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German concessives as TPs, JPs and ActPs

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The concessive relation is said to not be expressible by a central adverbial clause (CAC) but by a peripheral adverbial clause (PAC) or a non-integrated dependent clause (NonIC). This is true in the standard case. The paper argues that this ban on the appearance of the concessive as a CAC stems from the fact that the concessive relation standardly involves a judgement, which is due to a conception of an expected course of events that is associated as an implicature with the concessive relation. However, based on d'Avis (2016), it is shown that if a concessive just stands in opposition to a conditional that is salient in the context, it does not involve a judgement and can appear as a CAC.

A judgement constitutes a private act of evaluation (Krifka to appear). It follows that in the standard case concessive clauses necessarily involve a richer semantic structure than just a core proposition. This has consequences for syntax. Following Krifka, the paper assumes that the private act of a judgement is syntactically represented in clausal structure by a J(udge)P(hrase). CACs do not contain a JP-projection, but PACs do.

NonICs encode a speech act; in addition to a JP they also contain a Com(mitment)P(hrase) and an ActP(hrase). It is demonstrated that while concessives realised as PACs may host so-called weak root phenomena, concessives realised as NonICs may also host commitment modifiers and so-called strong root phenomena. Further distinguishing syntactic properties of concessives realised as PACs or as NonICs are discussed.

Keywords: types of concessives; degrees of integration; root phenomena; judgements; speech acts; sizes of clauses

1 Introduction

In German, a concessive adverbial clause is standardly expressed with the help of the complementiser *obwohl* ('although'), (1).

- (1) a. Max hat verloren, obwohl er sehr gut gespielt hat. Max has lost although he very well played has 'Max lost although he played very well.'
 - b. Obwohl Max sehr gut gespielt hat, hat er verloren.

The complementiser *obwohl* is considered to be neutral regarding style and variety differences (Zifonun et. al 1997: 2311). In English, *although* is the prototypical representative of concessive complementisers. German *trotzdem* and English *nevertheless* can be taken as the representatives of concessive adverbs appearing in an independent clause and *trotz* and *despite* are representatives of concessive prepositions. The present paper deals in detail with verb-final adverbial clauses introduced by *obwohl*.¹ Furthermore, there are special constructions which are associated with a concessive meaning. In our discussion the verb-first concessive construction (V1-concessive) in (2), which obligatorily contains the modal particle (MP) *auch*, will play a central role.

(2) Max hat verloren, hat er auch sehr gut gespielt. Max has lost has he MP very well played 'Max lost, although he played very well.'

According to the standard assumption, the meaning of the concessive relation expressed for example by *p*, *obwohl q* involves two components. First it is expressed that p and q are true, and second that in the normal course of events non-p follows from q. Furthermore, the second meaning component is considered to be not-at-issue. Thus, the two components of the concessive meaning are often stated as in (3) (cf., e.g., König 1985; Kortmann 1997; Breindl 2004).² The slightly different version of Antomo & Steinbach (2013) with the second meaning component expressed by a non-selective quantifier, a restrictor and a nucleus and with the assumption that it is conventional implicature instead of a presupposition is depicted in (4).³ The presupposition and the conventional implicature are associated with a lexical item like *obwohl* as illustrated in (3) and (4), respectively. Likewise, one would assume that these meaning components are associated with a special construction like the V1-concessive.

- (3) *p, obwohl q* assertion: $p \land q$ presupposition: normally $(q' \rightarrow \neg p')$, with p' and q' plausible generalisations of p and q, respectively
- (4) *p, obwohl q* assertion: p ∧ q
 conventional implicature: USUALLY {q} [¬p]

Based on d'Avis (2016), the present paper will argue that as a general condition the presupposition/conventional implicature depicted in (3)/(4) is too strong. In the standard use of a concessive, however, the non-at-issue condition in (3) or (4) is operative and if it is, it has far-reaching consequences. It is in the cases in which such a modalised not-at-issue condition is in operation that the concessive cannot have the status of a central adverbial

¹ The constructions in which *obwohl* precedes clauses with main clause word order – cf. an example in (i) – will not be discussed. There is evidence that here *obwohl* does not form a constituent with the following clause. Instead, it appears as a syntactically independent discourse marker connecting two discourse units (cf., e.g., Günthner 1999, Frey & Masiero 2018). Such a construction is not only syntactically radically different from *obwohl*-adverbial clauses (cf. e.g. Frey & Masiero 2018). Its semantics is also different. A construction such as (i) has the effect that the assertion made with the clause preceding *obwohl* is withdrawn by the assertion of the clause following *obwohl*.

⁽i) Peter wird sicherlich zum Vortrag kommen, obwohl – er ist zurzeit in München. Peter will certainly to-the lecture come although he is currently in Munich 'Peter will certainly come to the lecture although – he is currently in Munich.'

² König (1988) proposes the slightly different presupposition of the concessive relation in (i). In the present paper, the difference between the formulations of the presupposition in (3) and in (i) will be ignored.

⁽i) $q' \rightarrow normally \neg p'$.

³ There are further proposals. Iten (2005) argues for a relevance-theoretic analysis of the meaning of concessive sentences, and Spooren & Sanders (2008) give a taxonomic analysis of coherence relations in terms of primitives like polarity and continuity.

clause. In these cases, the concessive relation obviously does not just claim that certain facts exist. Rather, a crucial part of its meaning is that the co-occurrence of two facts does not correspond to a rule which a thinking mind takes to hold usually. It is something rather special about concessives that in their standard use they crucially involve an estimation by a thinking mind, or, as we will say, by a judge. This is an important difference to, for example, the causal or the conditional relation. These are not necessarily understood as exhibiting an appraisal by a thinking mind as part of their meaning. Thus, in the standard case a concessive adverbial clause encodes a rather complex conceptual relation (e.g., König 1985; Di Meola 1997; Spooren & Sanders 2008).⁴

The article will proceed in the following way. For comparison, Section 2 presents some basic syntactic properties of temporal verb-final clauses (V_{fin}-clause), obwohl-V_{fin}clauses with and without specific linguistic contexts and V1-concessives. Furthermore, it investigates the distribution of different kinds of root phenomena with these clause types and discusses whether these types carry illocutionary force. Then, the clause types are assigned to three classes of dependent non-complement clauses: central adverbial clauses (CACs), peripheral adverbial clauses (PACs) and non-integrated dependent clauses (NonICs). Section 3 introduces Krifka's (2018, to appear) semantic layers of a speech act: a proposition, a judgement, a commitment and a speech act, as well as their corresponding syntactic categories: TP, JP, ComP and ActP. The categorical make-up of CACs, PACs and NonICs will be discussed. An *obwohl*- $V_{\rm fin}$ -clause in the use without a very special context necessarily involves a judgement and features a JP in syntax, and therefore cannot appear as a CAC but rather as a PAC. In contrast, a V1-concessive necessarily is a NonIC; it constitutes an independent speech act and is of the syntactic category ActP, containing ComP and JP. This section also compares Krifka's classification with Sweetser's (1990) three domains of interpretation (content, epistemic, speech act) and demonstrates that the two classifications are orthogonal to each other and additive. Section 4 is concerned with the syntactic licensing of concessives as PACs and as NonICs. Section 5 gives a summary.

2 Concessives and the distinction between CACs, PACs and NonICs

In this section temporal V_{fin} -clauses, *obwohl*- V_{fin} -clauses and V1-concessives are compared regarding some basis syntactic properties, and it is determined how these clause types are to be classified under the classification into CACs, PACs and NonICs (e.g., Haegeman 2003; Frey 2016). Let us first consider whether binding is possible into these clauses when they appear without linguistic context:

(5)	a.	Keiner ₁	wurde	bleich,	als	er_1	erschrocken	ist.
		no-one	got	pale	when	he	frightened	got
		'No-one turned pale when he got frightened.'						

- b. *Keiner₁ wurde bleich, obwohl er₁ erschrocken ist. no-one got pale although he frightened got
- c. *Keiner₁ wurde bleich, ist er₁ auch erschrocken. no-one got pale got he MP frightened

The temporal in (5a) allows binding from the matrix clause more easily than the concessives (5b,c) do. The same grouping of these clause types can be found with other phenom-

⁴ A reflection of this circumstance can be seen in the fact that concessives are acquired rather late (Di Meola 1997; Spooren & Sanders 2008; Knoepke et al. 2016) and are more difficult to process (Morera et al. 2017; Xu et al. 2018) and to understand (Köhne & Demberg 2012) than, say, causatives. Furthermore, primary school children have some problems using them (Becker & Musan 2014; Dragon et al. 2015; Knoepke et al. 2016).

ena. For example, in a context which induces a wide focus reading a temporal may carry the nuclear accent of the complex [host + adverbial clause] more easily than an *obwohl*-concessive or a V1-concessive may. (Thus, the reader is asked to read the examples in (6) without a clausal accent in the matrix clause.)

- (6) Was hast Du Neues erfahren?'What did you find out?'
 - a. Der Angeklagte blieb sitzen, als der Richter den RAUM betrat. the defendant remained seated when the judge the room entered 'The defendant remained seated when the judge entered the room.'
 - b. ??Der Angeklagte blieb sitzen, obwohl der Richter den RAUM betrat. the defendant remained seated although the judge the room entered
 - c. *Der Angeklagte blieb sitzen, hat der Richter auch den RAUM betreten. the defendant remained seated has the judge MP the room entered

Likewise, it can be shown that a temporal clause may be in the scope of a constituent negation appearing in the matrix clause, whereas an *obwohl*-concessive or a V1-concessive may not (cf., e.g., Brandt 1994).

