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On two types of adverbial clauses allowing root-phenomena*

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Peripheral adverbial clauses show many differences from central adverbial clauses, one being that they allow certain root-phenomena, whereas central adverbial clauses do not allow any. A third class of adverbial clauses has to be distinguished, which in German contains continuative *w*-relatives and free *dass*-clauses. These allow more root-phenomena than the peripherals and show other signs of greater independence. The paper argues that central and peripheral adverbial clauses are differently licensed syntactically, the former by the host's verbal projection, the latter by Force in the host's periphery. Moreover, adverbials of the third class are not syntactically licensed at all; they are orphans, being only semantically linked to their associated clause by a specific discourse relation.

1. Introduction

Especially due to the work of Liliane Haegeman on English (e.g. Haegeman 2002ff.), it is well-known that there exist adverbial clauses which may exhibit at least certain root phenomena, that is, patterns which can only occur in main clauses and in special subordinate clauses. Haegeman calls the adverbial clauses which allow root phenomena peripheral adverbial clauses, distinguishing them from so-called central adverbial clauses.

The present work studies several properties which distinguish central and peripheral adverbial clauses in German. However, equally important for the subsequent discussion is a property which does not differentiate the two types: with the members of both types no independent speech act can be performed. The fact that peripheral adverbial clauses allow certain root phenomena but are not able to perform their own speech act indicates that indeed they have an illocutionary potential but that they are 'speech act parasites' on their host clause. The paper makes a proposal as to how this borderline status of peripheral clauses is reflected in syntax.

Furthermore, the paper aims to show that, importantly, a third type of adverbial clause has to be distinguished. These adverbial clauses are able to perform a separate speech act. Thus, they are not speech act parasites on the host clause; rather, as will be argued, they are directly anchored to the speaker. After the study of distributional differences between peripheral adverbial clauses and the members of this third type, it will be proposed that the latter adverbials are not syntactically integrated at all although they are verb-final clauses. Rather, they are syntactic orphans; their dependency on their host clause is solely semantic. These adverbials are called non-integrated adverbials.

The paper is organized as follows. In Section 2, basic differences between German central and peripheral adverbial clauses are presented. It is shown that although peripheral adverbial clauses display signs of non-integration, they may occupy the prefield position of a German verb-second clause, a position integrated into the host clause. Section 3 shows that German modal particles, whose occurrence constitutes a root phenomenon, may occur in a peripheral adverbial clause. Section 4 draws conclusions from these observations for the syntactic licensing of peripheral adverbial clauses. Section 5 compares peripheral adverbial clauses with the non-integrated adverbials, and discusses the syntactic status of the non-integrated ones. The section also contains a brief consideration of why grammar should supply non-integrated adverbial clauses.

2. The differences between central and peripheral adverbial clauses

With respect to the degree of integration into their host clauses, two classes of adverbial clauses are distinguished in the literature. The more integrated ones Haegeman (2002ff.) calls central adverbial clauses (CACs), and the less integrated ones peripheral adverbial clauses (PACs). Examples of the former class are temporal adverbial clauses, event-related conditionals, event-related causals, final clauses, and clauses of manner. Examples of the latter class are adversatives, concessives, and argument-related causal clauses (justifying clauses). Helpfully, as we will see shortly, in German event-related causal clauses and argument-related causal clauses can be distinguished by different complementisers: an event-related causal clause is introduced by *weil*, and an argument-related causal clause by *da*.

In the following, some of the distinguishing properties are illustrated with German examples. Let us start with the semantic difference between *weil*-causal clauses and *da*-causal clauses. Pasch (1989) observes that in (1a) the *da*-clause does not relate to the content of the matrix clause since if this were so, the result would be semantically ill-formed. According to Pasch (1989), a *da*-clause relates to the epistemic mode of the matrix clause. The *da*-clause yields the reason for the speaker's belief that the matrix

clause is true. (1b) is bad because under regular intonation of the construction, the *weil*-verb-final clause expresses a causal relation between two eventualities.

(1) a. *Es hat Frost gegeben, da die Heizungsrohre geplatzt sind.*
EXPL has frost been because the heating-pipes burst have   (PAC)

b. **Es hat Frost gegeben, weil die Heizungsrohre geplatzt sind.*   (CAC)

Next, German CACs allow a correlative element (COR) while PACs cannot have a correlative:

(2) a. *Maria ist deshalb gegangen, weil Max kam.*   (CAC)
Mary has COR gone because Max came

b. **Maria ist deshalb gegangen, da Max kam.*   (PAC)
Mary has COR gone because Max came

CACs, but not PACs, can be in the scope of negation in the main clause:

(3) a. *Peter wird nicht kommen, sobald er kann, sondern sobald es Clara erlaubt.*
Peter will not come as-soon-as he can but as-soon-as it Clara allows
(CAC)

b. **Peter wird nicht kommen, obwohl er arbeiten muss, sondern obwohl er schlafen sollte.*   (PAC)
Peter will not come although he work must but although he sleep should

CACs following the main clause may carry the nuclear stress of the whole construction, i.e. the whole construction may constitute one focus-background partition. The same is not possible with PACs.

(4) *Was hat Maria gesagt?*
'What did Mary say?'

a. *Peter fährt nach Paris, weil er dort eine KonfeRENZ besucht.*
Peter travels to Paris because he there a conference attends   (CAC)

b. *#Peter fährt nach Paris, da er dort eine KonfeRENZ besucht.*   (PAC)

A CAC may be questioned, but not a PAC:

(5) *Warum bleibt Hans zu Hause?*
'Why is Hans staying at home?'

a. *Weil seine Frau krank ist.*   (CAC)
because his wife ill is

b. **Da seine Frau krank ist.*   (PAC)
because his wife ill is

Furthermore, if the associated clause is transformed into a question, a CAC becomes part of that question; this is different for a PAC:

(6)   a.   *Geht Peter nach Hause, weil er müde ist?*   (CAC)
           goes Peter home because he tired is

      b.   **Geht Peter nach Hause, da er müde ist?*   (PAC)

      c.   **Ist Maria für Physik begabt, während ihr Bruder nur an Sprachen
           interessiert ist?*
           is Mary for physics gifted while her brother only in languages
           interested is   (PAC)

