Process, eventuality, and *wieder/again*[*]

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Abstract

This paper argues for a scopal explanation of the readings of the adverb *wieder* ('again'). It is the syntactic entity that *wieder* is related to which determines whether the repetitive or the restitutive reading obtains. If it is adjoined to the minimal verbal domain, it relates to a situation-internal state thus producing a restitutive interpretation, if adjoined to a higher verbal projection, it relates to an eventuality resulting in a repetitive interpretation. Proceeding from the assumption that adverbial adjuncts have base positions which reflect their semantic relations to the rest of the sentence, repetitive *wieder* is shown to belong to the class of eventuality adverbs that minimally c-command the base positions of all arguments, whereas restitutive *wieder* has many properties in common with process (manner) adjuncts that minimally c-command the verb in clause-final base position.

1. Introduction

The German adverb *wieder* (as well as its English equivalent *again*) has intrigued linguists for decades. It is generally acknowledged that there are two different readings of *wieder*, the restitutive and the repetitive reading. While the first refers to the restitution of an earlier state, the second refers to the repetition of an eventuality.

(1) a. *Sie spielte wieder eine Sonate.* (repetitive)
    she played again a sonata
    b. *Er schloss das Fenster und öffnete es dann wieder.* (restitutive)
    he closed the window and opened it then again

Communis opinio is also the presuppositional character of *wieder*. The repetitive reading presupposes an earlier eventuality of the same kind as the one asserted in the sentence, whereas the restitutive reading presupposes the state denoted by the main predicate to have held previously.

It is still controversial, however, how these different readings are to be accounted for. The main controversy is whether there is only one *wieder* and the different meanings are due to scope differences, as for instance Dowty (1979) and von Stechow (1996) assume, or whether there are two

meanings of *wieder* which cannot be reduced to a scope difference. Proponents of the latter view are Fabricius-Hansen (1983), Kamp and Roßdeutscher (1994), Jäger and Blutner (this volume).

In this paper, a scope-based explanation of the readings of *wieder* will be defended. The availability of the repetitive or the restitutive reading is determined by the syntactic entity that *wieder* is related to. I assume that there is one lexical entry for *wieder* which is underspecified semantically. The basic meaning of both restitutive and repetitive *wieder* is that the entity in its scope (D) has obtained previously (D_0). If *wieder* is adjoined to the minimal verbal domain, the entity denoted is a state and the interpretation is restitutive, if *wieder* is adjoined to a higher verbal projection, the entity denoted is an eventuality and the interpretation is repetitive. Simplifying somewhat, a lexical entry for *wieder* might look like this:

(2)   WIEDER (D) $\rightarrow \exists\, D_0 \wedge D_0 < D$

D is a variable for the entity in the scope of *wieder,* the arrow signifies a presupposition and "<"expresses temporal precedence.[1]

(3)   D = (situation-internal) state, if only V is in its scope
       D = eventuality, if the verbal projection including the base position
            of all arguments is in its scope

There are two different base positions for *wieder* which are determined by the semantic entity that *wieder* is related to. Repetitive *wieder* is related to whole eventualities which are syntactically represented by complete verbal projections containing all the arguments of the predicate. Restitutive *wieder* is related to situation-internal states which are represented by the verb or predicative phrase, hence they are adjoined to the minimal verbal domain usually represented by V^0. It will be shown that the positions of restitutive *wieder* are the same as those positions that manner adjuncts occur in, so that the question arises what restitutive *wieder* and manner adjuncts have in common.

Von Stechow (1996) uses lexical decomposition of verbs in the style of Generative Semantics in order to explicate the different scopes of restitutive and repetitive *wieder*. He assumes that the elements of lexical decomposition are directly represented in the syntax, e.g. CAUSE in VoicePhrase and BECOME under V. *Wieder* in its restitutive reading is in the scope of BECOME and has the resultant state in its scope which is represented as a lexical head X^0 together with the object NP in a kind of small clause. The object is assumed to move to AgrO and the subject to AgrS, both for case

reasons. If *wieder* occurs outside the scope of BECOME, we get the repetitive reading.

My approach differs from von Stechow's in two major respects. I assume a base position of restitutive *wieder* as an adjunct to the verb which in German, as an OV-language, has a clause-final base position. A second major difference is that I do not assume that lexical decomposition is represented directly in the syntax. Together with many syntacticians, I assume that lexical decomposition structures are represented on a separate level of semantics, where they provide argument places which are projected into the syntax (e.g. Haider 1993). As far as the positioning of adverbs is concerned, I maintain that there is an isomorphic relation between certain syntactic positions and semantic entities. In my view, the base position of adjuncts is determined by the semantic entities they are related to.

In earlier work (Frey and Pittner 1998; Pittner 1999) it was proposed that there are five classes of adjuncts that are differentiated by their base positions: (I) frame adjuncts, (II) sentence adjuncts, (III) event-related adjuncts, (IV) event-internal adjuncts and (V) process-related adjuncts.[2] Within these classes, there may be semantic preferences for a certain order but this order is not syntactically determined. The base position of these classes and their c-command-relations reflect their semantic relations to the rest of the sentence.

(4)   *Base positions of adjuncts*:
    (i)   frame and domain adjuncts: c-command the base positions of sentence adjuncts
    (ii)   sentence adjuncts: c-command the finite verb and the base positions of event-related adjuncts
    (iii)   event-related adjuncts (e.g. time, cause): c-command the base position of the highest argument and the base positions of eventuality-internal adjuncts
    (iv)   event-internal adjuncts (e.g. instrument, comitative, mental attitude): they are minimally c-commanded by the argument they are related to, i.e. no other argument can intervene
    (v)   process adjuncts (e.g. manner): minimally c-command the verb or "verbal complex"

The goal of this paper is to show how *wieder* in its different readings fits into this picture of adjunct positions in German. The paper is organized as follows: Section 2 presents the basic facts about the positions of *wieder* in its two readings. A closer look at the base position of repetitive *wieder* is taken in Section 3. Section 4 deals with the base position of repetitive

wieder, which behaves as other event-related adverbs do. How intonation influences the interpretation of *wieder* is the subject of Section 5. Finally, we take a look at the diachronic development of the meanings of *wieder*.