- (7) a. Max ist nicht gegangen, als Maria kam, sondern als die Musik Max is not left when Maria came but when the music schlecht wurde. bad became
 'Max didn't leave when Maria came, but when the music got bad.'
 - b. *Max ist nicht gegangen, obwohl Maria kam, sondern obwohl die Max is not left although Maria came but although the Musik gut war. music good was
 - c. *Max ist nicht gegangen, kam auch Maria, sondern war auch die Max is not left came MP Maria but was MP the Musik gut. music good

It has been shown that regarding the properties tested in (5)–(7) a German causal *weil*- V_{fin} -clause ('because'- V_{fin} -clause) and a German conditional *wenn*- V_{fin} -clause ('if'- V_{fin} -clause) pattern with the temporal clause (cf., e.g., Frey 2016). According to an influential assumption, the generalisation in (8) underlies the data in (5)–(7) (cf., e.g., Haegeman 2006; Frey 2011).

(8) In contrast to other adverbial relations like the temporal, the causal or the conditional relation, the concessive relation cannot be realised with a CAC, which is base-generated in a low position in its host.

Usually it is stated like this, and no explanation is offered. Yet, if one thinks about the meaning of concessives, an attempt at an explanation suggests itself. With the help of CACs arguably only relations in the outside world are encoded. However, in a context-free use, concessives do not just refer to a relationship between eventualities in the outside

world.⁵ Thus, if the use of a context-free concessive necessarily goes beyond direct reference to the real world, it follows that such a concessive cannot be realised as a CAC.

Let us now come to examples in which an *obwohl*-concessive behaves as a CAC in contradiction to (8). Freywald (2018: 70) presents the authentic example in (9) (judgement by Freywald, her example 2.4: (23b)), which she takes to show that *obwohl* clauses can be CACs. Freywald (2018) asserts that sometimes concessives allow binding from the host, a sign of an adverbial clause being a CAC.

(9) Natürlich kann ein jeder₁, obwohl er₁ sich für die Marathonstrecke of course may one each although he REFL for the marathon-distance angemeldet hat, auch entweder die 115 km oder die 165 km Strecke fahren. signed-up has also either the 115 km or the 165 km distance drive 'Of course everyone can drive either the 115 km or the 165 km distance although he signed up for the marathon.'

I think Freywald's (2018) observation is important. However, in the following I will argue that (9) does not illustrate a general possibility for *obwohl*-clauses but depicts a special case.

D'Avis (2016) argues against (3)/(4) as correct explications of the general meaning of the concessive relation expressed for example by *obwohl*. D'Avis makes clear that there are usages of *obwohl*-clauses which do not involve the expression of a normal course of states of affairs. In these cases the conditional to which the concessive is in opposition is to be found in the context. D'Avis (2016) gives the following examples (translated into English):

- (10) S(peaker)1: If 2 times 2 equals 2 plus 2, then 3 times 3 equals 3 plus 3.S2: (No!) Although 2 times 2 equals 2 plus 2, 3 times 3 does not equal 3 plus 3.
- (11) S1: All mammals live on land.S2: Although whales are mammals, they live in the sea.
- (12) S1: If it is raining, Heinz is inside.S2: Although it is raining, Heinz is in the garden (today/right now).

In (10)–(12), we have the following situation. When S2 utters 'although p, q', a conditional of the form 'if p, then not q' is salient. Thus, in all these cases the conditional which is contradicted by the *although*-clause appears in the context either explicitly or as an appropriate deduction. Thus, according to d'Avis (2016), in such cases the assertion of p and q made by using the concessive is not in opposition to a modalised generalisation the speaker assumes but rather to a statement given in the context.

Interestingly, Freywald's (2018) example in (9) is of the type in which the relevant conditional is introduced in the discourse. In her example this happens via a question. If one checks the internet source, one finds that (9) is part of the answer to the question in (13) (translation of the German source).

⁵ Iten (2005: 238) puts it as follows: "... *although* doesn't actually express a real-world relationship between two states of affairs in the way *because* does. Instead, the relationship *although* expresses is one that exists in the speaker's mind and is based on her knowledge of a real-world causal relation between the state of affairs described in the subordinate clause and the negation of the main clause."

(13) Do I have to decide upon the 115 km, 165 km or marathon distance in advance?

Thus, when (9) is expressed, among others, the following conditional is salient: 'If a certain person has signed up for the marathon distance, this person has to drive the marathon distance'. (9) contradicts this conditional and states: 'for all x, if x has signed up for the marathon distance, then x can drive 115 km, 165 km or the marathon distance'.⁶

D'Avis (2016) states the condition of use for concessives in (14). The set of context candidates contains propositions upon which it has not yet been decided by the discourse participants whether they will become members of the common ground.

(14) When expressing a concessive 'although p, q', there is a conditional 'if p, then not q' in the set of context candidates.

In Section 3 it will be argued that the option of binding in (9) depends on the very fact that (9) does not come with a concept of the speaker of what normally is the case. According to d'Avis, such a conception of an expected course of events (CECE) is only associated with a stand-alone use of a concessive clause.

We can replicate the relationships observed with (9) with a constructed example. Without an explicit context which satisfies (14), (15) does not allow binding into the *obwohl*-clause.

(15) *Jeder₁ ist mit dem Hotel unzufrieden, obwohl er₁ ein schönes Zimmer everyone is with the hotel dissatisfied although he a nice room bekam.
 got

Consider now (16). Here the conditional which is contradicted by the concessive is given in the context. Binding into the concessive conditional becomes possible.

(16)S1: Wenn Hans ein schönes Zimmer bekam, dann ist er mit dem Hotel nice if Hans a then is he with the hotel room got zufrieden. satisfied 'If Hans got a nice room, then he is satisfied with the hotel.' S2: Nein, jeder ist mit dem Hotel unzufrieden, obwohl er₁ ein schönes everyone is with the hotel dissatisfied although he a no nice Zimmer bekam.

room got

'No, everyone is dissatisfied with the hotel although he got a nice room.'

Thus, (9) and (16) suggest that a concessive may appear as a CAC if no CECE is operative since the proposition to which the concessive is in opposition is given by the context.

Now, the question arises of how the general explications of the concessive meaning like the ones depicted in (3)/(4) can be reconciled with d'Avis' (2016) condition for the use of concessives presented in (14). According to d'Avis the interrelationship is as follows. Suppose the following sentence occurs discourse initially.

⁶ Thus (9) shows that the standard assumption that with a concessive a conjunction is asserted, cf. (3)/(4), is not always correct. (9) involves the statement of a conditional.

(17) Obwohl es geregnet hat, war Heinz im Garten.although it rained has was Heinz in-the garden'Although it was raining, Heinz was in the garden.'

Since (14) is in effect, the set of context candidates contains contradicting propositions.

(18) (if it was raining, Heinz was not in the garden), (it was raining, and Heinz was in the garden)

It seems that by uttering (17) the speaker is contradicting her-/himself. One can assume that the speaker wants the at-issue content of (17), i.e., 'p and q', to become part of the common ground. Why does she/he use an expression which leads to a contradiction between the members of the set of context candidates which she/he her-/himself establishes? According to d'Avis, this is just the point of this kind of concessive. The hearer is requested to think about why the speaker is bringing a contradictory conditional into play. An obvious solution is that the conditional for the specific case can be derived from a conception of an expected course of events ascribed to the speaker. For (17) the appropriate CECE is given in (19).

(19) Normally, if it is raining, Heinz is not in the garden.

D'Avis assumes that the maintenance of CECEs and the formulation of generalisations belong to the basic cognitive equipment of the human being. When expressing a concessive, the speaker assumes that the listener recognizes that the contradictory conditional, which she/he her-/himself has brought into play, is based on a CECE of hers/his. Thus, we have:

(20) The set of context candidates after uttering (17) = {(if it was raining, Heinz was not in the garden), (it was raining, and Heinz was in the garden), (normally, if it is raining, Heinz is not in the garden)}

In contrast to the standard assumptions depicted in (3)/(4), d'Avis (2016) takes the CECE which appears in these uses of concessives as a generalised conversational implicature triggered by the speaker, the reason being that it is deletable by the speaker. D'Avis gives the following example.

(21) Although it is raining, Heinz is in the garden, by which I do not mean that Heinz is normally in the garden when it is raining, but only that he should not be in the garden today.

As an intermediate summary we can state that in the context-free use concessives do not appear as CACs. It can be assumed that the reason is that in the context-free use the concessive comes with a CECE ascribed to the speaker. With a CECE a speaker goes beyond a pure reference to the external world. With a CAC only a reference to the external world is possible. Accordingly, if a concessive contradicts a statement about the external world which is salient in the discourse, the speaker does not evoke a CECE and the concessive can be realised as a CAC.

In the following let us concentrate on the context-free use of concessives. In this use, concessives do appear as PACs or, as we will see later, as non-integrated adverbial clauses (NonICs). Let us first consider their appearance as PACs. Under the assumption in (22),

cf., e.g., Haegeman (2006) and Frey (2011), to be refined below, the differences to CACs illustrated in (5)–(7) make sense: binding by the host's subject is possible into a CAC but not into a PAC,⁷ a CAC, but not a PAC, may carry the nuclear accent of the complex sentence, and a CAC, but not a PAC, may be in the scope of a constituent negation appearing in the TP-domain of the matrix clause.

