, they must have all gone through an intermediate adverbial stage (cf. Abraham 1991a; Diewald 1997; 2011; Petrova 2017). Here, such an analysis will be extended to Italian MPs and it will thus be argued that Coniglio’s (2022) observations have a much broader validity. From an empirical perspective, it will be shown that the grammaticalization paths leading to MPs are in fact very restricted. The diachronic facts observed for German and Italian thus offer interesting new theoretical perspectives on how syntactic change processes take place in general.

The paper is structured as followed. Section 2 briefly discusses the grammaticalization process of MPs as usually described in the German literature. Section 3 presents empirical facts demonstrating an adverbial origin of MPs and argues for similar grammaticalization processes both for German MPs (as discussed in Coniglio 2022) and Italian MPs. A syntactic account of the grammaticalization processes – considering both the internal and external syntax of MPs – is provided in Section 4. Section 5 concludes.

2 On the grammaticalization of modal particles

The grammaticalization of MPs has been the object of several investigations in many languages. In particular, there is an impressive amount of works written on German that indicate MPs as a relatively young word or particle class (cf. for example Hentschel 1986; Burkhardt 1994; Diewald 1997; Ormelius-Sandblom 1997a, 1997b; Autenrieth 2002; Molnár 2002, etc.).

Diewald’s (2011) fundamental work describes the grammaticalization of MPs as a case of pragmaticalization, which she defines as grammaticalization of discourse functions. In her previous work, she analyzes utterances containing MPs as the result of the inclusion and compression of the so-called “pragmatic pretext” – which is implicit in the discourse – in the utterance (cf. Diewald 1997: 78; also cf. Borst 1985: 23–42; Foolen 1989: 312f.; Abraham 1991a: 333). Table 1 exemplifies this idea for the MP *aber* (lit. ‘however’). In this case, the MP integrates the pragmatic pretext – the possible addressee’s objection that

someone could consider his or her behavior to be good – in the speaker’s opposite belief in the relevant situation.

pragmatic pretext	Jemand denkt, das ist nett von dir. ‘Someone thinks this is nice of you.’
relevant situation	Ich denke, das ist nicht nett von dir. ‘I think this is not nice of you.’
→ Utterance	<i>Das ist aber nicht nett von dir!</i> ‘ <u>Hey</u> , this is not nice of you!’

Table 1: Description of the relational function of the MP *aber* (adapted from Diewald 1997: 78)

According to Diewald (1997), the grammaticalization of MPs is hence a case of pragmaticalization, since their emergence is associated with the development of their peculiar property of encoding discourse functions.

While the general emergence of MPs can thus be easily explained, much more debated is the concrete origin of individual MPs. Thus, for example, a very often quoted classification of the *Spenderlexeme* of MPs is the one provided by Burkhardt (1994: 138–147), according to which MPs take their origin from homophonous elements in other word classes, as represented in Table 2.⁵

conjunctions	<i>aber</i> lit. ‘however’, <i>doch</i> ‘however’, etc.
temporal adverbs	<i>denn</i> ‘then’, <i>eben</i> ‘just’, <i>einmal</i> ‘once’, <i>etwa</i> ‘roughly’, <i>halt</i> ‘simply’, <i>ja</i> ‘indeed’, <i>jetzt</i> ‘now’, <i>mal</i> ‘once’, <i>noch</i> ‘still’, <i>schon</i> ‘already’, etc.
sentence adverbs	<i>eigentlich</i> ‘actually’, <i>gefälligst</i> ‘obligingly’, <i>schließlich</i> ‘finally’, <i>vielleicht</i> ‘maybe’, etc.
(genuine) adverbs	<i>einfach</i> ‘simply’, <i>fein</i> ‘finely’, <i>hübsch</i> ‘nicely’, <i>irgendwie</i> ‘somehow’, <i>langsam</i> ‘slowly’, <i>schlicht</i> ‘simply’, <i>zufällig</i> ‘randomly’, etc.
degree particles	<i>bloß</i> ‘merely’, <i>nur</i> ‘only’, etc.
predicatives	<i>dreist</i> ‘insolently’ (old-fashioned), <i>ruhig</i> ‘quietly’, etc.

Table 2: Donor lexemes of German MPs (adapted from Burkhardt 1994: 138–147; cf. Coniglio 2022: 16)

As to Italian MPs, no similar systematic survey of their origin has been conducted so far. Hence, a closer investigation of their grammaticalization process (especially in comparison with the better investigated German MPs) is felt to be necessary at this point. Below, it will be claimed that Italian MPs go through the grammaticalization path proposed by Abraham (1991a), in

⁵ Here, the classification and terminology in Burkhardt (1994) is adopted, even if there is no consensus about the status of MPs of some of these elements (my translations are intended to be literal). Cf. Thurmair (2026) and Paschke (2026) for a discussion on the complexity of identifying the elements belonging to the class of MPs. Notice that Burkhardt’s (1994) “genuine” adverbs probably corresponds to traditional adverbs of manner (affecting the event), as opposed for examples to sentence adverbs, which have evaluative, epistemic or evidential functions. Furthermore, notice that, according to different classifications, the term “degree particles” is used for other types of particles, while *bloß* and *nur* are classified as “focus particles”.

which illocutive/discourse functions grammaticalize starting from local and temporal functions via logical functions (cf. Coniglio 2022 with respect to German MPs):

- (3) localistic > temporal > logical > illocutive/discourse functional

(Abraham 1991a: 373)

As to the adverbial nature of MPs, other authors before, such as Diewald (2011: 377–384), had in fact recognized that MPs mostly have an adverbial origin. However, they often make specific exceptions for single MPs, thus for example adjectives, degree particles, conjunctions are sometimes considered as possible donor lexemes of certain MPs (cf. for example Diewald 1997: 73–100, 99). The main claim in this paper is that, in fact, all donor lexemes – independently from their origin – must go through an intermediate adverbial stage before becoming MPs. This will be claimed to be not specific to German (cf. Coniglio 2022), but to have a more general validity, as shown by data provided by Italian. As we will see more specifically in the theoretical part of the paper in Section 4, this also means that the donor lexemes must be syntactically reanalyzed as being integrated in the clausal spine at some point before they can be further reanalyzed as higher sentence adverbials. This will be argued to have specifically to do with economy principles underlying grammaticalization processes in general. Since only adverbs are possible precursors of MPs, it will thus be claimed that approaches *à la* Burkhart (1994), according to which different classes of donor lexemes of MPs can be recognized, should be dismissed.

