

# From Modal Particle to Interrogative Marker: A Study of German *denn*

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## 0. Introduction

The German particle *denn* (from Old High German temporal *thanne*, “then”, and related to Engl. *then* and German *dann*, “then”) is either a conjunctive or a so-called “modal particle” (MP), also known as “discourse particle”. Only the latter use will be of interest here. *Denn* as an MP is in its core occurrences confined to root V1-questions and V2 wh-questions. Its occurrence in clauses of that type is optional. It signals that the speaker is in a particular way concerned about the answer that his or her question will elicit. An analysis will be offered according to which *denn* is a functional head which heads a particle phrase that is in construction with the CP’s layer of illocutionary force. The Bavarian dialect which will be in the focus of the final part of this article does not employ the lexical element *denn* but rather the clitic form *-n* (which appears to be related to *denn*). This clitic element is interesting as it combines two remarkable properties that distinguish it from *denn*. The article is organized as follows: Section 1 explains the discourse function of *denn*. Section 2 develops the syntax of *denn*. Section 3 turns to the role of *denn* in Bavarian where it has turned into a clitic element. A conclusion is given in section 4.

## 1. The discourse relevance of German *denn*

In its function as an MP, the German particle *denn* occurs in root questions as in (1) and (2) where it gives rise to an attitude of wondering and being concerned on the side of the speaker.

(1) Disjunctive question (V1)

Hat dich denn Dr. Schreck angerufen?

*has you PRT Dr. Schreck called*

“Did Dr. Schreck call you? (I am wondering)”

(2) Constituent question (V2)

Wer hat dich denn angerufen?

*who has you PRT telephoned*

“Who called you? (I am wondering)”

MPs like *denn* have "expressive" rather than "descriptive" meaning.<sup>1</sup> König (1977), Wegener (2002) and Grosz (2005) emphasize the addressee's knowledge to which *denn* signals a relation. According to König and Wegener, *denn* is inappropriate if the question opens a discourse out of the blue.<sup>2</sup> The deeper reason for this may, however, be that there is no common knowledge background to which a true answer could relate. For instance, an administration officer whose sole job it is to write down a citizen's address can hardly felicitously ask *Wo wohnen Sie denn?* (“Where do you live, I am wondering?”). The officer is not concerned as there is no (or perhaps too weak a) common ground that could be updated by a true answer to these questions. Let me propose the pragmatic condition in (3).

- (3) [*denn*  $\alpha$ ] is appropriate in a context  $c$  if (i)  $\alpha$  is a question, and (ii) the expected true answer  $p$  updates the common knowledge  $K_c$  of speaker and addressee in such a way that  $p$  is relevant to the knowledge  $K'_c$  of the speaker.

The relevance requirement implies that the speaker is CONCERNED about the answer as it relates to his/her contextually given knowledge in a way that

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<sup>1</sup> Expressive meaning is that part of meaning which informs about the actual utterance situation (in contrast to the truth conditions). MPs fall in the domain of “expressives”; cf. Kratzer (1999; 2004), Grosz (2005) and further references provided there.

<sup>2</sup> König's example: A wakes up his wife and asks *Wie spät ist es denn?* (How late is it DENN?) According to him it is inappropriate because the addressee lacks a context in which to interpret the question. It is appropriate if the wife asks A the same question because A can be supposed to have a context that specifies the actual time.

matters for him/her in one way or another.<sup>3</sup> In the syntactic account of *denn* to follow in section 2, I will encode the anaphoric link that *denn* supplies a question with by means of the feature <conc> for "concern".<sup>4</sup> (3) predicts that *denn* is confined to root clauses because only root clauses make indexical reference to the speaker via the highest layer of the split-CP domain that is known as the force projection. We shall see whether this prediction has to be modified or not.

