Abstract

This article deals with the combination of modal particles in German. In the first part the combinatorial regularities for modal particles are shown and three general rules are formulated. First, only those modal particles can be combined that are acceptable in the same sentence types; second, modal particles must be compatible with regard to their meaning; third, combined modal particles occur in a fixed linear order. With these rules general methodological procedures can be evaluated. The second part shows how these procedures can be applied systematically to other phenomena in the research of (modal) particles and sentence types.

Introduction

In the present article I shall deal with an area of modal particle research which has hitherto been largely neglected, viz. the combinatorial possibilities of modal particles. By the term 'modal particle combination' I mean the appearance of two or more particles in a modal particle function in one sentence or clause. In general we are dealing here with combinations of two particles, but combinations of three and four (cf. the title of this article) are also possible.

In the first section I shall deal with the system of regularities by which particle combinations are constrained. When these regularities have been researched, they can then serve as a touchstone for other kinds of regularity, which I shall deal with in the second section.
1. Regularities of particle combination

The modal particles forming the basis of this analysis are the ‘classical’ sixteen: *aber, auch, bloß, denn, doch, ebens, eigentlich, etwa, halt, ja, mal, nur, ruhig, schon, vielleicht, wohl.*

My initial thesis is that a combination of two modal particles leads to their semantic features being added together. Thus a modal particle combination is always the sum yielded by the two individual parts. First we must ask what laws permit the combination.

1.1 Sentence mood dependent distribution

The precondition for an additive combination of meanings is that the modal particles to be combined are ‘compatible in terms of sentence mood (or sentence types)’. This means that a modal particle A, which may only appear with sentence mood Z, and a modal particle B, which may only appear with sentence mood Y(Z≠Y), should not be combinable, and that a modal particle A, which appears in sentence mood X and Y, may co-occur with a modal particle B, which appears in sentence moods Y and Z, only in sentence mood Y, that is, in the intersection.

This rule is valid in practically every case, that is, combinations are only possible in those sentence types in which each particle can also appear alone. Following Altmann (1987) I assume the following seven basic types (or sentence moods):\(^1\) declarative sentences (DEC), polar interrogative sentences (POL), WH-interrogative sentences (WH), imperative sentences (IMP), optative sentences (OPT) (for example, *Hätte ich doch mehr Ruhe!* ‘If only I had a little more peace!’), exclamatory sentences (EX) (for example, *Hast du ein schönes Fahrrad!* ‘Have you got a beautiful bike!’), WH-exclamatory sentences (WHEX) (for example, *Wie laut ist es hier!* ‘How noisy it is here!’).

I shall first present a few examples of combinations which should not be possible and in fact are not possible, because the modal particles do not display the same distribution:

- \(\text{aber (EX)} + \text{denn (POL/WH)}\)
- \(\text{bloß (WH/IMP/OPT)} + \text{etwa (POL)}\)
- \(\text{denn (POL/WH)} + \text{eben (DEC/IMP)}\)
- \(\text{denn (POL/WH)} + \text{ja (DEC/IMP)}\)
- \(\text{doch (DEC/WH/IMP/OPT/WHEX)} + \text{etwa (POL)}\)
- \(\text{eben (DEC/IMP)} + \text{etwa (POL)}\)
- \(\text{etwa (POL)} + \text{halt (DEC/IMP)}\)
On the other hand, the following combinations should be possible on the basis of their sentence mood compatibility:

\[
\begin{align*}
denn & \text{(POL/WH)} + \text{eigentlich (POL/WH)} \rightarrow \text{denn eigentlich (POL/WH)} \\
doch & \text{(DEC/WH/IMP/OPT/WHEX)} + \text{bloß (WH/IMP/OPT)} \rightarrow \text{doch bloß (WH/IMP/OPT)} \\
denn & \text{(POL/WH)} + \text{auch (DEC/POL/WH/IMP/WHEX)} \rightarrow \text{denn auch (POL/WH)} \\
doch & \text{(DEC/WH/IMP/OPT/WHEX)} + \text{mal (DEC/POL/IMP)} \rightarrow \text{doch mal (DEC/IMP)} \\
etwa & \text{(POL)} + \text{auch (DEC/POL/WH/IMP/WHEX)} \rightarrow \text{etwa auch (POL)}
\end{align*}
\]

With the sixteen modal particles examined in the present article 120 combinations of two should be mathematically possible; of these roughly a third are not possible on distributional grounds. Rule 1 summarizes the regularities:

**Rule 1:** A modal particle A is compatible with a modal particle B if and only if A appears in at least one sentence mood alone in which B also appears alone.

A few possible exceptions to Rule 1 can be given, these being cases in which a particular modal particle in a combination seems to appear with a sentence mood in which it may not appear alone.

a) The combination *aber auch*

The combination *aber auch* occurs in WH-exclamatory sentences:

(1) *Was machst du aber auch für Sachen!*  
‘What sort of things are you *aber auch* doing!’

On its own *auch* is certainly possible in WH-exclamatory sentences (*Was sind wir auch für blöde Kerle!* ‘What stupid fellows we *auch* are!’); *aber*, on the other hand, can no longer be used in this way today, although in earlier stages of the language it could also occur in WH-exclamatory sentences. In this case the combination *aber auch* has presumably ousted the use of *aber* on its own; if we take this historical dimension into account, the combination *aber auch* is not an exception to Rule 1.

b) *Denn* in combinations with certain modal particles

In declarative sentences *denn* may also co-occur with modal particles like *doch, auch* or *wohl*:
(2a) Das geht denn doch ein bißchen zu weit.
   'That's going denn doch a little too far.'
(2b) So einfach ist die Sache denn doch nicht.
   'The matter is denn doch not so simple.'
(3) Sie blieb denn auch nicht lange im Pensionat.
   'She didn't denn auch stay long at the boarding school.'
(4) Das ist denn wohl der Höhepunkt der Misere.
   'That's denn wohl the height of the calamity.'

