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Wolfgang Klein

Time and again<sup>1</sup>

Immer wieder kehrst du Melancholie.

Trakl

## 1. An ambiguity

Like its English counterpart *again*, the German adverb *wieder* yields two different readings when combined with a telic verb:

- (1) Er hatte ihren Namen wieder vergessen.  
He had her name again forgotten.

This can mean that it was not the first time that he had forgotten her name, or it can mean that he had learned her name and then forgotten it. In the first case, the entire process that is partly described by <to forget her name> is repeated. In the second case, it may well have been the first time that he forgot it: but an earlier state - a state in which her name was not present to him - is restituted. Thus, sentence 1 has a 'repetitive reading' and a 'restitutive reading'. This terminology, which we owe to Harweg (1969), is very suggestive but also somewhat misleading. In the restitutive reading, something is repeated, as well: it is just not the entire process but the state in which it results. Thus, the difference is only in WHAT is repeated. This difference is very often brought out by intonation, a fact which has found no explanation whatsoever in the rich literature on *wieder*. If the main stress is on *vergessen*, then only the resulting state is said to obtain again, whereas main stress on *wieder* indicates that the entire action did not happen for the first time.

As any other ambiguity, this one may have lexical or structural reasons. If it is LEXICAL, then there must be two (or more) lexical entries *wieder* with the same phonological but different categorial or semantical information. This assumption has one point in favour: in many languages, the two readings are served by different morphemes. In French, for example, and similarly in other Romance languages, the restitutive reading is often expressed by a prefix *re-* attached to the verb stem, whereas the repetitive reading is expressed by an adverbial such as *de nouveau*. But this argument is not particularly forceful; we would not assume that English *only* or

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German *nur* are lexically ambiguous just because their French counterpart varies between *seul*, *seulement* and *ne...que*, depending on what it is applied to. Two points, however, speak strongly against the notion that there are two lexical entries *wieder*. First, it is not a very desirable assumption in general; lexical ambiguities should be seen as the *ultima ratio* (see also Kamp and Rossdeutscher 1994: 197). Second, the contribution which *wieder* makes to the entire meaning of the sentence seems exactly the same under both readings: AND THIS NOT FOR THE FIRST TIME. The difference is only in what the ‘this’ relates to. If it can be shown that the two readings only result from what *wieder* is applied to in the sentence in which it occurs, then such a solution is clearly preferable.

The main problem with a purely STRUCTURAL solution is simply that, barring intonation, there is no obvious structural difference between the two readings of example 1. Hence, we must assume that there is a more abstract level of representation in which the underlying sentence *Er hat ihren Namen ... vergessen* has two different structures. This level may belong to syntax or to semantics. Since the difference between the two readings lies in what does or does not obtain for the first time - the entire process as described by the verb or its resultant state -, this level must be sufficiently differentiated such as to give selective access to various components of the verb’s meaning. Therefore, this meaning must somehow be ‘decomposed’. Various proposals to achieve this are found in the literature; they may, but need not, be combined with a lexical ambiguity. The best-known treatments for English *again* are McCawley (1973) and Dowty (1979, chapter 5). German *wieder* has been most systematically investigated by Cathrine Fabricius-Hansen (1980, 1983 and 1995) and, more recently, by Arnim von Stechow (1995, 1996).

In what follows, I shall assume some familiarity with these proposals, and I shall not try to examine their merits and shortcomings. In spirit, the analysis presented here resembles von Stechow (1996); but there is also a number of substantial differences which will become clear as we go along. My starting assumption is that *wieder* indeed makes a constant meaning contribution in all of its use. This meaning contribution is ‘and this not for the first time’. The expression ‘this’ has variable reference, and thus, we must clarify how it is fixed in a given sentence; furthermore, we must clarify what ‘not for the first time’ means. This will be done in three steps. First, I will discuss a number of problems connected to *wieder* which go beyond the simple repetitive-restitutive ambiguity; some of these are familiar from the literature, whereas others are new; this discussion will highlight the fact that this ambiguity is just a special case of a much wider scope ambiguity. Then, I will show that a difference must be made between the temporal order of events and the temporal order in which the events are presented in discourse. This distinction is fundamental to an understanding of what ‘not for the first time’ means. It is also fundamental to an understanding of a fact which is regularly mentioned in earlier research but is hardly ever addressed and has never found a satisfactory solution - the intonational difference between various readings of *wieder*. Finally, I will show that the traditional repetitive-restitutive ambiguity is easily accounted for if we assume that the verb content may contain one or two time variables.

## 2. Three problems

Wieder so ein Abend, wieder so ein endloser Abend  
beim Griechen.

Hubert Selby, Last exit to Brooklyn

## 2.1 Scope effects beyond the lexical verb

In sentence 1, the ambiguity is closely related to the meaning of the lexical verb *vergess-*: it is either the entire process or only its resultant state to which ‘and this not for the first time’ applies. As was first noted in Fabricius-Hansen (1983: 99-103), this picture is by far too simple; the varying effects of *wieder* may also involve other parts of the sentence.

### 2.1.1 Indefinite direct object

The following two sentences only differ by the position of *wieder* in relation to the direct object:

- (2) a. Arnim hat wieder einen Gipfel bestiegen.  
Arnim has again a mountain top climbed.  
b. Arnim hat einen Gipfel wieder bestiegen.  
Arnim has a mountain top again climbed.