3 A comparative empirical investigation of the grammaticalization of German and Italian MPs

If MPs are adverbs that have become weak in in the course of time (cf. Cardinaletti 2011), this means that, for each particle, we should be able to find a stage during which this element was a strong adverb (cf. Coniglio 2022). It will be shown below that some of the corresponding original adverbs still exist in the languages considered, but some of them eventually disappeared and this sometimes gives the erroneous impression that MPs must have developed from homophones (in other word classes) that are still attested in the present-day languages.

In the following, some representative examples of German and Italian MPs will be comparatively discussed according to their proposed class of origin (see Table 3). Notice that, for reason of completeness, a further category was added to Burkhart's classification, because there is possibly one MP in Italian – *mica* – that takes its origin from a negative element. However, this is not an uncontroversial source of MPs (see Section 3.7, where I suggest a possible temporal origin of the particle use). In addition, it is neither clear whether *mica* is a MP in the first place.⁶

⁶ In the primary sources in the References, you can find the list of corpora and other tools used for this investigation (with the respective abbreviations). For the origin of other German MPs, consult Coniglio (2022), in particular the Appendix presented there.

	German	Italian
conjunctions	<i>aber</i> ‘however’	
temporal adverbs	<i>denn</i> ‘then’	<i>mai</i> ‘never’, <i>poi</i> ‘then’
sentence adverbs	<i>eigentlich</i> ‘actually’	
(genuine) adverbs	<i>einfach</i> ‘simply’	<i>ben</i> ‘well’, <i>tranquillamente</i> ‘quietly’
degree particles	<i>nur</i> ‘only’	<i>pur(e)</i> ‘also’
predicatives	<i>ruhig</i> ‘quietly’	
negation particles		<i>mica</i> ‘(not) at all’

Table 3: Selected German and Italian MPs discussed in this paper

3.1 Conjunctions

Besides there being no clear evidence for an origin of MPs in conjunctions, it can be argued that the latter are hardly potential donor lexemes for MPs, both for syntactic and semantic reasons (cf. Coniglio 2022: 25–27). Syntactically, one cannot easily explain which ambiguous contexts should be at the origin of the reanalysis of a conjunction to a MP, given that conjunctions are sentence-peripheral, while MPs typically only occur in the middle field. Also semantically, it would be hard to explain how a (typically) contentless word like a conjunction – with just a logical-connective function – could be reanalyzed as a MP, i. e. as an adverbial element with an expressive meaning and a clearer pragmatic content.⁷

Coniglio (2022) discusses this problem by considering German *aber* and *doch*, which have homophonous forms in the category of conjunctions. No similar potential cases seem to be present in Italian, which is maybe further indirect evidence that the existence of two examples that are homophonous with conjunctions in German is just a fortuitous coincidence. Below, the results for *aber* presented in Coniglio (2002: 26f.) are summarized briefly.

German *aber*

The MP *aber* (lit. ‘however’) is claimed to have derived from the homophonous adversative conjunction (cf. Burkhardt 1994; Diewald 1997: 80; Molnár 2002, etc.). A Germanic comparative form gave origin to an iterative adverb meaning ‘again, in turn’. From this, an adversative adverb ‘however’ and an adversative conjunction ‘but’ grammaticalized (cf. Diewald 1997: 80). Less clear is whether the MP developed starting from the adverb or from the conjunction. Both are in fact attested already in Old High German (OHG), as observed by Diewald (1997: 80). For the theoretical reasons seen above, the origin of the particle is most probably to be found in the adversative adverb, whose syntactic ambiguity could have given rise to its reanalysis to a MP (contra Diewald 1997: 80).

According to Diewald (1997: 81), the first attestations of the MP are from the 15th century, but still earlier potential evidence for the MP can be found already in OHG. Unfortunately, it is extremely difficult to distinguish between the different readings of *aber* in the absence of other cues, such as prosody, in historical data. Coniglio (2022: 26f.) suggests that examples such as

⁷ Cases of degrammaticalization are possibly attested (cf. Norde 2009), but, still, they are considered to be not very frequent.

the following one could be seen as possible early evidence for this MP in OHG, given its possibly exclamative character:

- (4) [...] zi themo hohen hímilriche, In hoho gúallichi,
 to the high heaven-kingdom in great glory
 theist **avur** thaz hímilrichi; [...]
 this-is *PRT* the heaven-kingdom
 ‘[...] to the high heavenly kingdom. In great glory. This is indeed the heavenly kingdom; [...]’
 (Otfrid I 28, cited in *Referenzkorpus Altdeutsch*, in the following: ReA)

Another interesting OHG example is the following one, in which either *áber* or *dóh* translates the Latin conjunction *sed*, so that the other element must have an illocutionary function and be interpreted as a MP:

- (5) Nû ist **áber** **dóh** mēr zít. láchennis tánne chlágo.
 now is *PRT* *PRT* more time medicine_{GEN} than lament_{GEN}
 ‘But now it is the time for the medicine rather than the lament.’
 Lat. ‘Sed tempus est inquit medicinę quam quereleę.’
 (Notker, *De consolatione philosophiæ*, I 8–12, cited in ReA)

This certainly indicates that such particles could be very old, but – specifically for *aber* – both the homophonous conjunction and the adversative adverb are present until today, so the MP could have grammaticalized at any time from one of the two elements, but theoretical and conceptual considerations lead us to think that the adverb is the donor lexeme of the MP.

3.2 Temporal adverbs

Temporal adverbs have been claimed to be possible donor lexemes of MPs, but only after a reanalysis has taken place in which temporal relations are reinterpreted as logical relations (cf. Abraham 1991a; Diewald 1997). Coniglio (2022) claims that donor lexemes belong to the class of lower (aspectual) adverbs analyzed in Cinque (1999). Some examples are *eh* (whose original meaning is ‘before’), *schon* (‘already’), *eben* (‘just’), etc. (cf. Atayan/Moroni 2026). In all these cases, the adverb lost its temporal-aspectual meaning in favor of a logical connective-interpretation. Below, the case of German *denn* (cf. Coniglio 2022: 24f.) and of Italian *mai* and *poi* will be discussed.