(22) CACs are base-generated low in their host clauses, i.e., in the (extended) V-domain of their hosts. PACs are base-generated high in their host clauses, i.e., above of their hosts' TPs.

Another important difference between CACs and PACs lies in the fact that CACs do not tolerate so-called root phenomena (RPs) whereas PACs do.⁸ This is how it is normally stated (cf., e.g., Haegeman 2012). However, in Frey (2011) and Frey & Meinunger (2019) it is argued that one should distinguish between weak and strong RPs; weak RPs have a wider distribution, and only they can occur in PACs. As weak RPs the following German phenomena will be discussed: modal particles (MPs) like ja,⁹ evaluative adverbials like *leider* ('unfortunately') and the marking of an aboutness topic with the help of the particle *jedenfalls* ('at least').

A temporal clause may not host the MP ja, (23a), whereas a concessive clause may, (23b). As a weak RP ja may also appear in the complement of a mental attitude verb, (23c), this holds for the other weak RPs as well.

- (23) a. Während Max (*ja) vorgetragen hat, wurde er unterbrochen. while Max MP presented has was he interrupted 'While Max was presenting, he was interrupted.'
 - b. Obwohl Max ja häufig unterbrochen wurde, blieb er ruhig. although Max MP frequently interrupted was stayed he calm 'Although Max was frequently interrupted, he remained calm.'
 - c. Max dachte, dass Maria ja wunderbar ruhig blieb. Max thought that Maria MP wonderfully calm stayed 'Max thought that Maria remained wonderfully calm.'

(24) shows that a temporal clause may not host the evaluative sentence adverbial *leider* whereas a concessive clause may.

⁷ Von Wietersheim (2016) reports on experiments which compare binding from the matrix clause into a CAC with binding into a PAC. She compares German temporal *während*-clauses ('while'-clauses), which are CACs, with adversative *während*-clauses, which are PACs (cf., e.g., Frey 2011). The experiments confirm that binding into a CAC is judged much better by the study participants than binding into a PAC.

⁸ With the notion 'root phenomena' one standardly refers to phenomena which only occur in root clauses and in the restricted set of so-called root-like dependent clauses. Often the dependent clauses which may show root phenomena are vaguely ascribed the property of having some illocutionary potential. The main focus of research was first on argument clauses, especially on complement clauses of non-negated verbs of saying, of expressing a doxastic attitude (*glauben – believe, hoffen – hope, einfallen – occur to*) and of perception (*fühlen – feel*). Standard examples of non-root-like dependent clauses are the object clauses of factive verbs and of predicates which are inherently negative (*leugnen – to deny, unmöglich sein – to be impossible*). Later the availability of root phenomena in non-restrictive relative clauses and certain adverbial clauses was discussed. Haegeman (2003) and much work after, for example, observe that CACs do not allow root phenomena, whereas PACs do.

⁹ The standard explication of the meaning contribution of the unstressed MP *ja* appearing in a canonical declarative clause A is given by Thurmair (1989: 104): with *ja* the speaker indicates that in his opinion the proposition referred to by A is also known to the listener.

- (24) a. Als Max (*leider) unterbrochen wurde, wurde er unruhig. when Max unfortunately interrupted was became he nervous 'When Max was (*unfortunately) interrupted, he became nervous.'
 - b. Obwohl Max leider unterbrochen wurde, blieb er ruhig. although Max unfortunately interrupted was remained he calm 'Although Max was unfortunately interrupted, he remained calm.'

In German, the particle *jedenfalls* may serve as a marker for an aboutness topic (cf. Frey 2004). (25) demonstrates that a temporal clause may not host such a marked phrase whereas a concessive clause may (of course, (25a) would be fine without the appearance of the topic marking particle *jedenfalls*).

- (25) Gestern Abend ist meine Wandergruppe in das neue Restaurant gegangen. 'Yesterday evening my wandering-group went to the new restaurant.'
 - a. *Als uns [der Kellner jedenfalls] freundlich begrüßt hatte, sind wir when us the waiter at-least friendly welcomed had are we froh gelaunt zum reservierten Tisch gegangen. glad tempered to-the reserved table gone
 - b. Obwohl uns [der Kellner jedenfalls] freundlich begrüßt hatte, sind wir although us the waiter at-least friendly welcomed had are we missmutig zum reservierten Tisch gegangen.
 bad-tempered to-the the reserved table gone
 'Although the waiter, at least, had pleasantly welcomed us, we went to the reserved table in a bad mood.'

Let me stress the correlation between the different properties of being a CAC and the correlation between the different properties of being a PAC. Consider German *weil*-causal clauses. In principle, *weil*-clauses can appear as CACs and as PACs. This is demonstrated in (26). (26a) shows that binding into a *weil*-clause is possible, giving evidence that a *weil*-clause can be a CAC. (26b) shows that a *weil*-clause in the pre-field may host a MP or a sentence adverbial, giving evidence that the *weil*-clause can appear as a PAC. (Its positioning in the prefield is to guarantee that it is a PAC and not a NonIC, see below.)

- (26) a. Jeder₁ hat protestiert, weil er₁ unterbrochen wurde. everyone has protested because he interrupted was 'Everyone protested because he was interrupted.'
 - b. Weil er ja/leider unterbrochen wurde, hat Max protestiert. because he MP/unfortunately interrupted was has Max protested 'Because he was Ø/unfortunately interrupted, Max protested.'

Crucially these two phenomena cannot co-occur. Binding into a *weil*-clause is no longer possible when the *weil*-clause hosts a MP or a sentence adverbial.

 (27) *Jeder Anwesende, hat protestiert, weil er, ja/leider every attendee has protested because he MP/unfortunately unterbrochen wurde. interrupted was The correlation of these properties is also found with concessives. Above we have seen that a concessive which contradicts a conditional salient in the discourse can appear as a CAC. We established this by the possibility of binding into the concessive, cf. (16). What happens if in this case a MP is added? As illustrated in (28), the binding option is lost.¹⁰

(28) S1: Wenn Hans ein schönes Zimmer bekam, dann ist er mit dem Hotel zufrieden.
 S2: *Nein, jeder₁ ist mit dem Hotel unzufrieden, obwohl er₁ schon ein no everyone is with the hotel dissatisfied although he MP a schönes Zimmer bekam. nice room got

(29) demonstrates that the construction is grammatical if no binding is involved.

(29) S1: Wenn Hans ein schönes Zimmer bekam, dann ist er mit dem Hotel zufrieden.
S2: Nein, Hans ist mit dem Hotel unzufrieden, obwohl er schon ein no Hans is with the hotel dissatisfied although he MP a schönes Zimmer bekam.
nice room got
'No, Hans is dissatisfied with the hotel although he did get a nice room.'

Let us next address the subject of strong RPs and their differences to weak RPs. While weak RPs are legitimate in all root contexts, strong ones can only be found in a subset of these contexts. Strong RPs only occur in independent clauses and in a very small set of dependent clauses which show signs of being syntactically independent of their host clauses (Frey 2011). Following the terminology of Frey (2011), the latter will be called non-integrated dependent clauses (NonICs). German NonICs are, for example, concessive verb-first clauses (V1-concessives),¹¹ causal verb-first clauses (V1-causals), consecutive *so-dass*-clauses ('so-that' clauses), continuative relative clauses and *wobei*-clauses ('whereby'-clauses); *wobei*-clauses may have different readings, including the concessive one. In addition, as we will see below, some adverbial clauses which normally appear as PACs can be realised as Non-ICs if they are separated from their hosts by a pause and carry their own sentence accent.

- (i) a. Ist sie auch sehr begabt, hat sie *(doch/dennoch) nicht schnell promoviert. is she MP very talented, has she MP/still not quickly graduated 'Although she is very talented, she still didn't graduate quickly.'
 - b. *Sie hat doch/dennoch nicht schnell promoviert, ist sie auch sehr begabt.
 - c. Sie hat nicht schnell promoviert, ist sie auch sehr begabt.
 - d. *Ist sie auch sehr begabt, hat sie nicht schnell promoviert.

¹⁰ According to Thurmair (1989: 150) the basic meaning of the MP *schon* can be described as 'restriction of possible counterarguments', which can be one's own or external ones.

¹¹ The comments of an anonymous reviewer make clear that remarks of caution are appropriate here. There are two versions of the so-called V1-concessive construction with different properties. In the first version, the dependent V1-clause contains the MP *auch*, and in addition the matrix clause contains the MP *doch* or the adverb *dennoch*, cf. (ia). This V1-concessive has to occur in first position, cf. (ia,b); arguably it occupies the prefield of its matrix clause. This is the more integrated V1-concessive construction, and it will not be considered any further in the present paper. The second version of the V1-concessive construction has the MP *auch* in the V1-clause but does not contain the MP *doch* or the adverb *dennoch* in the matrix clause, cf. (ic). The second version has a high style and belongs to the written language. In this version the V1-concessive needs to follow its matrix clause; in particular it cannot appear in the prefield of its matrix clause, (id). This is the non-integrated V1-concessive, i.e., the NonIC-version of the V1-concessive. It is a topic of the present paper. In the following it will just be called V1-concessive.

I will not try to explain why the MP *auch* is obligatory in the dependent clause with the two versions of the V1-concessive construction. For the corresponding non-integrated V1-causal clause, Pittner (2011) offers an explanation for the obligatory presence of the MP *doch*.