In 2b, it must be the same mountain top which he has reached for the second time (or, more precisely, not for the first time), whereas this is open in the case of 2a. It appears that not only the verb meaning but also the indefinite object is sensitive to the scope of *wieder*: in 2a, the “repeated part” is described by <einen Gipfel besteigen>, whereas in 2b, the repeated part is described by <besteigen>.

Three facts are remarkable in connection with this observation. First, we have the same difference when the lexical verb *besteig-* and hence the lexical information expressed by it PRECEDES the adverb *wieder*, as in 3:

- (3) a. Arnim bestieg wieder einen Gipfel.  
Arnim climbed again a mountain top.  
b. Arnim bestieg einen Gipfel wieder.  
Arnim climbed a mountain top again.

Therefore, we cannot simply say that the scope of *wieder* goes to the right - at least not on the surface. This is only possible under the assumption that, on some other level of representation, the lexical part of the verb, as expressed by the lexical verb, follows *wieder*.

Second, the neat difference between ‘repetitive’ and ‘restitutive’ seems somehow blurred. Both sentences have a repetitive reading, the difference being in what is repeated. It is much less clear whether one of them, or even both, can also have a restitutive reading. In 1, such a reading is suggested when the lexical verb, rather than *wieder*, is stressed. If this is done in 2a,b or 3a,b, it is still hard to image that only an earlier state of Arnim’s being on a mountain top is restituted, even if we believe that he is born there; but it is perhaps not excluded.

Third, the behaviour of *wieder* in 2 and 3 matches the scope properties of other adverbials, such as *zweimal* (cf. Klein 1994, chapter 8):

- (4) a. Arnim hat zweimal einen Gipfel erstiegen.  
Arnim has twice a mountain top climbed.  
b. Arnim hat einen Gipfel zweimal erstiegen.  
Arnim has a mountain top twice climbed.

Here, too, it must be the same mountain top in 4b, whereas this need not be the case in 4a.

Whatever makes *einen Gipfel* specific - this effect is blocked by the adverbial. Or to put it the other way around: SPECIFICITY IS RELATIVE TO THE ACTION WHICH IS SELECTIVELY DESCRIBED BY THE LEXICAL VERB, and if there are two such actions, then each one has a 'specific mountain top'.

### 2.1.2 Indefinite subject

The observations just stated are not confined to the direct object. They have also been noted for the subject, whose position is relatively free in German and hence may be before or after *wieder* (again, it was Fabricius-Hansen (1983: 100), who first pointed out this fact):

- (5) a. Bald darauf ist wieder jemand gestorben.  
Soon afterwards has again someone died.  
b. Bald darauf ist jemand wieder gestorben.  
Soon afterwards has someone again died.

In 5a, the repeated part is described by <someone die>, whereas in 5b, it is <die>, and this dying is applied to the same person. Therefore, 5b is distinctly odd, when *wieder* is stressed. Interestingly enough, it is marginally possible when *gestorben* is stressed, thus giving rise to a restitutive reading. Such a reading is much more plausible when the subject is definite:

- (5) c. Bald darauf ist er wieder gestorben.  
Soon afterwards has he again died.

This makes a perfect continuation to a preceding sentence such as: *Im folgenden Jahr wurde ihnen ein Junge geboren*. This points to the fact that restitutive must somehow be related to 'maintenance of information' from an immediately preceding sentence, a point to which we will return shortly.

### 2.1.3 Adverbials

In general, the contribution which the lexical verb makes to the meaning of the entire sentence can be further specified by adverbials. If the lexical verb describes an action, then an adverbial may describe the position of this action on the time line, its duration, or if it was done deliberately or not. Is this additional information in the scope of *wieder* or not - i.e., does it belong to the 'something' which is said not to obtain or occur for the first time? In contrast to English (cf. von Stechow 1995, section 10), this is very flexible in German:

- (6) a. Frau Rubi hatte das Lädchen wieder für drei Tage geöffnet.  
Missis Rubi had the shop again for three days opened.  
b. Frau Rubi hatte das Lädchen für drei Tage wieder geöffnet.  
Missis Rubi had the shop for three days again opened.

In both cases, the adverbial indicates the duration of the resultant state, not of the action. In 6b, nothing is said about the duration of an earlier state at which the shop was open, whereas in 6a, the preferred understanding is that this earlier state lasted three days, as well; it **MUST** have this

reading if *wieder* carries main stress.

- (7) a. Arnim hatte das Axalphorn wieder am letzten Donnerstag bestiegen.  
Arnim had the Axalphorn again last Thursday climbed.  
b. Arnim hatte das Axalphorn am letzten Donnerstag wieder bestiegen.  
Arnim had the Axalphorn last Thursday again climbed.

In 7b, it is completely open when Arnim had climbed on the Axalphorn before; the positional adverbial only indicates the time at which he had achieved it again. Sentence 7a, by contrast, sounds somewhat odd, unless *am letzten Donnerstag* does not refer to a fixed day (a ‘p-definite day’ in the terminology of Klein 1994), for example if it is meant to refer to the last Thursday in the month. Hence, it appears that in 7a, the contribution of the adverbial belongs to the repeated part.

All adverbials considered so far provide temporal information. But we observe the same effect for non-temporal adverbials:

- (8) a. Arnim hat Frau Rubi wieder ungern verlassen.  
Arnim has Missis Rubi again (?) left.  
b. Arnim hat Frau Rubi ungern wieder verlassen.  
Arnim has Missis Rubi (?) again left.