The examples in (6) should be read with one intonation contour that includes the dependent clause (cf. Footnote 8). According to my judgements, under this contour (6b,c) are not good. However, even those informants who do find (6b,c) fairly good agree that there is a significant difference between (6a) on the one hand and (6b,c) on the other. For example, a possible answer to (6a) could be "Nein, er geht nach Hause, weil er noch arbeiten muss" (*No, he is going home because he still has some work to do*). A corresponding answer is not possible for (6b). Likewise, in (6c) the adversative clause is not part of the question. If the question is accepted as grammatical at all, a possible answer can only relate to the matrix clause.[1]

Finally, it is possible to have binding of a quantified DP into a CAC. In (7a), the CAC is extraposed; in (7b), the CAC is in the middle field, i.e. inside the TP-domain:

(7)   a.   *Kein Linguist$_1$ sollte Bier trinken, wenn er$_1$ Durst hat.*
           no linguist should beer drink when he thirsty is   (CAC)

      b.   *Keiner$_1$ hat, als er$_1$ unterbrochen wurde, protestiert.*
           nobody has when he interrupted was protested   (CAC)

How do PACs behave? Let us first consider binding into a PAC following the matrix clause. This is not possible:

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1.   A reviewer doubts the judgement of (6c) by suggesting slightly changing (6c) into (i), which sounds good with the PAC as part of the question.

(i)   *Sollte Maria für Physik begabt sein, während ihr Bruder nicht mal die
      Grundrechenarten beherrscht?*   (PAC)
      should Maria for physics gifted be while her brother not even the basic rules of
      arithmetic masters

Note, however, that (i) strongly tends to be understood as a rhetorical question. It is presupposed that the content of (i) is true. In view of the analysis of PACs given below, it is to be expected that (i) is fine.

(8) a. **Jede Kollegin$_1$ ist am Sonntag am Institut gewesen, während sie$_1$ sonst bei schönem Wetter einen Ausflug macht.*
every colleague has on Sunday at-the institute been while she otherwise in nice weather an excursion goes-on   (PAC)

b. **Kein Kollege$_1$ wirkt richtig erholt, obwohl er$_1$ lange im Urlaub war.*
(PAC)
no colleague appears really recovered although he long on holiday was

One might conclude that in (8), the PACs are just extraposed to an adjoined position which is too high to allow binding of a constituent of the matrix clause into them. However, this cannot be right since the judgements do not change if the PACs occur inside the TP-domain.

(9) a. **Jede Kollegin$_1$ ist am Sonntag, während sie$_1$ sonst bei schönem Wetter einen Ausflug macht, am Institut gewesen.*   (PAC)

b. **Kein Kollege$_1$ wirkt, obwohl er$_1$ lange im Urlaub war, richtig erholt.*
(PAC)

Drawing her conclusions from English PACs data, which are equivalent or similar to the data with German PACs just reported, Haegeman (2002) proposes that in English, PACs adjoin to the CP of the associated clause. PACs are merged after the associated CP has been projected completely. In a footnote, Haegeman (2002) even entertains the idea that the structure of a PAC and its host is like that of a coordination.

At least for German, this cannot be quite correct. PACs may occur in the prefield, (10), and the prefield does not correspond to a position adjoined to CP. Rather, according to the well-founded assumption in generative syntax, the prefield corresponds to the specifier position of a functional projection in the left periphery of the clause; standardly this is taken to be the specifier position of CP (SpecCP).

(10) a. *Obwohl Hans lange im Urlaub war, wirkt er nicht erholt.*
although Hans long on holiday was appears he not recovered
(PAC)

b. *Während Hans sonst bei schönem Wetter einen Ausflug macht, ist er gestern zu Hause geblieben.*   (PAC)
while Hans otherwise in beautiful weather an excursion goes-on has he yesterday at home stayed

In a verb-second clause (V2-clause), SpecCP has to be filled. In current syntactic theories, the prefield is a derived position. No contentful element is considered to be base-generated there; rather the prefield is the target of Ā-movement. Thus, for German the statement in (11) is assumed (see for a recent reference Haider 2010). To the best of my knowledge, for any verb-second language, an assumption in the spirit of (11) is adopted.

(11)   With the possible exception of expletives, the prefield is filled with an
        element whose base position is lower in the clause.

(11) implies that an element sitting in the prefield is completely integrated into the
structure of its clause. This assumption is generally taken for granted and is explicitly
stated in König and van der Auwera (1988):

(12)   The prefield in German is an unequivocal position of integration.

A phrase occupying the prefield is considered a constituent of the sentence. It is
assumed – however, not proven – that all sentence constituents are licensed inside the
core of the clause, i.e. TP-internally. This assumption underlies the thesis in (11), and
it also holds in non-generative accounts. However, under this perspective PACs would
need to receive a similar syntactic treatment to CACs, and it would seem to be impos-
sible to account for all the differences between the two types of sentences observed
above. Even worse, (9) clearly shows that PACs are not base-generated TP-internally.
To put it in other words: according to the 'prefield test', PACs are normal constituents
of the clause, fully integrated into the clause, while according to the data in (2)–(9)
PACs fail important tests for integration, and are not base-generated inside TP.

In Section 4, it will be shown that the seemingly conflicting evidence can be
reconciled and that (11) is in fact an incorrect assumption.

3.   PACs, the root-phenomenon modal particles and Force

German modal particles (MPs) may occur in various types of root clauses:

(13)   a.   *1931 war Hitler ja noch nicht an der Macht.*
              1931 was Hitler MP not yet in the power   (Thurmair 1989: 104)

        b.   *Was ist denn hier passiert?*
              What has MP here happened

        c.   *Und nun mach dich mal an die Arbeit!*   [...]
              and now get yourself MP on to work   (Thurmair 1989: 185)

As Jacobs (1986), Thurmair (1989), and Coniglio (2011), among others, emphasise, an
MP occurring in an independent clause interacts with the illocution of the clause. For
example, there are MPs which strengthen (*ja*) or weaken (*mal*) a command; there are
MPs which indicate that the speaker's assertion runs against an assumption of the
hearer (unstressed *doch*), that it makes salient a fact that follows from the common
ground (*ja*), or which indicate that the speaker's justification for his assertion is
reduced (*wohl*).