The context dependency of *denn* which is captured in (3) agrees well with Behaghel's (1923-1928) observation – referred to by Dittmann (1980) and Wegener (2002) – that *denn* has an anaphoric meaning due to its origin from OHG *thanne*. *Thanne* refers to previously mentioned or situationally recovered circumstances as seen in the following example.

- (4) Ther púzz ist filu díofer, war nimist thu thánne ubar tház  
*the well is much deeper where take you then over the*  
*wazar flíazzantaaz* [Otfried II, 14, 29f.]  
*water running*  
 “The well is very deep, so where will you then take running water?”

Although the current use of *denn* does in many cases not allow an anaphoric interpretation as concrete as *thanne*, there seems to be an abstract residue of this usage by which the speaker signals that the question is situationally anchored in what he/she takes to be the situationally given common ground.

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<sup>3</sup> One may object that *denn* may also appear in non-information-seeking interrogatives, e.g.

- (i) Bist du denn wahnsinnig?  
*are you DENN crazy*  
 “You are crazy!”
- (ii) Wie siehst du denn aus?  
*how look you DENN out*  
 „You look weird!”

What is special here is the question, however, not the contribution of *denn*. While the speaker implies that the addressee is crazy or looks weird he/she nevertheless expects an update – typically some explanation – which matters for his/her contextually determined knowledge.

<sup>4</sup> Thurmair (1989: 200) suggests a somewhat similar feature, <konnex>, to characterize the clause-linking function of *denn*. To be sure, features of this kind should not be mistaken as a semantic analysis. They are mnemonics to describe in a most general form the core contribution of an individual particle.

As the contrast between (5a) and (5b) shows, *denn* may arise in an embedded clause with root-interpretation due to a selecting *verbum dicendi* but not in a propositional attitude context as in (5b).

- (5) a. Christine fragte, warum der Klaus denn so blass ist  
       *Christine asked why the Klaus PRT so pale is*  
       b. \*Christine weiß, warum der Klaus denn so blass ist  
       *Christine knows why the Klaus PRT so pale is*

In (5a), the attitude of wondering/being concerned is, of course, ascribed to Christine and not to the speaker.<sup>5</sup>

## 2. The syntax of *denn*

In this section it will be shown that *denn* precedes high discourse oriented adverbs and also occupies the highest position in the hierarchy of MPs. We will then provide arguments for the place of *denn* in clause structure. Finally cases will be considered in which *denn*, contrary to expectation, appears in embedded clauses.

### 2.1 Hierarchy

Following the lead of Cinque (1999) for the ordering of adverbs, one can show that *denn* precedes the adverbs which figure as the highest in Cinque's hierarchy.<sup>6</sup> For instance, *schließlich* (finally), *zum Glück* (fortunately), and *schlauerweise* (intelligently), *dummerweise* (stupidly) belong to the higher adverbs. As the following examples show, they can never precede *denn*.

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<sup>5</sup> Cf. Doherty (1985: 76f.). Doherty argues that *denn* cannot be used in self-directed questions because it relates to the attitude of an interlocutor. I disagree with her intuition. Monological questions such as

(i) Wo habe ich denn meine Brille hingelegt?  
       “Where did I put my glasses (I am wondering)?

are perfectly normal. (3) is compatible with such a case because speaker and addressee may happen to be identical.

<sup>6</sup> For detailed discussion cf. Coniglio (2005) and Grosz (2005)

- (6) a. Bist du denn schließlich ans Ziel gekommen?  
*are you PRT finally at-the goal come*  
 “Did you finally reach the goal? (I am wondering)”  
 b. \*Bist du schließlich denn ans Ziel gekommen?
- (7) a. Hat der Hans denn schlauerweise die Heizung zurückgeschaltet?  
*has the Hans PRT cleverly the heating back-switched*  
 Did Hans cleverly reduce the heating? (I am wondering)”  
 b. \*Hat der Hans schlauerweise denn die Heizung zurückgeschaltet?
- (8) a. Wer ist denn schließlich ans Ziel gekommen?  
*who is PRT finally at-the goal come*  
 “Who reached the goal finally? (I am wondering)”  
 b. \*Wer ist schließlich denn ans Ziel gekommen?
- (9) a. Wer hat sich denn zum Glück gemeldet?  
*who has REF PRT to-the luck responded*  
 “Who has luckily responded? (I am wondering)”  
 b. \*Wer hat sich zum Glück denn gemeldet?