In 8a, he must have left her at least once before, and furthermore, it is said that he didn’t like to do this in either case. Sentence 8b, by contrast, can have a repetitive and a restitutive reading, where the latter one is a bit marginal. In both cases, the adverbial *ungern* only applies to his present leaving her - hence, it is not in the scope of *wieder*.

#### 2.1.4 Summing up

Most of these observations are not new. But it seems worthwhile to explicitly note four conclusions to be drawn from them.

- A. If the repetitive-restitutive ambiguity is due to differences in the scope of *wieder*, then it is only a **BORDERLINE PHENOMENON** of the scope variation which this adverbial has.
- B. As a rule, elements which follow *wieder* are in its scope, and elements which precede it are not. But there are exceptions; if, for example, the lexical verb is amalgamated with the finite part of the verb and, as a consequence, precedes *wieder*, then the contribution of this verb is in the scope of *wieder*.
- C. Somehow, the availability of a restitutive reading seems to be connected to (a) which information is maintained from the preceding utterance, and (b) to the amount of lexical material found in the scope of *wieder*.
- D. Some of the scopal properties of *wieder* are also found in other adverbials.

We shall return to these four conclusions below.

#### 2.2 Similar effects with atelic verbs

Initially, the repetitive-restitutive ambiguity was only stated for verbs whose lexical meaning expresses a change of state. Such verbs are often called “transformative”, “resultative”, or “telic” - this being the term chosen above. In Vendler’s familiar classification, the ambiguity applies to achievements and accomplishments. It was again Fabricius-Hansen (1983, 1995) who pointed out a number of very related effects for other verb types.

### 2.2.1 Counterdirectional verbs

The first case noted by Fabricius-Hansen concerns verbs such as *to fall-to rise*, *to come-to go*, and similar ones, which, in a way, express opposing directions (in what follows, intonational prominence is marked by boldface):

- (9) a. Die Aktien sind wieder **gefallen**.  
The shares have again fallen.  
b. Die Aktien sind **wieder** gefallen.  
The shares have again fallen.

In 9b, the shares must have fallen before. This may have happened a while ago; but the most natural reading is that they continued their fall, for example if they first fell from 5600 to 5400 and then from 5400 to 3754. Other than with telic verbs, there is no lexically defined resultant state; the ‘repetition’ simply goes into the same direction. In 9a, by contrast, no earlier movement into this direction is required; it is appropriate when the shares first rose up to a certain level and then fell: the direction is reverted, whence the term counterdirectional. This does not preclude, of course, that at some earlier time, the shares may have fallen; but nothing to this effect is required.

A second, even more perplexing case are static expressions. Consider the following examples:

- (10) a. Im folgenden Herbst waren sie wieder auf der **Axalp**.  
In the next fall were they again on the Axalp.  
b. Im folgenden Herbst waren sie **wieder** auf der Axalp.  
In the next fall were they again on the Axalp.

In both cases, it is required that they were on the Axalp before. But 10a, in contrast to 10b, requires a change from not being on the Axalp **IN THE PRECEDING FALL** to being on the Axalp **IN THE NEXT FALL**. In a way, therefore, the contrast between 10a and 10b corresponds to the difference between restitutive and repetitive readings in example 1 *Er hatte ihren Namen wieder vergessen*, where either only the state of not-knowing is repeated, or the change from knowing to not-knowing. Fabricius-Hansen (1983: 100) concludes that the difference cannot be only due to the semantical complexity of the predicate.

### 2.2.2 A complication

But the case is more complex than has been assumed in the literature. Sentence 10b is distinctly odd, when their stay on the Axalp is **NOT** preceded by an interval at which they are **NOT** on the Axalp. If this were the case, a different adverbial has to be chosen, such as *noch* or *immer noch*:

- (10) c. Im nächsten Herbst waren sie **immer** noch auf der Axalp.  
In the next fall were they still on the Axalp.

The constellations described by 10a-c are as follows ( $t < \text{XYZ} >$  is a time span  $t$  at which XYZ obtains,  $t_i$  immediately precedes  $t_j$ ):

- (10) a.  $t_i < \text{they not be on the Axalp} >$   
 $t_j < \text{they be on the Axalp} >$   
       b.  $t_i < \text{they not be on the Axalp} >$   
 $t_j < \text{they be on the Axalp} >$   
       c.  $t_i < \text{they be on the Axalp} >$   
 $t_j < \text{they be on the Axalp} >$

In other words, ‘not for the first time’ appears to exclude mere continuation of a situation; it must, obviously, be possible to talk about a first time, a second time, and so on. The problem is the fact that 10b no less than 10a requires a transition from not-being on the Axalp to being on the Axalp. But if 10a as well as 10b require that there be some interval earlier than  $t_j$  at which they are on the Axalp - what, then, is the difference between 10a and 10b?

The crucial difference is whether they also were on the Axalp **IN THE PRECEDING FALL** - or, more generally speaking, at the **TIME TALKED ABOUT BEFORE**. What is at issue, is not the interval which immediately precedes the event time, but the preceding ‘topic time’, as I shall say. This preceding topic time is not explicitly specified in the utterance itself; it is given in context, usually in the immediately preceding utterance, and it contrasts to the time about which 10 itself says something - *im folgenden Herbst*. If the initial adverbial in 10 were *im Jahre 1982*, then the topic time of the preceding utterance might be, for example, *im Jahre 1979*. Let us call the topic time of the utterance itself  $TT_a$ , and the topic time of the preceding utterance  $TT_{a-1}$ , respectively. Then, we can describe the difference between 10a and 10b as follows. In 10a, they must not have been on the Axalp at  $TT_{a-1}$ , whereas in 10b, they must have been on the Axalp at  $TT_{a-1}$ , as well. In both cases, they must be on the Axalp at  $TT_a$  itself, and moreover, there must be a time  $TT_x$  earlier than  $TT_a$ , at which they are at the Axalp, as well. It is open, however, whether  $TT_x$  is identical to  $T_{a-1}$  or not.