2.   Position and interpretation of *wieder*

Restitutive *wieder* can occur only with predicates denoting a change of state or a state which can be conceived of as the result of a change. Thus, in the absence of such predicates, no ambiguity arises with respect to *wieder*. When such a predicate is involved, the possible ambiguity of *wieder* depends on its syntactic position.

In a position adjacent to the verb in final position, *wieder* is ambiguous due to syntactic ambiguity. The object can either be in its base position, which means that *wieder* is adjoined to V^0. If the object has been scrambled out of its base position, *wieder* is adjoined to a higher verbal projection thus allowing for a repetitive interpretation (cf. von Stechow 1996 and this volume).

(5)   a. *Hans hat das Auto wieder repariert*.   (repetitive or restitutive)
'Again, Hans has repaired the car.'/'Hans has repaired the car again.'
    b. *Hans hat wieder das Auto repariert*.   (repetitive)
'Again, Hans repaired the car.'

If *wieder* occurs higher than the object (5b), usually only a repetitive interpretation is possible. There are exceptions to this like (6), as has been noted by von Stechow (1996).

(6)   *Anna hat wieder das Haus verlassen*.
'Again, Anna left the house.'/'Anna left the house again.'

For some speakers, this sentence can also have a restitutive interpretation, it does not necessarily presuppose that Anna left the house before, but that she was outside the house before. Examples of this kind will be discussed in the next section.

Wieder in the position before the finite verb in verb-second clauses (in the German "pre-field") can only get a repetitive interpretation.

(7)   *Wieder hat Hans das Auto repariert.*
'Again, Hans has repaired the car.'

If *wieder* is topicalized together with the verb, thus forming a complex pre-field, the restitutive reading is strongly preferred.

(8)   *Wieder repariert hat Hans das Auto.*
       'Hans repaired the car again.'

It is possible to form sentences containing two occurrences of *wieder*:

(9)   *Er hat das Auto wieder wieder repariert.*
       'Again, he repaired the car again.'

In this case there is a clear intuition that the first *wieder* is the repetitive one and the second the restitutive one. In (10), the *wieder* that occurs with the verb in the prefield is the restitutive one, the sentence-final *wieder* is the repetitive one.

(10)   *Wieder repariert hat er das Auto wieder.*
       'Again, he repaired the car again.'

These data show that restitutive *wieder* is tied to the verb more closely than the repetitive one. Restitutive *wieder* is so close to the verb that it has even been assumed to be incorporated into the verb (Fabricius-Hansen 1980; Rivero 1992 for Greek; cf. Delfitto 2000). In the following section, a closer look at the base position of restitutive *wieder* is taken, paying particular attention to the comparison with manner adjuncts.

3.   The base position of restitutive *wieder*

The goal of this section is to establish that the base position of restitutive *wieder* is adjacent to the verb in final (base) position. It will be argued that it is due to a process of integration that an object may intervene between restitutive *wieder* and the final verb.

   German allows for scrambling of verbal arguments (and even adjuncts, cf. Frey and Pittner 1998). Thus, in order to determine the base position of an adjunct, we employ indefinite w-expressions which may not scramble as a diagnostic (see also Frey, this volume).

(11)   a. *Er hat wen wieder geheilt.*   (restitutive)
          'He has healed someone again.'
       b. *Er hat wieder wen geheilt.*   (repetitive)
          'Again, he has healed someone.'

The position of the object pronoun shows that restitutive *wieder* has a base position lower than the object, whereas repetitive *wieder* has its base position higher than the object. (11) is not compatible with the assumption of Jäger and Blutner (this volume) that restitutive *wieder*, like the repetitive *wieder*, has a base position higher than all verbal arguments. Note that the indefinite w-pronoun *wen* ('someone') cannot scramble.

Interestingly, it can be shown that restitutive *wieder* behaves like manner adjuncts with regard to their position. Both manner adjuncts and restitutive *wieder* are positioned close to the verb, as the position of the indefinite w-pronoun shows:

(12)   *Sie hat was gründlich gelesen.*
       'She read something carefully.'[3]

Additional evidence for the base position of manner adverbs adjacent to the verb comes from the scope test, cf. Frey and Pittner (1998) and Frey (this volume).

(13)   a.   *Hans hat mindestens eine Frau auf jede Art und Weise*
            umworben. ($\exists\forall$)
            'Hans courted at least one woman in every conceivable
             manner.'
       b.   *Hans hat auf jede Art und Weise mindestens eine Frau umworben.*
            ($\exists\forall$, $\forall\exists$)

My clear intuition is that there is a scope ambiguity in (13b), but not in (13a). The scope ambiguity in the second example is due to an interpretation of the scope either according to surface structure or according to the base order, which means the manner adjunct has a base position below the object.

It has been argued (Frey and Pittner 1998; Frey, this volume) that elements occurring after manner adverbs are part of a complex predicate. The verb combines with certain adjacent elements such as resultative predicates and directional PPs so closely that it cannot be topicalized alone (14a) and neutral sentential negation cannot occur between the verb and these elements (14b).

(14)   a.   ??*Gefahren ist er in die S*TADT.   (acceptable only with
                                                    contrastive focus)
       b.   *Er ist in die Stadt nicht ge*FAH*ren* (*sondern ge*LAUF*en*).
            'He didn't go into the town by car (but walked).'

The fact that sentential negation cannot occur between manner adjuncts and verbs shows that manner adjuncts are adjoined to the verb. They could also be part of the complex predicate but the intonation does not support this assumption (cf. Section 5).