An exception to which we will turn shortly seem to be adverbs of time and space such as *gestern* (yesterday), *heute* (today), *damals* (in those days), *hier* (here), *dort* (there) etc.

- (10) Hat mich (gestern) denn (gestern) jemand anrufen wollen?  
*has me (yesterday) DENN (yesterday) someone call wanted*  
 „Did someone want to call me yesterday (I am wondering)?“

As Thurmair (1989), Abraham (2000), Coniglio (2005) and Grosz (2005) show, MPs are hierarchically ordered, similarly to the order of adverbs that has been found by Cinque. In (11) I confine myself to disjunctive questions.

- (11) a. Hast du denn eigentlich schon was gegessen?  
*have you DENN EIGENTLICH already something eaten*  
 (\*eigentlich < denn)  
 b. Könnte er denn vielleicht in Rom sein?  
*could he DENN VIELLEICHT in Rome be*  
 (\*vielleicht < denn)

- c. Hast du denn etwa wieder Kopfschmerzen?  
*have you DENN ETWA again headache*  
 (\*etwa < denn)
- d. Seid ihr denn auch nach Caorle gefahren?  
*did you DENN AUCH to Caorle drive*  
 (\*auch < denn)

The MPs which figure in constituent questions are partially different but it is equally true that *denn* precedes all of them. As Coniglio (2005: 110ff.) points out, the lower MPs can precede high adverbs such as *vermutlich* (presumably) but can also appear in interspersed position as long as their intrinsic order is retained. With respect to *denn*, this yields roughly the hierarchy in (12), where we refer to the complementary class of MPs with the ad hoc feature [-*denn*].

- (12) The position of *denn* in the hierarchy of MPs and adverbs<sup>7</sup>  
 (ADV<sub>time/space</sub>) > *denn* > MP<sub>-denn</sub> > ADV > MP<sub>-denn</sub>

## 2.2 Clause structure

There is controversy about the X'-status of MPs to which I cannot do justice here for reasons of space.<sup>8</sup> Tests of leftward/rightward movement, (non-) projection, coordination, focusing etc. suggest that MPs are functional heads. Various researchers nevertheless argue that MPs are XPs in the specifier of an empty head, albeit “degenerate” XPs. A complicating factor is that MPs do not have totally homogeneous syntactic properties. For instance, *denn*, unlike other MPs, can turn into a clitic (see section 3). It has also been argued that MPs cannot be heads because these heads would inhibit V-movement to the C°/Fin°-position. This argument which applies equally to negation is, of course, theory-dependent. Empirically it appears to be problematic to deny head status to the standard negator *nicht* which in dialects with negative concord appears to be a head into whose specifier a negative quantifier has to move in order to check off its neg-feature.<sup>9</sup> Nega-

<sup>7</sup> Cf. Grosz (2005: 2.4.3) for further discussion. For the positioning of strong and weak pronouns, cf. section 2.2 below.

<sup>8</sup> Cf. relevant discussions in Bayer (1991), Meibauer (1994), Coniglio (2005), Grosz (2005) and Cardinaletti (2007) among others.

<sup>9</sup> Cf. Bavarian

tion does not interfere with V-to-C movement. It seems to be feasible to modify Relativized Minimality in such a way that the verb (or rather, its fin-features) will skip certain medial head positions.<sup>10</sup> On the basis of these considerations, I prefer analyzing *denn* as a functional head which projects a particle phrase (PrtP) by taking VP or its “extension” (VP<sup>ext</sup>) where VP<sup>ext</sup> may be MoodP, ModP, AspP in Cinque’s sense or another PrtP.