All of this becomes clearer as soon as the topic time of the preceding utterance is made explicit, as in 11:

- (11) a. Im Herbst 1980 waren sie in Riva Faraldi. Im folgenden Herbst waren sie wieder auf der **Axalp**.  
       In the fall of 1980 were they in Riva Faraldi. In the next fall were they again on the Axalp.  
       b. Im Herbst 1980 waren sie auf der Axalp. Im folgenden Herbst waren sie **wieder** auf der Axalp.  
       In the fall of 1980 were they on the Axalp. In the next fall were they again on the Axalp.

At this point, we begin to suspect the reason for the difference in intonation: it must have to do with what is maintained from the preceding sentence. We will postpone this point, however, for a moment and briefly look at another example:

- (12) a. Die nächste Tagung war wieder in **Rom**.  
       The next workshop was again in Rom.  
       b. Die nächste Tagung war **wieder** in Rom.  
       The next workshop was again in Rom.

The difference is much the same as in 10, except that in 12, the topic time is not explicitly indicated by an adverbial in initial position. In both cases, there must have been a meeting in Rome before. But this, of course, is not the meeting to which the subject of 12a, b refers: *die nächste Tagung*. It is not plausible to assume that the next meeting already had taken place once before. What must have taken place is an earlier meeting in a series of meetings, and *die nächste Tagung* relates to the last meeting in this series which was MENTIONED IMMEDIATELY BEFORE. Again, this is best made clear by embedding it into context:

- (13) a. Die dritte Tagung war in München. Die nächste Tagung war wieder in **Rom**.  
The third workshop was in München. The following workshop was again in Rom.
- b. Die dritte Tagung war in Rom. Die nächste Tagung war **wieder** in Rom.  
The third workshop was in Rom. The following workshop was again in Rom.

In 11 as well as in 13, we have a ‘topic shift’. But whereas in 11, this shift only involves the time talked about, it also involves the subject in 13. Part of the lexical information of *die nächste Tagung* is maintained from the preceding utterance: *die ... Tagung*, whereas another part is shifted: *nächste*; it is this latter part which carries contrastive accent. There is also a shift in the topic time; but other than in 11, this shift is not made explicit. So far, 13a and 13b are identical. They differ in what else is shifted or maintained. In 13a, the reference to the spatial predicate <in Rom> is shifted, whereas in 13b, it is maintained from the preceding utterance. Therefore, it is destressed in 13b but not in 13a. We shall come back to this point below, but first draw a short intermediate conclusion.

### 2.2.3 Summing up

Two major conclusions can be drawn from these observations:

- A. There are two - not mutually exclusive - reasons why in a sentence with *wieder*, something is felt to be ‘repeated’: It can be maintained from the previous utterance, and is thus stated ‘not for the first time’, or this repetition is brought in by the meaning contribution of *wieder*, this contribution being ‘and not for the first time’. This is immediately reflected in intonation, because maintained information is (normally) destressed. Note that both reasons may apply at the same time: something which is in the scope of *wieder* may be maintained from the preceding utterance (and then it is destressed, thus giving prominence to *wieder* itself).
- B. What matters, is not so much the temporal relation between events themselves but the order in which these events are described in the unfolding discourse.

In the next section, we will first address point B; it will naturally lead us to point A.

## 3. Order of mention and order of events

Wieder mal ist es so weit ...  
Degenhardt

### 3.1 Atemporal situations

The complications discussed so far do not affect a general point made in the first section: the

meaning contribution of *wieder* is always ‘and this not for the first time’. But what if it does not make sense to speak of a first and a second time because the situation at issue obtains forever? Being a prime number is a permanent property. If something is a prime number at some time *t*, then it is also a prime number at any other time. Hence, the three facts *Seven is a prime number. Thirtyone is a prime number. Ninetyone is a prime number* are not temporally ordered. They all apply at the same time - namely forever. There may be a temporal order, however, in the way in which these facts are **STATED** in ongoing discourse. Suppose that some student has to determine which natural number is a prime number. Then, it might be perfectly natural to say:

- (14) a. Neunzehn ist wieder eine **Primzahl**.  
Nineteen is again a prime number.  
b. Neunzehn ist **wieder** eine Primzahl.  
Nineteen is again a prime number.

Sentence 14a is natural in a sequence such as ... *Siebzehn ist eine Primzahl, achtzehn ist keine Primzahl, neunzehn ist wieder eine Primzahl*. In such a context, 14b, i.a. with stress on *wieder*, would be distinctly odd. But it is perfectly natural when the list under consideration is different. Suppose the poor pupil is given the list in the following order: 14, 99, 11, 13, 16, 23, 19. This list gives the **topics** he has to say something about, and it fixes the **order** in which he has to say it. As a consequence, it also defines the topic shifts. In this case, the sequence of utterances which answers the underlying question would be *Vierzehn ist keine Primzahl,..., sechzehn ist keine Primzahl, dreiundzwanzig ist eine Primzahl, neunzehn ist wieder eine Primzahl*. In this case, *wieder* can be stressed. The reason is that there is a shift in the topic talked about, but not in the property assigned to this topic. What can be stressed is therefore not this property *be a prime number* but the fact that **THIS IS NOT THE FIRST CASE MENTIONED SO FAR** which has this property (thirteen also had (!) it); therefore, the word *wieder* carries main stress, rather than *be a prime number*.