Again, restitutive *wieder* behaves just the same. Manner adjuncts and restitutive *wieder* have to appear to the right of sentential negation:

(15) a. *Er hat das Geschirr nicht sorgfältig gespült.*
          'He did not do the dishes carefully.'
      b. ??*Er hat das Geschirr sorgfältig nicht gespült.*
          'He carefully avoided doing the dishes.'

(16) a. *Er hat die Patienten nicht wieder geheilt.*   (restitutive)[4]
          'He did not heal the patients again.'
      b. *Er hat die Patienten wieder nicht geheilt.*   (only repetitive)
          'He again did not heal the patients.'

This is solid evidence that the base position of restitutive *wieder* is lower than that of the repetitive *wieder* which sheds doubt on the assumption made by Jäger and Blutner (this volume) that *wieder* in both readings has a base position higher than all verbal arguments.

Manner adjuncts can precede certain objects, however, as will be discussed with restitutive *wieder* below:

(17) *weil   sie schüchtern einen Prinzen geküsst hat*
       because she shyly   a   prince   kissed has
       'because she kissed a prince shyly'

Indeed, some authors hold that the base position of manner adjuncts is higher than the object. In our view, data like (17) are due to the "integration" of the object into the predicate in the sense of Jacobs (1993).[5] The integrated object is not conceptualized as a separate entity, but merely as a part of a process. This is possible if the object exhibits Proto-Patient characteristics as defined by Dowty (1991). Focus on an integrated object can be wide focus.

(18) a. *Sie hat ein* BUCH *gelesen.*   (wide focus possible)
          'She read a book.'
      b. *Sie hat einen* KOLLEGEN *verachtet.*   (only narrow focus)
          'She despised a colleague.'

The Patient object in (18a) can be integrated whereas this is not possible for the Stimulus object in (18b) which does not have Proto-Patient characteristics.

It has also been observed that distributive quantification prevents integration (cf. Jacobs 1993: 80f.):

(19) a. *Sie hat jedes* HEMD *gebügelt.*   (only narrow focus)
          'She has ironed each shirt.'
      b. *Sie hat alle* HEMD*en gebügelt.*   (wide focus possible)
          'She ironed all shirts.'

Manner adjuncts can occur only in front of integrated objects. Therefore the following sentences with objects that resist integration are not acceptable.

(20) a. **Ich habe abgrundtief den Mann verachtet.*
          'I despised the man deeply.'
      b. ??*Er hat sorgfältig jedes Hemd gebügelt.*
          'He ironed each shirt carefully.'

In the following, I will argue that the occurrence of restitutive *wieder* to the left of objects is also due to a process of integration. More specifically, this means that in these cases the object is seen as part of the result, not as the entity undergoing change. What these sentences denote is not primarily a state of change of the object, but rather the object is conceptualized as part of the resultant state.[6]

Kamp and Roßdeutscher (1994) assume that restitutive *wieder* necessarily involves a fixed Theme. They see this as the main reason for the position of restitutive *wieder* below the object:

> Throughout the succession of states and processes the theme remains fixed. In particular, the presupposition must share the theme with the assertion that the sentence makes. This shared identity will be guaranteed only when the theme phrase is outside the scope of *wieder*. (1994: 202)

Contrary to Kamp and Roßdeutscher, a restitutive interpretation of *wieder* can occur (admittedly rather marginally) with indefinite Themes which get an existential interpretation, as the following example shows:

(21) *Hans hat wieder ein Fenster geöffnet.*
      'Hans opened a window again.'

In a context in which a window has been open before a conference, during which the air is getting stuffy, *wieder* in (21) can get a restitutive reading: the state of one window being open is restituted and it does not have to be the same window as before. It is not necessarily presupposed that Hans opened a window before.

Generally, it has to be said that a restitutive reading in these sentences is often marginal and not available to all speakers, as in the following example.

(22)   *Anna hat wieder das Haus verlassen.*
        'Anna left the house again.'

The explanation for the (marginal) restitutive reading in this case is that in the phrase *das Haus verlassen* nobody thinks of a particular house, it is rather an idiomatic phrase roughly meaning 'to go out'. The article may not be changed and if adjectives are added, the restitutive interpretation disappears as far as my intuition is concerned.

As we have seen, quantification by means of *jeder* ('each') prevents integration. Again, if an object cannot be integrated as in (23b), restitutive *wieder* to the left of the object is not acceptable:[7]

(23)   a. *Sie hat ihm wieder alle Bücher zurückgegeben.*
            'She gave him all books back again.'
        b. ??*Sie hat ihm wieder jedes* BUCH *zurückgegeben.*
            'She gave him each book back again.'

So, I assume that restitutive *wieder* to the left of an object is due to an integration of this object into the complex predicate. As we have seen, an indefinite object to the right of restitutive *wieder* can only get an existential reading (as restitutives normally imply a fixed Theme, this is a rather marginal case). This is in accord with the observation of Frey (2001) that an indefinite NP within a complex predicate is always existentially interpreted and supports my point that restitutive *wieder* is adjoined to the complex predicate.

Although manner adjuncts and restitutive *wieder* share some common properties, there are also some differences. Manner adjuncts can appear in the preverbal position ("pre-field") under certain conditions, whereas this position of *wieder* necessarily results in a repetitive reading.

(24)   a. *Langsam/Hastig hat sie das Buch gelesen.*
          'Slowly/hastily, she read the book.'
       b. *Wieder hat sie das Buch gelesen.*   (only repetitive)
          'Again, she has read the book.'

For manner adverbs in the pre-field there is a strong tendency for them to be interpreted as event-related adverbs if it is possible. So, *langsam* in (24a) is preferentially interpreted not as the way the reading is performed but as measuring the time until the event of her reading the book is completed, so-called "event-interpretation".[8] A process interpretation of the adverb in the prefield is possible under two conditions: either if the process adjunct is narrowly focussed and thus bears the nuclear accent (e.g. as an answer to 'How was she reading the book?') or, in rare contexts, if it has been mentioned before. In this case, it may remain unaccented.