(13) [PrtP [Prt° *denn*] VP<sup>(ext)</sup>]

The space between *denn* and the raised finite verb (which I take to head a FinP) can remain empty or can be filled by topical constituents which embrace the sentence topic (what the sentence is “about”) but also discourse referents which have been established by previous discourse.

- (14) a. Hat *denn* ~~der Hans~~ den Hund gefüttert?  
*has DENN the Hans the dog fed*  
 "Did Hans feed the dog?"  
 b. Hat der Hans *denn* ~~der Hans~~ den Hund gefüttert?  
 c. Hat der Hans den Hund *denn* ~~der Hans den Hund~~ gefüttert?

Since adverbs of time and space, so-called “stage setting” adverbs, are potential topics, while mood-, mod-, asp-adverbs are generally not, we understand the distribution of the data in (10) and (11).<sup>11</sup> NPs and DPs which do not qualify as topics – rhematic indefinites and quantifiers – are excluded from the topic field.

- (15) a. Hat *denn* in Venedig {*jeder* / *keiner*} einen Hund?  
*has DENN in Venice everybody nobody a dog*  
 “Does {everybody/nobody} in Venice have a dog?”  
 b. \*Hat {*jeder* / *keiner*} *denn* in Venedig {~~*jeder*~~ / ~~*keiner*~~} einen Hund?

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(i) Er ~~had~~ [<sub>NegP</sub> *koa* *Schneid* [<sub>Neg°</sub> *ned* ~~*koa*~~ ~~*Schneid*~~ *g'habt*]]  
*he had no courage not had* "He was not courageous"

<sup>10</sup> Grosz (2005) argues that German MPs must be in a spec-position in order to allow the verb to move via the empty head position. His proposal follows one of Cinque’s (1999) motivations to suggest such an architecture for adverbs. The argument overlooks the important fact that in Italian the verb (in fact the participle) can land in intermediate positions while nothing of that sort can be observed in German.

<sup>11</sup> Cf. Frey & Pittner (1998: note 35, p. 532). Cinque’s (1999: 28ff.) analysis of circumstantial adverbials as predicates of VP-meanings is compatible with this view because predicates can be topics.

Indefinites which move higher than *denn* have a generic interpretation, in agreement with Diesing (1992), and then constitute potential topics. Pronouns can hardly remain to the right of *denn*. When they do they are normally accented, i.e. strong. While accented strong pronouns may appear to the left of *denn* as contrastive topics, weak and clitic pronouns as seen in (16b) must move up.

- (16) a. Hat {mich/MICH} denn {??mich/MICH} jemand sprechen wollen?  
*has me DENN me someone speak wanted*  
 "Did someone want to talk to me?"  
 b. Hat {es / 's } denn { \*es / \*'s } jemanden interessiert?  
*has it DENN it someone interested*  
 "Did someone take an interest in it?"

I conclude that part of German clause structure is as in (17).<sup>12</sup>

- (17) [<sub>FinP</sub> Fin° [<sub>TopP</sub> topic\* [<sub>PrtP</sub> [<sub>Prt°</sub> *denn*] [<sub>VP(ext)</sub> ... ~~topic\*~~ ... ]]]]

In agreement with an articulate split structure of the CP, one can see PrtP as part of the CP-layer as suggested by one of the reviewers. Given that *denn* is lower than the Fin-head which activates illocutionary force, and lower than the clause-internal topic domain, this still leaves the question how to associate the particle's feature <conc> with Fin°/Force°. <sup>13</sup> Assume that *denn* has an unvalued Interr(ogative)-feature which is valued by the finite verb in Fin°/Force° via a probe/goal relation as proposed in Chomsky (2001) and subsequent work. As we have shown in section 1, *denn* endows the interrogative with the feature <conc>. The finite verb in Fin°/Force° is not specified for <conc>. Due to feature maximization, alias "Free Ride" (Chomsky, 1995), it inherits this feature as an automatic consequence of Interr-feature

<sup>12</sup> One reviewer suspects that clitic and weak pronouns cannot be topics because they cannot freely move to SpecFinP (the "Vorfeld"). In my view, these constraints (where they hold) are still compatible with pronouns/clitics first scrambling into the TopP of (17) and then attaching to Fin°. Relevant discussion can be found in Frey (2006).