In the case of prime numbers and other atemporal properties, there is no temporal sequence on the ‘fact level’ - a number is either a prime number or not, and this at any time. But these atemporal facts may be **ASSERTED** in varying order. There is a temporal sequence on the discourse level, and it is this order which is relevant here. In particular, such an assertion may maintain parts of a ‘preceding’ assertion, and this is immediately reflected in intonation.

### 3.2 Other text types

In the preceding section, I had chosen examples which do not allow for a temporal order of events because the event itself is atemporal. One might consider this case to be exceptional; but there are many texts that do not lend themselves to a temporal order, although the facts described are not atemporal. Take, for example, the description of a completely static scenery, say on a picture. In such a text, it is easily possible to say:

- (15) Gleich daneben steht wieder eine Eiche.  
Right next to it stands again an oak.

Depending on the preceding utterance, different stress patterns are possible. An oak’s standing on a particular place is usually a long-term property, but it is not atemporal, such as being a prime number. Still, 15 does not mean that this is not the first time that an oak - or this oak - is standing there. It means that it is not the first time during the construction of the entire text, that a situation

is characterised as having the properties <an oak stand at some place>.

Whenever a speaker sets out to solve a complex verbal task - for example in answer to questions such as *What happened yesterday to you? What is on the picture? How do I get from here to Frau Rubi? Which number on the following list is a prime number -*, then he (or she) has to perform a whole series of subtasks. In particular, he must decide which bits of information from his underlying knowledge base are to be transformed into a sentence ('selection'), and since not everything can be said at the same time, the speaker has to decide in which order to arrange the resulting sentences ('linearization'). The task of linearization is considerably simplified if the underlying knowledge base involves an inherent temporal order. This is, for example, the case of a narrative, in which the information bits are 'subevents' of a complex event, or in the case of a baking recipe, in which case the information bits are actions to be performed in a certain order. Then, linearization regularly follows a principle which is sometimes called 'principle of chronological order' (PCO); in ancient rhetoric, it was referred to as the interdiction of a *hysteron proteron*:

(16) PCO: Unless marked otherwise, order of mention corresponds to order of events.

This means that the individual situations are 'mentioned' in the order in which they occurred, or should be performed.

The speaker's task is much more complicated if there is no such inherent temporal sequence in the knowledge base. One solution is to introduce a temporal order into the knowledge base. In route directions, for example, the underlying knowledge base is spatially, rather than temporally, structured. But the speaker presents this information in form of an imaginary wandering through this space, that is, in form of a sequence of actions. These actions, in turn, have a temporal order which then underlies the speaker's order of mention in constructing the entire text. In picture descriptions, very often a 'gaze tour' serves this function. The bits of information presented in the individual sentences are spatial (*Daneben steht wieder eine Eiche*); but they are presented in the order in which the speaker scans the picture.

There is no such natural 'temporal projection' of underlying knowledge, if the question to be answered is, for example *Why is the Axalphorn more dangerous to climb at than the Rothorn?* Then, it is much less obvious how the speaker should solve the linearisation problem. In the case of the prime numbers, as in example 14 discussed above, the speaker might work through a list, and if no such list is externally given, he might follow the 'natural order' 1, 2, 3, .... This order in itself is not temporal, but it provides a basis for the (temporal!) order in which the individual sentences of the entire text follow each other.

In all of these cases, *wieder* can be used in a sentence, when an earlier sentence describes a situation with properties that are similar in relevant aspects. It does not matter whether these situations themselves exhibit a temporal order or not. If, as is typically the case in narratives, the order of mention reflects the order of events, then there is also a temporal precedence of the situation itself, which is said to not occur for the first time. But this is just a special case that, for whichever reason, enjoys a special preference among linguists.

#### 4. The meaning contribution of *wieder*

Das Feuchte  
wird trocken, das Trockene wieder

In section 1, we assumed that *wieder* regularly makes one meaning contribution to the entire meaning of the sentence in which it occurs: *And this not for the first time*. The discussion of sections 2 and 3 has not falsified this idea; but it has to be made more precise in at least three respects.

(a) The feature ‘not for the first time’ does not relate to the ‘fact level’ but to the ‘discourse level’, i.e., to the temporal order in which the facts are asserted in ongoing discourse. There need not be a real temporal precedence of a situation to some other situation, although this is not excluded, of course; very often, both types of order coincide.

(b) Second, the ‘this’ is normally not the full situation described by the sentence in which *wieder* occurs (the ‘utterance situation’). It must be a situation which shares some properties with the utterance situation - the properties which are in the scope of *wieder*. In the default case, these are the properties described by that part of the sentence that follows *wieder*.

(c) Another important factor of text construction may intervene - the mechanism of ‘referential movement’ (Klein and von Stutterheim 1987), i.e., the way in which information is freshly introduced in the *wieder*-sentence or maintained from a previous sentence. The details of this mechanism are complicated. In straightforward cases, however - and only these are considered here -, maintained information is destressed, whereas non-maintained information is not. As a consequence, information in the *wieder*-sentence may be ‘not for the first time’ because it is in the scope of *wieder*, and is thus marked to be not for the first time, or because it is maintained from a previous sentence, or both.