Before we study strong RPs, let us consider some of the properties of NonICs. Like PACs NonICs do not allow binding into them from their host, they cannot carry the sole nuclear accent of the complex [host + NonIC] and they cannot be in the scope of a constituent negation appearing in the host clause; cf. Frey (2011, 2016). However, while a CAC or a PAC may occupy the prefield of its host, as demonstrated for instance in (23a,b), a NonIC may not. (30a,b) contain a V1-concessive, (30c,d) a V1-causal, (30e,f) a continuative relative clause, and (30g,h) a concessively interpreted *wobei*-clause. That NonICs cannot be placed in the prefield is of some importance since the prefield is a possible position for the constituents of a clause. Furthermore, from the fact that NonICs cannot occupy the prefield it can be concluded that in (30a,c,e,g) these clauses do not occupy the (integrated) position for extraposed elements.

- (30) a. Maria hat nicht schnell promoviert, ist sie auch sehr begabt. Maria has not quickly graduated is she MP very talented 'Maria hasn't graduated quickly although she is very talented.'
 - b. *Ist sie auch sehr begabt, hat Maria nicht schnell promoviert.
 - c. Maria wird schnell promovieren, ist sie doch sehr begabt. Maria will quickly graduate is she MP very talented 'Maria will quickly graduate because she is very talented.'
 - d. *Ist sie doch sehr begabt, wird Maria schnell promovieren.
 - e. Max hat die Prüfung bestanden, worüber er sich sehr gefreut hat. Max has the exam passed about-what he REFL very been-glad has 'Max passed the exam, about which he was very glad.'
 - f. *Worüber er sich sehr gefreut hat, hat Max die Prüfung bestanden.
 - g. Maria hat nicht schnell promoviert, wobei sie sehr begabt ist. Maria has not quickly graduated, whereby she very talented is 'Maria hasn't graduated quickly although she is very talented.'
 - h. *Wobei sie sehr begabt ist, hat Maria nicht schnell promoviert.

Another property which differentiates NonICs from PACs (and from CACs) concerns the possibility of being embedded together with the host clause. This is illustrated in (31) with representatives for PACs and NonICs. Whereas a PAC can be embedded together with its host, (31a), a NonIC cannot be; cf. (31b) with a V1-concessive, and (31c) with a *wobei*-clause.

- (31) a. Hans denkt, [dass Maria nicht schnell promovieren wird, obwohl sie Hans thinks that Maria not quickly graduate will although she sehr begabt ist]. very talented is 'Hans thinks that Maria won't graduate quickly although she's very talented.'
 b. *Hans denkt, [dass Maria nicht schnell promovieren wird, ist sie auch Hans thinks that Maria path graduate quickly graduate will is she MD
 - Hans denkt, [dass Maria nicht schnell promovieren wird, ist sie auch Hans thinks that Maria not quickly graduate will is she MP sehr begabt]. very talented

 c. *Hans denkt, [dass Maria nicht schnell promovieren wird, wobei sie Hans thinks that Maria not quickly graduate will whereby she sehr begabt ist].
 very talented is

The data in (30) and (31) demonstrate that NonICs are less integrated than PACs (for more evidence, see Frey 2016). Altogether we find the integration hierarchy in (32).

(32) CAC > PAC > NonIC

Let us recapitulate the two main insights about the structural relationships between CACs, PACs and NonICs and their licensing clauses. First, CACs are in the c-command domain of the subjects of their licensing clauses; this does not hold for PACs and NonICs. Second, CACs and PACs are constituents of the structures of their main clauses, while NonICs are not. According to Frey (2011), the licensing of CACs, of PACs and of NonICs is therefore rather different. A CAC is licensed in the standard way inside its host's (extended) V-domain. A PAC is syntactically licensed inside its host too, albeit in a very high position. According to Frey (2011), a NonIC is not part of the syntactic structure of its associated clause but is a true orphan in the sense of Haegeman (1991/2009). In Section 4 the licensing of CACs, PACs and NonICs will be considered again and a refined proposal will be presented.

Let us now look at strong RPs.¹² An example is tag questions like German *habe ich recht?* ('am I right'). Such tags add an inquisitive illocutionary act to an assertion. They invite the hearer to give a yes-no answer, with a clear bias toward a support of the assertion. Now, (33) demonstrates that question tags are not tolerable in an object clause of a verbum dicendi, (33a), or in a PAC, (33b), but they are possible, for example, in a concessive V1-clause, (33c), and in a *wobei*-clause, (33d).¹³ Crucially (33c) and (33d) are fine with tags that only relate to the contents of the V1-concessive and the *wobei*-clause, respectively.

- (33) a. *Max hat erzählt, [dass Maria sehr begabt ist, hab ich recht?] Max has told that Maria very talented is, have I right
 b. ??[Obwohl Maria sehr begabt ist, hab ich recht?], hat sie nicht schnell
 - promoviert.
 - c. Maria hat nicht schnell promoviert, [ist sie auch sehr begabt, hab ich recht?] 'Maria hasn't graduated quickly although she is very talented, am I right?'
 - d. Maria hat nicht schnell promoviert, [wobei sie sehr begabt ist, hab ich recht?]

The same contrast is shown by integrated causal verb-final clauses on the one hand and V1-causals on the other. Again, only the V1-causal yields a reading in which the tag is restricted to the semantically dependent clause.

¹² There is a certain methodological problem in testing whether a strong RP may occur with a V1-NonIC. Most strong RPs are primarily phenomena of spoken language. The reason lies in their very nature: they are means by which the speaker directly addresses the addressee. V1-concessives and V1-causals, in contrast, mainly belong to written language. Therefore, in the following the reader is asked to ignore the stylistic inconsistency of the appearance of strong RPs with V1-concessives and V1-causals.

¹³ The parentheses indicate the intended semantic domain of the tags.

One might wonder why in (33b) the tag test is applied to the preposed subordinate clause. The reason is that a postposed concessive may appear as a NonIC if the right intonation is supplied (i.e., sentence accent for the adverbial clause and a pause preceding it); cf., e.g., Frey (2011) and below.

- (34) a. *[Weil Maria sehr begabt ist, hab ich recht?], wird sie schnell since Maria very talented is have I right will she quickly promovieren. graduate
 - Maria wird schnell promovieren, [ist sie doch sehr begabt, hab ich Maria will quickly graduate is she MP very talented have I recht?]
 right
 'Maria will graduate quickly, because she is very talented, am I right?'

Thus, in their distribution tags are much more restricted than weak RPs.

Another strong root phenomenon I would like to mention is the German interjection *Mann*. This interjection cannot appear with a PAC, (35a), but it can appear with a NonIC; cf. (35b) with a V1-concessive, and (35c) with a *wobei*-clause.

(35)	a.	*[Obwohl Max echt wenig gearbeitet hat, Mann], hat er die Prüfung							
		although Max MP little worked has man has he the exam							
		brillant gemeistert.							
		brilliantly mastered							
	b.	Max hat die Prüfung bestanden, [hat er auch echt wenig gearbeitet,							
		Max has the exam passed has he MP MP little worked							
		Mann].							
		man							
	'May passed the ayam although he really didn't work much								

'Max passed the exam although he really didn't work much, man.'

c. Max hat die Prüfung bestanden, [wobei er echt wenig gearbeitet hat, Mann].

Crucially again, the interjection in (35b,c) can be understood as being related only to the content of the V1-concessive and the *wobei*-clause, respectively.¹⁴

Let us next observe that *obwohl*-Vf_{in}-clauses, which standardly appear as PACs, can include a strong root phenomenon if they are separated by a pause from their host clauses and carry their own sentence contour, cf. (36). It follows that *obwohl*-Vf_{in}-clauses may occur as NonICs.

- (36) a. Max hat die Prüfung bestanden\ /obwohl er echt wenig gearbeitet hat, Mann.
 - b. Obwohl Max echt wenig gearbeitet hat, hab ich recht?/ /er hat die Prüfung bestanden.

Let us now note an important feature of NonICs. NonICs have their own illocutionary force. This can be most clearly seen by the fact that the illocutionary force of a NonIC can be different from the illocutionary force of its host. In (37a,b) the main clause is an imperative, in (37c) it is a (rhetorical) question, and in all examples the dependent clause is assertive. ((37c) is constructed based on an example in Pittner 2011 with a V1-causal.)

¹⁴ Of course, there are candidates for strong RPs in other languages. Here I just want to mention the sentential particles in Venetan dialects discussed in Munaro & Poletto (2009) and the West Flemish speech act particles discussed in Haegeman & Hill (2013). The distributions of these particles as described in these papers very clearly suggest that they are strong RPs.

(37) a. Sprich mal mit Max\ – / obwohl der manchmal etwas schwierig talk MP to Max although this-one sometimes a-little difficult ist. is

'Talk to Max although he's sometimes a little difficult.'

- b. Sprich mal mit Max /ist der auch manchmal etwas schwierig.
- c. Wer wollte ihm das verweigern?/ /Ist er auch einer der who would him that deny is he MP one of-the am wenigsten vertrauenswürdigsten Leute in der ganzen Gruppe. least trustworthy people in the whole group 'Who would deny him that? – Although he is one of the least trustworthy people in the whole group.'