As far as *wieder* in the pre-field is concerned, in principle the same conditions obtain. However, as will be discussed later, a nuclear accent on *wieder* always excludes the restitutive reading, so the narrow focus context is not possible with restitutive *wieder*. Moreover, givenness by prementioning is even more unlikely than with manner adjuncts.

The question arises: what do manner adjuncts and restitutive *wieder* have in common? If they can occur in the same positions, there must be at least some similarity in the semantic object they apply to. The semantic object that restitutive *wieder* applies to is a state. Hence, it can only occur with stative predicates or resultative verbs. Manner adjuncts, however, apply to a semantic entity that, in earlier work, has been called "process" (Pittner 1999; Frey and Pittner 1998; Haider 2000).

Sometimes the term "process" is used in opposition to states and other types of eventualities. This is not what is meant here: "process" is the internal structure of dynamic eventualities. The difference between "event" and "process" is rather of an aspectual nature, that is, looking at situations from outside vs. looking at their internal structure.

This can be illustrated with adverbs of speed like *schnell* ('quickly') or *langsam* ('slowly'). The idea behind the term "process adjunct" is that manner adjuncts apply to inner aspects of a situation disregarding its beginning or its end. The following sentence is ambiguous between a process adjunct reading and an event-related adjunct reading.

(25)   *Er ging schnell.*
       'He walked quickly.'/'He quickly left.'

In one reading of *schnell gehen* ('walk quickly'), the adverb characterizes the single successive movements of the legs that constitute the activity of walking. The adverb *schnell* characterizes this activity with regard to a temporal parameter and the judgement is based on what the normal speed of walking is. Thus, *schnell* applies to the inner aspect of the situation, its progression. In its process (manner) interpretation, the adverb says nothing about the duration of the activity of walking. In its "event" reading, which applies to the whole situation, *schnell* says that the event of his leaving came about quickly whereas it says nothing about the speed of his walking.

What do manner adjuncts and restitutive *wieder* have in common? A manner adjunct applies only to aspects of a situation that are expressed by the semantics of the verb alone, as we have seen in the case of walking, which denotes a successive movement of legs.

In the same vein, restitutive *wieder* picks out a part of the verbal semantics, but in this case the state. W*ieder* in general presupposes an earlier occurrence of the semantic entity in its scope. Obviously, *wieder* as a V^0-adjunct is not in the right syntactic position to apply to a whole eventuality. To conclude, V^0-adjuncts can only apply to parts of the verbal semantics representing internal properties of the situation. Eventualities, however, are not represented by V^0, but by complete verbal projections containing all verbal arguments.

I suggest the following principle which is responsible for the base positions of both manner adverbs and restitutive *wieder* close to the verb:

(26)   Adjuncts that apply to parts of eventuality predicates which are supplied by the semantics of the verb alone take a verb-adjacent base position.

Both restitutive *wieder* and process adjuncts are sensitive to the semantics of the predicate, albeit in different ways: process adjuncts cannot combine with stative predicates[9] whereas restitutive *wieder* requires a stative predicate or a resultative verb. The interpretation of these adjuncts close to the verb is dependent on the semantics of the verb in various ways, cf. Bierwisch (2000) for *wieder*, Maienborn (this volume) for verb-close locative modifiers. That these adverbs are sensitive to verb semantics is a direct consequence of their narrow scope reflected in their verb-adjacent position.

So far, it has been argued that restitutive *wieder* is a V^0-adjunct, but that objects may occur in its scope if they are conceptualized as part of the result. In rare cases, restitutive *wieder* may even take a base position higher than the subject, cf. the example given below.

(27) *Es   siedeln sich wieder Delawaren in New Jersey an.* (restitutive)
EXPL settle REFL again   Delawares in New Jersey
'Delawares are settling again in New Jersey.'

The meaning of *wieder* in this sentence is basically restitutive: The sentence does not necessarily denote the repetition of an event, but rather the restitution of an earlier state, as the Delawares are conceived to have been in New Jersey originally and not to have settled there, disappeared and settled there again. This example is the main reason given by Jäger and Blutner (2000) in order to support their view that *wieder* in both readings has its base position higher than the subject.[10]

They argue that this example falsifies a scope-based explanation of the different readings of *wieder*. Jäger and Blutner argue that a restitutive reading should be excluded under von Stechow's analysis since the subject position in his analysis is higher. It is not quite clear, however, that the subject here is in the "usual" subject position binding an argument of the CAUSE-predicate. The verb in this sentence is an ergative verb with a subject in the object position which lies within the scope of the BECOME-predicate and therefore can occur within the scope of restitutive *wieder*.

It has to be noted that examples of this kind are hard to find. That a restitutive reading is possible here is due to the fact that nobody saw the Delawares settling for the first time so that they can be conceived of as always having been there. This speciality cannot be extended to verbs of appearing in general. Other examples of the Delaware type denote the restitution of some state that can be conceived as a native natural state, e.g.

(28) *weil da wieder Bäume wachsen*
'since there grow trees again'

Moreover, the same pattern can be found with predicates that denote the availability of their subject referents:[11]

(29) *weil wieder Feuerwehrmänner verfügbar sind*
'because firemen are available again'

What these sentences have in common is that they are asserting the existence of their subject referents in some place. The subjects bear the main accent, whereas the predicates remain unaccented.

Although the concept of integration is not explicitly applied to subjects by Jacobs (1993), there are some good reasons to assume that something similar is taking place in these sentences. First of all, it can be observed that

neutral sentence accent is placed on the subject, nuclear accent on other constituents inevitably results in a narrow focus, cf. Rochemont (1986: 55) who observes this for verbs of appearing in general. Moreover, it can be argued that *Delawaren* and the subject referents in the other examples have a Proto-Patient property, as they change their place. This means that in (27) the Delawares are conceptualized as part of the resulting state, namely that there are Delawares again in New Jersey. As we have seen, objects have to occur in the scope of restitutive *wieder*, if they are part of the resulting state. This also extends to subjects of some verbs of appearing.