<sup>13</sup> The idea that V-fin raising triggers force goes back to Wechsler's (1991) analysis of V2 in Swedish and the development of his idea for German in Bayer (2004) and Brandner (2004). Force is activated by V-raising to Fin° but in an underspecified form. The distinction of declarative, imperative, interrogative mood (with the formal distinction between disjunctive and wh-questions) etc. is a matter of further tuning the elementary distinctions of which may be achieved via spec-head configurations.

valuation. Assuming that <conc> can only be interpreted in the force projection of the clause, the feature must delete at the foot of the chain.

- (18) a. [<sub>FinP/ForceP</sub> ... <sub>Fin°/Force°</sub><Interr> [<sub>PrtP</sub> *denn*<uInterr, conc> (...) [<sub>VP</sub> ...]]]  
 AGREE ⇔  
 b. [<sub>FinP/ForceP</sub> ... <sub>Fin°/Force°</sub><Interr, conc> [<sub>PrtP</sub> *denn*<uInterr, eone> (...) [<sub>VP</sub> ...]]]

### 2.3 Distant *denn*

We have so far assumed that *denn* appears exclusively in the root clause. As the following data from the internet (to which structural information about wh-extraction has been added) show, this assumption must be modified.

- (19) a. Wie denkst Du, dass es *denn wie* weitergehen soll mit euch?  
<http://mein-kummerkasten.de/142829/fremdgehen.html>  
 "How do you think that the two of you can carry on?"  
 b. Welches Bild glaubst du dass er *denn welches-Bild* von mir haben könnte?  
[http://www.marsvenus.de/search.php?search\\_author=Lola&sid=0fe369faf60ccfd8c76eee167638b51f](http://www.marsvenus.de/search.php?search_author=Lola&sid=0fe369faf60ccfd8c76eee167638b51f)  
 "Which picture do you believe that he could have of me?"

As the following equally grammatical examples show, neither depth of embedding nor the exact placement of *denn* seems to play a role as long as cyclic wh-movement passes *denn*.

- (20) a. Wohin glaubst du *denn, wohin* dass der Hans *wohin* gefahren ist?  
*where believe you DENN where that the Hans where driven is*  
 "Where do you believe that Hans went?"  
 b. Wohin glaubst du, *wohin* dass der Hans *denn wohin* gefahren ist?  
 c. Wohin glaubst du, *wohin* dass Paula meint, *wohin* dass der Hans *denn wohin* gefahren ist?  
 d. Wohin glaubst du, *wohin* dass Paula *denn* meint, *wohin* dass der Hans *wohin* gefahren ist?

Putting aside embedded interrogative clauses with quasi root properties such as (5a), *denn* is illicit in clauses from which the *wh*-phrase cannot have been raised.<sup>14</sup> The following examples show that *denn* cannot raise from islands.

(21) Relative-clause Island

Wer kennt (denn) eine nette Frau, die dem Hans (\*denn) helfen könnte?  
*who knows DENN a nice lady who the Hans DENN help could*  
 "Who knows a nice lady who could help Hans?"

(22) Adjunct-Island

Warum ist (denn) der Hans, ohne (\*denn) einen Führerschein zu haben,  
*why is DENN the Hans without DENN a drivers-license to have*  
 Auto gefahren?  
*car driven*  
 "Why did Hans drive a car without having a drivers license?"