Another piece of evidence for the claim that NonICs have independent illocutionary force consists in the very fact that they can host strong RPs. Arguably, strong RPs presuppose that the clauses they are added to have illocutionary force. A tag, for example, demands the confirmation of an assertion. An interjection like Mann leads to a (rather rude) strengthening of the illocutionary force of the host, be it assertive or imperative. Note furthermore that the fact that a NonIC cannot be part of the syntactic structure of its host can be seen as a consequence of the fact that it has its own illocutionary force. There is a tradition in philosophy of language and in linguistics that assumes that an expression which has illocutionary force cannot be a genuine part of the structure of another expression (e.g., Green 2000). I follow this line of thinking. Given these considerations we can immediately draw an important conclusion, which is that PACs do not have independent illocutionary force. As clauses lacking illocutionary force, PACs can be embedded, but they cannot host strong RPs. Note that with the claim that PACs do not have independent illocutionary force we object to the assumption that concessives (and adversatives for that matter) necessarily have illocutionary force (e.g., König 1991), since, as we have seen, obwohl-clauses normally appear as PACs (the same is true for adversative während-clauses ('while'-clauses); cf., e.g., Frey 2016). Furthermore we take issue with the often made claim that MPs serve as modifiers of a speech act or an illocutionary operator (e.g., Thurmair 1989; Jacobs 1991; Karagjosova 2004; Bayer & Obenauer 2011; Coniglio 2011). According to our findings, this assumption is too strong; the occurrence of a MP does not presuppose that its host has illocutionary force.

Let us restate the main observations of the present chapter: in the standard use concessives may not occur as fully integrated CACs but only as less integrated PACs or as even less integrated NonICs (this is in opposition to conjectures to the contrary in Breindl 2014: 922 and Freywald 2018); in contrast, other adverbial relations like the temporal or the causal one can be realised by a CAC.

Above we already hinted at an intuition as to why it might be the case that a concessive normally cannot be a CAC. In its standard use a concessive necessarily goes beyond a reference to the actual world; it contains a modalised rule, for which a thinking mind assumes responsibility. In the following, a suggestion is made which outlines how this circumstance is reflected in syntax. Furthermore, proposals for the syntactic structures will be made that allow an explanation of some of the differences between concessives realised as PACs and concessives realised as NonICs.

3 The layers of a speech act and their syntactic representations

We have seen that evaluative sentence adverbials belong to the weak RPs. It can be shown that evaluative adverbials are not-at-issue expressions. This is demonstrated in (38) (cf., e.g., Krifka 2018 for such a test).

(38) A: Es regnet bedauerlicherweise. it rains unfortunately 'It's raining, unfortunately.'

B: Nein!

The evaluative sentence adverbial is not part of the target of B's denial, i.e., B's denial in (38) is not understood as 'it is not true that it is unfortunate that it rains'. It rather is understood as 'it is not true that it rains'; the evaluative adverbial is not in the scope of B's denial. It can be deduced that the evaluative adverb in (39) has the status of a non-at-issue expression.

(38) should be compared with (39), in which an evaluative predicative occurs.

(39) A: Es ist bedauerlich, dass es regnet. it is unfortunate that it rains 'It's unfortunate that it's raining.'

B: Nein!

In (39) B's denial can be understood as 'it is not true that it is unfortunate that it rains'. Thus, the evaluative predicative is in the scope of B's denial, and it can be deduced that the evaluative adjective in (39) is at-issue.

With Krifka (2018) we can draw the important conclusion from these observations that evaluative adverbials, being not-at-issue, are external to the core proposition which is communicated by the clause in which they occur, whereas evaluative predicatives, being at-issue, belong to the core proposition communicated.

We can extend these considerations to MPs, which also belong to the weak RPs. They are also not-at-issue. Let us consider the MP *ja*.

- (40) A: Maria ist ja zum Vortrag gekommen. Maria is MP to-the lecture come 'Maria came to the lecture.'
 - B: Nein!

B's denial in (40) is not understood as something like 'it is not true that I know that Maria came to the lecture', (cf. fn. 9), it rather is understood as 'it is not true that Maria came to the lecture'. B's denial is not concerned with any additional nuance or expressive feature that comes along with the MP.

The marking of an aboutness topic is equally not-at-issue.

- (41) A: Hans jedenfalls wird mithelfen. Hans at-least will help 'Hans, at least, will help.'
 - B: Nein!

B's denial does not encompass A's marking of an aboutness topic. Building on one popular explication of the concept of an aboutness topic (cf. Reinhart 1981), we can say that B's statement does not deny that the ingredient of A's statement which is that the proposition that Hans will assist should be added to the address 'Hans'. B just denies that Hans will assist. Thus B's utterance is not concerned with the additional meaning that comes along with topic marking.

The strong RP Mann is also not-at-issue, cf. (42).

- (42) A: Maria ist nicht zum Vortrag gekommen, Mann. Maria is not to-the lecture come man 'Maria didn't come to the lecture, man.'
 B: Doch!
 - 'Yes, she did!'

The interjection *Mann* expresses a strong emotional involvement of the speaker regarding her/his statement. B's contradiction does not concern A's expression of emotional involvement. Thus, the meaning component of the interjection is not in the scope of B's dissension. In the same way, if applying the denial test, the result would be that the other examples of strong RPs are not-at-issue.

It seems a reasonable assumption that by means of the denial test it could be shown that weak and strong RPs are generally not-at-issue. To check this is beyond the scope of the present article though. However, we can be sure that our example RPs are not-at-issue and we can, for the time being, assume that this holds for all RPs. In any case, all RPs considered here are external to the core proposition communicated. With Krifka (2018) we assume that the not-at-issueness of RPs is mirrored by the fact that in syntax, RPs are located outside TP. This is a natural assumption for strong and for weak RPs. Regarding weak RPs, for example, according to Cinque (1999), sentence adverbials are positioned outside of TP, and the marking of an aboutness topic always seems to occur outside TP; cf., e.g., Frey (2004), who shows this for German. For German MPs it is also standardly assumed that they are generated above TP; cf. Coniglio (2011). Regarding strong RPs, we can safely assert that they do not occur structurally below weak RPs.

Next, we can observe with Krifka (2018, to appear) that evaluative adverbials are not related to the speech act performed. Their semantic contribution does not lie in a modification or qualification of the speech act. Furthermore, evaluative adverbials may occur in the complement of a propositional attitude predicate (cf. *John thinks that it will unfortunately rain*), where they become part of the embedded propositional attitude. This too makes clear that they do not qualify a performed speech act.

Thus, the data show that evaluative adverbials are not part of the core proposition communicated, but that they also do not scope over speech acts. Therefore, Krifka concludes that there must be a distinct semantic layer in-between the layer of the core proposition and the layer of the speech act.

In Section 1, on independent grounds we already arrived at the conclusion that weak RPs in general are not related to speech acts. Furthermore, we have just observed that weak RPs do not belong to the communicated proposition denoted by the clause in which they occur. Thus, we can assume that weak RPs in general relate to a distinct layer between the speech act and the communicated proposition (cf. also Frey & Meinunger 2019).

Krifka points to writings of Frege (1918) and Peirce (cf. Peirce 1994; Tuzet 2006) in which such a distinct layer is introduced. Frege (1918) explicitly differentiates between the following aspects involved in an assertion:

- (43) i. das Fassen eines Gedankens das Denken ('the grasping/conception of a thought the thinking')
 - ii. die Anerkennung der Wahrheit des Gedankens das Urteilen ('the appreciation of the truth of the thought – the judging')
 - iii. die Kundgebung des Urteils das Behaupten ('the manifestation of the judgement the asserting')

Peirce developed similar ideas about the distinction between a thought, a private judgement on the truthfulness of the thought and a public assertion of this judgement.

Krifka (2018) generalises Frege's and Peirce's partition to all speech acts. Moreover, Krifka (2018, to appear) subscribes to the commitment view of speech acts. Regarding assertions, the commitment view holds that in asserting a proposition φ a speaker S expresses public responsibility for the truth of φ , backed by social sanctions if φ is false and S has no excuse. To the common ground (CG) shared by S and the hearers it is added that S is publicly committed to the truth of φ . According to the commitment view, the proposition φ itself is just added to the CG as a conversational implicature.

Thus, according to Krifka one has to assume that four distinct layers are involved in a speech act.

- (44) The semantic operations to be distinguished as part of a speech act
 - i. the forming of a thought/proposition φ , which has truth conditions,
 - ii. the building of a judgement by a thinking mind \times concerning a proposition ϕ , a private act, resulting in ψ ,
 - iii. the taking over of a commitment by a thinking mind \times toward $\psi,$ resulting in $\omega,$
 - iv. the performing of a speech act by a thinking mind \times involving $\omega,$ a public act.

Given (44) we can formulate the following theses:

- (45) a. Weak RPs are semantically anchored to a judge and belong to a judgement.
 - b. Strong RPs express a modification or a qualification of a speech act.

Now, for our concerns, the next step is crucial. We follow Krifka (2018, to appear) in assuming that the layers depicted in (44) are represented in syntax by different functional projections. Thus, in addition to the common assumption that the core proposition is syntactically represented by TP, we assume that the layers of the judgement, the commitment and the speech act are syntactically represented too.

- (46) i. The TP represents a proposition.
 - ii. The judgement phrase (JP) encodes the private assessment of a proposition by a judge.
 - iii. The commitment phrase (ComP) encodes the commitment of a committer to a judgement.
 - iv. The speech act phrase (ActP) encodes a speech act performed by a speaker.