In my opinion we are not dealing with denn in a modal particle function here, but with a variant of the temporal adverb dann. In certain varieties of German this type of denn is also possible on its own:

(5a) Die hatten ein Zimmer freigemacht. Das war denn unser.
   'They'd vacated a room. That was denn ours.'
(5b) Und späterhin wurde das denn von der Stadt vermietet.
   'And later it was let denn by the town.'
(5c) Und die dritte jetzt, Rita, die hab ich denn zur Schule geschickt.
   (Bottrooper Protokolle: 76 {5a, b}, 27 {5c})
   'And the third, Rita, I sent her denn to school.'

In the standard language dann always occurs in cases like (5).
In uses like (2), (3) and (4) we might consider denn to be a variant of the temporal adverb: it can also be substituted by dann. In Southern German dann is used in all cases anyway.3 In addition this denn, in contrast to the modal particle denn, cannot occur as a clitic. Hence the attested occurrences of denn in declarative sentences do not form a modal particle combination in the sense defined above and are thus not an exception to Rule 1.

c) The combination doch nicht etwa

From the point of view of sentence mood doch and etwa are not really compatible, either. However, in certain declarative sentences it is possible to combine them – but only when also combined with nicht:

(6) Du hast doch nicht etwa das ganze Geld verspielt?
   'You haven't (n't = nicht) doch etwa gambled away all the money?'

There is in fact a somewhat marginal and not generally acceptable use of etwa, in which it occurs in combination with nicht and verbs of thinking and feeling in imperative sentences and in declarative sentences with the modal verb sollen:
Combinatorial regularities for modal particles

(7) Glaub **nicht etwa**, daß ich dir das verzeihe!
‘Just don’t (just + n’t = **nicht etwa**) think that I’m going to forgive you for that!’

(8) *Der soll nicht etwa* denken, daß ich ihm nachlause.
‘He just needn’t think I’m going to run after him.’

The combination *doch nicht etwa*, however, cannot be explained in conjunction with this marginal occurrence of *etwa*, as it is in no way subject to these restrictions. For this reason the occurrence of *etwa* in the combination *doch nicht etwa* cannot be derived from uses like (7) and (8).

*Doch nicht etwa* and *doch wohl nicht etwa* occur in utterances that have the form of declarative sentences (verb second, falling intonation possible), but are to be interpreted as questions, as in the following examples:

(9) *Der meint das doch nicht etwa im Ernst?*
‘Surely he doesn’t **doch etwa** mean that seriously?’

(10) *Du hast doch wohl nicht etwa den BMW zu Schrott gefahren?*
‘Surely you can’t **doch wohl etwa** have smashed up the BMW?’

This combination is revealing in that *etwa* can only occur in sentences that have the structure of declaratives (that is, verb second) if the sentence is modified by other means – viz. by *doch* and/or rising intonation and the content of the utterance – such that it can only be interpreted as a question. The occurrence of *etwa* in this type of declarative sentence with a question interpretation is thus one of the few indications that support the thesis that the occurrence of a modal particle is not determined by the form of an utterance but by its functional or illocutionary type.

At all events the combination *doch (wohl) nicht etwa* presents a genuine exception to Rule 1 with respect to sentence mood compatibility in modal particle combinations.  

1.2 The meaning of modal particles and modal particle combinations

If we now exclude combinations that are not acceptable for reasons of sentence mood distribution (that is, roughly one third of the total), about 80 combinations of two particles still remain (of the modal particles examined here). Within this group a surprisingly large number of combinations occur relatively frequently in my corpus.

The corpus on which the research is based encompasses around 2,000 occurrences of modal particle combinations from various text types – oral and written. Alongside those that occur in the corpus a group of combinations still remains that are distributionally possible but occur only once or not at
all. Since non-occurrence may either mean that a combination is unacceptable or that it occurs very rarely indeed, a test was conducted where sentences with modal particle combinations which were embedded in suitable texts had to be classified as ‘acceptable’, ‘marginally acceptable’ or ‘unacceptable’. Forty subjects each were asked in two runs of the test. The examples in the test were chosen in such a way as to allow in principle each of the modal particles alone in the utterance concerned: the unacceptability of the utterances is then definitely attributable to the combination, in fact more precisely to semantic problems, since sentence mood compatibility is maintained.

The results of the test yielded relatively clear evaluations in many cases with respect to both acceptability and non-acceptability. The acceptability of the remaining combinations is still questionable.

The following examples show acceptable and usual combinations:

(11a) Du kennst doch Fredi, der ist ja auch ziemlich schüchtern.
    ‘Surely you know Fred, he’s ja auch rather shy.’

(11b) Machen Sie doch mal die Hinterhand auf!
    ‘Open up doch mal the last hand.’

(11c) Wer hat denn damals schon ein eigenes Auto fahren können?
    ‘Who could drive his own car denn schon in those days?’

(11d) Was ist denn bloß los mit dir?
    ‘What’s denn bloß the matter with you?’

(11e) Hätte ich doch bloß den Herz-Zehner behalten!
    ‘If only (= doch bloß) I’d kept the ten of hearts!’

The following combinations (out of well over 30 that were examined) are clearly unacceptable:

(12a) *Wie hieß doch eigentlich seine erste Frau?
    ‘What was doch eigentlich his first wife’s name?’

(12b) *Sie ist ja halt seit zwei Monaten arbeitslos.
    ‘She’s been out of work ja halt for two months.’

(12c) *Ist Max eigentlich wohl schon da?
    ‘Is Max eigentlich wohl already here?’