It is known that the occurrences of MPs belong to the so-called root-phenomena
(Bayer 2001; Coniglio 2011; Coniglio & Zegrean this volume). Root-phenomena can

only occur in root-clauses and in the restricted set of root-like dependent clauses. The classic examples of root-like dependent clauses are the object clauses of verbs of saying and of verbs expressing a doxastic attitude. Standard examples of non-root-like dependent clauses are the object clauses of so-called factive predicates (like *regret, be surprised*) and of predicates which are inherently negative (*avoid, be impossible*). Classic examples of so-called root-phenomena are English topicalisation and Germanic V2. The root-sensitivity of MPs is shown by the fact that they may occur in a root-like clause but not in a non-root-like one:

(14) a. *Maria fiel ein, dass Hans (ja) längst hier sein müsste.*
          to-Maria occurred that Hans MP long-ago here be should

                                                    (Thurmair 1989: 109)

     b. *Er leugnete, dass er die Zeugin (*ja) unter Druck gesetzt habe.*
          he denied that he the witness MP under pressure put have-SUBJ

In contrast to the MPs occurring in the main clauses in (13), in (14a) the MP *ja* does not express an attitude of the speaker regarding the utterance but an attitude of the referent of the matrix subject regarding a potential utterance that (s)he could have made.

   Coniglio (2011) systematically studies the behaviour of MPs in adverbial clauses. He finds that PACs are good hosts for MPs:

(15) a. *Gestern ist sie den ganzen Tag zu Hause geblieben, während sie doch*
          sonst bei schönem Wetter meistens einen Ausflug macht.   (PAC)
          yesterday has she the whole day at home stayed while she MP otherwise
          in nice weather mostly an excursion goes-on   (Thurmair 1989: 78)

     b. *Er hat die Prüfung nicht bestanden, trotzdem er ja recht intelligent ist.*
                                                                (PAC)
          he has the exam not passed even though he MP quite intelligent is
                                                    (Thurmair 1989: 78)

     c. *Max könnte etwas hilfsbereiter sein, da wir ihn doch höflich gefragt*
          haben.   (PAC)
          Max could a-little more-helpful be because we him MP politely asked
          have

In contrast, CACs usually do not tolerate MPs:

(16) a. **Maria ging oft in die Staatsoper, als sie ja in Wien lebte.*
          Maria went often to the State-Opera-House when sie MP in Vienna
          lived   (CAC)

     b. **Wenn es schon Frost gibt, erfrieren die Rosen.*   (CAC)
          when it MP frost is freeze-to-death the roses   (Brauße 1994: 112)

     c. **Während er wohl den Brief schrieb, ist er gestört worden.*   (CAC)
          while he MP the letter wrote has he disturbed been
                                                    (Asbach-Schnitker 1977: 49)

Sometimes a *weil*-clause or a *wenn*-clause may host an MP:

(17)　a.　*Weil er halt zu lange redete, hat man Max das Wort entzogen.*
　　　　　because he MP too long talked have they Max the word taken-away

　　　b.　*Wenn sie halt doch Durst bekommt, trinkt Maria Bier.*
　　　　　when she MP MP thirsty gets drinks Mary beer

However, such *weil*- and *wenn*-clauses are not central adverbial clauses but are PACs: they cannot have a correlate, (18a), they cannot be in the scope of negation in the associated clause, (18b), and it is not possible to bind into an adverbial containing an MP, (18c), cf. Coniglio (2011). Thus, standardly *weil* and *wenn* introduce CACs, but *weil*- and *wenn*-clauses can be PACs if triggered by the presence of an MP.

(18)　a.　**Man had Max deshalb das Wort entzogen, weil er halt zu lange redete.*　　　　　　　　　　　　　　　　　　　　(PAC)
　　　　　they have Max COR the word taken.away because he MP too long talked

　　　b.　**Man had Max das Wort nicht entzogen, weil er halt zu lange redete, sondern weil ...*　　　　　　　　　　　　　(PAC)
　　　　　they have Max the word not taken.away because he MP too long talked, but because…

　　　c.　**Kein Linguist₁ sollte, wenn er₁ halt doch Durst bekommt, Bier trinken.*　　　　　　　　　　　　　　　　　(PAC)
　　　　　no linguist should when he MP MP thirsty gets beer drink

In sum, there is evidence that PACs in contrast to CACs may host MPs. Given the root-sensitivity of MPs, this is evidence that PACs belong to the root-like subordinated clauses, whereas CACs do not.[2]

　　These observations reveal something about the syntactic structure of PACs since on the one hand an MP interacts with the illocutionary force of its clause and, on the other, it arguably needs some sort of formal licensing.

　　Rizzi (1997) proposes that as part of the structure of the clause's left periphery (the CP layer), there exists a functional projection Force, which represents the clause type and may also encode the clause's specific illocutionary force. Modifying Rizzi's (1997) proposal, Haegeman (2002, 2006), Coniglio (2011) and Bayer (to appear) among others assume that root-clauses and root-like dependent clauses possess a Force-projection,

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2.　This is confirmed by the fact that in English, PACs allow topicalisation in contrast to central adverbials (Haegeman 2002):

(i)　a.　We don't look to his paintings for commonplace truths, though truth they contain none the less.　　　　　　　　　(PAC)

　　b.　*If these final exams you don't pass, you won't get the degree.　(CAC)

while non-root-like clauses do not (see also Coniglio & Zegrean this volume for arguments to represent clause type and the possible illocutionary force of a clause by different functional projections). The proposal is that it is the Force-projection which makes possible topicalisation, V2 or the occurrence of an MP. Hence, important ingredients of this proposal are that, first, only root-contexts tolerate phrases containing a Force-projection, and second, only phrases containing Force allow so-called root-phenomena.

An immediate consequence of this proposal is that PACs, being root-like, have a projection which encodes illocutionary force and that CACs, not being root-like, do not have such a projection. Note, however, that the argumentation of the present article remains neutral as to whether there in fact exists a special additional functional projection in the left periphery representing the illocutionary force of its clause or whether in a clause with illocutionary force, the C-projection, which every non-reduced clause possesses, is enriched with a feature encoding this force. Thus, in the following, when I speak of a Force-projection it is just to be understood as referring to the syntactic representation of the illocutionary force (or illocutionary potential, see below) of a clause in its left periphery.

Another consequence of the proposal is that complement *dass*-clauses may or may not possess a Force-projection. In general, complement *dass*-clauses are not root-sensitive. Hence, they do not always have Force. However, a *dass*-clause which hosts an MP is root-sensitive, (14a,b). Such a *dass*-clause necessarily has Force. A final consequence worth mentioning is that although the presence of Force is a necessary condition for V2, it obviously is not a sufficient condition for V2. The root-like *dass*-clauses with an MP and the root-like PACs are verb-end. These sentences have Force without allowing V2.[3]

4.   The licensing of PACs

In the last section, the proposal was adopted that root- and root-like clauses, to which PACs belong, have a Force-projection (or a C[+FORCE]-projection), whereas non-root-like clauses, to which CACs belong, do not.