In the syntactic structure, (46) leads to the hierarchy in (47):

(47) ActP > ComP > JP > TP

We can reasonably assume that the occurrence of the projections in (47) is implicational from left to right, i.e., if a clause structure contains the projection α of (47), it also contains all projections below α . Thus every independent clause which represents a speech act and consequently contains an ActP also exhibits a ComP, a JP and a TP. What about dependent clauses? Let us investigate for some of them which is the highest node of (47) which they contain.

The claims in (48) (to be extended later) are natural consequences of the theses in (45).

- A weak RP needs syntactic licensing inside its minimal clause by J⁰. (48)a.
 - A strong RP gets licensed by being adjoined to an ActP. b.

Since weak and strong RPs can only occur in some types of dependent clauses, the possible or non-possible occurrence of a given RP in a clause together with (48a) and (48b) can tell us something about the syntactic structure of the clause. All clauses which allow weak RPs exhibit a JP and all clauses disallowing weak RPs don't. Thus with (47) we can immediately deduce that clauses of the latter type are just TPs. Furthermore, it holds that all clauses which allow strong RPs exhibit an ActP and all clauses disallowing strong RPs don't.

Does the projection ComP distinguish certain dependent clauses? The answer is yes. There is evidence that the complement clauses of speech predicates have the status of a ComP (cf. Krifka 2018, to appear, Frey to appear), whereas the complement clauses of mental attitude predicates are just JPs. The following German data provide evidence for this distinction (cf. Krifka to appear). There are high modifiers in German which arguably specify the commitment of a speaker to the truth of a proposition, cf. (49). These modifiers will be called 'commitment modifiers' here. It seems reasonable to assume that commitment modifiers are licensed by ComP.

(49) Florian hat wahrhaftig/im Ernst/ungelogen die Arie nicht gut gesungen. Florian has truly/seriously/in-truth the aria not well sung 'Florian truly/seriously/in truth didn't sing the aria well.'

Now, it is interesting to observe that commitment modifiers can very well occur in the complements of speech act predicates, (50a), but lead to ungrammatical results if they occur in the complements of mental attitude verbs, cf. (50b).

- Eva sagte, dass wahrhaftig/im Ernst/ungelogen ihre Mutter nichts (50)a. that truly/seriously/in-truth her mother nothing Eva said davon hält. of-it thinks 'Eva said that truly/in all seriousness/in truth her mother has a low opinion of it.' b. *Eva denkt, dass wahrhaftig/im Ernst/ungelogen ihre Mutter nichts
 - Eva thinks that truly/seriously/in-truth her mother nothing davon hält. of-it thinks

If we assume that the complement of a speech predicate is a ComP and the complement of a mental attitude verb does not contain a ComP but is just a JP, this pattern follows.

Commitment modifiers are not good in a PAC (cf. Frey to appear); in (51) this is illustrated with an adverbial obwohl-clause.

(51)*Obwohl Max wahrhaftig/im Ernst/ungelogen schlecht vorbereitet war, hat er although Max truly/seriously/in-truth badly prepared was has he die Prüfung bestanden.

the exam passed Thus, PACs do not contain a ComP. However, we know that they contain a JP, since they may host weak RPs.

We have seen that the concessive relation can also be realised via a NonIC. We expect that in this case the concessive may host a commitment adverbial since as a NonIC it is an ActP and an ActP contains a ComP. This expectation is confirmed.

(52) Max hat die Prüfung bestanden, war er auch wahrhaftig/im Ernst/ungelogen Max has the exam passed was he MP truly/seriously/in-truth schlecht vorbereitet. badly prepared 'Max passed the exam even though he truly/seriously/in truth was badly prepared.'

The commitment modifiers lead to the announced extension of the licensing of RPs as stated above in (48). Commitment modifiers belong to the class of the semi-strong RPs (cf. Frey to appear), for which condition (53) holds.

(53) A semi-strong RP needs syntactic licensing inside its minimal clause by Com⁰.

Let us now come to the categorical endowments of CACs, PACs and NonICs. Our observations suggest the assignments in (54i–iii). (54iv–vi) are added in the interest of completeness. An independent clause of course has the status of an ActP.

- (54) i. CAC: [_{CP} TP]
 - ii. PAC: [^{Cr}_{CP} JP]
 - iii. NonIC: ActP
 - iv. complement of a not-root-inducing predicate: [_P TP]
 - v. verb-final complement of a mental attitude verb or of a verb of perception: [___ JP]
 - vi. verb-final complement of a speech predicate: [_{CP} ComP]

[Spec,ActP] and Act⁰ constitute the left periphery of independent clauses and NonICs. According to Frey (to appear) all integrated dependent clauses are covered by a CP-shell.¹⁵ The CP-shell is transparent for the categorical features delivered by TP, JP and ComP. [Spec,CP] and C⁰ constitute the left periphery of integrated dependent clauses. ActP and CP do not occur together. Thus, ActP and CP are head-first. [Spec,ActP] and, in the case of embedded verb-second clauses (V2-clauses), [Spec,CP] constitute the prefield (according to Frey to appear, in an embedded V2-clause CP covers ComP). They can be the target of long-distance movement. In independent V2-clauses the finite verb targets Act⁰ and in dependent V2-clauses the finite verb is in C⁰.

ComP, JP and TP (and vP and VP of course) are head-final. Their heads host the finite verb in the different verb-final clauses or are the intermediate positions of the finite verb on its way to the left in V2-clauses. ComP, JP and TP are not projections of the left periphery. Thus, proposals which postulate a fine structure of the left periphery with different functional projections, as pioneered by Rizzi (1997), are largely orthogonal to the proposed series of functional projections in (47).

¹⁵ Some linguists would assume that the subordinators of CACs and PACs are prepositions, which would mean that the top-nodes of CACs and PACs are PPs. However, in the following the standard assumption of treating all German subordinators as C⁰-elements is adopted.

CACs are TPs with a CP-shell; they express a core proposition and do not allow any RPs. PACs express an extended proposition, i.e., they allow weak RPs; they do not allow strong RPs and semi-strong RPs. Thus, they are JPs with a CP-shell. NonICs additionally allow strong RPs and semi-strong RPs. According to our considerations, they have full illocutionary force, i.e., they are ActPs and as such contain a ComP, a JP and a TP.

Obviously by assuming the categorical assignments in (54) we stand in the tradition which postulates different structural sizes of different dependent clauses, especially of different adverbial clauses (e.g., Haegeman 2006; Coniglio 2011; Frey 2016). Note however that (54) is accompanied by the claim that the different syntactic sizes of dependent sentences are anchored directly in conceptual differences. Greater syntactic complexity corresponds to greater semantic complexity.

At this point it seems appropriate to add some notes about the comparison of Krifka's layers of interpretation *proposition, judgement and speech act* and Sweetser's (1990) famous three domains of interpretation *content, epistemic and speech act*.¹⁶ As we will see, these two classifications are not alternatives but stand in an additive relationship.

Since Sweetser (1990) it has been standard practice to distinguish between content related, epistemic and speech act related interpretations of different types of adverbial clauses. For example, a relation like the causal one can in principle be interpreted on three different cognitive levels – in Sweetser's (1990) terminology these are the content domain, cf. (55a), the epistemic domain, cf. (55b), and the speech act domain, cf. (55c).

- (55) a. Maria ist sehr bleich, weil sie krank ist. Maria is very pale because she ill is 'Maria is very pale because she is ill.'
 - b. Maria ist krank, weil sie sehr bleich ist. Maria is ill because she very pale is 'Maria is ill because she is very pale.'
 - c. Maria ist krank weil du dich doch immer für sie interessierst. Maria is ill because you REFL MP always in her interested-are 'Since you are always interested in Maria, she is ill.'

A causal relation interpreted in the content domain states that one fact of the outside world causes another fact of the outside world. A causal relation interpreted in the epistemic domain gives the reason why the speaker takes a certain proposition to be true. Finally, a causal relation interpreted in the speech act domain tells the motivation for why the speaker is performing a certain speech act.

Concessive *although-* or *obwohl-*clauses may express the three readings as well (cf. Sweetser 1990).

- Obwohl er schlecht vorbereitet war, hat Max die Prüfung mit Bravour (56)a. although he badly was has Max the exam brilliantly prepared bestanden. passed 'Although he was badly prepared, Max passed the exam brilliantly.' Obwohl er die Prüfung mit Bravour bestanden hat, war Max schlecht Ь. although he the exam brilliantly passed has was Max badly vorbereitet.
 - prepared

'Although he passed the exam brilliantly, Max was badly prepared.'

¹⁶ I am grateful to an anonymous reviewer who suggested conducting this comparison.

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 Max hat die Prüfung mit Bravour bestanden – obwohl dich das Max has the exam brilliantly passed although you that vielleicht gar nicht interessiert. perhaps at-all not interests 'Max passed the exam brilliantly – although perhaps that doesn't interest you at all.'

(56a) illustrates the reading in the content domain. Among other things, it expresses that in the speaker's view it normally holds that being badly prepared has the consequence that one does not pass the exam brilliantly. (56b) illustrates the epistemic reading. Normally the speaker would deduce from the truth of the proposition that someone brilliantly passed the exam the truth of the proposition that she/he was not badly prepared. (56b) expresses that this normal reasoning does not hold for the case at hand. Finally (56c) has an interpretation in the speech act domain. Normally, given the content of the concessive clause, the speaker would not assert the matrix clause.