(12d) *Dann steh doch eben früher auf!
    ‘Then get up doch eben earlier!’

(12e) *Geh eben bloß weg!
    ‘Go eben bloß away!’

(12f) Geh bloß ruhig rein!
    ‘Go bloß ruhig in!’

(12g) *Hast du etwa auch deine Schuhe geputzt?
    ‘Have you etwa auch cleaned your shoes?’
Examples (12f) and (12g) show that an unacceptable occurrence as a modal particle combination of two expressions may be perfectly possible when one of the two expressions does not appear in a modal particle function. Thus (12f) is obviously possible whenever ruhig is an adverbial adjective ('quietly')(cf. 12f' below), and (12g) is possible whenever auch ('also' or 'as well') is understood as a focus particle (cf. 12g' below):

(12f) 'Geh bloß ruhig rein, sonst weckst du das Baby auf!
'Make sure you go in bloß quietly or you'll wake up the baby!'
(12g) Hast du etwa auch deine Schuhe geputzt (und nicht nur die Hemden gebügelt)?
'Have you really cleaned your shoes etwa as well (and not just ironed your shirts)?'

The following examples show combinations with questionable acceptability:

(13a) ? Findest du das etwa vielleicht schön?
'Do you find that etwa vielleicht beautiful?'
(13b) ? Bring doch JA das Geld mit!
'Bring the money doch JA with you!'
(13c) *? Jetzt geh schon ruhig/ruhig schon rein!
'Now go schon ruhig/ruhig schon in!'
(13d) *? Könnt ich nur bloß Klavier spielen!
'If nur bloß I could play the piano!'

How can we now explain the fact that some combinations are possible given distributional compatibility while others are not? Starting with the above mentioned thesis that a modal particle combination is the sum of two meanings, it is clear that a combination is only possible if these two meanings are 'compatible'.

Rule 2: A combination of modal particle A with modal particle B is only possible if the meaning of A is compatible with the meaning of B.5

However, it also follows that for all modal particle combinations, whether acceptable or not, one must be able to explain on the basis of the meaning assigned to a particle why the combinations are possible or not.

1.2.1 Acceptable combinations
The following is an example of an acceptable combination and its meaning: ja auch:

(14) A Mensch, die kann vielleicht gut singen!
'Wow! Can she sing well!'
B Ja, die nimmt ja auch Gesangsstunden.
‘Yes, she takes ja auch singing lessons.’

As an addition of meanings, the combination can be explained as follows: With ja the speaker indicates that, as far as s/he is concerned, the content of her/his utterance is known to the hearer; at the same time the utterance is thereby confirmed (cf. Weydt 1969: 36–37; Bublitz 1978: 97; Franck 1980: 232 or Hentschel 1986: 163). Through the use of auch (in declarative sentences) the speaker sets up a qualified relationship to the immediately preceding utterance by indicating that the content represented in that was expected by her/him; in the utterance containing auch itself the speaker gives a reason or an explanation for it (cf. above all Franck 1980: 210–211; in a similar vein König and Requardt 1991). The combination ja auch is the exact sum of the two meanings: the speaker indicates that the previous turn was expected and gives a reason for it (= auch), and also marks this reason as known to the hearer (= ja).

Below are a few more examples which show the meaning of the combination compared to the use of the individual particles:

\begin{enumerate}
\item Mach mal das Fenster auf!
\item Mach doch mal das Fenster auf!
\item ‘Open mal/doch mal/doch the window!’
\end{enumerate}

\begin{enumerate}
\item A Also heute waren die Kinder wirklich fürchterlich.
\item B1 Das war auch zuviel für sie.
\item B2 Das war ja auch zuviel für sie.
\item B3 Das war doch auch zuviel für sie.
\item B4 Das war eben auch zuviel für sie.
\item B5 Das war halt auch zuviel für sie.
\item ‘That was auch/ja auch/doch auch/eben auch/halt auch too much for them.’
\end{enumerate}

1.2.2 Unacceptable combinations

The following two examples display unacceptable combinations:

a) The combination of auch with etwa: both occur in polar questions; however, they can be distinguished by different expectations which they signal with respect to the answer. Whereas the speaker expects or wishes the proposition to be validated (and thereby agreed to) by the use of auch, s/he expects a negative answer to a question containing etwa, or, more precisely, s/he hopes to receive such an answer (cf. here König 1977; Franck 1979). On the basis of these differing expectations concerning the answer or the tendency
expressed with these questions, the two modal particles may not be combined:

(17) Ist das Kleid etwa durchsichtig? (preferred answer: ‘no’)
   ‘Is the dress etwa transparent?’

Ist das Kleid auch durchsichtig? (preferred answer: ‘yes’)
   ‘Is the dress auch transparent?’

*Ist das Kleid etwa _MP auch_ _MP durchsichtig?*
   ‘Is the dress etwa auch transparent?’

b) The second example, the combination of ruhig and bloß (cf. {12f}) is taken from the domain of imperative sentences. The permissive, and thus encouraging, meaning of ruhig is not compatible with the threatening, or warning, meaning of bloß. In principle, this is just as valid for demands with nur as well; in affirmative demands, however, in which nur can be clearly distinguished from bloß, it is possible to combine nur with ruhig (cf. the title of this article).

1.2.3 Results

An examination of all possible combinations has shown that the possible and impossible combinations can be explained with one unified description of the modal particles – in fact they can be explained as a simple addition of two meanings (cf. in more detail here Thurmair 1989: chapter 3).

In analyzing the combinations, it has also been shown that synonymous modal particles can only be combined with difficulty.⁸ Above all, this concerns aber and vielleicht in exclamatory sentences, and nur and bloß, and in part also etwa and vielleicht, in polar questions:

(18a) *Sie haben aber vielleicht einen Husten!*
   ‘You’ve got aber vielleicht a cough!’