Haegeman (2002) states that Force either has to be anchored to a speaker or to a potential speaker. The Force-projection of an independent sentence is directly anchored to the speaker. The Force-projection of a root-like complement clause is anchored to the referent of the logical subject of the superordinated sentence, a potential speaker.

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3.   It is likely that the reason is simply that in these sentences, Force is already occupied by the complementiser such that there is no target position available for the verb-movement in V2, German being a language which does not allow 'CP-recursion'.

Thus, according to Haegeman, a PAC, not being a complement, is directly anchored to the speaker. This fits her suggestion that PACs are adjoined to a root clause, or may even constitute with the host a kind of coordinated structure.

It was stated above that the fact that a PAC may occupy the prefield of a German V2-clause shows that this proposal cannot be the full story. Therefore, I propose that there exists another way of anchoring a Force-projection, namely indirectly via a Force-projection which is anchored. This is what happens with PACs: their Force-projection is not directly but indirectly anchored to a (potential) speaker because it is licensed by the Force-projection of the superordinated clause, which in turn is anchored to a (potential) speaker. Thus, I propose in addition to (19) the constraint (20) for subordinated phrases with an illocutionary potential:

(19)   Any Force must be (directly or indirectly) anchored to a (potential) speaker.

(20)   A subordinated phrase containing a Force-projection must be licensed either

  i.   by a subcategorising verb whose logical subject denotes a potential speaker, or
  ii. by a Force head.

In the following, I argue that condition (20) allows us to deduce many of the peculiarities PACs show.

Thurmair (1989) and Coniglio (2011) assume that MPs can only occur in clauses which constitute an independent speech act. Under this view, all root-like dependent clauses are associated with their own speech act. Likewise, Haegeman (2002, 2006) supposes that with a PAC and its host two independent speech acts are performed. However, the following data show that this strong assumption can hardly be maintained. It seems more appropriate to say that MPs may also occur in clauses which have an illocutionary *potential*. Consider the following examples:

(21)   a.   *??Du wirst erstaunt sein, da ich hiermit kündige.*   (PAC)
              you will astonished be because I hereby quit

       b.   **Hast du noch Hunger? Da ich noch viel Essen übrig habe.*
              are you still hungry since I still a-lot-of food left have   (PAC)

       c.   **Hans wurde gewählt*, [*obwohl er es gar nicht wollte, nicht wahr?/oder?*]
                                                                              (PAC)
              Hans was elected though he it at-all not wanted did he?

       d.   **Ich werde nach Hause gehen, während ich dir (hiermit) rate, zu bleiben.*
              I will home go while I you hereby advise to stay   (PAC)

(21a,d) show that it is (nearly) impossible to use a PAC as a performative. (21b) shows that a *da*-clause cannot justify the speech act made with the main clause. In (21c) the attempt fails to form a tag question with the concessive clause. These observations suggest that the view that all root-like dependent clauses constitute an independent speech act is too strong an assumption. Note that the situation is different with

denn- or *weil*-V2-clauses. (22) shows that, for example, these sentences can be used as performatives and can justify a speech act.

(22)   a.   *Du wirst erstaunt sein, denn/weil ich kündige hiermit.*
            you will astonished be because I quit hereby

       b.   *Hast du noch Hunger? Denn/weil ich habe noch viel Essen übrig.*

Given our assumptions, the fact that PACs cannot be illocutionarily independent of their host is to be expected. The Force of a PAC is licensed by means of the Force of its superordinated clause. Thus, its Force is dependent on the Force of its host. That a phrase is illocutionarily independent presupposes that its Force is directly linked to a speaker. A PAC is not directly linked to a speaker.

Hence, it can be said that the fact that a PAC possesses Force only encodes that the PAC has an illocutionary potential, which needs for its realisation the piggyback of a Force which encodes illocutionary force. In general, Force just encodes the necessity of the phrase to be finally anchored to a speaker or to a potential speaker, i.e. this anchoring might be indirect via a Force-projection which is directly anchored.[4]

Let us move to another property of PACs. Interestingly, PACs can belong to an embedded clause. In this case, the embedded clause has to occur in a root-context, i.e. the embedded clause has to be root-like. This is shown by (23a,b). Note that this restriction does not hold for CACs, cf. (23c,d); they may occur in non-root-environments.

(23)   a.   *Paul glaubt/*bedauert, dass Otto kommt, da er Geld braucht.*
            Paul thinks/regrets that Otto comes since he money needs   (PAC)

       b.   *Max meint/*bestreitet, dass Maria Fußball liebt, während Paul für Opern schwärmt.*
            Max thinks/denies that Maria soccer loves while Paul about operas
            is-crazy   (PAC)

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4.   Let us briefly compare the following cases:

(i)   a.   *Hans ist ein wenig dumm, während seine Frau sehr klug ist.*
            Hans is somewhat dumb while his wife very intelligent is   (PAC)

       b.   *Hans ist ein wenig dumm. Hingegen ist seine Frau sehr klug.*
            Hans is somewhat dumb in contrast is his wife very intelligent

In (ib), we find two separate assertions of equal importance; in (ia), given the discussion in the text, there is only one assertion involved. Arguably, the parts of this complex assertion are not of the same weight. The main clause seems to be more at issue than the *während*-clause. However, importantly, the speaker is committed to the content of the adverbial clause; the clause is challengeable (cf. Verstraete 2007). This, then, is a crucial difference between PACs and CACs. A PAC is challengeable; the content of a CAC is taken for granted by the discourse participants (modulo the adverbial relation, of course).

    c. *Paul bedauert, dass Otto kommt, weil er Geld braucht.*   (CAC)

    d. *Max bestreitet, dass Maria wegfuhr, während Paul krank war.*
       Max denies that Maria went-away-on-a-trip while Paul ill was (CAC)

That the subordinated clause which is the host of the PAC has to occur in a root-inducing context is due to the PAC's Force-projection. This Force-projection has to be locally licensed by a Force head. An embedded clause with a licensing Force has to occur in a root-context to get its Force licensed. In the well-formed variants of (23a,b), the Force-projection of the PAC is licensed by the Force of the embedded *dass*-clause. In the ungrammatical ones, the subordinated *dass*-clause occurs in a non-root-context and cannot have a Force-projection. Therefore, the PAC's Force-projection cannot be licensed. Since CACs do not have Force, their hosts are not restricted to Force-licensing environments. Note that if a PAC were just adjoined to a CP-node that was insensitive to the illocutionary status of its host, the differences observed in (23) would not be expected.