German *denn*

Many works point out that German *denn* (lit. ‘then’) represents a typical case of the grammaticalization of a MP starting from the temporal semantics of the corresponding adverb (cf. Burkhardt 1994: 140; Diewald 1997; Wegener 2002; Bayer 2012; Coniglio 2022; Cognola/Moroni 2022: 201–208, etc.). The source of the MP is the OHG temporal adverb *thanne/thenni*, meaning ‘after that’ (cf. Diewald 1997: 88), which – as we notice – heavier and more complex than the OHG adverb *tho*, meaning ‘then’ (and thus probably a lower temporal-aspectual adverb in Cinque’s 1999 sense). The temporal adverb is probably first reanalyzed as a logical-connective adverb in the sense proposed by Abraham (1991a), i. e. with the meaning ‘further(more), beyond that’. The MP seems to have grammaticalized already during the OHG period and thus represents one of the oldest MPs at all (cf. for example Burkhardt 1994: 140; Molnár 2002; Wegener 2002; Bayer 2012, etc.). Burkhardt (1994: 143) indicates the following example from

the 9th century as one of the earliest attestations of the MP use. Here, the temporal adverbial interpretation of *thanne* as ‘after that’ is implausible:

- (6) Thiu óugun sie imo búntun [...] /
 the eyes they to.him bound
 joh frágetun ginúagi, wér inan **thanne** slúagi
 and asked enough who him *PRT* beat
 ‘They blindfolded him and asked (often enough) who had beaten him’
 (Otfrid IV 19, cited in ReA)

Notice that Van Kemenade/Links (2020) argue that an equivalent of the OHG MP is present also in Old English (*bonne*). This could point to a common grammaticalization process that already took place in West Germanic (or to polygenesis, given the very similar starting conditions of English and German).

Italian *mai*

An analogous reanalysis must have taken place for *mai* (lit. ‘never’), from Lat. *mā(gis)* ‘more’ (Lo Zingarelli 2000 (in the following: LZ), s. v. *mai*). Despite its original semantics, this element was very early used both as a temporal adverb (7) and – at least potentially – as a MP (8), marking a rhetorical question (cf. Obenauer/Poletto 2000; Coniglio 2008: 108–111; Coniglio 2011: 28f.):

- (7) Che Iddio **mai** s’adira né nuoce.
 that God never himself=gets.angry nor harms
 ‘That God is never angry nor injurious’
 (Degli Uffici di Cicerone (volgarizzato), cited in OVI: s. v. *mai*)
- (8) Adunque che fatto di battaglia
 then what fact of battle
 fu **mai** di tanto pregio?
 was *PRT* of such quality
 che trionfo fu **mai** da essere agguagliato?
 what triumph was *PRT* to be compared
 ‘So what battle was ever of such merit? What triumph was there that could ever be compared?’
 (Degli Uffici di Cicerone (volgarizzato), cited in OVI: s. v. *mai*)

In (8), *mai* can no longer be interpreted as the negative temporal adverbial meaning ‘never’. It is uncontroversial that the MP function grammaticalized via reanalysis of the homophonous adverb.

Italian *poi*

Poi (lit. ‘afterwards’) stems from Lat. *pōst* ‘behind, (there)after’ (cf. *Vocabolario Treccani* (in the following: TRECC), s. v. *poi*). Already in Old Italian, it was used as a temporal adverb (9) (and preposition), but also as a temporal conjunction (see the derived conjunction *poiché* ‘since’) (10):

- (9) [...] en santo paradiso serà **poi** envīadhe [...]
 in holy paradise will.be then sent
 ‘[...] will then be sent to the holy paradise [...]’
 (Uguccione da Lodi, *Libro*, cited in OVI: s. v. *poi*)

- (10) **poi** sì spesso ti confessi,
 after so often you you.confess
 poca fatica avrò d'udire o di dimandare
 little trouble I.will.have to=listen or to ask
 'since you confess so often, I shall have little trouble to hear or to ask'
 (Boccaccio, *Decameron*, cited in OVI: s. v. *poi*)

It is undisputable that the temporal adverb developed into the present-day MP (11) via an intermediate logical-connective stage (cf. Coniglio 2008: 111–114, 2011: 29; Cruschina/Cognola 2021). Nonetheless, it is very difficult to date this process. The following sentence exemplifies the non-temporal use of *poi*, which is used to mark a rhetorical question or to underline the interest or concern with respect to the content of the uttered proposition:

- (11) Chi avrà **poi** telefonato?
 who will.have PRT called
 'Who called then?'
 (adapted from Coniglio 2011: 29)

3.3 Sentence adverbs

Sentence adverbs can be mostly considered to be the results rather than the source of grammaticalization processes, as one would expect if MPs are categorized as weak sentence adverbs (as proposed by Cardinaletti 2007, 2011, a. o.). While no similar cases can be found in Italian, Coniglio (2022: 22–24) discusses the two prominent cases of German *eigentlich* (lit. 'actually') and *vielleicht* (lit. 'maybe'). For both of them, it is shown that they derived from adverbs of manner. Below, the results about *eigentlich* are summarized briefly (cf. Coniglio 2022: 22f.).

German *eigentlich*

Eigentlich (lit. 'actually') is used both as a MP and a sentence adverb in present-day German, although a clear distinction between the two uses cannot be made (if there is a distinction at all).⁸ My claim is that both the MP and the (surmised) sentence adverb derive from the adverb of manner meaning 'in a proper way' (which in turn derived from an adjective), as in the following example:

- (12) [...] die mögend jhn nicht so gar **eigentlich** bekennen.
 these can him not so completely properly recognize
 '[...] they cannot recognize him in a really proper way.'
 (Bullinger 1558, cited in DTA, s. v. *eigentlich*)

The adverb of manner was attested from the 13th century until the 20th century, when it disappeared from the language, leaving only the MP and the (strong) sentence adverb.

⁸ Thurmair (1989: 26f.) considers only the unaccented *eigentlich* in the middle field of interrogative sentences as a MP. In all other cases, it would be a sentence adverb with the meaning of 'really, basically'. Actually, many examples reveal that this distinction is not always so clear-cut.

In the *Deutsches Textarchiv* (DTA), the first uses as a MPs can be found starting already from the 16th century, as an excerpt from the same text as in the previous example illustrates. In this example, *eigentlich* can no longer be paraphrased as ‘in a proper way’:

- (13) [...] die tyrannen sind **eigentlich** nicht Gottes /
 the tyrants are *PRT* not God_{GEN}
 sonder deß teüffels diener.
 but the_{GEN} devil_{GEN} servants
 ‘[...] the tyrants are actually not God’s servants, but the devil’s servants.’
 (Bullinger 1558, cited in DTA, s. v. *eigentlich*)

3.4 “Genuine” adverbs

“Genuine” adverbs can be the source of MPs both in German and Italian. This claim, which is also the central hypothesis in this paper, is largely supported by the data. In particular, adverbs of manner are typical precursors of MPs, as will be shown below by means of German *einfach* (cf. Coniglio 2022: 21) and Italian *ben* and *tranquillamente*.