What is also remarkable is that there is no definite entity which changes its place but that the Delawares that are settling in New Jersey are not those that have been there before. Usually, the entity undergoing change remains constant in a restitutive reading but, as we have already seen, there are exceptions to this, namely if an indefinite occurs in the scope of restitutive *wieder*. This is a case of sloppy identity which is due to the property of kind terms like *Delawaren* to change their referents in the course of time.

In this section, it was argued that restitutive *wieder* has a base position adjacent to the verb. Objects and, in rare cases, subjects may be integrated into the predicate if they are conceptualized as part of the resultant state. In these cases, restitutive *wieder* occurs to the left of these elements.

4.   Repetitive *wieder* as event-related adverb

Repetitive *wieder* has been claimed to be a sentence adverb (e.g. Dowty 1976; Fabricius-Hansen 1983). In this section, it will be argued, however, that in a more fine-grained classification of adverbs there is a separate class of eventuality adverbs to which repetitive *wieder* belongs. Event-related adverbs, dominating the base positions of all arguments, delimit the range of existential closure, cf. Frey (in press). Diesing (1992), on the contrary, assumed that sentence adverbs delimit the range of existential closure. It will be shown that sentence adverbs have a higher base position than event-related adverbs, and more specifically, that they delimit the topic range of the sentence to their left.

From a semantic point of view, it makes sense to say that repetitive *wieder* is related to events. Kamp and Roßdeutscher (1994: 196) make use of the notion of eventuality in their description of repetitive *wieder*: "The presupposition generated by repetitive *wieder* is that an eventuality of the type described by the *wieder*-sentence happened before the one whose occurrence the sentence asserts."

Event-related adjuncts, according to rule (4iii) above, c-command the base positions of all arguments. This can be shown by quantifier scope:

(30)   *weil mindestens ein Kollege wieder protestiert hat*
         (∃ WIEDER, WIEDER ∃)
         'because at least one colleague protested again'

While the reading of the quantifier *ein* with wide scope is a reflection of the surface order, the wide scope reading of *wieder* can be attributed to a base position of the subject lower than *wieder* according to the scope principle of Frey (1993):

(31)   A quantified expression α can have scope over a quantified expression β if the head of the local chain of α c-commands the base position of β.

Note that the ambiguity observed in (30) does not occur with restitutive *wieder*.

(32)   *weil mindestens ein Kollege wieder krank geworden ist*
         (only ∃ WIEDER with the restitutive reading)

Sentence adverbs c-command the finite verb and the base position of event-related adverbs according to (4ii) above. On the surface, sentence adverbs partition the sentence into topic and comment (Frey and Pittner 1998; Pittner 1999; Frey, in press). Since only referring expressions can be topics (cf. Lambrecht 1994), this partitioning can be tested by means of expressions that have no referent such as *keiner* ('nobody').

(33)   **weil keiner wahrscheinlich* KOMMT
          'because nobody probably comes'

Other types of adjuncts may precede sentence adjuncts, but this requires that they are topics:

(34)   *Petra wird auf diese Weise anscheinend ihre Reise finanzieren.*
         'Petra apparently will finance her trip in this way.'

In contrast to (33), *wieder* can occur to the right of *keiner*:

(35)   *weil keiner wieder singt*
       'because nobody sings again'

The finite verb is c-commanded by sentence adverbs. As German is of the OV-type, this condition is always fulfilled for sentence adverbs in the middle field. In German, this condition can be observed in the following sentences in which it is violated and leads to ungrammaticality (judgement applies to non-focussing use of the sentence adverb).

(36)   **Leider   geraucht hat er gestern.*
       Unfortunately smoked   has he yesterday.
       'He unfortunately smoked yesterday.'

For repetitive *wieder* as event-related adverb this condition does not obtain:

(37)   *Wieder geraucht hat er gestern.*
       'He again smoked yesterday.'

So far, it has been argued that repetitive *wieder* has a base position different from that of sentence adverbs, and, in contrast to sentence adverbs, does not delimit the topic range in the sentence. As was indicated at the beginning of this section, event-related adverbs, the class to which repetitive *wieder* belongs, delimit the range of existential closure. This means that indefinite NPs occurring to their left can only get a "strong" interpretation. In the case of bare plurals, this means that they do not get an existential but a generic interpretation (cf. Frey, in press).

(38)   a. *weil Väter an Weihnachten mit der Eisenbahn spielen*
                                             (only generic)
           'because fathers play at Christmas with the train set'
       a.' *weil an Weihnachten Väter mit der Eisenbahn spielen*
                                               (existential or generic)
           'because fathers play at Christmas with the train set'

       b. *weil Väter wieder mit der Eisenbahn spielen*   (only generic)
           'because fathers play with the train set again'
       b.' *weil wieder Väter mit der Eisenbahn spielen*   (existential or
                                                             generic)[12]

           'because fathers play with the train set again'

A position to the left of *wieder* does not mean that these NPs are topics, however. By using a context which identifies topics, it can be shown that elements to the left of sentence adverbs are topics, but not necessarily elements to the left of event-related adverbs, the class to which also repetitive *wieder* belongs (cf. Frey 2001):

(39)   *Da wir gerade von Vätern sprechen*:
       'Speaking about fathers'

   a.   *#Ich habe gehört, dass erfreulicherweise Väter wieder mit der Eisenbahn spielen.*
   b.   *Ich habe gehört, dass Väter erfreulicherweise wieder mit der Eisenbahn spielen.*
        'I heard that fathers luckily play with the train set again.'

This shows that topics have to occur to the left of sentence adverbs. Contrary to von Stechow (1996), who assumes movement of subjects to a position higher than repetitive *wieder* for case reasons, I argue that movement to a position that is higher than repetitive *wieder* has effects on the interpretation and on the information status of the respective verbal arguments.

The fact that topics occur to the left of repetitive *wieder* and, as we have seen, to the left of sentence adverbs, does not mean, however, that these NPs necessarily have the same referent in the presupposed and the asserted event.