    As observed in (8) and (9), an element of the host cannot bind into a PAC. However, if a PAC is part of an embedded structure, an element of the superordinated clause may bind into it, since the complete embedded structure occurs in the c-command domain of any matrix element.

(24)   *Jeder$_1$ dachte, andere werden bevorzugt, während er$_1$ doch der Richtige sei.*
      everybody thought others were favoured, while he MP the right-one is
                                             (PAC)

The next property of PACs to be discussed played a crucial role in the discussion above: a PAC may occupy the prefield of a V2-clause. A V2-clause has Force in its left periphery. Again, it is irrelevant whether there is a special structural position SpecForce or whether the prefield corresponds to SpecCP, with CP carrying the feature [+FORCE]. Just for convenience of expression, I speak of SpecForce.

    Since for the licensing of PACs, condition (20ii) is relevant, and since licensing is a local relation, we arrive at a new view about the options for filling the German prefield of a V2-clause. A PAC has to be licensed by Force of its host clause. This condition can be fulfilled if the PAC is base-generated in SpecForceP. Thus, the condition (11) should be replaced by the conditions in (25) (cf. Frey 2011):

(25)   Options for filling the prefield of a clause S in German
      With the possible exception of some formal elements,[5] the prefield is filled
      either

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5.   Possible examples of such elements are the expletive *es* or the scope marking *w*-phrase in a *w*-scope marking construction.

    i.   by movement of an element base-generated inside the TP-domain, or

    ii. by base-generation of an XP with an illocutionary potential (i.e. an XP with a non-independent Force) in SpecForce of S, XP being licensed by Force of S.

An XP which is licensed by Force of the clause functioning as its host may be called a Force-element. PACs are the Force-elements mainly discussed in this paper, however, below some other Force-elements are considered.[6]

    According to (25ii), a Force-element may be base-generated in the prefield of a V2-clause, i.e. in SpecForceP. As another option for its positioning in the syntactic structure, I assume that a Force-element may be adjoined to the Force-projection of its host and be licensed there by Force. Phonetically, such a phrase adjoined to Force may be realised to the left or to the right of its host.[7] Furthermore, it may also be realised in parenthetical niches related to the licensing Force. In the middle field, such parenthetical niches are at the very top and follow each sentence constituent. Thus, if a PAC is serialised in the middle field, it appears as a Force-related parenthetical and not as a constituent of the TP-domain, i.e. it does not occur in the middle field as a regular constituent.

    This brings us into a position to consider the next properties of PACs. Section 2 presented data which show that PACs cannot have a correlate, that they cannot be in the scope of negation in the host clause, that no element of the host clause may bind into them, and that they cannot carry the nuclear stress of the construction consisting of the host clause and the PAC. These properties are consequences of the

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6.   Note that although in Section 3 it was demonstrated that MPs can only occur in clauses which have Force, MPs are not Force-elements. The same holds for sentence adverbials like *glücklicherweise* ('fortunately') or *anscheinend* ('apparently'). Frey (2004) argues that in the TP-domain of a German fully specified clause there is a structural position for sentence topics to the left of sentence adverbials and MPs. In terms of phrase structure, this means the TP-internal Topic-projection selects the projection which may host MPs and sentence adverbials. Sentence topics are only possible in clauses with illocutional potential, i.e. in clauses which have a Force-projection in their left periphery.

7.   If a PAC follows its host it is adjoined to, in German the result normally sounds much better than if it precedes its host, cf. (29b) below. However, the following example with a preceding concessive is, albeit marked, quite good:

   (i)   *Obwohl Hans krank ist, seiner Frau scheint es sehr gut zu gehen.*
        although Hans ill is his wife seems EXPL very fine to be   (PAC)

Thus, at this point I would blame non-syntactic reasons for the preference to have PACs follow if they are adjoined, especially since in German with the prefield there is an excellent position available for PACs if interpretative and discourse-pragmatic needs favour having them begin the complex structure.

fact that in syntactic structure, a Force-element may appear in its host's prefield, or it may be adjoined to its host's ForceP. In both cases, the Force-element is outside the c-command domain of any TP-internal element of the host clause.

Another property observed above is that a PAC, in contrast to a CAC, cannot be questioned, cf. (5). One might speculate that the reason that PACs cannot be questioned is that in this case the matrix clause would only contain material that is taken as given, i.e. the matrix clause's Force would exclusively cover given material, which is not compatible with the illocutionary function encoded in Force. In the case of a questioned CAC the adverbial belongs to the domain of the matrix clause's Force.

Another contrast between PACs and CACs is that if the associated clause is transformed into a question, a CAC becomes part of that question, whereas a PAC does not, cf. (6). It is reasonable to assume that a PAC's illocutionary potential is assertive by default. A PAC's illocutionary potential has to be compatible with the illocutionary force of the whole construction. This is not fulfilled in (6b–d).[8]

Finally, with regard to (1) it was observed that PACs do not relate eventualities, but CACs do. These semantic facts hold because PACs are licensed by Force and central adverbials are licensed TP-internally. Only an adverbial which is licensed inside the TP of its matrix clause can relate to the eventuality denoted by the matrix clause.

Let me conclude this section with some remarks about other elements licensed by Force. First, there are speech-act-related adverbials that may appear in the prefield (Pittner 1999), (26a,b). As to be expected these adverbials may appear in the middle field only parenthetically, (26c).

(26)   a.   *Wenn du mich fragst, könnten wir uns um 17:00 treffen.*
            if you me ask could we REFL at 5 pm meet

       b.   *Am Rande bemerkt bin ich etwas enttäuscht von dir.*
            by the way am I somewhat disappointed in you

       c.   *Ich bin – am Rande bemerkt – etwas enttäuscht von dir.*

Given their distribution and their semantic content, it seems reasonable to assume that these speech-act adverbials belong to the Force-elements. Other examples of Force-elements are given by the prefield constituents in (27) (cf. also Meinunger 2004). Again, these constituents cannot appear in the middle field, except as parentheticals.

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8.   The judgements for (6b–d) change if the verb-final clauses get their own question intonation. In this case the sequence of the two clauses, each having a question intonation, is interpreted as one question.