German *einfach*

Similarly to *eigentlich*, *einfach* (lit. ‘simply, in a simple way’) was an adjective that began to be used as an adverb of manner in the 16th century with the meaning ‘just once, simply’ (DWDS; cf. also Autenrieth 2002):

- (14) Jch muß die Schmerzen Duppelt im Herten /
 I must the pains doubly in.the heart
 Aber nur **einfach** die Liebe verüben.
 but only simply the love exercise
 ‘I must exercise the pain in my heart two times, but love just once.’
 (Schirmer 1650, cited in DTA, s. v. *einfach*)

As discussed in Coniglio (2022), the first potential MP uses developed from this adverb of manner and, in the DTA, first examples of these uses can be found starting from the 19th century, as in the following sentence, in which *einfach* no longer means ‘once’:

- (15) Die Union scheiterte **einfach** an
 the Union failed *PRT* at
 der Unmöglichkeit, den deutschen
 the impossibility to.the German
 Mittelstaaten ein Zutrauen zu Preußen
 Middle-States a confidence to Prussia
 und seinen Absichten einzuflößen
 and to.its intentions to.instill
 ‘The Union just failed because of the impossibility of instilling confidence in Prussia and its intentions among the German Middle Powers.’
 (*Die Bayerische Presse* 1850, cited in DTA, s. v. *einfach*)

Italian *ben*

As shown in Coniglio (2008: 122–124, 2011: 33f.), Cognola/Schifano (2018a, b) and Schifano/Cognola (2020), the MP *ben* (lit. ‘well’) takes its origin from Lat. *bĕne* (‘well, suitably’, cf. TRECC, s. v. *bene*¹), an adverb of manner that still exists in Italian. This is often apocopated in proclitic position (LZ 214). The following example illustrates its adverbial use in Old Italian:

- (16) [...] com’eo dicesse **bene** / la propia cosa ch’eo sento d’amore:
 how=I said well the right thing that=I feel of=love
 ‘[...] how I could express my right loving feeling well [...]’
 (Giacomo da Lentini, *Rime*, cited in OVI: s. v. *bene*)

However, *ben(e)* can also be very early used as an adversative conjunction/adverb (17) (TRECC, s. v. *bene*¹) or in a MP function, reporting the speaker’s positive evaluation of the propositional content of the utterance (18):⁹

- (17) uno cavaliere di Lombardia ... non avea reda niuna;
 a knight of Lombardy not had heir no
bene avea gente di suo lignaggio
 but had people of his lineage
 ‘a knight of Lombardy ... he did not have any heir; but he had people of his lineage’
 (Novellino, cited in TRECC: s. v. *bene*¹)

- (18) Elli hae **bene** morte servita;
 he has well death served
 ‘He well deserves to die;’
 (Novellino, cited in Schifano/Cognola 2020: 239)

- (19) Ci deve **ben** pur essere una scorciatoia.
 there must PRT PRT be a shortcut
 ‘there MUST be a shortcut’

(adapted from Coniglio 2008: 123)

Italian *tranquillamente*

Tranquillamente (lit. ‘quietly’) is also an adverb of manner at its origin (cf. Cardinaletti 2011). It comes from the adjective *tranquillo/a* ‘quiet’ in combination with the suffix *-mente*, used to derive adverbs from adjectives in Italian. In the corpus OVI (*Opera del Vocabolario Italiano*), examples of the adverbial use can already be found in the 14th century:

⁹ Data from Old Italian varieties might indicate that *ben(e)* also occurred in other positions than in the I-Layer. Nonetheless, its surface positions could be related to different word order restrictions in these varieties (cf. Schifano/Cognola 2020: 239–243, especially fn. 10) or to further specific functions of this element. This point is left for future research.

- (20) [...] e reggendola ora più **tranquillamente**, [...]

and holding-it now more quietly

‘[...] and holding it now more quietly [...]’

Agostino da Scarperia (?). *Della città di Dio di sant’Agostino*, volgarizzata, cited in OVI: s. v. *tranquillamente*)

- (21) [...] stette in Egitto cenquaranta

stayed in Egypt one.hundred.and.forty

cinqu’anni, **tranquillamente** in prima,

five=years quietly in first

in fino che morirono

in until that died

quelli che conosceano Iosef

those that knew Iosef

‘[...] stayed in Egypt one hundred and forty-five years, quietly at first, until those who knew Iosef died: [...]’

(Agostino da Scarperia (?), *Della città di Dio di sant’Agostino* volgarizzata, cited in OVI: s. v. *tranquillamente*)

According to Cardinaletti (2011), *tranquillamente* has become a MP in present-day Italian. It thus resembles the German MP *ruhig* ‘quietly’ and is typically used in contexts of permission, invitation or just potentiality (especially in imperative or modalized clauses), as in the following example:

- (22) Puoi **tranquillamente** chiamarlo domani.

you.can PRT call-him tomorrow

‘You can call him tomorrow (if you want to).’

3.5 Degree particles

Degree particles are sometimes assumed to be the source of the grammaticalization of MPs. Based on German *nur* and Italian *pure*, it will be argued that such a view poses several problems and that these particles grammaticalized from adverbs, instead.

German *nur*

Coniglio (2022: 27f.) argues that *nur* (lit. ‘only’) grammaticalized from the adverb and not from the degree particle *nur* (as proposed for example by Burkhardt 1994 and Diewald 1997: 97). All the three elements are homophonous and still used in present-day German, as shown by the example below for the adverb, the degree particle and the MP, respectively:

- (23) Ich kann diesen Satz **nur** nicht verstehen.

I can this sentence only not understand

‘I just can’t understand this sentence.’

(24) Ich kann **nur** diesen Satz verstehen.

I can only this sentence understand

‘I can understand only this sentence.’

- (25) Wenn ich **nur** diesen Satz verstehen könnte!
 if I *PRT* this sentence understand could
 ‘If only I could understand this sentence!’

In Coniglio (2022: 27f.), both the degree particle and the MP are claimed to have developed from the adverb, which in turn grammaticalized from OHG *ni wâri* / MHG *ne wære* ‘were it not’. Thus, the idea of a grammaticalization path of the type “adverb > degree particle > MP” should be rejected, also for reasons of semanto-syntactic scope. The degree particle has a narrower scope than the adverb. Thus, assuming a grammaticalization of the MP – which has a typical wider or sentential scope, thus even wider than the original adverb – starting from the degree particle would mean that the narrowing process that has affected the degree particle got reversed.