Sweetser (1990) uses the concept of three domains to describe whether an adverbial clause is used to express a relation to an eventuality of the outside world, to an assumption of the speaker or to a speech act by the speaker. Crucially the three domains do not refer to different objects in a semantic model which are denoted by the adverbials, like Krifka's propositions, judgements, commitments and speech acts.

Since CACs are of category TP, PACs are of category JP and NonICs are of category ActP, it follows in Krifka's semantic model that they have as denotations propositions, judgements and speech acts, respectively. Crucially it does not follow that NonICs only have a reading in the speech act domain, and PACs only have a reading in the epistemic domain. In fact in Frey (2016) it was shown on the basis of German adverbial causal clauses that the following correlations regarding Sweetser's classification hold:

- (57) i. CACs only allow interpretations in the content domain,
 - ii. PACs only allow interpretations in the content or in the epistemic domain,
 - iii. NonICs allow interpretations in the content, in the epistemic or in the speech act domain.

Sweetser's distinctions refer to the communicative intention of the speaker and not to the semantic type of a relation. For example, Sweetser only interprets a causal relation as epistemic if the speaker wants to substantiate an assumption and not to state the cause of a fact. Note, however, that a causal relation between facts p and q can lead in a natural way to a causal relation between attitudes; a relation in the outside world is presented by the relation that the assumption that p is true leads to the assumption that q is true (see Volodina 2011). This happens when a causal relation in the content domain is expressed by a PAC. Consider in this context German causal clauses with the complementiser *da*. These cannot appear as CACs (cf., e.g., Frey 2016), but a statement can be made with a *da*-clause in Sweetser's content domain (e.g. *Maria ist sehr bleich, da sie krank ist.* ('Maria is very pale since she is ill.')). Here it is the case that the causal relationship realised with the *da*-clause does not speak directly of a relation between facts but of a relation between assumptions that certain facts are true.

The corresponding considerations apply to Sweetser's speech-act domain. Here in the causal area Sweetser refers exclusively to the justification of the execution of a speech act. Logically, a causal relationship between speech acts can have facts as content. Then, a speaker asserts a proposition q because she/he asserts the proposition p.

Now to confirm (57), here we first consider causals before we consider concessives. To see that (57i) holds in regard to *weil*-clauses, it is enough to realise that if a *weil*-clause is

not interpreted in the content domain, then no binding into the clause is possible, (58). This in turn implies that the clause is not a CAC.

- (58) a. *Fast jeder Anwesende₁ ist krank, weil er_1 sehr bleich ist. nearly every attendee is ill because he very pale is
 - b. *Fast jeder Kollege₁ ist krank, weil du dich doch immer für nearly every colleague is ill because you REFL MP always in ihn₁ interessierst.
 him interested-are

To see that (57ii) holds for *weil*-clauses, we first realise that a *weil*-clause can be a PAC which is interpreted in the content domain in Sweetser's sense, cf. (26b), and it can be a PAC with an epistemic reading, cf. (59). That the *weil*-clauses in (26b) and (59) are PACs is evident because first MPs or sentence adverbials appear, and second the clauses occur in the prefield of their host.

(59) Weil sie ja/leider sehr bleich ist, ist Maria wohl krank. since she MP/unfortunately very pale is is Maria MP ill 'Because she's unfortunately very pale, Maria must be ill.'

Second, we observe that if a *weil*-clause has an interpretation in the speech act domain, then it cannot occupy the prefield of a V2-clause, (60a), and it cannot be embedded together with its host, (60b). Both facts imply that a *weil*-clause with this reading is not a PAC.

- (60) a. *Weil du es ja doch erfährst, lässt sich Peter scheiden. since you it MP MP learn gets REFL Peter divorced
 - b. *Peter sagte zu Maria, [dass er sich scheiden lässt, weil sie es ja Peter said to Maria that he REFL divorced gets because she it MP doch erfährt].
 anyway learns

To see that (57iii) holds we first notice that a V1-causal may be interpreted in the content domain, (61a), and in the epistemic domain, (61b). As Pittner (2011) observes a V1-causal cannot operate in the speech act domain though.¹⁷ The reasons are not clear yet. However, that a causal NonIC may refer in the speech act domain can easily be shown with the help of a non-integrated *weil*-V_{fin}-clause preceding a yes-no question, (61c).

- (61) a. Maria ist sehr bleich, ist sie doch krank. Maria is very pale is she MP ill 'Maria is very pale because she's ill.'
 - b. Maria ist krank, ist sie doch sehr bleich. Maria is ill is she MP very pale 'Maria is ill because she's very pale.'
 - c. Weil du doch immer alles weißt, ist Maria krank? since you MP always all know is Maria ill 'Since you always know everything, is Maria ill?'

¹⁷ We can add that the same holds for V1-concessives.

Let us next consider concessives. We have already seen that concessives too may have readings in the content domain, the epistemic domain and the speech act domain, and we have seen that in the standard case concessives cannot be CACs. That a concessive which is a PAC can express the first two readings is illustrated in (56a,b). (56c) shows that an *obwohl*-clause which is a NonIC can express the third reading. (62a) shows that a concessive which is a PAC cannot express this third reading.¹⁸ (62b,c) demonstrate that an *obwohl*-clause appearing as a NonIC preceding a V2-clause may also express the first and the second reading; this could also be shown with the help of a V1-concessive.

- (62) a. *Obwohl dich das gar nicht interessiert, hat Max die Prüfung mit Bravour bestanden.
 - b. Obwohl er schlecht vorbereitet war, Max hat die Prüfung mit Bravour bestanden.
 - c. Obwohl er die Prüfung mit Bravour bestanden hat, Max war schlecht vorbereitet.

In sum, we see that concessive PACs are necessarily interpreted in the content or in the epistemic domain, and that concessive NonICs can be interpreted in the content, in the epistemic or in the speech act domain.

We can now relate the claims in (57) to Krifka's system. A CAC denotes a proposition and propositions can be used to refer to and connect eventualities of the external world. A PAC denotes a judgement of a thinking subject and judgements can be used to refer to and connect eventualities of the external world, eventualities of possible worlds or inferences of a thinking subject. A NonIC denotes a speech act by a speaker and speech acts can be used to refer to and connect eventualities of the external world, eventualities of possible worlds, inferences of the speaker or speech acts performed by the speaker.

With these considerations in mind we can make sense of the fact that an adverbial clause with an epistemic reading cannot be a CAC; cf. (58a). Any epistemic reading necessarily involves a judgement and a judge. The sentence pair in (63) illustrates this once more.

- (63) a. Weil das Licht im Arbeitszimmer an ist, denkt Paul, dass Max zu because the light in-the study on is thinks Paul that Max at Hause arbeitet.
 home works
 'Because the light is on in the study, Paul thinks that Max is working at home.'
 - b. Weil das Licht im Arbeitszimmer an ist, arbeitet Max zu Hause. because the light in-the study on is works Max at home 'Because the light is on in the study, Max is working at home.'

(i) Wenn du mich fragst, lässt Peter sich scheiden. if you me ask gets Peter REFL divorced 'If you ask me, Peter is getting a divorce.'

¹⁸ An anonymous reviewer refers to a sentence like (i) and suggests that here a *wenn*-clause interpreted in the speech act domain occurs in the prefield of its host, indicating that a clause which is not a NonIC can have a speech act related interpretation.

However, I do not think that the *wenn*-clause in (i) is speech act related. The clause rather has the meaning (and the syntax) of a source adverbial, much like an adverbial such as 'in my opinion'.

(63a) can be understood as a simple description of a causal relation existing in the external world. An external cause is given for the external fact that Paul has a certain belief. Thus, the *weil*-clause in (63a) can be a CAC. This is confirmed by the possibility of binding into such a *weil*-clause, cf. (64a). The situation is different with (63b). The mind of a thinking subject, i.e., the speaker, concludes that Max is at home on the basis of the light in the study. For syntax this means that the adverbial clause is a modifier of the JP of its host. Furthermore the adverbial clause itself must be a JP. It is a reasonable assumption that the modifying element of a JP has to encode a judgement. For syntax it follows that the adverbial clause in (63b) is a PAC. A PAC does not allow binding into it from its host, cf. (64b).

- (64) Weil das Licht in seinem, Arbeitszimmer an ist, denkt jeder₁, a. on is thinks because the light in his study everyone dass Einbrecher im sind. Haus that burglars in-the house are 'Because the light is on in his study, everyone thinks that burglars are in the house.'
 - b. *Weil das Licht in seinem, Arbeitszimmer an ist, arbeitet jeder,
 because the light in his study on is works everyone zu Hause.
 at home

4 The licensing of concessives as PACs and as NonICs

(48a), repeated here, formulated the licensing condition for weak RPs.

(48a) A weak RP needs syntactic licensing inside its minimal clause by J⁰.

How are the presence of JP and J^0 syntactically licensed? (65) expresses the obvious assumption. We have seen either that a JP has Com⁰ as the next higher functional projection above it or that a JP is a complement (with a transparent CP-shell) of a mental attitude verb or of a verb of perception.

(65) JP has to be locally licensed by Com⁰ or by a verb which takes it as a complement.

A locally licenses B iff A minimally c-commands B modulo any adjunctions to B. For a PAC, (65) has the consequence stated in (66).

(66) A PAC has to be locally licensed by the licenser of the JP of the PAC's host.

Because of the locality requirement, (66) implies (67).

(67) A PAC is base-generated in a position adjoined to the JP of its host.