(27)   a.   *Wenn Eva sich nicht irrt, reist Karl nach Lund.*
            if Eva REFL not is-wrong travels Karl to Lund

        b.   *Ein Glück habe ich den Regenschirm dabei.*
            a luck have I the umbrella with-me

In (27a), the prefield constituent is again used to make a meta-linguistic statement; it is what Haegeman (2002) terms a "premise conditional". This sentence can be paraphrased as 'if Eva is not wrong, the following statement holds: Karl will travel to Lund'. The prefield constituent in (27b) transforms the structure into a kind of exclamative. The sentence shares with regular exclamatives the property of factivity and the emotive attitude of the speaker towards the proposition expressed. In the analysis of exclamatives, the specification of Force plays a crucial role (cf. e.g. Zanuttini & Portner 2003). Thus, it seems reasonable to assume that the prefield constituents in both (27a,b) do not enter into a licensing relation with the verb or with any verb-related functional projection, but are licensed by Force.

     Haegeman (2002) gives the conditional in (28a) as an example which is neither a premise nor an event conditional. The German examples (28b,c) also show that this conditional clause is not a PAC (and surely not a CAC); it cannot occupy the prefield. In Pittner (1999), this kind of conditional is called an (Ir-)Relevanzkonditional ('(ir) relevance conditional').

(28)   a.   *If you are hungry, there's food in the fridge.*
        b.   **Wenn du Hunger hast, ist Essen im Kühlschrank.*
        c.   *Wenn du Hunger hast, Essen ist im Kühlschrank.*

Given the content of a relevance conditional, it is no surprise that it behaves differently from a premise conditional. A relevance conditional does not affect the Force of its associate clause. Rather it sets a scene relative to which the illocution of the associated clause might be relevant.

     As discussed at length above, a PAC may appear in the prefield of a V2-clause in German, (29a). In German, only one Spec-position in the left periphery may be occupied, so there is only one 'prefield' (the special construction 'Linksversetzung' being an exception). In (29b), *Hans* occupies the prefield. In an adjoined position, a PAC favours being right-adjoined to Force, i.e. clause-finally. As to be expected, in English, the corresponding PAC may precede its clause perfectly, (29c). The subject remains TP-internal; SpecForceP hosts the PAC.

(29)   a.   *Während seine Frau arbeitslos ist, hat Hans einen anspruchsvollen Job.*
                                   (PAC)
        b.   ??*Während seine Frau arbeitslos ist, Hans hat einen anspruchsvollen Job.*
                                       (PAC)
        c.   *While his wife is unemployed, John has a high-powered job.*
                              (PAC)   (Haegeman 2002)

Let me finish this section with a remark on Haegeman's more recent treatment of the difference between the internal syntax of CACs and PACs. In her new articles on this topic (for example, Haegeman 2010, this volume) Haegeman assumes that PACs as well as CACs have a fully equipped left periphery, i.e. the structure of the left periphery of a CAC is not truncated in comparison to that of a PAC. Haegeman argues that the pertinent differences between CACs and PACs should be explained differently. She assumes that conditional and temporal CACs are derived by movement of an operator from a TP-internal position to the left periphery. She now rules out the root-phenomenon of argument fronting in English conditional and temporal CACs by assuming that fronted arguments give rise to intervention effects on movement. That 'high' adverbials are possible ins PACs but not in CACs is also seen as a result of intervention effects on movement in CACs. For a PAC Haegeman sees two options. Either its operator movement is high up and hence the path of operator movement that derives the PAC does not interfere with the movement operations that derive the main clause phenomena, or no operator movement takes place to derive PACs.

It is obvious that this new analysis of Haegeman's is not compatible with the present findings, the simple reason being that in this new approach PACs and CACs should behave the same with regard to their external syntax, since from the outside there is no difference between the two types. However, the present paper argues that there are important differences between PACs and CACs with regard to their external syntax, which have important consequences for embedding, binding, the possibility of a correlate etc. The differences in external syntax are seen here as the result of the differences in their left peripheries.

Coniglio (2011) raises further questions about Haegeman's new approach: Which operators are moved in other central adverbial clauses, say, causal or final ones? Where are these operators base-generated? Finally, a sentence like the non-restrictive relative clause in (30), which obviously shows movement of a 'low' operator, does not show intervention effects.

(30) *Ich habe gestern mit dem Chef gesprochen, welcher hoffentlich unser Problem lösen wird.*
      I have yesterday with the boss talked who hopefully our problem solve will
                                                                        Coniglio (2011)

5. The differences between peripheral and non-integrated adverbial clauses

Let us now consider a further class of adverbial clauses, which show interesting differences from PACs. As will soon become clear why, the members of this class are called

non-integrated adverbial clauses (NACs). (31) exhibits a continuative *w*-relative, a continuative *d*-relative, and a free *dass*-clause,[9] respectively:

(31) a. *Emma gewann die Schachpartie, was Oskar ärgerte.*
          Emma won the chess-match which Oskar annoyed   (NAC)

      b. *Maria gibt ihrem Mitarbeiter ein Buch, das der gleich ins Regal stellt.*
                                                              (NAC)
          Maria gives her assistant a book that he right-away onto-the shelf puts
                                                              (cf. Holler 2009)

      c. *Er ist verrückt, dass er ihr jetzt nachreist.*   (NAC)
          he is   crazy   that he her now follows
          'He is crazy to follow her now.'

These clauses are verb-final adverbial clauses. One might be led, erroneously as I will argue, to assume that they are syntactically dependent in some way on the clauses preceding them.

To begin with, we can observe that if one applies the tests of Section 2 to NACs, one finds that they do not share any of the properties with CACs, i.e. they do not allow a correlate, they cannot be questioned, it is not possible to bind into them, and so on and so forth. Furthermore, NACs are perfect hosts for MPs, (32). Thus, with regard to all these properties, they behave like PACs. Given the considerations in Section 3, the last property is a strong indication that NACs possess a Force-projection.

(32) a. *Emma gewann die Schachpartie, was Oskar eben* (MP) *doch* (MP)
          ärgerte.   (NAC)
      b. *Maria gibt ihrem Mitarbeiter ein Buch, das der wohl* (MP) *gleich ins*
          Regal stellt.   (NAC)
      c. *Er ist verrückt, dass er ihr jetzt eben* (MP) *doch* (MP) *nachreist.*
                                                              (NAC)

However, in the following various properties are considered which show that NACs are crucially different from PACs. First, an NAC cannot be positioned in the prefield:

(33) a. **Was Oskar ärgerte, gewann Emma die Schachpartie.*   (NAC)
      b. **Dass er ihr jetzt nachreist, ist er verrückt.*   (NAC)

Yet, perhaps one could assume that the ungrammaticality of (33) is not due to a structural property of the NACs but follows from their semantics, in so far as their content continues the content of the associated clause or justifies its assessment, such that the NACs should also follow their associated clauses linearly. If this

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9. A free *dass*-clause gives reasons for the assessment expressed in the prior clause based on the fact that it denotes (Reis 1997).

reasoning is true, (33) does not tell us anything about structural differences between NACs and PACs.