In the DTA, first potential MP uses are found in the 17th century (cf. Coniglio 2022; also cf. Diewald 1997: 97). Its specific use in optative clauses is possibly even older, as shown by the following example from the 16th century:

- (26) [...] wenn ich **nur** seyn kleyd mocht an ruren [...]
 if I *PRT* his dress could touch
 ‘[...] If only I could touch his clothes [...]

(Septembertestament 1522, cited in DTA, s. v. *nur*)

Italian *pur(e)*

Pur(e) literally means ‘also’ in present-day Italian (cf. Coniglio 2008: 115–118, 2011: 30f.). This particle comes from the Lat. adverb *pūre* ‘purely, in a simple way’ (LZ 1413). This adverb is very early used in Old Italian as an adverb of manner (and possibly also as a conjunction) with the meaning ‘simply, merely, only’ (cf. TRECC, s. v. *pure*), as shown in (27), or as a temporal adverb, meaning ‘constantly, always’, as in (28):

- (27) la tua benignità non **pur** soccorre / a chi domanda
 the your goodness not only help to who asks
 ‘your benignity does not only help those who ask’

(Dante, *Paradiso*, cited in Dantesearch: s. v. *pur*)

- (28) e l’occhio vostro **pur** a terra mira
 and the=eye your constantly to ground stares
 ‘and your eye constantly looks down upon the ground’

(Dante, *Purgatorio*, cited in Dantesearch; s. v. *pur*)

The adverbial usage – arguably the adverb with the manner interpretation – possibly gave rise to the MP function already at an early stage, if examples like (29) can be interpreted as first occurrences of this function. Here, the speaker intends to underline that there is at least some weak evidence for the reported fact:¹⁰

¹⁰ For other possible occurrences of *pure*, cf. Coniglio (2011: 30f.).

- (29) il vidi **pur** ieri costi
 him I.saw *PRT* yesterday there
 ‘I actually saw it yesterday there’
 (Boccaccio, *Decameron*, cited in OVI: s. v.)

3.6 Predicatives

Predicatives – i. e. adjectives (in predicative uses), according to Burkhardt’s (1994) classification – are claimed to be only apparently donor lexemes of MPs in German since, in this language, adjectives can also often be used adverbially without any special morphological marking (cf. Coniglio 2022: 21f.). Thus, a clear distinction between adjectives in predicative positions and adverbs of manner can hardly be drawn for German. Below, this will be illustrated by means of *ruhig* (cf. Coniglio 2022). Given its meaning and function, this is comparable to Italian *tranquillamente*, which instead – given the presence of a morphological marking – clearly takes its origin from an adverb (see 3.4). In fact, no analogous examples of adjectives becoming MPs can be found in Italian, which could be taken as a piece of evidence that adjectives cannot be *per se* donor lexemes of MPs.

German *ruhig*

Ruhig (lit. ‘quietly’) is an adjective, attested from the 15th century, which starts to be used adverbially in the 16th-17th century, according to the data found in the DTA.¹¹ As an adverb, its meaning has been “without any movement, quietly, without worries” since the beginning of its adverbial use:

- (30) [...] so könnet jhr auch ohne Sorge **rühig** leben.
 so can you also without worry quietly live
 ‘so you can live quietly without worry.’
 (Melander 1605, cited in DTA, s. v. *ruhig*)

From the 19th century on, it is also used (unambiguously) as a MP, as in the following example in which the meaning of *ruhig* is not to be paraphrased as the one of the original adverb:

- (31) [...] Laß du **ruhig** meine Thaten auf meinem Haupt: [...]
 leave you *PRT* my deeds on my head
 ‘You can leave my deeds on my head.’
 (Kraus 1884, cited in DTA, s. v. *ruhig*)

3.7 Negation particles?

There is only one lexeme in Italian – belonging to the category of negation particles – which could represent a different type of donor lexeme and will be, therefore, briefly discussed below.

Italian *mica*

Mica – which can be roughly translated with ‘after all’ – comes from Lat. *mīca(m)* ‘crumb’ (LZ 1072), but, as other minimizers, it developed very early to an intensifier of the negation and to

¹¹ Differently from Coniglio (2022: 22), in which the first attestations are dated in the 18th century.

other functions, including that of a full sentential negator in some Northern Italian varieties (cf. Molinelli 1988; Visconti 2007, 2009; Hansen/Visconti 2009).¹²

Mica is often described as a postverbal negation particle (such as French *pas*). However, it seems to show special functions, which make it different from a simple negative marker, negative polarity item or a negation reinforcer (cf. Cinque 1991; Thaler 2016), as illustrated by the following example:

- (32) Non sarete **mica** così scemi da farlo entrare.
 Not you.will.be *PRT* so stupid to make=him enter
 ‘Hopefully, you are not so foolish to let him in.’
 (adapted from Cinque 1991: 311)

In the example above, *mica* is used by the speaker to deny somebody’s expectation (cf. Cinque 1991: 314).¹³

Some early evidence is already reminiscent of certain MP uses of the present-day negation particle:

- (33) Io non venni **mica** in Francia
 I not came *PRT* in France
 per lo mio grado solamente,
 for the my will alone
 anzi ne fui richiestò e
 instead of.it I.was requested and
 pregato da’ Franceschi, [...]
 begged by(.the) French
 ‘After all, I did not come to France because of my will alone, but I was requested and begged by the French, [...].’
 (Corsini, *Fatti de’ Romani*, cited in OVI: s. v. *mica*)

While, in some Romance varieties, similar intensifiers grammaticalized to simple negative markers, Italian *mica* (and some equivalents in Italian varieties) has the function of an emphatic or presuppositional negative marker (cf. Cinque 1991; Zanuttini 1997; Visconti 2007; Ramat 2006; Frana/Rawlins 2019, etc.).

Because of the potential expression of the speaker’s attitude by means of *mica*, some authors tend to consider it as a MP (cf. Coniglio 2008: 118–120; 2011: 31–33; Cognola/Moroni 2022, but cf. Cinque 1999, who considers it an adverb). Its “intersubjective use” (Visconti 2009) seems to underlie this particle, which would thus have arisen either from the early nominal stage or from the later emphatic negative stage.

This would mean that, if *mica* is really a modal particle in Italian, its grammaticalization path can be considered to be unique, but still compatible with the upward reanalysis proposed in Section 4. Nonetheless, it cannot be completely excluded that this particle had an intermediate adverbial stage

¹² Note, in this regard, that there is considerable regional variation in the use of *mica*, which does not exhibit the same properties in all varieties of Italian and whose distribution is mainly restricted to Northern varieties (cf. Zanuttini 1997; Penello/Pescarini 2008; Garzonio/Poletto 2009; Frana/Rawlins 2019).