(18b) *Bring nur bloß nicht die Daten durcheinander!*
   ‘Don’t nur bloß mix up all the data!’

(18c) ? Findest du das etwa vielleicht schön?
   ‘Do you find that etwa vielleicht beautiful?’

In addition, it also became clear that some modal particles are more combinatorily open than others: on the one hand, this quite obviously depends on their distribution: the more frequently a modal particle can occur in different sentence types, the more combinations it may potentially enter. On the other hand, however, combinatorial openness depends on the meaning of the individual particles. Most combinations are possible with denn, which is semantically acceptable in all distributionally possible combinatorial occurrences; it is followed by ja, doch and auch.
From time to time combinations with three or more modal particles may be found. Naturally, the same constraints hold here as above: all modal particles must be syntactically and semantically compatible with one another, as can be seen from the following two examples:

Each of the combinations denn schon, denn auch and auch schon is acceptable and in general use. A combination of three particles is thus possible, for example:

(19) Ein kleines Mädchen plärrt da hemmungslos seinen Schmerz in die Umwelt. Aber die Mammi ist ja dabei, und so braucht man sich nicht weiter darum zu kümmern. Was wird's denn auch schon groß sein?
‘A little girl howls out her pain. But Mummy’s there, and so we don’t have to worry about it any more. What’s this denn auch schon all about?’

The combinations doch ruhig, doch mal, nur ruhig, nur mal and ruhig mal are also possible, so the following groups of three or four can be formed from all these modal particles:

(20) Komm doch ruhig mal vorbei!
(21) Komm doch nur mal vorbei!
(22) Komm doch nur ruhig mal vorbei!
‘Call doch ruhig mal/doch nur mal/doch nur ruhig mal by!’

On the other hand, a combination like the one in (22) with bloß instead of nur is not possible (cf. (22a)); bloß can certainly co-occur with doch, but not with mal or ruhig, so that a group of four formed from these modal particles is not acceptable:

(22a) *Komm doch bloß ruhig mal vorbei!
‘Call doch bloß ruhig mal by!’

There are two reasons why these multiple combinations are by no means so frequent. On the one hand, because of the constraints of distributional and semantic compatibility the group of combinations which might be thought of is naturally rather small; on the other hand, it is quite possible that rhythmic constraints play a role: the number of unstressed syllables might be too high.

1.3 Serialization in modal particle combinations

The acceptable and frequent combinations are subject to somewhat strict sequential rules.
Rule 3: The sequence of modal particles in combination is strictly regulated.

1.3.1 Selected rules
A few of these rules are as follows:

a) (Unaccentuated) ja and denn always occur before all other modal particles:

(23a) Du könntest *ja ruhig die Sachen wegräumen.
‘You might *ja ruhig clear up the things.’
(23b) Die könnten *ja wohl auch morgen losfahren.
‘They could leave *ja wohl auch tomorrow.’

(24a) Wer macht denn nur so einen Lärm?
‘Who on earth is making denn nur such a noise?’
(24b) Was ist das denn eigentlich nur für ein Mensch!
‘What kind of a person is that denn eigentlich nur!’

(24c) Was wird’s denn auch schon groß sein?
‘What’s this denn auch schon all about?

b) Etwa or mal always stand at the end of a sequence:

(25a) War der denn etwa ein Engel in Kriegszeiten?
‘Was he denn etwa an angel during the war?’
(25b) Du willst doch wohl nicht etwa andeuten, daß ich dich
bestohlen hätte?
‘You don’t (= nicht) doch wohl etwa mean to suggest that I’ve
robbed you?’

(26a) Du könntest ja ruhig mal etwas freundlicher sein.
‘You might be ja ruhig mal a bit more friendly.’
(26b) Besuchen Sie mich doch ruhig mal zu Hause!
‘Come and visit me doch ruhig mal at home!’
(26c) Da hättest du ja doch wohl mal kurz vorbeischauen können!
‘Then you could have ja doch wohl mal popped by!’

The following examples show that these word order rules are obligatory:

(27a) Du könntest *ruhig ja die Sachen wegräumen.
‘You might *ruhig ja clear up the things.’
(27b) Die könnten *wohl ja auch/*wohl auch ja ihr Auto richten.
‘They could *wohl ja auch/*wohl auch ja shift their car.’
(27c) Was soll das *nur denn?
‘What’s the meaning of this *nur denn?’
(27d) Was bringt Ihnen das *schon denn?
‘What good will that do you *schon denn?’
In almost all the examples, the modal particles have followed one another immediately in the combination; however, there are also ‘open combinations’, that is, those in which other expressions appear between the modal particles that make up the combination. Here, too, the word order rules are in force:

(28a)  Wo hat denn die Frau eigentlich das Geld geklaut? →
   *Wo hat eigentlich die Frau denn das Geld geklaut?
   ‘Where did that woman denn eigentlich/ *eigentlich denn pinch the money?’

(28b)  Ruf doch den Versicherungsmenschen mal an! →
   *Ruf mal den Versicherungsmenschen doch an!
   ‘Ring up doch mal/ *mal doch the insurance fellow!’

1.3.2 Explaining the facts

What rules of a more general nature constrain the serialization of modal particles? Two quite different types of explanation can be presented here.

A: An explanation that takes as its point of departure above all the function (or, alternatively, meaning) of the modal particles in question.

To begin with I shall present five statements, which might at first sight appear to be somewhat divergent:

1. The particle with the ‘most non-specific’ meaning occurs in first place in the combination. This explains the word order of ja and denn.