The following sentence has a repetitive reading which is strongly preferred over a restitutive reading on account of the individual level predicate:

(40)   *weil der Präsident wieder ein Frauenheld ist*
       'because the president is a womanizer again' (same or another
                                                           president)

Here we have an individual level predicate and, according to Diesing (1992), the subject of an individual level predicate is generated outside the domain of existential closure and thus has to precede *wieder*. The fact that we have an individual level predicate strongly suggests a reading in which different presidents are meant in presupposition and assertion. If we exchange it for a stage level predicate, the reading in which one and the same president is intended becomes much more likely and we get a restitutive interpretation (although two presidents are still a possible interpretation which yields a repetitive reading).

(41)   *weil der Präsident wieder schlank ist*
       'because the President is slim again'

That an element to the left of *wieder* can have two different referents is due to a semantic peculiarity of nouns like *President*, since they are functional expressions whose referent may change in the course of time. A similar example is the following, in which the NP to the left of *wieder* has a different referent in assertion and presupposition:

(42)   *weil Anna den Titel ihres Vortrags geändert und den Titel wieder*
       angekündigt hat[13]
       'because Anna changed the title of her talk and announced the title again'

It can be argued that the second occurrence of *den Titel* ('the title') in (42) is topic (according to both a notion of topic based on pragmatic aboutness as well as a notion of familiarity). Since topics must occur higher than sentence adverbs, which again are higher than all other kinds of adverbs (except frame adjuncts that are topics), it follows that topics can occur only higher than adverbs in the middle field.

In this section, it was argued that repetitive *wieder* belongs to the class of event-related adverbs which c-command the base positions of all arguments as well as of event-internal adjuncts. They delimit the domain of existential closure to the effect that indefinite NPs occurring to the left of repetitive *wieder* receive a "strong" interpretation. Sentence adverbs, however, which were assumed to delimit the range of existential closure by Diesing (1992), have a different base position: they delimit the topic range to their left in the sentence.

5.   *Wieder* and nuclear accent assignment

Following observations made by Fabricius-Hansen (1980, 1983, 1995), Jäger and Blutner (this volume) assume that intonation has a disambiguating effect on the readings of *wieder*: "Unmarked intonation goes with the restitutive reading, while main accent on *wieder* leads to the repetitive interpretation." The first part of this statement is not quite adequate, as will be shown in this section. I agree with the second part of this statement and will try to give an explanation for this.

As was mentioned in Section 3, restitutive *wieder* can occur with stative predicates which denote states that may be conceived of as the result of a

change. In my view, a nuclear accent on the predicate can occur with both the restitutive and the repetitive reading, whereas a nuclear accent on *wieder* excludes the restitutive reading (cf. Fabricius-Hansen 1995).

(43)　a.　*weil der Kapitän wieder* NÜCH*tern ist*　　(restitutive, repetitive)
　　　　　'because the captain is sober again'
　　　b.　*weil der Kapitän* WIE*der nüchtern ist*　　(only repetitive)
　　　　　'because the captain is sober AGAIN'

Wieder has a repetitive reading with stative predicates if two separate periods of time are involved in which it is of no relevance whether or not the same state or a different state occurs between the two time periods. A restitution is also the repetition of a state but in this case the repetition occurs within a single complex situation, where, between the two identical states, a different, usually an opposite, state obtained. The following diagrams illustrate the difference.

Figure 1. Repetition of a state

Figure 2. Restitution of a state

The effect of intonation on *wieder* can also be observed with other types of predicates (cf. Fabricius-Hansen 1995, who identifies a counterdirectional reading of *wieder* in the following example).[14]

(44)　a.　*weil das Barometer wieder* FIEL　　(restitutive/counterdirectional,
　　　　　'because the barometer fell again'　　　　　　　　　repetitive)
　　　b.　*weil das Barometer* WIE*der fiel*　　(only repetitive)

In this section, it shall be briefly shown how this pattern can be explained by the rules for focus assignment and for the interpretation of focus according to an Alternative Semantics as developed by Rooth (1992). I assume that nuclear accent indicates focus which, according to Rooth, delimits the range of alternatives. Focus is not restricted to the accented constituent but can spread according to certain rules, so that there is wide focus or "focus projection". Since a focus on an adjunct cannot project (cf. Pittner 1999 for a discussion of exceptions), nuclear accent on *wieder* is not neutral, but

indicates narrow focus on *wieder*,[15] which means that the rest of the sentence is background. Background information can be taken to be presupposed in some sense. Since the rest of the sentence denotes an eventuality, an eventuality is presupposed and the reading of *wieder* is necessarily repetitive.

In view of the semantics of restitutive *wieder*, it makes sense to say that there are different states which a Theme is going through, so that the alternatives lie in the state expressed by the predicate, whereas the rest is usually given. Hence, focus usually includes the predicate which expresses the state as it indicates the correct set of alternatives for the restitutive interpretation of *wieder*.

This does not mean that there is a simple correlation between a neutral nuclear accent and a restitutive interpretation of *wieder*. Sentence accent on the verb allows for either narrow focus on the verb or wide focus and therefore allows both a restitutive and a repetitive reading. I do not share the view held by Jäger and Blutner (this volume) that in what they call an "empty context"[16] *wieder* has to bear the nuclear accent in order to be interpreted repetitively. There is no simple disambiguating effect of intonation as suggested by Jäger and Blutner (this volume) and Fabricius-Hansen (1995). While it is true that a nuclear accent on *wieder* precludes a restitutive reading, this is not necessarily the reason for accenting it. It may be stressed for emphatic reasons, for instance in order to emphasize the unexpectedness or even the unpleasantness of the repetition. On the other hand, the verb may be stressed to contrast the eventuality with other possible eventualities in a repetitive reading.

To illustrate this, we consider a sentence that may be interpreted repetitively or restitutively (or, in the terminology of Fabricius-Hansen 1995, counterdirectionally).