¹³ Cf. Cinque (1991) and Frana/Rawlins (2019) about some general syntactic and pragmatic properties of *mica*.

with a meaning that could be led back either to that of an adverb of manner or of a temporal adverbial. For example, Visconti (2007: 218) suggests a possible influence of certain adverbial (34) or temporal (35) uses of (*né*) *mica* in the development of this element, as illustrated by the following examples:

(34) [...] dond'elleno sono meno vergognose
 whence=they are less shameful
 e quasi **né mica** vergognose
 and almost nor *PRT* shameful
 '[...] whence they are less shameful and almost not shameful at all.'
 (Egidio Romano volg., cited in Visconti 2007: 218)

(35) Ché [...] l'uomo non giudica, alcuna volta o **né mica**,
 because the=man not judges some time or not *PRT*
 di quelli ch'elli ama od odia
 of those that=he loves or hates
 'Because [...] a man does not judge any time or ever about those that he loves or hates'
 (Egidio Romano volg., cited in Visconti 2007: 218)

3.8 Interim conclusions

If we ignore the special case of *mica*, the data so far indicate that:

- 1) MPs cannot grammaticalize from conjunctions for syntactic and semantic reasons.
- 2) MPs grammaticalize from temporal adverbs, but indirectly, i. e. through a metaphorical process in which the temporal relation expressed by the original adverb is first reanalyzed as a logical relation, before it is reinterpreted as a MP (cf. Abraham 1991a).
- 3) MPs do not derive from sentence adverbs, since they are sentence adverbs themselves and no case of secondary grammaticalization are observable in this word class. Sentence adverbs are thus the results of this grammaticalization process and never donor lexemes of MPs.
- 4) (Genuine) adverbs (especially manner adverbs) are potential donor lexemes of MPs.
- 5) While sharing common origins, MPs and degree particles are not different steps on the same grammaticalization path, but rather represent independent bifurcations starting from the common adverbial counterpart.
- 6) Predicatives – i. e. adjectives used in predicative functions – are not direct donor lexemes of MPs. Their development from adjectives is only an illusion caused by the fact that, in German, adjectives and adverbs are often morphologically indistinguishable.

To summarize, if we ignore the unclear case of the negative particle in Italian, the only two possible grammaticalization paths that lead to the grammaticalization of MPs in German and Italian start from (or pass through) adverb(ial)s of manner or lower temporal adverb(ial)s via a logical-connective stage. This means that, in general, only lower adverb(ial)s are possible donor lexemes of MPs. This proposal, while being basically similar to some other proposals in the literature (cf. Abraham 1991a; Cardinaletti 2011; Diewald 2011; Petrova 2017, etc.) make in fact better predictions, since only these two specific classes of adverbs – and no other word classes – are assumed to be potential donor lexemes of MP. Below, we will discuss how to interpret this idea syntactically.

4 Syntactic account of the grammaticalization process of modal particles

In the following, the effects of the grammaticalization process on the external and internal syntax of MPs, respectively, will be considered. It will be claimed that MPs grammaticalized from adverb(ial)s corresponding to Cinque's (1999) categories of lower adverb(ial)s.¹⁴ In the course of the grammaticalization process, these adverbs got reanalyzed as higher adverbs following economy principles independently argued for in the literature. Furthermore, it will be shown that, in contrast to the other classes of sentence adverbs, MPs became weak in the sense proposed by Coniglio (2005, 2011), Grosz (2005) and Cardinaletti (2007, 2011). A discussion will follow as to how they possibly developed their strong link to the C-domain (as first proposed by Abraham 1991b).

4.1 External syntax: reanalysis to higher adverbs

Let us start with the reanalysis from lower to higher adverbs. Several approaches to the syntactic ordering of adverbials have been proposed in the literature (such as the ones in Alexiadou 1997; Frey/Pittner 1998; Cinque 1999).¹⁵ For example, Frey/Pittner (1998) argue for a syntactic ordering of adverbials in German that is basically determined by c-command relations. In particular, they distinguish the following syntactic classes of adverbials:

(36) **The sequence of adverbials in the middle field**

- (i) Frame and domain adverbials c-command the base position of sentence adverbials (e. g. *from a medical perspective, in the Middle Ages*)
 - (ii) Sentence adverbials c-command the finite verb and the base position of event-related adverbials (e. g. *luckily, probably*)
 - (iii) Event-related adverbials c-command the base position of the highest argument (e. g. *usually*)
 - (iv) Event-internal adverbials are minimally c-commanded by the argument they are related to (e. g. *presumptuously*)
 - (v) Process-related adverbials minimally c-command the verbal complex (e. g. *carefully*)
- (adapted from Frey/Pittner 1998: 501–521, 528)

A different hierarchical approach was proposed by Cinque (1999), who assumes a very articulated universal hierarchy of functional projections hosting adverbs in their specifiers:

(37) **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}

¹⁴ To avoid confusion, it should be pointed out that I am not referring to Cinque's (1999) higher (and lighter) temporal adverbs here, but to lower temporal-aspectual adverbs and to lower adverbials possibly occupying low adverbial shells (as for example postulated in Cinque 2006: 145–166). Thus, for example, the original meaning of *denn* is not 'then', but rather 'afterwards' (see section 3.2).

¹⁵ Also see the interesting recent survey of existing analyses in Möhrstädt (2021).

[*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)}

(adapted from Cinque 1999: 106, 130, based on Coniglio 2011: 105f.)

Nonetheless, Frey/Pittner's (1998) and Cinque's (1999) approaches are comparable since both approaches distinguish different syntactic domains in which adverb(ial)s can be realized. In fact, both views recognize two main clausal layers: 1) a lower one, related to the event and aspect, and 2) a higher one, related to illocution, mood and modality, as represented in Figure 1.