2. The modal particles whose meanings refer to the ongoing utterance occur before those which set up a qualified relation to the preceding turn. For this reason, ja, doch, halt, eben and wohl appear before schon and auch.

3. Those modal particles through which the illocutionary type of the utterance is clearly determined occur in final position in a combination: this concerns the word order behavior of mal, ruhig, accentuated JA, as well as schon and auch (in WH).

This observation can be made more precise: the more specifically a modal particle determines the illocutionary type, the further towards the end of the combination it occurs. This then accounts for the word order behavior of denn, too. Although denn, which always occurs in first place, clearly signals an interrogative act (cf. Thurmair 1991), more specific modal particles like eigentlich, auch or schon can occur in such utterances determining a specific question type and thus specifying more exactly the question type determined by denn.
4. Those modal particles whose function lies in weakening or strengthening the illocution always occur in final position in a combination. This explains why the weakening *mal* and the strengthening *nur, bloß* and (accentuated) *JA* always occur in final position.

5. Those modal particles by which the coparticipant in the interaction is particularly influenced in one way or another in her/his linguistic or non-linguistic actions occur in final position.

'Influencing' the communicative partner may, for example, refer in questions to the speaker expecting a particular answer from the hearer. This hypothesis is supported, for example, by the word order behavior of *etwa* and *schon*.

These five points can be summarized in the following way to give a more global and generalized picture: the more specific a particle is, the further to the right it will stand in a particle combination. This general rule also shows that the second or last particle in a combination appears to be the more important.

B: A completely different explanation of word order behavior runs as follows: the sequential rules for modal particle combinations refer to the following groups of modal particles:

<table>
<thead>
<tr>
<th>ja</th>
<th>wohl</th>
<th>auch</th>
<th>einfach</th>
</tr>
</thead>
<tbody>
<tr>
<td>denn</td>
<td>halt</td>
<td>eigentlich</td>
<td>nur</td>
</tr>
<tr>
<td>doch</td>
<td>eben</td>
<td>vielleicht</td>
<td>bloß</td>
</tr>
<tr>
<td>aber</td>
<td>etwa</td>
<td>mal</td>
<td></td>
</tr>
</tbody>
</table>

The problem in dividing things into groups in this way, however, is (and this applies equally to the suggestions made in footnote 14) that sequences of elements from one and the same group are not accounted for.

I consider this grouping interesting, even if it is speculative, because it suggests that in the word order behavior of modal particles in the combinations we can see which other grammatical function the particle can fulfil. Put simply, this means that particles that are also conjunctions (*aber, denn, doch*) or discourse particles (*ja, doch, eben*) always occur right at the beginning of a combination, while particles that are also adverbs (*einfach, schon, mal*) are at the end, and those that are focus particles as well (*auch, nur, bloß*) are relatively near the end. Modal particles that are also sentence adverbs (*wohl, eigentlich, vielleicht*) are situated roughly in the middle.
1.4 Summary

Summarizing the investigation, Table 1 on p. 33 makes it clear which modal particle combinations there are (I have only listed those that really occur frequently), the sentence moods over which they are distributed and how serialization is regulated in the combinations.

2. Combinatorial regularities as an instrument of analysis

How can the results obtained from the preceding section of this paper be applied methodologically?

2.1 The identification of sentence mood

Since, with the one (obvious) exception *doch nicht etwa*, combinations only occur in sentence moods with which the individual particles are compatible, the combinatorial potential of modal particles, considered from the opposite point of view, can also be used as a criterion according to which sentence moods can be identified. An example will illustrate this point; we are concerned with the classification of certain structures containing a WH-expression which may be WH-questions, rhetorical questions, or WH-exclamations. The borderline between the latter two categories is particularly problematic.

WH-utterances with *nur/bloß* are either WH-questions or WH-exclamations, but not rhetorical questions, as has often been assumed in the literature (cf. for example, Becker 1976: 10; Berg 1978: 78–80; Bublitz 1978: 69; or Meibauer 1986: 124). The following two sentences exemplify this point:

(29) *Wo hast du das nur gelernt?* (WH-question)

‘Where did you *nur* learn that?’

(30) *Was hat er nur für einen schönen Kopf?* (WH-exclamation)

‘What a beautiful head he *nur* has!’

The modal particle *auch*, on the other hand, occurs in rhetorical WH-questions and WH-exclamations, the modal particle *schon* only in rhetorical WH-questions. The modal particles thus display the following distribution:

<table>
<thead>
<tr>
<th></th>
<th>WH-questions</th>
<th>rhet. WH-questions</th>
<th>WH-exclamations</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>bloß/nur</em></td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><em>auch</em></td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><em>schon</em></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
This shows that *schon* is not compatible with *bloß/nur*; on the other hand, *auch* can be combined with *bloß/nur* without any problems (cf. for example, *Was kann der *schon* bloß unternehmen?* {"What can he schon bloß undertake?"} vs. *Wie kann man auch bloß so blöd sein!* {"How can one be auch bloß so stupid!"}). Utterances with the combination *auch* bloß or *auch nur* can only be WH-exclamations, since the meaning of *bloß/nur* in WH-questions is not compatible with the rhetorical indicator *auch*. Hence *bloß* and *nur* are in no way combinable with the rhetorical indicator *schon*, either. If WH-questions with *bloß* and *nur* were (also) rhetorical questions – as is always stated – there would be no reason why these particles should not be combinable with *schon* and with *auch* in certain occurrences. It cannot be because a double rhetorical marker is not possible, for both modal particles that function as rhetorical indicators, *auch* and *schon*, are perfectly combinable. Thus, in these cases combinability and non-combinability with *auch*, *bloß/nur* and *schon* can offer an (additional) argument for classifying certain utterances containing WH-expressions.

Table 1. Distribution of frequently occurring modal particle combinations.