(45)   (*In den letzten Tagen gingen die Aktienkurse rauf und runter.*
         Wie stehen die Aktienkurse heute?)
         ('During the last few days the shares went up and down. How are the shares today?')
         Die Aktienkurse FALL*en wieder*.
         'The shares are falling again.'

If the shares fell some time before and now are falling again, we have a repetitive reading. The verb is accented because the alternative would be that they are rising. If the shares had been rising right before falling, we have a counterdirectional reading. The verb is accented on account of the contrast between this fall to the preceding rise.

The following diagram shows that it depends on the periods of times we are looking at whether there is a repetitive or a restitutive/counterdirectional reading.
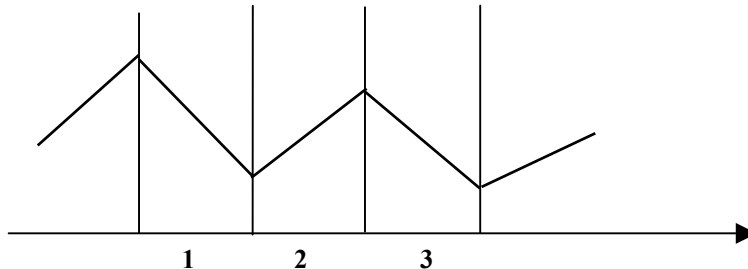

Figure 3. Repetition vs. restitution

Looking at 1 and 3 in Fig. 3, we get a repetitive reading, whereas looking at 2 and 3, the interpretation is restitutive/counterdirectional. The accent remains the same in both cases.

In this section, it was argued that a nuclear accent on *wieder* leads to a backgrounding of the eventuality denoted by the rest of the sentence. The eventuality is presupposed, thus resulting in a repetitive reading. It was argued that an accent on the predicate does not automatically lead to a restitutive reading, in contrast to what some authors assume. In these cases, disambiguation is not so much affected by intonation as by the context.

6.   The meaning(s) of *wieder*

As was indicated in the introduction, the question of whether there is only one meaning of *wieder* or whether polysemy is involved remains controversial. It has been argued that the two readings of *wieder* can be reduced entirely to a difference in scope.

A short look at the diachronic development of this lexeme may shed additional light on the question. As in English, where we have *again* and a related preposition *against*, in German, *wieder* is related to a preposition *wider* ('contra') which has an archaic flavour. The dictionary by Grimm (1960, Vol. 29: 867ff.) notes that the oldest meaning of *wieder* was a directional one, roughly equivalent to *towards*. Out of that, an adverse meaning 'against' and a meaning 'contrary to' developed as well as a counterdirectional meaning ('back', 'backwards'). This was the basis for the develop-

ment of the restitutive meaning and, later on, for the development of the repetitive meaning.[17]

Fabricius-Hansen (1995), who discusses these etymological facts, concludes that the counterdirectional-restitutive meaning today still has priority over the repetitive reading which obtains only if the context does not allow for a repetitive reading. In the following short sketch of the development of the meanings of *wieder*, I want to argue for a different view, namely that the repetitive meaning is the prevailing meaning today. I will also suggest an explanation for this change.

There is a close connection between the counterdirectional meaning and the restitutive meaning: a counterdirectional movement leads one back to a place, or rather, many places where one was earlier. By a metaphorical transfer from a concrete local meaning to more abstract "places", i.e. states, the restitutive meaning is gained. The restitutive meaning can be conceived of as a reverse movement to an earlier state. That this necessarily implies the repetition of this state is the starting point for the development of the repetitive meaning.

As we have seen, the restitutive meaning is dependent on a close syntactic relation to the verb. Once this relation is loosened and the adverb occurs higher in the sentence, there is no longer access to the internal aspects of the eventuality, i.e. the state referred to by the verb which is reached again in the restitutive sense. What remains if the adverb occurs in these positions is the repetitive meaning element, in this case not of a situation-internal state, but of the whole eventuality.

Thus the emergence of the repetitive meaning can be seen as the effect of a loosening of selectional restrictions because repetitive *wieder* can occur with any type of eventuality, except of course those that are temporally unlimited. The loosening of selectional restrictions has an effect on the syntactic position of *wieder*, which may occur higher in the sentence than before.

I find it adequate to assume that the adverb nowadays is reduced to its repetitive meaning, and that the only difference between a "restitutive" and a "repetitive" meaning lies in the semantic entity to which it is applied. This is, in turn, reflected in the syntactic base position of the adverb. As we have seen, we can get the repetition of an event-internal state only in the position adjacent to the predicate. A modification of the whole eventuality is possible for *wieder* in a base position that is above the base position of all verbal arguments.

There are other illustrative examples of the "meaning change" of adverbs patterning with a change of their syntactic class. Another case in point is the German adverb *gerne* which has a frequency interpretation ('often') and a

volitional interpretation ('willingly'). In its volitional interpretation, it qualifies the attitude of the subject referent and is event-internal. Hence, this interpretation is not available if the position of the adverb does not meet the requirements for event-internal adverbs as in (46):

(46)   *weil hier gerne jemand arbeitet*   (only frequency interpretation)
       'because often somebody works here'

This shows clearly that there are ordering restrictions of adverbs relative to the arguments in a sentence. *Gerne* is not c-commanded by the subject and therefore cannot be interpreted as a mental-attitude adverb since it does not meet condition (4iv).

As far as *gerne* is concerned, we have an implicature that something that is done willingly is done often. If *gerne* is used in a context in which there is no volitionally acting person, the meaning element 'willingly' is suppressed and the meaning element 'often' is the only one to survive.

The border line between polysemy and homonymy is often difficult to draw. Even if there is clearly a common etymological source, which is usually a reason to assume polysemy, there may be reasons to assume homonymy, i.e. two lexical entries. Although there is a common etymological source in the case of *gerne*, it is reasonable to assume two lexical entries: only the adverb with the volitional interpretation can be negated by the prefix *un-* (*ungern* 'unwillingly') and may appear in comparative or superlative form (by means of the suppletive stem *lieb-*). In the case of *wieder*, however, there is nothing to enforce the assumption of two separate lexical entries.