A simple illustration will help. Suppose a sentence has the form X-*wieder*-Y, where X is the part which precedes *wieder*, and Y is the part which follows *wieder*. Then, an earlier sentence must describe a situation which also has the properties described by Y. This, and only this, is the meaning contribution of *wieder*. It may now be that the immediately preceding sentence provides this information. Then, the Y-properties are maintained and, as a consequence, destressed, as in the sequence  $X_1$  *auf der Axalp*.  $X_2$  ***wieder*** *auf der Axalp*. But it may also be that there is a shift with respect to Y, and then, Y is stressed, as in  $X_1$  *in Riva Faraldi*.  $X_2$  *wieder auf der Axalp*. The X-part, by contrast, is not in the scope of *wieder*. But it also takes part in referential movement, i.e., it may be maintained or shifted. In the sequence *Im Jahre 1979 waren sie auf der Axalp*. *Im nächsten Herbst waren sie wieder auf der Axalp*., the ‘topic time’ is shifted, and everything else is maintained. Complications arise when X (and similarly Y) is composed such that parts of are maintained whereas other parts are new; these complications may lead to very complex patterns of referential movement. But they have nothing to do with the functioning of *wieder* in particular.

## 5. Repetitive and restitutive readings reconsidered

fan ferd ich dich fiedersehn

Jandl

Under the analysis of *wieder* just discussed, its scope is highly variable. It must include the information provided by the lexical verb (even if, due to some morphosyntactical operation, this verb stem happens to precede *wieder*). It may also include many other components of the sentence (see the examples in section 2.1). Can this variability also go into the other direction, i.e., can the scope of *wieder* also be narrowed down to only parts of the information provided by the lexical verb? We shall address this question first from a more general point of view and then turn to the specific issue of the repetitive-restitutive distinction.

### 5.1 Inherent temporal structure, descriptive properties and BECOME

Do morphosyntactical operations always treat lexical units as impermeable entities, or do they have access, albeit limited perhaps, to their inner structure? The lexical entities at issue here are verbs (including copula constructions). The notion that a verb can be lexically decomposed is very old. It underlies all attempts in traditional and structural word semantics (see, e.g., Lyons 1977). This does not mean, however, that these components, or at least some of them, might be ‘visible’ to morphosyntactical operations. This idea came first up in Generative Semantics, where the tree representing a sentence such as *Cain killed Abel* not only contained lexical items and syntactic categories but also abstract predicates such as CAUSE, BECOME and similar ones, which would allow to give to this sentence as structure such as [Cain CAUSE [Abel [BECOME be dead]]. The idea was violently attacked from various sides, but resumed and elaborated by various semanticists, such as Dowty (1979) or Jackendoff (1991). We shall not follow up this discussion here but only consider the role of ‘lexical decomposition’ for the analysis of *wieder*.

In its original form, the repetitive-restitutive ambiguity was confined to those verbs which are called ‘telic’, ‘resultative’, ‘transformative’, or verbs of ‘achievement’ and ‘accomplishment’. The crucial feature of these verbs is the fact that they somehow involve a distinct change-of-state, and in the repetitive reading of *wieder*, the entire change must be repeated, whereas in the restitutive reading, only the resultant state is said to be restored. In lexical decomposition, it is assumed that the lexical content of the verb stem contains an operator, mostly called BECOME or CHANGE, which accounts for this change-of-state. As a rule, more such operators are found in lexical decomposition, for example CAUSE, DO or ACT; but since this is of secondary importance to our present concern, I will only consider the change-operator. The presence of such an operator offers a straightforward way to account for the repetitive-restitutive ambiguity of *wieder* (with respect to telic verbs): *wieder* may have the change-operator in its scope, and then, the ‘entire event’ is repeated; or *wieder* has scope over only the part after the change-operator, and then, only the resultant state is repeated, i.e., restituted. This idea was first suggested by McCawley (1973) and then elaborated and considerably refined by authors such as Dowty (1979) for *again* and by von Stechow (1995, 1996) for *wieder*. But independent of the varying forms in which it was implemented, this type of decomposition faces two major problems.

The first of these problems is straightforward: the analysis does not work if there is no change-operator in the verb and hence no scope variation relative to it. Therefore, it may function in the case of telic verbs; but it is hard to see how it can account for the other cases discussed in sections 2 and 3, in particular for static predicates. The second problem has to do with the notion of a change-operator itself. It stems from the fact that this notion confounds two interrelated but in principle independent features of verb meaning. These are its TEMPORAL STRUCTURE, i.e., intervals and subintervals and the temporal relations between them, and its DESCRIPTIVE PROPERTIES, such as being open or being on the Axis. Compare, for example, the two sentences *Arnim slept* and *Arnim woke up*. In the first case, a descriptive property (‘asleep’) is assigned to

Arnim at some time  $t_i$ ; morphological marking indicates that this time  $t_i$  is (normally) in the past. In the second case, two distinct properties are assigned to Arnim; first, say at  $t_j$ , he must be asleep, and then, say at  $t_k$ , he is not asleep; again (!), morphological marking indicates again that both times are (normally) in the past. Hence, the lexical content of the verb *to wake up* comprises two temporal variables,  $t_j$  and  $t_k$ , which are sequentially ordered and which are associated with different descriptive properties. In this case, the properties ‘asleep’ and ‘not asleep’ are mutually exclusive, a constellation which is perfectly well covered by the notion of a change-operator, such as BECOME.