<table>
<thead>
<tr>
<th>DEC</th>
<th>POL</th>
<th>WH</th>
<th>IMP</th>
<th>OPT</th>
<th>WHEX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>dem auch</td>
<td>dem auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>halts</td>
<td>eben</td>
<td>dem auch</td>
<td>dem auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>noch</td>
<td>auch JA</td>
<td>dem eigent-lisch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>noch mal</td>
<td>dem etwa</td>
<td>denn</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ja auch</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ja eben</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ja mal</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ja schon</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ja wohl</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>wohl</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>auch</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>doch</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>wohl</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>doch</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>etwa</td>
<td>das auch</td>
<td>auch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.2 Analysis of meanings

Rule 2 – combination only in the case of semantic compatibility – may be used in analyzing the meaning of individual modal particles.

2.2.1 Verification and falsification of meaning hypotheses

Acceptable or unacceptable combinatorial potential can be used as an instrument to verify or falsify hypotheses concerning the meaning of modal particles. If the semantic descriptions of two particles contradict one another, for example, one is described as the opposite of the other, but they are nevertheless combinable, then something is wrong with the semantic descriptions.

One example can be given with the particles denn and eigentlich. In general, the function of denn is described in such a way that, first, denn marks the connection with an immediately preceding utterance or other aspects of the discourse situation (cf. for example, König 1977; Franck 1980: 222–226; Hentschel and Weydt 1983), and, second, the speaker expresses her/his surprise through the use of denn. (This is mainly assumed to be the case for denn in polar questions (POL); cf. Bublitz 1978: 59; Hentschel and Weydt 1983; however, cf. also Thurmair 1991).

For eigentlich, on the other hand, the following functions are assumed: it marks an utterance as independent from the discourse context, signals a break in thematic cohesion or a topic change, all this depending on an internal thought process and not on an external reason in the context or situation (cf. for example, Kohrt 1988; Hentschel and Weydt 1983; König 1977). The descriptions of these two modal particles are thus in opposition to one another (cf. on this point König 1977: 123; Hentschel and Weydt 1983: 269–270; Weydt 1986: 398).

But they are combinable and indeed they are combined relatively frequently (in both types of question). So, on the basis of the central premise that meanings must be compatible, the description of denn and/or eigentlich must be revised.

If we do this, we see that surprise is only an optional element of meaning for denn – and cannot therefore be generated by denn. Hence only a subset of the denn-questions display surprise, and it is precisely in these that the combination denn eigentlich may not occur; cf. the feasibility of the combination in the various WH-questions in (31), which can be distinguished precisely through the element of surprise; cf. also the polar question with the element of surprise in (32) with that without surprise in (33):

(31) "Ja A, wie is das denn (denn eigentlich)? Wann könn wer denn (denn eigentlich) unsere Sonntagsschuhe anziehen?" – "Ja", sag ich,
“wieso das denn (*denn eigentlich)? (...)” – “Ja, will du denn (*denn eigentlich) nich ma bald heiraten?” – “Nee, wieso das denn (*denn eigentlich)?” (Brons-Albert 1984: 41)

‘Well A, so how is that denn (denn eigentlich)? When can we denn (denn eigentlich) put on our Sunday shoes?” – “Yes,” I say, “Why that denn (*denn eigentlich)? (...)” – “Yeah, don’t you wanna denn (*denn eigentlich) get married soon?” – “No, why that denn (*denn eigentlich)?’

(32) A Gibst du mir einen Vorschuss?
B Ja, bist du denn (*denn eigentlich) schon wieder pleite?
A ‘Can you lend me some money?’
B ‘Yes, are you denn (*denn eigentlich) already broke again?’

(33) A Die is bei ihrem Freund. Die wird in den nächsten 2, 3 Wochen kaum hier auftauchen.
B Ah, so! Hat denn (denn eigentlich) der Freund bestanden?
(Brons-Albert 1984: 25)
A ‘She’s with her boyfriend. I don’t think she’ll show up here again in the next two or three weeks.’
B ‘Aha! Did the boyfriend pass denn (denn eigentlich)?’

For eigentlich, revising the meaning entails distinguishing between a topic change and an aspect change signalled by eigentlich. By aspect change I mean that within an overall topic frame a new sub-topic is introduced (cf. Oppenrieder and Thurmair 1989). The combination denn eigentlich may now only occur when an aspect change is on hand and not when a topic change occurs (cf. (34), an example with a topic change, and (35), an example with an aspect change):

(34) A Ich hab dem Schulkollegium ein Photo von mir geschickt, das war das letzte, was ich aufreiben konnte (...) ja da sah ich also wie so ne Hexe aus, so unheimlich giftig guck ich da rein, naja.
B Wie is es eigentlich (*denn eigentlich), wenn man son Seminar mal doppelt belegt hat? (Brons-Albert 1984: 14)
A ‘I gave the teaching staff a photo of mine. It was the last one I managed to dig up (...) yeah, well I looked just like a witch, I’m looking really nasty there, yeah.’
B ‘What’s it like eigentlich (*denn eigentlich) if you’ve done a seminar like that twice’
(35) A Am Anfang [der Referendarzeit] wirds sicherlich gemütlich?
    B Ach so, ja. Oder jaja man hat nich allzuviel zu tun. Hör mal
       weißt du eigentlich (denn eigentlich) wie weit das mit dieser
       Neuregelung der Referendarbezüge is? (Brons-Albert 1984: 60)
A 'Surely it's comfortable when you're beginning as an assistant
    teacher?'
B 'Eh? Oh yeah. Well...yeah yeah, you don’t have much to do.
    Listen, do you know eigentlich (denn eigentlich) how far they've
    got with this new regulation about salaries for assistant teachers?'