Adverbs like *wieder* or *gerne*, in their different readings, belong to different adverb classes as was pointed out in (4). The meaning change comes about when the adverb appears in a position where certain meaning elements are not compatible with the adverb class it belongs to on account of its structural position. As we have seen, *gerne* can have its mental attitude meaning only if the syntactic conditions for it are fulfilled. In a similar fashion, *wieder* in a position adjoined to a complete verbal projection, loses the counterdirectional flavour that restitutive *wieder* still has and is reduced entirely to its repetitive sense.

In summary, although we can still easily see today how the restitutive reading of *wieder* is closely connected to the earlier counterdirectional meaning of the adverb, it seems plausible that we have only a repetitive meaning now and that the so-called restitutive reading is also a repetition, in this case not of a whole eventuality, but of a situation-internal state.

7.   Conclusions

In this paper, a scope-based explanation of the different readings of *wieder* was defended. It was demonstrated that restitutive *wieder* has a base position close to the main predicate in its clause-final base position, whereas repetitive *wieder* in its base position c-commands the verb phrase containing the base positions of all arguments. Restitutive *wieder* shares its base position with manner adverbs. Both restitutive *wieder* and manner adverbs apply to internal aspects of the situation which are denoted by the verb. Repetitive *wieder* shares its base position with temporal adjuncts. Adjuncts occurring in this position apply to the situation as a whole. It was argued that these event-related adverbs are a class distinct from sentence adverbs which relate to the proposition. Whereas the former delimit the domain of existential closure to the effect that existentially interpreted indefinite NPs may occur only to their right, sentence adverbs mark the topic-comment boundary.

The influence of accentuation on the interpretation of *wieder* was explained by the rules for the assignment and interpretation of neutral sentence accent. The characteristics of repetitive vs. restitutive *wieder* support the assumption stated in the introductory part of the paper that adverbs have a base position which is determined by their semantic relations to the rest of the sentence.

Notes

*   I would like to thank Werner Frey and Hubert Haider as well as two anonymous referees and the editors of this volume for their comments on an earlier version of this paper.
1.   An analysis very similar in spirit is found in Klein (2001), which came to my attention only after finishing work on this paper. Klein identifies the meaning contribution of *wieder* as 'and this not for the first time'. He points out that the temporal precedence need not be a factual temporal one, but may exist only on the discourse level or in sequential attention to simultaneously existing facts.
2.   For slightly modified versions of this classification, cf. Frey (this volume) and Pittner (in press).
3.   Eckardt (this volume) questions the validity of the w-pronoun test by pointing out examples like the following:
    (i)   *Alicia hat dann gierig was gegessen.*
           'Alicia then ate something greedily.'
    Here the manner adjunct *gierig* occurs higher than the indefinite object pronoun. However, the adverbs that Eckardt uses to make her objection are those that can also be used as mental-attitude adverbs which have a higher base posi-

tion according to (4iv) above. If an adverb can occur to the right of an indefinite object w-pronoun that cannot be scrambled, this should provide suffcent evidence for the base position of the adverb below the object.

4.   It can be neglected that with the proper intonation of *wieder*, *nicht* can be a negation of *wieder* only with the result that the presupposition is refuted ('he did it not again, but for the first time').

5.   For a more detailed discussion of this, the reader is referred to Frey and Pittner (1998: 498–501).

6.   Von Stechow offers the explanation that in all these cases "the qualification of the target state speaks about the object *and* the subject of the verb" (1996: 109) and calls them "holder + object result verbs" (1996: 110). This comes close to the idea advocated here that in these cases the object is conceptualized as part of the resulting state.

7.   In these examples it may be the element *zurück* which enforces the restitutive reading as an anonymous reviewer notes.

8.   Event-related *langsam* may also apply to the time between a reference point and the beginning of an event, as Claudia Maienborn points out (p.c.). The different interpretations of event-related *langsam* and *schnell* (cf. (25)) are probably due to their interaction with the semantics of the verb and its tense. Further study on this point is yet to be done.

9.   For those manner adjuncts that can apply to stative predicates, it makes no sense to call them process adjuncts, e.g. *Sie ist seltsam schön. / She is strangely beautiful.* A detailed subclassification of manner adjuncts is still missing. Cf. Maienborn (2000) and Katz (this volume) for adverbial modification of stative predicates.

10. The example occurs in a slightly modified form in Jäger and Blutner (this volume). Cf. the discussion by von Stechow (this volume).

11. Cf. Section 5 for the repetitive vs. restitutive interpretation of sentences with stative predicates.

12. Frey (in press) shows that the generic interpretation of e.g. *Väter* in (38) is not due to topichood as is often assumed. Generic interpretation emerges if the bare plural occurs to the left of an eventuality adverb, but it can occur to the right of a sentence adverb, which means that generic NPs are not necessarily topics.

13. I owe this example to B. Partee.

14. Fabricius-Hansen (1995) defines a relation CONTRA which holds between predicates like *fall* and *rise* where the precondition is the result condition of the other predicate of the relation and vice versa. In my view, a counterdirectional reading of *wieder* can be subsumed under restitution because e.g. *to rise again* means to reach many states that obtained before.

15. *Wieder* is also accented if it is part of a particle verb whose base verb begins with an unstressed syllable: *wiéderbeleben*, *wiédereröffnen*, but *wiederhérstellen*. In these particle verbs we find most often restitutive *wieder*. Its accentuation is due to a process of integration into the verb.

16. It is not quite clear what their concept of an empty context is because they assume that in the examples they discuss all constituents except *wieder* are given.
17. Fabricius-Hansen (2001), which deals extensively with *again(st)* and *wi(e)der*, came to my attention only after finishing this paper.

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