But it is also imaginable that a verb stem comprises two time variables with less divergent descriptive properties. Take, for example, *The shares fell* and *The shares rose*. For the first sentence to be true, it is necessary that at some interval  $t_k$ , the shares are ‘lower’ on some scale than at some earlier interval  $t_j$ . For the second sentence to be true, the shares must be ‘lower’ at the first interval  $t_j$  than at the second interval  $t_k$ . Verbs of this sort (Fabricius-Hansen’s counterdirectionals, cf. section 2.2.1) are not ‘telic’ or ‘resultative’. The familiar Vendler tests identify them as activities, rather than as accomplishments or achievements. I am not sure whether they should be described by a change-operator; surely, such an operator would be different from the conventional BECOME.

Is it possible that the lexical content of a verb provides two time variables with IDENTICAL descriptive properties? At first, this idea sounds odd. But compare the two sentences *Arnim was on the Axalp* and *Arnim remained on the Axalp*. They both assign a ‘static’ spatial property to Arnim; but somehow, the second sentence gives the impression that Arnim was there at some time  $t_j$  and then, at some later time  $t_k$ , he could have gone but hasn’t. The difference is brought out more clearly if we add a modal verb, such as in *Arnim was allowed to be on the Axalp* and *Arnim was allowed to remain on the Axalp*. In the first case, the permission concerns his entire stay, whereas in the second case, it only concerns the second subinterval. If we replace *allowed* with *inclined*, the first construction *Arnim was inclined to be on the Axalp* becomes odd, whereas *Arnim was inclined to stay on the Axalp* is perfect. In order to describe the semantic effect of these morphosyntactical operations appropriately, we must assume that they have SELECTIVE access to the verb content - to a subinterval which is descriptively not different from the first interval. The addition of constructions such as *be allowed* or *be inclined* is just one of several morphosyntactical processes which demonstrate this fact. Another, simpler case is negation. In *Arnim was not in Riva*, his entire stay there is denied; in *Arnim did not stay in Riva*, it is only denied that he was there at a second subinterval during which he could have been there.

The conclusion is therefore, that we must carefully distinguish whether a verb content has one, two or even more temporal variables, on the one hand, and the descriptive properties which characterise these subintervals, on the other. An operator such as BECOME conflates these notions. There is no change in verbs such as *to remain* or *to stay*, and similarly in German *bleiben*; still, there are two subintervals which are selectively accessible to morphosyntactical operations. There are also exceptions in the opposite direction. The situation described by *Arnim worked at his house* includes many quite heterogenous subintervals, hence many ‘changes’. None of these subintervals, however, is selectively accessible to any morphosyntactical operation, such as negation, adverbial modification or addition of another verb stem. The linguist’s decision whether a lexical verb involves one or more temporal variables can therefore not be based on mere semantic intuition; it must explore how the content of this verb stem can be modified by all sorts of morphosyntactical operations. With this in mind, let us now come back to the problem of the repetitive-restitutive ambiguity.



have to be expressed by (*immer*) *noch* rather than by *wieder*. The only interpretation which makes sense in this context is a complete repetition of the lexical verb, here in its participle form *vergessen*. Since it is completely repeated from the preceding utterance, it is destressed; as a consequence, the immediately preceding element *wieder* appears to be stressed in the ‘repetitive’ reading.

Consider now 18b. Here, the preceding situation ends with <present in mind>; here, it does not make sense to repeat the entire cycle from <present in mind> to <not present in mind>. All that can be repeated is the target state <not present in mind>, i.e., an earlier state is ‘restituted’. The lexical verb *vergessen* is not maintained from the preceding utterance: there is a shift from *gehört* to *vergessen*. Hence, in the ‘restitutive’ reading, the verb itself is stressed. This explains the intonational mystery of the repetitive-restitutive ambiguity.

We have exactly the same constellation when the descriptive properties are gradually different, such as example 9:

- (9) a. Die Aktien sind **wieder** gefallen.  
       The shares have again fallen.  
       b. Die Aktien sind wieder **gefallen**.  
       The shares have again fallen.

Here, the asymmetry between the two intervals is best captured by assigning properties such as <lower> or <higher> to  $t_s$  or to  $t_t$ , where the comparative predicates <lower> and <higher> always relate to the other subinterval in the lexical content of the same verb. Hence, we have:

- |      |    |  |  |
|------|----|--|--|
| (19) | a. | Gestern sind die Aktien gefallen.<br>$t_s$ <higher>                      | Heute sind sie <b>wieder</b> gefallen.<br>$t_t$ <lower><br><i>wieder</i><br>[ $t_s'$ <higher> $t_t'$<br><lower>] |
|      | b. | Gestern sind die Aktien gestiegen.<br>$t_s$ <lower><br><b>gefallen</b> . | Heute sind sie wieder<br>$t_t$ <higher><br>$t_s'$ <higher><br><i>wieder</i><br>[ $t_t'$ <lower>]                 |

Consider first 19a. At the end of the preceding day, the shares had reached a certain level. It is not said what their value is, but for the sentence to be true, this value must be lower than at  $t_s$ . Suppose the value is 220 at  $t_s$  and 200 at  $t_t$ . Under the non-trivial but normal assumption the second sentence continues the description of the first sentence, the value at  $t_s'$  is 200, and therefore, the shares must be lower at  $t_t'$ , for example 180. Hence, the entire sequence from higher to lower is repeated. Consider now 19b. Here, the two verbs, *steig-* and *fall-*, are the not maintained information, they are in contrast (and hence marked by contrastive stress). Therefore, the value at  $t_s$  was lower than at  $t_t$ , say 170 vs 200. At  $t_s'$ , the value is 200, and at  $t_t'$ , it must be lower than that, say 170, 180 or 190. The precise value is not fixed, but in any event,  $t$  must be lower than at  $t_s'$  and thus lower than at  $t_t$ ; as a consequence, the ‘lower value’ which obtained before is restituted. The intonational fact in both readings follow again from what is maintained from the preceding utterance and from what is shifted. In 19a - the ‘repetitive’ reading - the lexical verb is maintained and hence destressed. In 19b, it is shifted and hence not

destressed.