Thus denn in this combination signals the connection with a topic frame
and eigentlich shows the shift to another aspect of the topic. On the basis of
combinatorial properties, the 'surprise' component for denn, however, cannot
be maintained – indeed not merely on those grounds (cf. Thurmain 1991).

My comments on denn, eigentlich and denn eigentlich were meant to clar-
ify, by means of one example, how profitably the combinatorial regularities
for modal particles can be used to verify or falsify meaning hypotheses.

2.2.2 Distinguishing between so-called synonymous modal particles

Combinability can also offer arguments for distinguishing between modal
particles that are commonly considered synonymous. If two modal particles
are synonymous, they would have to behave in exactly the same way with re-
spect to their combinatorial potential.

One frequently cited synonymous pair are the modal particles eben and halt.
But combinatorial potential displays clear differences between these two:

(36) Die hat ja eben (*ja halt) keine Zeit.
    'She doesn’t have ja eben (*ja halt) any time.'
(37) Komm halt ruhig (*eben ruhig) heute abend zum Essen!
    'Come round halt ruhig (*eben ruhig) to dinner this evening.'

The fact that these two frequently occur together (cf. {38}), which we
would hardly expect of synonyms, is also an argument for their meaning
difference:

(38) Der ist halt eben Kommunist und du bist schwarz.
    'He’s halt eben a communist and you’re “black”.'

For bloß and JA, too, interesting differences are in evidence in their combi-
natorial potential:

(39) Komm doch bloß!?doch JA rechtzeitig heim!
    'Come home doch bloß!?doch JA in time!'
(40) Komm *?auch bloß/lauch JA rechtzeitig heim!
    'Come home *?auch bloß/lauch JA in time!'
2.3 The identification of different particle functions

The strict sequential rules can be used as a criterion for solving functional ambiguities or separating out particle functions. For example, if two expressions whose modal particle sequence is AB occur in the sequence BA, then A must occur in another function, for example:

(41a) \(\textit{Mach auch }_\text{MP} \ \textit{JA }_\text{MP} \ \textit{das Fenster zu!}\)

vs.

(41b) \(\textit{Mach }_\text{JA }_\text{MP} \ \textit{auch }_\text{FP} \ \textit{das Fenster zu (und nicht nur die Tür)!}\)

‘Close \textit{auch} \textit{JA} the window!/Close \textit{JA} the window too (= \textit{auch}) (not just the door)!’

(42a) \(\textit{Was ist }_\text{eigentlich }_\text{MP} \ \textit{nur }_\text{MP} \ \textit{mit ihm los?}\)

vs.

(42b) \(\textit{Was ist nur }_\text{MP} \ \textit{eigentlich }_\text{S...ADV} \ \textit{mit ihm los?}\)

‘What’s \textit{eigentlich} \textit{nur}/\textit{nur} really (= \textit{eigentlich}) wrong with him?'

(43a) \(\textit{Gehen Sie nur }_\text{MP} \ \textit{ruhig }_\text{MP} \ \textit{zur Schule!}\)

vs.

(43b) \(\textit{Gehen Sie }_\text{ruhig }_\text{MP} \ \textit{nur }_\text{FP} \ \textit{zur Schule (und nicht auch...)!}\)

‘Go \textit{nur} \textit{ruhig} to school!/Go \textit{ruhig} only (= \textit{nur}) to school (and nowhere else)!’

(44a) \(\textit{Das ist doch }_\text{MP} \ \textit{wohl }_\text{MP} \ \textit{das Letzte!}\)

vs.

(44b) \(\textit{Das ist woh}l_\text{MP} \ \textit{doch }_\text{ADV} \ \textit{das Letzte (nicht das Vorletzte)}!\)

‘That’s \textit{doch} \textit{wohl} the final straw!/That’s \textit{wohl} nevertheless (= \textit{doch}) the final straw (not the pre-final one)!’

Consequently, a reversal of the sequence is simply not possible with particles that otherwise occur in particle functions not appearing in the syntactic middle field (for example, conjunctions):

(45) \(\textit{Was ist denn }_\text{bloß} \ \textit{los?}\)

vs.

*\(\textit{Was ist }_\text{bloß} \ \textit{denn }_\text{los?}\)

‘What’s \textit{bloß}/*\textit{bloß} \textit{denn} the matter?’

One might remark very briefly that examples (41)–(44) show yet another regularity: the class of modal particles always appears before the class of sentence adverbs and the class of focus particles. Thus, if we consider more general serialization rules for modal particles and other classes of particles, even more possibilities can be found of clarifying this functional differentiation through word order.
To conclude I shall give one example to show how the various criteria derived from the regularities of particle combinability can work together practically. Combinability provides strong arguments for a decisive separation of unaccentuated ja from accentuated JA.

It is a well-known fact often referred to in the literature that both are very different in terms of the way they function (cf. for example, Bublitz 1978: 101–103; Franck 1980: 229–233; Weydt and Hentschel 1983: 13–14).

Thus ja and stressed JA are, of course, different in terms of their combinatorial behavior, cf. the following:

(48a) Du könntest ja ruhig etwas freundlicher sein.  
‘You could be ja ruhig a bit more friendly.’

(48b) Mach *JA ruhig/ruhig JA die Türe zu!  
‘Close *JA ruhig/ruhig JA the door!’

(49a) Sie können ja mal die Zwiebel schneiden.  
‘You can cut up ja mal the onions.’

(49b) Machen Sie *JA mal/mal JA die Türe zu!  
‘Close *JA mal/mal JA the door!’

(50a) Das ist ja eben das Problem.  
‘That’s ja eben the problem.’