(23) Complex-NP-Constraint

Wer hat (denn) die Behauptung, dass Hans (\*denn) bankrott sei, aufgestellt?  
*who has DENN the statement that Hans DENN bankrupt be made*  
 "Who made the statement that Hans was bankrupt?"

One could argue that due to subadjacency *denn* cannot undergo classical LF-style raising. However, dependent clauses from which movement is potentially possible are equally out as long as no *wh*-phrase passes through the minimal clause which hosts *denn*.

(24) a. Wer hat dir (denn) erzählt, dass der Hans (\*denn) weggefahren ist?  
*who has you DENN told that the Hans DENN left is*  
 "Who told you that Hans has left?"

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<sup>14</sup> To be precise, it is not *wh*-movement as such but rather the general class of mechanisms by which the scope of the embedded clause can be extended to the root clause. The following example of partial movement yielded perfect acceptability in a judgment test with 20 speakers.

(i) Was glaubst du, wohin der Hans denn gefahren ist?  
*what believe you where the Hans DENN driven is*  
 "Where do you believe that Hans went?"

- b. Habe ich dir (*denn*) schon erzählt, dass der Hans (\**denn*)  
*have I you DENN already told that the Hans DENN*  
*weggefahren ist?*  
*left has*  
 „Did I tell you already that Hans has left?“

*Denn* may physically remain in a domain lower than the one in which it can be interpreted by virtue of a wh-phrased that picks up its feature <conc> and moves it up to the force projection.<sup>15</sup> To implement this, *denn* must enter an agree relation with the wh-feature of the wh-phrased which meets with <Interr> as soon as it reaches SpecForceP. The derivation in (18) makes use of a direct relation between *denn* and an interrogative force head. What is needed now is an indirect relation between the two which is mediated by the wh-phrased.<sup>16</sup> Setting examples like (5a) aside, we observe that the syntax of German activates <Interr> only in conjunction with the force head.<sup>17</sup> This suggests that wh embraces a feature < $\alpha$ Interr> such that  $\alpha$  will be set to + in a spec-head agreement relation with the finite verb in Fin<sup>o</sup>/Force<sup>o</sup>. Assuming standard concepts of movement as leaving a copy whose operator part is deleted in core syntax, the relevant derivation of (20b) will then proceed as in (25).<sup>18</sup>

- (25) a. [CP dass der Hans [PrTP *denn*<<sub>u</sub>Wh, conc> wohin gefahren ist]]

MOVE AND AGREE ⇔

- b. [CP wohin<Wh, conc> dass<wh> der Hans [PrTP *denn*<<sub>u</sub>Wh, conc> ~~wohin~~ gefahren ist]]

MERGE ⇔

- c. [FinP/ForceP glaubst<Interr> du [CP wohin<Wh, conc> dass<wh> der Hans [PrTP *denn*<<sub>u</sub>Wh, conc> ~~wohin~~ gefahren ist]]]

<sup>15</sup> An earlier proposal in this direction can be found in Hasegawa's (1999) work on exclamation.

<sup>16</sup> Recall that wh by itself does not license *denn* as shown by (5b).

<sup>17</sup> For cases like (5a) I assume that the matrix verb *fragen* ("to ask") selects a CP with the force feature <Interr> in C in whose scope *denn* is interpretable.

<sup>18</sup> I consider here only the CP-phase. Involving a vP-phase would be a trivial extension.

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- d. [<sub>FinP/ForceP</sub> *Wohin*<Wh, Interr, conc> *glaubst*<Interr> *du* [<sub>CP</sub> ~~*wohin*~~<Wh, conc>  
 dass<wh> *der Hans* [<sub>PrtP</sub> *denn*<uWh, conc> ~~*wohin*~~ *gefahren ist*]]]

Cases like (20d) – *Wohin glaubst du, dass Paula denn meint, dass der Hans gefahren ist?* – follow because *wh* can pick up the feature <conc> on its way in passing the particle with which it undergoes partial agreement. *Wh* can, if assigned extra focus, also literally pick up *denn* as a stylistically more marked option and move it piggyback outwards as seen in (26).<sup>19</sup>

- (26) [*WOHIN denn*] *glaubst du, dass der Hans gefahren ist?*  
*where DENN believe you that the Hans driven has*

As already said in note 14, *denn* can also remain distant from the root clause in partial movement constructions.