## 6. Concluding remarks

All das ist wieder nicht richtig ausgearbeitet.  
von Stechow

Under the analysis of *wieder* proposed here, this word is not ambiguous. The contribution which it makes to the meaning of the entire sentence is always the same: AND THIS NOT FOR THE FIRST TIME. What ‘this’ relates to, is provided by the sentence in which *wieder* occurs. The term ‘not for first time’ does not primarily relate to the temporal order of the situations themselves but to the order in which these situations are stated on ongoing discourse. In special text types, for example narrative texts, ‘order of events’ and ‘order of mention’ may be closely interconnected, and then, ‘first time’ relates to the order of events.

Variability in meaning does not come in because *wieder* is lexically ambiguous but because it can be inserted at different places in the sentence. As a consequence, the elements that are in its scope vary. As a rule, the scope of *wieder* includes all elements to its right. There are exceptions; thus, the lexical part of a verb may be fused with its finite part and then precede *wieder* but still be in its scope. A special situation may arise when ONLY the lexical verb is in the scope of *wieder*. Then, its precise effect depends on whether the lexical content of this verb stem involves one or two time variables; the last one of these and the descriptive properties coupled with it must in any case be in the scope of *wieder*; another time variable may, but need not, be included. This is the source of the repetitive-restitutive ambiguity.

The particle *wieder* interacts with the mechanism of ‘referential movement’, i.e., the way in which information is freshly introduced or maintained from previous utterances in a text. Such an interaction is in no way specific to *wieder*. But it has the peculiar consequence that, if some information is marked as ‘not for the first time’, then this may be due to the fact that it is in the scope of *wieder*, or it may be due to the fact that it is ‘maintained’ from the preceding utterance; both possibilities may go together. This is clearly reflected in intonation: maintained information is (normally) deaccentuated. Under a repetitive reading, the entire verb is maintained from the preceding utterance and hence deaccentuated, leaving main stress on *wieder*. Under a restitutive reading, the verb is normally new with respect to the preceding utterance, and therefore, it is not deaccentuated.

While I believe that the analysis of *wieder* suggested here is correct, it is also clear that it needs refinement in several respects. This is most clear for the mechanism of referential movement and its consequences for intonation. As is well known from the literature, this mechanism is much more complex than what has been said above. It is easy to see, for example, that ‘maintained information’ need not necessarily be destressed; after all, it is possible to place contrastive stress on an anaphorical element, which by definition expresses maintained information. Or consider a question-answer sequence such as *Was the oak tree on the left or was it on the right? – It was on the right.* Then, *on the right* is no less maintained from the previous utterance than *was* or *it*; still, it must carry stress. In some cases, maintenance does not relate to the immediately preceding sentence but to an earlier one, especially if the text is partitioned into foreground sentences and background sentences; then, maintenance may jump over a background sentence (cf. Klein and von Stutterheim 1987). These problems are complex, and they may affect the interaction with *wieder*. But they also show up when no *wieder* is involved.

A second refinement concerns scope. It is likely that scope assignment is more complex

than the simple rule ‘scope of *wieder* goes to the right’; we already mentioned the fusion of finite and non-finite component of the verb, which places the finite verb into the ‘wrong’ position. Other exceptions in both directions are possible, as is the case with many other scope-bearing elements.

A third refinement has to do with the ‘order of events’. As was argued in section 3, the notion ‘not for the first time’ is in the first place related to the temporal structure of discourse, rather than to the temporal order of the situations, that are described by the sentences which form the discourse. But often, there is also an ‘earlier’ and ‘later’ with respect to the reality which is depicted. According to the traditional principle stated in (16), order of events and order of mention are simply mapped onto each other (‘principle of chronological order’). Normally, however, a sentence - even a simple sentence - involves not just one temporal variable, which is interpreted as ‘the event time’ but a whole structure of temporal intervals, including what has been called above the ‘topic time’. The precise nature of this temporal structure is a vast field, and a simple rule such as ‘order of mention corresponds to order of events’ is therefore a gross simplification. A last point, somehow related to this one, concerns the inherent temporal structure of lexical entries. In section 4, it was said that a lexical item may contain two such intervals. Again, I think this is an oversimplification. As I have argued elsewhere (Klein 2000), there are good reasons to assume that these intervals are relative to the individual arguments of the verb. Hence, it would be more appropriate to speak of ‘Argument-Time pairs’; the lexical content of a verb may provide several ‘AT-variables’. If this is correct, it also has consequences for what precisely is in the scope of *wieder*, just as it has consequences for the scope properties of other adverbials.

All of these refinements are important, and they are anything but easy to achieve. But they are not specific to the functioning of *wieder*. They existed in the same way, if we didn’t have this wondrous word in our language.

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