(50b) Steh *JA eben/eben JA rechtzeitig auf!  
‘Get up *JA eben/eben JA in time!’
Combinatorial regularities for modal particles

It might even be possible that both ja’s could occur in one sentence, that is, as a combination, which would be one more clear indication for separating them:

(51) (?) Ich darf ja JA meine Unterlagen nicht vergessen.
‘I mustn’t ja JA forget my notes.’

However, the different word order behaviors they display in combination are more serious and thus represent an even stronger argument for separating the two. Whereas unaccentuated ja is always in first place, accentuated JA always moves to the final position in the combination.

(52a) Der hat ja auch seine Hausaufgaben schon gemacht.
‘He’s already done his homework ja auch.’

vs.

(52b) Mach auch JA deine Hausaufgaben!
‘Do auch JA your homework!’

In my opinion this word order behavior and all other differences can only be accounted for if we make room for two ja’s.

The preceding remarks show that and how the investigation of modal particle combinability and the use of perceived regularities can prove to be a powerful instrument of analysis in many ‘classical’ areas of (modal) particle research; thus, an investigation of modal particle combinability is not merely interesting in and of itself.21

University of Munich

Notes

* In the examples modal particles are not translated, whereas particles in other functions are given in English.

1. Alongside these there are also several types of independent verb-final sentences to which I shall not refer any further in the present analysis.

2. Asbach-Schnitker (1978: 320), however, gives the following example: Wie bist du heute aber lieb! ‘How very nice you are aber today!’ This use of aber does not appear to me (or to my informants) to be particularly usual today, nor do I have any examples of it in my corpus.

3. This was confirmed for me by a test in which Southern German speakers were given the choice of inserting denn or dann into texts which contained denn in the original. In almost all cases dann was chosen.

4. In fact the combination doch (wohl) nicht etwa is interesting in a number of ways: both the fact that nicht is obligatory (the function of which is, in addition, very unclear) and the fact that this nicht must appear before the modal particle (that is, before etwa) distinguishes it from all other combinations.
In the last resort even the criterion of sentence mood compatibility (Rule 1) can be derived from Rule 2, since the distributional constraints on the individual modal particles can also be traced back to their specific meanings.

Adding up meanings always works in the same way even if, for example, another meaning is assumed for ja such as ‘unity’ posited by Heringer (1988) or ‘evidence’ posited by König and Requardt (1991).

In passing we might note that combinations are not always acceptable in all distributionally possible sentence moods. The combination doch bloß is distributionally possible in imperative and optative sentences and in WH-questions. In point of fact, however, the combination cannot be used in the latter cases for semantic reasons: Hör doch bloß auf! ('Stop that doch bloß!') Hätt ich doch bloß mehr Zeit! ('If only (doch bloß) I had more time!') vs. *Wie hieß doch bloß seine erste Frau? ('What was doch bloß his first wife’s name?')

Identical modal particles can never be combined. In other words, reduplications such as occur with other particles, for example, discourse particles, are not possible.


Only rarely do cases appear in which the sequence is not strictly regulated, for example, Der ist halt eben/halt Kommunist. ('He’s halt eben/halt a communist.') Was würds denn auch schon/schon auch groß sein? ('What’s this denn auch schon/schon auch all about?')

Open combinations are also a strong argument against the position frequently taken in the literature (for example, Krivonosov 1977: 202) that modal particles form a border ('water mark') between the theme and the rheme. In that case, however, the question arises as to what category elements between the modal particles belong: theme, rheme, or something in between?

To argue in favor of these statements one would have to describe all the modal particles. Readers are thus referred to the relevant literature.

In the case of schon the expectation of a specific type of response is so strong that a response is superfluous.

Similar approaches have been made by Engel (1968: 91–94) and Helbig and Kötz (1981: 41–42). In both cases no sharp distinction is made between expressions with a modal particle function and those with other functions. On the other hand, Lautenbacher’s suggestion (1988: 105–106) concerns only modal particles.

The sentence mood exclamatory sentence (EX) is missing here, since the only two modal particles that occur in this structure (aber and vielleicht) are hardly combinable.

By rhetorical question I understand a question that entails an implicit statement; in general the latter exists for WH-questions in the ‘opposite’ interpretation of the gap opened up by the WH-expression (that is, in affirmative questions the insertion of a negative expression). In addition the hearer’s obligation to respond is waived.

These combinations are only possible in declarative sentences which are modified by other means, above all modal verbs, such that they represent requests.

Denn often occurs in questions expressing surprise, but the surprise is marked by other linguistic and paralinguistic means.

The abbreviations MP, FP, S.ADV and ADV stand for modal particle, focus particle, sentence adverb and adverb.

The stress on JA is not a (syntactic) focus stress – in principle, modal particles may not carry this type of stress. Thus sentences with JA contain another accentuated element bearing focus stress. The stress on JA (similar to that on bloß) is best described as an emphatic stress.

I am grateful to Richard J. Watts for translating this article.
References

Altmann, Hans

Asbach-Schnitker, Brigitte

Becker, Norbert
1976 Die Verknüpfungspartikeln 'denn, mal, doch' und andere. Zielsprache Deutsch 3, 6-12.

Berg, Wolfgang

Bottroper Protokolle

Brons-Albert, Ruth

Bublitz, Wolfgang

Engel, Ulrich

Franck, Dorothea

König, Ekkehard

König, Ekkehard and Susanne Requardt

Kohrt, Manfred
1988 Eigentlich, das 'Eigentliche' und das 'Nicht-Eigentliche'. Deutsche Sprache 16, 103-130.
Krivonosov, Alexej

Lautenbacher, Christiane

Meibauer, Jörg

Oppenrieder, Wilhelm and Maria Thurmair

Thurmair, Maria

Weydt, Harald

Weydt, Harald and Elke Hentschel