- (27) *Was glaubst du, wohin der Hans denn gefahren ist?*  
*what believe you where the Hans DENN driven has*  
 "Where do you believe that Hans went?"

Agreement in the lower CP-phase works as in (25a,b). The difference is that the lower *wh*-phrase does not move on but is in an agreement/valuation relation with the neutral *wh*-element *was*. A natural extension of the movement analysis in (25) would be to say that *was* deletes the *wh*-feature of *wohin* but inherits from it the feature <conc> that *wohin* has acquired via agreement with *denn*.

<sup>19</sup> Space limitations prevent me from commenting on this construction. I leave it as a mere demonstration of the special relation that holds between *Prt* and the *wh*-operator. But notice here that if *denn* is taken to be an adverb with XP-status it is unclear how a *wh*-phrase could adjoin to it, or vice versa.

### 3. *Denn* in Bavarian

In the Bavarian variety to be discussed now, *denn* does not exist as a full form, but it exists as the enclitic element *-n*.<sup>20</sup> Bavarian is a language with Wackernagel-style cliticization to  $\text{Fin}^\circ$  or  $\text{C}^\circ$ . In agreement with our analysis of Standard German in (17), topical pronouns cliticized to  $\text{Fin}^\circ/\text{C}^\circ$  before *-n* cliticizes to the clitic complex.

- (28) Wann hod -a -s-da -n zoagt?  
*when has-he-it-you-N shown*  
 „When did he show it to you?“

In spite of acceptable phonotactics, permutations as in *\*Wann hot-a-s-n-da zoagt?*, *\*Wann hot-a-n-s-da zoagt?* etc. are ungrammatical. *N*-cliticization turns the particle into part of the *Fin/Force*-head. The *wh*-phrase that moves to its specifier is then in a *spec-head* configuration with the particle. The distant placement of *denn* that was discussed in 2.3 is absent in Bavarian; *-n* can target only *Fin/Force*. However *-n* is at variance with *denn* also in two other respects: (A) it is OBLIGATORY in *wh*-questions. Weiß (2002) provides the following example.

- (29) Wos hosd' \*(-n) g'sogd?  
*what have-you -N said*  
 “What did you say?”

(B) it does NOT YIELD THE CONCERN INTERPRETATION. In order to express the concern interpretation, Bavarian uses the non-clitic element *nou* or *no*, derived from *nach(her)* („after“, „after all“, „then“) which corresponds to Standard German *denn*. According to my intuitions, this element competes with *-n*, as can be seen in the following examples where we use the contracted form *homna-n* which unambiguously involves *-n* and thus circumvents the phonetic problem of misanalysis due to homophonous nasal segments.<sup>21</sup>

<sup>20</sup> The dialect to be described here is my own, spoken in Dietfurt/Altmühl, a Middle to North-Eastern Bavarian variety. Native speaker linguists from more eastern varieties whose judgments I had access to – Hans Altmann, Agnes Kolmer and Helmut Weiß – largely agree with the judgments to follow.

<sup>21</sup> The underlying form of 1<sup>st</sup>/3<sup>rd</sup> person plural *hom* („have“) is as in Standard German *haben*. If *-n* cliticizes before *haben* reduces to *hom*, *haben* + *n* yields *haben-en* due to vocalic epenthesis. Reduc-

- (30) a. Wou hom nou däi g'wohnt?  
*where have NOU they lived*  
 “Where did they live (I am wondering)?”  
 b. \*Wou homna-n nou däi g'wohnt?  
*where have -N NOU they lived*

Like Standard German *denn*, *no(u)* has an unvalued feature <uWh> or <uInterr> as well as the feature <conc>. The clitic *-n* lacks <conc>. Arguably it has only <uWh>. Due to its impoverished nature it has turned from an MP into a pure marker of root wh-questions; *-n* fuses with  $\text{Fin}^\circ/\text{Force}^\circ$  and imports an unvalued wh-feature which must be valued by a wh-phrase. The question is then how to account for the competition between *-n* and *no(u)*. By their respective feature structures seen in (31), *-n* is the default case whereas *no(u)* is the special case.