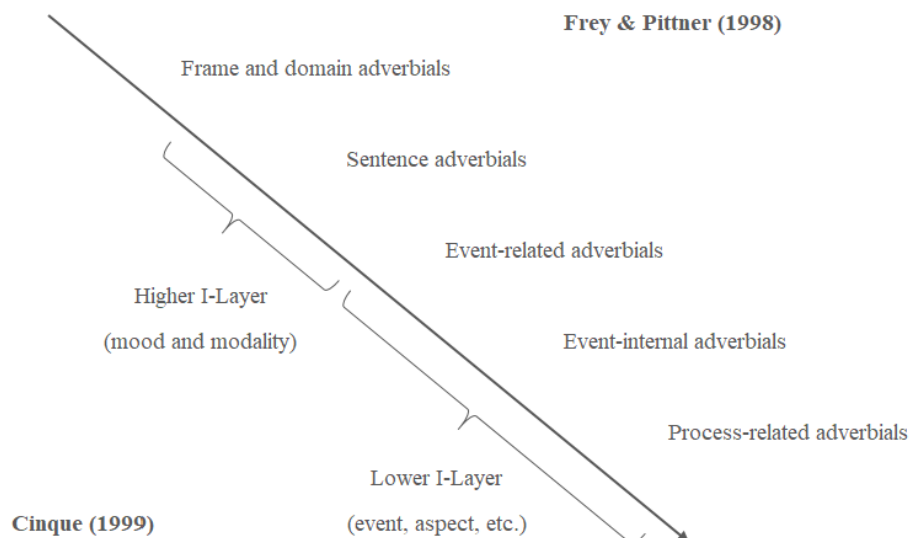


Figure 1: Hierarchical ordering of adverb(ial)s

With respect to the grammaticalization of MPs (and, in general, of sentence adverbs), the idea pursued here follows the one proposed in Roberts/Roussou (2003), who associate syntactic change processes to so-called “syntactic climbing”. According to this view, “[s]ince movement is always local and upward, categorical reanalysis is also local and upward.” (Roberts/Roussou 2003: 71). This means that, in some sense, it is to be expected that the grammaticalization of MPs (and sentence adverbs in general) always occurs “up the tree”, as shown in Figure 2.

- (47) a. Weak sentence adverbs (= MPs):
 $[_{FP} YP F [_{XP} X \dots [\dots t_{YP} \dots]]] > [_{FP} YP F [_{XP} X [\dots]]]$
 e. g. $[_{FP} \textit{eigentlich}_i F \dots [\dots t_i \dots]]$ > $[_{FP} \textit{eigentlich} F \dots [\dots]]$
- b. Strong sentence adverbs:
 $[_{FP} YP F [_{XP} X \dots [\dots t_{YP} \dots]]] > [_{XP} YP X [\dots]]$
 e. g. $[_{FP} \textit{vermutlich}_i F [_{MoodP} Mood \dots [\dots t_i \dots]]] > [_{MoodP} \textit{vermutlich} Mood \dots [\dots]]$
 ... where:
 X = one of Cinque's (1999) (higher) Mood/Mod/T heads
 YP = the element being grammaticalized

It goes without saying that YP must have – semantically – a different interpretation before and after the reanalysis. Crucially, in this view, MPs are free to merge in different (higher) syntactic positions, while a strong sentence adverb will end up in occupying one of Cinque's (1999) projections only if it develops an evaluative, evidential or epistemic meaning, i. e. the reanalysis of YP to a strong sentence adverb is made dependent on its semantic/functional compatibility with one of the classes of adverbs encoded in the functional projections in Cinque's (1999) universal hierarchy. Thus, while sentence adverbs find a fixed syntactic position in the clausal structure, MPs do not seem to get associated with fixed functional projections of the clause (and with the latter's related semanto-pragmatic functions), but rather to be compatible with a range of possible syntactic positions (cf. Coniglio 2005, 2011, etc.).

4.2 Internal syntax: Reanalysis to weak adverbs associated with the left periphery

In contrast to other sentence adverbs, MPs are assumed to have become deficient or weak adverbs in the course of their grammaticalization process (cf. Coniglio 2005, 2011, 2022; Grosz 2005; and Cardinaletti 2007, 2011). Below, it will be argued that their weakness and thus their reduced internal structure is associated with specific features that link them to the illocutionary force of the utterance (and thus syntactically to the left periphery of the clause as proposed for example by Abraham 1991b, Coniglio 2011, Bayer 2012, Coniglio/Zegrean 2012, etc.).

Let us first consider the status of MPs as weak (sentence) adverbs. By extending Cardinaletti/Starke's (1999) proposal of a tripartition of pronoun to adverbs, Cardinaletti (2007, 2011) argues that MPs are weak (or clitic) sentence adverbs, while traditional sentence adverbs and other adverbs can be considered to be strong (also cf. Coniglio 2005, 2011; and Grosz 2005). Only the latter can be modified, coordinated, fronted to the prefield, etc., as seen in Section 1. In contrast, MPs appear to be deficient elements (cf. Cardinaletti 2007). In particular, in the course of the grammaticalization process, they lost the possibility to get accented (as a general tendency, but with specific exceptions) and of being modified (so that combinations such as *so nur*, lit. 'so only', or *gar eigentlich*, lit. 'completely properly', became ungrammatical); they lost their syntactic flexibility, i. e. they cannot be fronted to the prefield, but they remain in fixed specialized positions in the I-domain (cf. Coniglio 2005 and subsequent works); furthermore, they no longer contribute to the propositional content of the utterance, but express the speaker's attitude to it; etc.

Not only can we interpret the properties of MPs by arguing for a different external syntax with respect to strong adverbs, but Cardinaletti (2007: 97) also proposes to assume a different internal syntax for MPs, which in fact are characterized as being deficient and not able to project

full-fledged structures as other adverbs do (also cf. Cardinaletti 2011), as exemplified below for the MP *mal* ‘just, simply’:

(48) [AdvP [Adv° *mal*]]

(adapted from Cardinaletti 2007: 79)

Now, the question arises as to whether we can reconcile the “weakened” syntactic status of MPs with the fact that they developed the peculiar function of encoding the speaker’s attitude to the utterance and thus of modifying its illocutionary force (cf. Jacobs 1986; Thurmair 1989).

Several approaches have developed a licensing mechanism that accounts for the syntactic link between MPs and the left periphery of the sentence, namely in the form of a covert movement at LF or of an Agree operation (cf. Abraham 1991b; Coniglio 2011; Bayer 2012, etc.). A more sophisticated licensing mechanism is proposed in Coniglio/Zegrean (2012), based on the fact that MPs not only display a link to the illocutionary force of the utterance, but also to clause type, which is in fact crucial for their syntactic licensing, as will be shown below.