A PAC may also occur in the prefield of an independent V2-clause, which according to our assumptions stated in Section 3 equals [Spec,ActP]. This is for example the case in (1b). The PAC is moved to [Spec,ActP] from its JP-adjoined base position. Furthermore, a PAC may occur in the prefield of an embedded V2-clause.¹⁹ In this case the PAC is moved to

¹⁹ In German the verbs which allow weak or semi-strong RPs in their complement clauses allow that their complement clauses are realised as V2-clauses (cf. Frey to appear for some discussion). In the prefield of such a V2-complement clause a PAC may appear, cf. (i) for illustration.

[Spec,CP] of the CP-shell of the embedded V2-clause from its JP-adjoined base position (cf. Frey to appear).

With (67) we can immediately explain data like (5b). There is no c-command from the base position of the host's subject into the PAC, cf. also (68a).²⁰ However, given (67), the possibility of binding from a higher clause into a PAC is expected. This expectation is fulfilled, cf. (68b).

- (68) a. *Jede₁ hat das Examen bestanden, obwohl sie₁ schlecht vorbereitet everyone has the exam passed although she badly prepared war.
 was
 - b. Jede₁ denkt, [dass das Examen gut gehen wird, obwohl sie₁ everyone thinks that the exam well go will although she schlecht vorbereitet ist].
 badly prepared is 'Everyone thinks that the exam will go well although she is badly prepared.'

(67) also accounts for (6b) and (7b). Regarding (6b), we note that in order for a phrase to be able to provide the nuclear accent for a wide focus reading of a complex construction, the phrase has to be the most deeply embedded. This cannot happen with a constituent of a PAC. Regarding (7b), we observe that a PAC cannot be in the scope of a negation appearing in the matrix clause since the PAC is just too highly base-generated.

Let us next turn to the licensing of concessive ActPs. Above it was already stated that the present paper adopts the assumption that ActPs cannot be syntactically embedded.

(69) Principle of the unembeddability of ActP: an ActP cannot be syntactically embedded (cf. Green 2000).

We have seen that like independent clauses, NonICs are also ActPs, cf. (54iii). (69) accounts for the fact that NonICs cannot occupy the prefield of a German V2-clause, cf. (30b,d,f,h), and that NonICs cannot occur embedded together with their hosts, cf. (31b,c).

(69) allows us to explain another peculiarity of NonICs. NonICs cannot be coordinated, cf. (70a). Note that, as to be expected, PACs can be coordinated, cf. (70b).

Maria sagte, obwohl er sehr gut gespielt hat, hat Max verloren. Maria said although he very well played has has Max lost 'Maria said, although he played very well, Max lost.'

²⁰ There is also no scrambling position from which a quantifier of the host could bind into a PAC. If an argument is scrambled above JP, it comes into the realm of clause-internal topic positions (Frey 2004). Since a quantified phrase cannot be a topic, it cannot be scrambled to this region.

A PAC which seems to occur lower in the so-called middle field of a German clause is used parenthetically. Therefore no binding from the host is possible into a PAC which is serialised in this region:

⁽i) *dass keiner₁ kürzlich – obwohl er_1 gut vorbereitet war – die Prüfung bestanden hat that no-one recently although he well prepared was the exam passed has

Regarding CACs, we can assume that the different CACs are base-generated adjoined to (different) positions in the (extended) V-domain. Binding from the host into any CAC is possible since a quantified phrase might be scrambled to a position c-commanding the CAC.

- (70) a. *Wir gehen spazieren, sind wir auch etwas müde und wird es auch we go for-a-walk are we MP a-little tired and will it MP bald regnen.
 soon rain intended: 'We are going for a walk even though we are a little tired and it's going to rain soon.'
 - b Wir gehen spazieren, obwohl wir etwas müde sind und obwohl es we go for-a-walk although we a-little tired are and although it bald regnen wird.
 soon rain will
 'We are going for a walk although we are a little tired and although it's going to rain soon.'

For the syntax of coordination it is often assumed that the coordinating element is the head of the construction, with the right conjunct as sister and the left conjunct as specifier (cf., e.g., Progovac 2003). Thus, the conjuncts are syntactically embedded. But even with alternative approaches to the analysis of coordination, at least the second conjunct is treated as embedded. With (69) it follows that NonICs, being of the category ActP, cannot be coordinated. In contrast, PACs, being of the category JP, can be coordinated.²¹

How are NonICs licensed? I would like to adopt a concept from Pittner (2011) and consider NonICs as constituting subsidiary speech acts relative to the speech acts performed by their hosts (Freywald 2018 also adopts this concept for non-integrated concessives). Presumably, in syntax this ancillary function of NonICs is mirrored by their being adjoined to their hosts. Since a NonIC constitutes a subsidiary speech act for another speech act, the host of a NonIC has to be ActP. We arrive at the assumption in (71).

(71) A NonIC is adjoined to the ActP of its host.

Note that concessive main clauses containing the German adverb *trotzdem* or the English *nevertheless* constitute not subsidiary speech acts but independent speech acts.

(72) Max hat sehr gut gespielt. Trotzdem hat er verloren. Max has very well played nevertheless has he lost 'Max played very well. Nevertheless he lost.'

Let us now recall that strong RPs can only occur with independent clauses and NonICs. This led to the formulation of the licensing condition for strong RPs in (48b), repeated here.

(48b) A strong RP gets licensed by being adjoined to an ActP.

It follows that strong RPs are base-generated at the very edges of their host clauses and cannot occur as integral parts of their hosts, for example they cannot occur in a prefield.

²¹ Note that disintegrated *obwohl*-V_{fin}-clauses can be coordinated.

⁽i) Obwohl wir etwas müde sind und obwohl es bald regnen wird, wir gehen spazieren.

We can assume that the two conjoined *obwohl*-clauses are JPs and the conjoined structure is a JP dominated by ComP and ActP. This structural assignment is of course not possible for the conjunction of two V1-concessives since V1-concessives are inherently ActPs.

In (73) this is illustrated with an interactional expression, with an interjection and with a tag.

- (73) a. Von Mann zu Mann, Max wird überschätzt. from man to man, Max is overrated 'Man to man, Max is overrated.'
 - b. *Von Mann zu Mann wird Max überschätzt.
 - c. Ich muss heute zum Amt, Mann. I must-go today to-the office man 'I have to go to the office today, man.'
 - d. *Mann muss ich heute zum Amt.
 - e. Wetten? Maria wird gewinnen. want-to-bet Maria will win 'Wanna bet? Maria will win.'
 - f. *Wetten wird Maria gewinnen.

It is tempting to assume that strong RPs constitute their own speech acts, albeit again subsidiary speech acts relative to the speech acts with which they are associated. This assumption seems to be justified on the grounds of the semantics/pragmatics of strong RPs and on the grounds of their prosodic realisation. Alston (2000: 158) speaks of 'subsentential acts'. Thus we slightly extend (48b) to (74).

(74) Strong RPs constitute subsidiary speech acts and as such they are adjoined to the ActPs of their hosts.

5 Summary

D'Avis (2016) states that the standard account of concessive *obwohl*-clauses does not capture all uses. He points out that there are usages of the concessive *obwohl*-clauses which do not involve the presupposition/conventional implicature of a normal course of states of affairs. In these cases, the conditional to which the concessive is in opposition is to be found in the context. In Section 2 it is shown that in this particular use, and only in this one, *obwohl*-clauses occur as CACs. Standardly used concessives cannot appear as CACs but only as PACs and NonICs, as can be demonstrated by syntactic and prosodic data. The paper argues that the reason why they cannot be realised as CACs is that in their standard use concessives come with a modalised conception of an expected course of events. According to d'Avis (2016) this conception appears as a generalised conversational implicature triggered by the speaker. The present paper argues that if the semantics of a clause α involves such a conception of normality, α does not just refer to the external world as CACs do, but α includes the evaluation and judgement of a thinking mind.

The paper follows Krifka (2018, to appear), who builds on Frege and Peirce, in assuming that distinctions have to be made between a proposition, a judgement about a proposition, a commitment to the truth of a judgment and the public manifestation of a commitment. These distinctions are reflected in syntax by the functional projections TP, JP, ComP and ActP, respectively. It is the JP-projection which represents the judgement of a thinking mind. CACs only contain TP, PACs contain TP and JP, and NonICs contain TP, JP, ComP and ActP. Thus, all PACs encode a judgement, and all NonICs encode a speech act. It can be shown that this has consequences for the internal and external syntax of the different types of concessive clauses.

Standardly used *obwohl*-concessives, being PACs, are JPs, which are constituents of their matrix clauses, generated in a high position. They are illocutionarily dependent on their hosts. Non-integrated concessives like verb-first concessives, being NonICs, are ActPs, which are not constituents of their matrix clauses. They are illocutionarily independent of their hosts and encode a separate speech act.

Among other things this approach allows us to explain why integrated *obwohl*-concessive clauses, and PACs in general, may contain so-called weak root phenomena like modal particles and sentence adverbials. These are not-at-issue expressions dependent on judgements. Concessives realised as PACs may not contain commitment modifiers and so-called strong root phenomena like tags and interjections, though. These are not-at-issue expressions dependent on a commitment and the performance of a speech act, respectively. Importantly, strong root phenomena require the presence of an ActP. Therefore, only if the concessive comes as a NonIC like a verb-first concessive or as an independent clause may it host strong root phenomena.

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