- (31) a. *-n*            <uWh>  
 b. *no(u)*        <uWh>, <conc>

This situation calls for an account in terms of Kiparsky's (1973) Elsewhere Condition. This condition, which was originally designed as a metric for rule application in generative phonology, says that in a situation of rule competition, a rule R1 which applies to a domain D1 which is a proper subset of a domain D2 prevent the more general rule R2 from applying to D1. In our case this means that insertion of the item which includes the feature <conc> takes precedence because it represents the special case in comparison with insertion of the item which lacks <conc>. We derive the contrast in (30) because merger of *no(u)* bleeds the use of the clitic *-n*.

Interestingly, the diachronic process that has turned *-n* into a pure wh-question marker has not affected disjunctive questions. Disjunctive questions in the Bavarian variety described here allow but certainly do not require *-n*, and the semantic contribution of *-n* is directly felt: (32a) is fully

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tion, in conjunction with syllabification and onset maximization, then yields the unambiguous bisyllabic form *hom.nan*.

acceptable although *-n* is lacking, and (32b) is semantically distinct from (32a).<sup>22</sup>

- (32) a. Hom däi aa a Haus?  
*have they also a house*  
 „Do they also have a house?“
- b. Homna-n däi aa a Haus?  
*have -N they also a house*  
 „Do they also have a house? (I am wondering)“

Both the full form and the clitic form have the same features, a situation which, of course, gives again rise to redundancy if both are merged, but now for the trivial reason of “repetition”.

- (33) \*Homna-n nou däi aa a Haus?  
*have -N NOU they also a house*

#### 4. Conclusion

The preceding study of the German MP *denn* has revealed a number of intricate syntactic properties which suggest that the study of MPs can enhance our understanding of clause structure. MPs are part of a highly articulated functional structure which systematically contributes to the illocutionary force of an utterance. In this architecture, *denn* projects a particle phrase that is in an agreement relation with an interrogative Fin/Force head of German V1/V2 clauses. We have made precise under which conditions *denn* may enter this functional structure even if it appears in a position below the root clause. Given that the complement of a *believe* type verb as in (19) and (20) does not project interrogative force (and perhaps lacks force altogether), distant *denn* must be in an agreement/movement relation with the root.

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<sup>22</sup> Cf. Plangg (1989: 659), Poletto (2000: ch.3) and work in progress by Franziska Hack on the particle *pa* (derived from Latin *post*) in Northern Italian dialects. Like *-n* in Bavarian, *pa* has become obligatory in wh-questions in the Rhetoromance of Val Badia, Val di Fassa, Val Gardena, Fodom/Livinallongo. According to Hack (2008), in Val Gardena it is obligatory also in disjunctive questions.

In Bavarian, *denn* appears as the clitic element *-n* which in *wh*-clauses is deprived of its special MP-semantics and rather operates like a pure interrogative marker without giving rise to the “concern interpretation”. Abraham (1991) identified in the history of German a grammaticalization path of *denn* as in (34).

(34) LOCALISTIC > TEMPORAL > LOGICAL > ILLOCUTIVE /  
DISCOURSE FUNCTIONAL

The Bavarian data discussed in 3. show that this grammaticalization path is prolonged due to further reduction of *denn* toward a simple marker of root *wh*-questions. The concomitant cline from XP to a lexical X, to a functional X and finally to a clitic element echoes a familiar diachronic process.

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