As argued in Coniglio/Zegrean (2012) and Coniglio (2014), based on Thurmair (1989, 1993), MPs seem to “ignore” the illocutionary force of an utterance they modify, but rather only “see” the clause type. This explains why, in the following examples, the particle *bloß* ‘just, merely’, which is typical for imperative clauses, can be licensed in an ordinary imperative clause (49), but not in an indirect speech act, such as a declarative clause with directive force (50):

(49) Mach *bloß* das Fenster zu!
make *PRT* the window close
‘Close the window!’

clause type:	imperative
illocutionary force:	directive

(50) * Du machst *bloß* das Fenster zu(!)
you make *PRT* the window close
‘You close the window!’

clause type:	* declarative
illocutionary force:	directive

Even though MPs do not appear to be sensitive to the type of illocutionary force of the utterance, it still remains to explain how they are able to modify the illocutionary force from a syntactic perspective. As argued in Coniglio/Zegrean (2012: 233), based on Jacobs (1986), MPs can be assumed to take on the illocutionary force of an utterance and to add a specific nuance to it, as illustrated below, in which the directive force of the sentence of the previous example is slightly modified by a different MP in another way in each case (cf. Jacobs 1986, 1991; Thurmair 1989; Abraham 1991b; Coniglio 2011):

- (51) a. Mach *mal* die Tür auf! suggestion
 b. Mach *halt* die Tür auf! suggestion with resignation
 c. Mach *doch* die Tür auf! suggestion with correction
 d. Mach *JA* die Tür auf! cogent order
 e. Mach *bloß/nur* die Tür auf! cogent order/menace
- (52) a. ILL [*u*type] [] / [*i*intent] []
 > CT [*i*type] []
 > *Prt* [*u*type] [val] / [*u*intent][val]
 AGREE →
 b. ILL [*#*type] [val] / [*i*intent] [val] ← intentionality valued
 > CT [*i*type] [val] ← clause type valued
 > *Prt* [*#*type] [val] / [*#*intent][val]
 (adapted from Coniglio/Zegrean 2012: 248f.)

By way of adopting an Agree mechanism as in Pesetsky/Torrego (2007), MPs are here assumed to possess uninterpretable, but valued features for the clause type [*u*type] and for intentionality, i. e. for the speaker's intention when uttering a sentence [*u*intent]. These values are transmitted to the higher projections ILL and CT via Agree. CT contains an interpretable [*i*type]-feature that needs to get a value via other properties present in the sentence, especially word order, but also from MPs. The same holds true for the interpretable feature [*i*intent] present in ILL, which needs to be valued by means of MPs or other elements affecting the illocutionary force of the utterance.²⁰

Now, if we compare the peculiar feature specifications of MPs to the feature specifications of other adverbs in this framework, we would get the situation represented in Table 4, in which different types of features are assumed for the different classes of adverbs.

			clause types	illocutionary types	feature specification	
					clause type	intentionality
higher	weak (clitic)	Modal particles	(each MP) in specific clause types (including non-declaratives)	in various illocutionary types (compatible with the declarative type)	[<i>u</i> type]	[<i>u</i> intent]
	strong	(Strong) sentence adverbs	mostly in declaratives	in various illocutionary types (compatible with the declarative type)	[<i>u</i> type: decl]	∅
lower			Lower adverbs	in all clause types	in all illocutionary types	∅

Table 4: Adverbial feature specification

²⁰ Furthermore, the uninterpretable feature [*u*type] in ILL needs to enter an Agree relation with the corresponding interpretable feature [*i*type] in CT.

Lower adverbs are typically licensed in all clause types, independently of the illocutionary types. Hence, they do not seem to be either specified for the clause type or for intentionality, as illustrated by German *schnell* ‘fast’:

- (53) *schnell*
[Ø]

Considering higher adverbs, the situation gets more complex. Strong sentence adverbs are characterized by typically (but not exclusively) occurring in declarative clauses. They are probably compatible with all illocutionary types, but these types must necessarily be compatible with the declarative clause type. Basically, this mostly restricts the illocutionary types in which they can occur to assertions. Therefore, German *wahrscheinlich* ‘probably’ has for example the following feature specification:

- (54) *wahrscheinlich*
[u_{type}: declarative]

MPs have been shown to be dependent on the clause type of the sentence in which they occur, but each of them can occur in one or more different types of clauses. For instance, German *denn* (lit. ‘then’) can occur both in *yes/no* and *wh*-interrogative clauses. They can in fact also occur in different illocutionary types modulo the compatibility of illocutionary and clause type. Another and more important difference with respect to strong sentence adverbs is a further property that MPs seem to possess, i. e. one related to the modification of the illocutionary force, namely an uninterpretable feature [u_{intent}], as illustrated here:

- (55) *denn*
[u_{type}: interrogative]
[u_{intent}: interest]

If this view is correct, the major difference between strong and weak adverbs is twofold:

- 1) Each MP grammaticalized in special clause types, which are very often different from that of strong sentence adverbs, and in fact mostly non-declarative clauses. For example, the sentence adverb *vielleicht* ‘maybe’ is mainly used in declarative (but also in interrogative clauses), while *vielleicht* in exclamative clauses mostly gets a MP interpretation. Furthermore, we should consider the existence of doublets of homophonous particles specialized for different clause types, e. g. the unaccented particle *ja* occurs in declarative clauses, while the accented particle *JA* mainly occurs in imperative clauses.
- 2) MPs further developed a feature related to what is called “intentionality”, i. e. the speaker’s specific intention when uttering a sentence. This feature is specific to the class of MPs (and possibly to other illocution-modifying elements), probably since they lost their semantic content in favor of pragmatic functions.

These two differences are probably also the reason why there are no cases of secondary grammaticalization from strong sentence adverbs to weak sentence adverbs. In a sense, their feature specification has gone two different paths, in particular with respect to the clause types in which they can occur.

5 Conclusions

In this paper, it was argued that both German and Italian MPs grammaticalized from lower strong adverb(ial)s. Thus, it was shown that 1) they have been reanalyzed as higher adverbs, i. e. as sentence adverbs and that 2) they have become deficient, i. e. weak adverbs. A theoretical analysis was provided in which these elements climb up the syntactic tree diachronically, thus occupying higher syntactic projections than the corresponding donor lexemes. Furthermore, their deficient status was shown to be typical of weak elements and to be linked to the left periphery of the sentence, in which the clause type and the illocutionary force of the utterance are encoded syntactically. It was shown that MPs are licensed by the clause type, but that they nonetheless modify the illocutionary force, due to the special feature specifications which they developed in the course of their grammaticalization process.

This paper represents a first tentative work on the grammaticalization of MPs from a comparative perspective, which allowed us to extend the results of the studies on German particles to the less investigated Italian cases. Especially in the field of Italian linguistics (and of Romance linguistics, in general), more should be done in this respect, not only diachronically, as in this paper, but also synchronically, considering for example different regional varieties and specific developments in each linguistic area. These aspects have to be left for future research on this topic.

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