This is different with the remaining properties to be considered. In the previous section, it was observed that a PAC cannot be used to perform a separate speech act. Crucially, NACs show a different behaviour.

(34) a. *Bringst du Vater nach Hause? Wofür ich dir dankbar wäre.*
            (NAC)   (cf. Holler 2008)
          see you father home for-which I you thankful be-SUBJ

    b. *Max hat sich auch beworben, weshalb ich hiermit zurücktrete.*
            (NAC)   (cf. Reis 1997)
          Max has REFL as-well applied why I hereby withdraw

    c. *Hans wurde gewählt,* [*worüber wir uns gewundert haben, nicht*
          wahr?/oder?]
          Hans was elected about-which we REFL surprised were, weren't we?
            (NAC)

    d. *Maria gibt ihrem Mitarbeiter ein Buch,* [*das der gleich ins Regal stellt,*
          nicht wahr?/oder?]   (NAC)

    e. *Ist denn etwas   los,   dass Max so   schreit?* (NAC)
          is   MP   something going-on that Max like-that screams
          'Is something wrong, that Max is screaming like that?'   (Reis 1997)

(34a) demonstrates that the continuative *w*-relative clause is possible as an assertion when the associated clause is a question/request. In (34b), a continuative *w*-relative clause is used as a performative, in (34c,d) a continuative *w*-relative and *d*-relative, respectively, are the basis for a question tag, and in (34e) the speech act performed with the preceding clause can be justified by means of an assertive free *dass*-clause (Reis 1997).

Hence, with an NAC an independent speech act is carried out. I take this as evidence that in contrast to the Force of a PAC, the Force of an NAC is not dependent on the Force of its associate clause. Rather, an NAC's Force is directly anchored to the speaker. For syntax, this means that the Force of an NAC is not licensed by the Force of its associate clause; an NAC's Force is as independent of its surroundings as the Force of any independent clause.[10]

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10. I remain neutral as to whether clauses which have an independent Force also have a super-structure encoding the speech act that furnishes information about the speaker and the hearer and their relationship; see Miyagawa (this volume) for the adoption of such a structure for the analysis of politeness marking in Japanese.

Let us see what can be said about the external syntax of an NAC. The first fact to note concerns its position relative to a PAC. As might be expected given the observations so far, an NAC has to follow a PAC:

(35) a. *Er ist gekommen, obwohl er eigentlich keine Zeit hatte, worüber sich alle freuten.* (PAC < NAC)
he has come although he actually no time had about-which REFL everyone happy-was

b. **Er ist gekommen, worüber sich alle freuten, obwohl er eigentlich keine Zeit hatte.* (NAC < PAC)

c. *Du bist verrückt, während deine Schwester vernünftig ist, dass du das ganze Geld verjubelst.* (PAC < NAC)
you are crazy while you sister intelligent is that you the all money blow

d. **Du bist verrückt, dass du das Geld verjubelst, während deine Schwester vernünftig ist.* (NAC < PAC)

The data in (35) by themselves do not prove too much. However, they obviously support the evidence given by (34) that NACs are less strongly connected to the associated clause than PACs.

Now, in my opinion the following observation is crucial for the determination of the external syntax of NACs:

(36) a. **Hans meint, Maria wird auch kommen, worüber sich alle freuen werden.*
Hans thinks Maria will too come about-which REFL everyone happy will-be (NAC)

b. **Max berichtet, dass Maria ihrem Mitarbeiter ein Buch gibt, das der gleich ins Regal stellt.* (NAC)
Max reports that Maria her assistant a book gives that he right-away onto-the shelf puts

c. *?*Hans glaubt, dass Fritz blöd ist, dass er Erna den Mantel bezahlt.* (NAC)
Hans believes that Fritz stupid is that he (for)-Erna the coat pays
(cf. Reis 1997)

The examples in (36) show that NACs cannot occur as part of an embedded structure. Note that in (36), the NACs' associated clauses occur in a root-context, i.e. in a context in which a PAC together with its host clause can occur.

I take the fact that an NAC cannot occur in an embedded structure as a strong indication that it is not part of the syntactic structure of its associated clause. An NAC is semantically dependent on its associated clause, but it is, unlike a PAC, not syntactically dependent.

Further evidence for this assumption is given by the fact that PACs are possible in answers to all-focus questions, whereas NACs are not. The reason is again that an NAC does not build one syntactic structure with its associated clause; the answer to a *w*-question, however, has to be built by one syntactic structure:

(37)   *Was hat Maria erzählt?*
'What did Mary tell?'

    a.   *Peter ist heute ins Schwimmbad gegangen, obwohl es stark regnete.*
                                                                 (PAC)
       Peter has today to-the swimming-pool gone although it heavily rained

    b.   #*Peter ist nach Paris gereist, worüber sich alle gewundert haben.*
                                                                 (NAC)
       Peter has to Paris travelled about-which REFL all surprised were

    c.   #*Peter ist größenwahnsinnig, dass er sich einen Porsche kauft.*
                                                                 (NAC)
       Peter is megalomaniac that he REFL a Porsche buys

That NACs are not part of the syntactic structure of their associated clauses while PACs are can also explain other differences. For example, in contrast to PACs, which can be completely deaccented (cf. Frey 2011), NACs necessarily are prosodically non-integrated in the sense that they need to have their own focus-background structuring, (38). That a clause must have its own focus-background structuring is taken as a sign of the independence of the clause (Brandt 1990; Reis 1997).

(38)   a.   **Emma gewann die Schachpartie, was Maria MAX erzählte.*   (NAC)
        Emma won the chess-match which Maria Max told

    b.   **Emma gewann die SCHACHpartie, was Maria Max erzählte.* (NAC)

    c.   *Emma gewann die SCHACHpartie, was Maria MAX erzählte.* (NAC)

In sum, NACs are syntactically true orphans in the sense of Haegeman (1991). They are licensed in discourse by interpretation.

The analysis which Antomo and Steinbach (2010) propose for *weil*-V2-clauses cannot be adopted for the NACs considered here and also is problematic for the analysis of *weil*-V2-clauses. A *weil*-V2-clause, illustrated in (39a), behaves with regard to the properties considered in the present paper like an NAC. In particular, a *weil*-V2-clause cannot occur in an embedded structure, (39b).

(39)   a.   *Hans ist nun sehr reich, weil seine Frau hat ihm viel Geld geschenkt.*
        Hans is now very rich because his wife has him a-lot-of money given

    b.   **Maria behauptet, Hans ist nun sehr reich, weil seine Frau hat ihm viel Geld geschenkt.*

Antomo & Steinbach (2010) assume that constructions with a *weil*-V2-clause are paratactic with *weil* as a coordinating conjunction:

(40) $[_{\pi P}\ CP_1\ [_{\pi'}\ weil_{\pi 0}\ [_{CP2}\ \text{sie arbeitet zu viel}]]]$

However, there is no evidence that a *weil*-V2-clause and its associate clause should constitute one syntactic node. What is more, one needs extra stipulations to account for the fact that *weil*-V2-clauses cannot occur embedded together with their associate clauses. After all, a structure like (40) would lead one to expect that embedding should be possible. The same would be true if a similar treatment were assumed for the NACs considered in the present paper. Likewise, one would expect that NACs should be possible in answers to all-focus questions.

Cinque (2008) proposes a structure like (40) for his analysis of non-integrated non-restrictive relative clauses, H^0 being an empty head:

(41) $[_{HP}\ CP\ [_{HP}\ H^0\ CP]]$

However, no empirical evidence is given for this proposal; rather Cinque (2008:119) writes: "we must also assume that the 'Discourse Grammar' head H, as is the general rule for sentences in a discourse, blocks every 'Sentence Grammar' relation between its specifier and complement […], despite the asymmetric c-command relation existing between the two [...]"

Hence, it appears that structures like (40) or (41) do not have much empirical justification, and that they require adopting extra stipulations. Thus, it seems appropriate to accept that there are clauses which are semantically dependent on their preceding clause but are not related syntactically to this clause.[11] However, these non-integrated dependent clauses seem to induce a specific discourse relation by which they are linked to the preceding sentence and by which they get licensed.

Using the framework of 'Segmented Discourse Representation Theory' of Asher and Lascarides (2003), Holler (2009) undertakes first steps towards investigating the discourse relations by which continuative *w*- and *d*-relative clauses as well as *weil*-V2-clauses are linked to their associated sentences. Holler finds that a continuative *w*-relative clause is linked to its antecedent by a subordinating discourse relation called 'Commentary', a *d*-relative clause is linked by the coordinating discourse relation 'Narration', and a *weil*-V2-clause by a subordinating discourse relation called 'Explanation*'. 'Explanation*(α,β)', being conceived as a so-called metatalk-relation, means that β justifies the utterance of α.

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11.   Since continuative *w*-relatives and *d*-relatives do not build a syntactic constituent with their associates, cf. (36a,b), (37b), I also believe that the Par(enthetical)-projection, which de Vries (this volume) proposes to host a parenthetical and the expression it is linked to, cannot be employed to relate a continuative *w*- or *d*-relative to its associate.

One might ask why speakers should choose an NAC when NACs are, as claimed here, syntactically and illocutionarily independent and why they do not just use a regular main clause with the same content. Holler (2009) argues that discourse segments which are related by a coordinating discourse relation are of equal informational weight, whereas in the case of a subordinating relation, the subordinated discourse segment is of less informational weight than the dominating discourse segment. Under this perspective, for example the choice of a continuative *w*-relative clause instead of a semantically equivalent main clause makes perfect sense: the content of the continuative *w*-relative clause is marked as being less important for the content of the overall text than the content of its associated clause. A similar reasoning applies to the choice of a *weil*-V2-clause instead of a regular main clause. Arguably, this also holds for a free *dass*-clause. In the case of a *d*-relative clause the situation is different since here the non-canonical verb-final clause induces a coordinating discourse relation like the corresponding main clause would do. However, if we compare the two possibilities in (42a,b), we find an interpretative difference with regard to a possible continuation like (42c), for example.

(42)   a.   *Maria gibt ihrem Mitarbeiter ein Buch, das der gleich ins Regal stellt.*
                                                                                            (NAC)
        b.   *Maria gibt ihrem Mitarbeiter ein Buch. Das stellt der gleich ins Regal.*
        c.   *Das hat alle erstaunt.*
             that has all astonished

If (42a) is continued by (42c), it is understood that the astonishment regards the content of both preceding clauses, whereas if (42b) is continued by (42c), the astonishment concerns only the content of the second clause of (42b). Thus, the two clauses in (42a) describe one single complex event, whereas the two clauses in (42b) describe a sequence of two events.

Already these cursory observations indicate that it makes sense for (German) grammar to offer non-canonical constructions like NACs. They allow something sui generis to be expressed which is not offered by semantically equivalent independent main clauses.

6.   Summary

The main goal of this article was to show that PACs and NACs have very different licensing conditions, which give rise to different formal and interpretative properties. Among the formal differences are: PACs in contrast to NACs can appear in the prefield of a V2-clause; PACs can appear with an embedded clause,

while NACs cannot; NACs have to follow PACs; and NACs in contrast to PACs are necessarily prosodically non-integrated. Among the interpretative differences are: NACs in contrast to PACs are not possible as parts of answers to all-focus questions; NACs need to have their own focus-background structuring, whereas PACs do not; finally and most importantly, NACs but not PACs constitute independent speech acts.

The paper has argued that a PAC has to be syntactically licensed by a left peripheral projection of its host clause which is anchored to a speaker or a potential speaker, often called Force. In contrast, an NAC is not part of the syntactic structure of its associated clause; it is syntactically a true orphan in the sense of Haegeman (1991). Thus, although NACs have formal properties of dependent clauses (e.g. the presence of a complementiser or the clause-final position of the verb in Germanic OV-languages), they are syntactically independent of the clauses they relate to semantically and, therefore, are root-clauses syntactically. An NAC is licensed by a specific rhetorical relation which connects it with its associated clause.

The interpretative differences between PACs and NACs follow from their different statuses. For example, since PACs are formally dependent on their host clauses, they cannot constitute independent speech acts, whereas NACs, which syntactically are independent root-clauses, can.

The paper suggests that in German at least four types of dependent clauses should be distinguished: (i) verb-final complement clauses without Force and CACs; (ii) verb-final complement clauses with Force and complement V2-clauses – their Force is licensed by a root-inducing subcategorising verb; (iii) PACs – their Force is licensed by the Force of their host clause; and (iv) NACs – they are syntactically independent of their associate clause; their Force is directly anchored to the speaker.

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