

contradict other criteria customarily applied in IC analyses. Provided the construction of complex words is, under most if not all circumstances, subject to a universally valid adjacency constraint, there are certain regularities in the patterns of allomorphy we observed with negative adjectives in English which could not be different.

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## REICHENBACH REVISITED: ONE, TWO, OR THREE TEMPORAL RELATIONS?

by

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### 1. Introduction

Reichenbach (1947:287-298) is widely recognized as the classical attempt at a symbolization of semantic values of verbal tenses.

This article<sup>1</sup> will suggest alternatives on two particular points: His system of tenses (sections 2 & 3) and his way of illustrating the semantic values of tenses as one three-place relation involving three points in real time, which may or may not coincide (section 4). First a chain of two two-place relations will be considered (section 5), and then a chain of three two-place relations (section 6). Finally I will mention some problems and consequences of the alternative analysis (section 7), mainly relating to time adverbials, before the conclusion in section 8.

### 2. Reichenbach's System: Nine Tenses

Reichenbach gives a supposedly universally valid system of nine tenses:

1. For valuable comments and discussions as well as for moral support I should like to express my thanks to Niels Davidsen-Nielsen, Torben Thrane, and Carl Vikner in Copenhagen, and to Annabel Cormack, Richard Hudson, Neil Smith, Deirdre Wilson and the rest of the participants in my seminar at University College London, November 1983.

(1) Reichenbach's name	Traditional name	Example
Anterior past	Past perfect	had worked
Simple past	Past	worked
Posterior past	—	would work
Anterior present	Present perfect	has worked
Simple present	Present	works
Posterior present	Future	will work
Anterior future	Future perfect	will have worked
Simple future	Future	will work
Posterior future	—	will be going to work

(adapted from Reichenbach 1947:297)

Three objections can be made to the above on syntactic and morphological grounds:

a. The tense forms of Reichenbach's simple future are identical to the forms of the posterior present, e.g. *will work*. There seems to be no linguistic evidence for a distinction between these two tenses.<sup>2</sup>

b. There are no tense forms for the posterior future in either English, French, or Danish. Reichenbach recognizes this himself, but gets around it by saying that posterior future is expressed 'by speaking not directly of the event E, but of the act of preparation for it', e.g. 'I shall be going to see him' (p. 297). As all the other tense forms can be made up of relatively few elements, cf. (3)-(5) below, and as the system is not able to accommodate such forms as 'I am going to see' or 'I was going to see', this solution seems rather far fetched, and I shall take it as lack of linguistic evidence for a posterior future.

c. There is no room for a form such as *would have worked*, even though linguistic evidence seems to point to this being a tense form, cf. (3)-(5) below: It is inflected for past, it contains a form of *shall/will*, and a form of *have*, and nothing else. It seems inconsistent that Reichenbach (1947:290) admits the existence as tense forms of 'I shall see John'. 'I shall have seen John', and (by analogy from an example on p. 297) 'I should see John', but has no room for the fourth member of this quartet, 'I should have seen John'.

2. Cf. Jespersen's (1924:254-255) criticism of Madvig's (1875) tense system for Latin, which is identical to (1).

To sum up, Reichenbach's nine tenses are criticized for including the same tense form twice, including something which is not a tense form, and excluding something which is a tense form.

### 3. A System of Eight Tenses

By way of alternative to Reichenbach's system, a system will be proposed which accommodates the points of criticism noted above. Though I suspect this system to be universally valid, I only claim it to be valid for English, French, and Danish (cf. the examples):

(2) Present	He works Il travaille Han arbejder
Present perfect	He has worked Il a travaillé Han har arbejdet
Future	He will write Il travaillera Han vil arbejde
Future perfect	He will have worked Il aura travaillé Han vil have arbejdet
Past	He worked Il travaillait/travailla <sup>3</sup> Han arbejdede
Past perfect	He had worked Il avait travaillé Han havde arbejdet
Future of the past	He would work Il travaillerait Han ville arbejde
Future perfect of the past	He would have worked Il aurait travaillé Han ville have arbejdet

3. The difference between the two forms of the French past tenses, *travaillait* versus *travailla*, the imparfait versus the passé simple, is commonly considered a difference, not of tense, but of something else, perhaps aspect.

Though this analysis is not completely uncontroversial, it is supported by analyses of several languages, as it is used in a.o. Mikkelsen (1911) for Danish, Pedersen et al. (1980) for French, Davidsen-Nielsen (forthcoming) for English and Danish, and Maegaard et al. (1981) for Danish, Dutch, English, French, German, and Italian. Furthermore Bull (1960: 29-32) recognizes the eight tense forms of (2) in languages as diverse as English, Hawaiian, and Yoruba.<sup>4</sup>

To recommend it, the analysis in (2) has a certain linguistic and systematic tightness in the syntax and morphology of the verbal elements, in the way the three basic concepts: past, future, and perfect can all be combined with each other:<sup>5,6</sup>

- (3) The first element of a past tense form ends in the morpheme *-ed*

The first element of a non-past tense form ends in the morpheme *-s* or  $\emptyset$

- (4) The first element of a future tense form is a form of *will/shall*

This is not the case with a non-future tense form

- (5) The penultimate element of a perfect tense form is a form of *have*

This is not the case with a non-perfect tense form

Perfect is here, somewhat controversially, considered a tense concept. Whether this is treating aspect (or part of aspect) as a subcategory of tense, or taking perfect out of aspect and putting it into tense, or neither, is really only a terminological question. The reasons for doing it are that perfect behaves in a way parallel to past and to future in significant fashions: morphologically (cf. above) and semantically (cf. section 6 below).

The names of the tenses in (2), termed 'traditional' by Reichenbach (1947:297), were suggested as least as early as Mikkelsen (1911), if not earlier, and they depend on the presence of the three

4. Bull, however, fits them into a system of 12 'possible tenses'. It is significant that the four 'possible tenses' which are realized as zero are the same in all three languages.

5. As in (2), the absence of modality, progressiveness, and passive is presupposed in (3)-(5).

6. These regularities are valid only for English, but similar ones could be set up for French and for Danish.

basic concepts of (3)-(5), with the one addition that the tenses which are neither past nor future are called 'present'.

As absence versus presence of something is the key to (3)-(5), this analysis would seem to be compatible with the binary approach of transformational-generative grammar, and that this is the case is shown in e.g. Korzen & Vikner (1980), from which the following schemata have been adapted, and which adduces further evidence for this analysis from several areas of French syntax.

Tense assignment would follow the rules:

- (6) S → NP INFL VP  
 INFL → ...[+tense] ...  
 [+tense] → [±past, ±future, ±perfect]

resulting in the eight tenses of (2), with the following specifications:

(7)	Past	Future	Perfect
Present	—	—	—
Present perfect	—	—	+
Future	—	+	—
Future perfect	—	+	+
Past	+	—	—
Past perfect	+	—	+
Future of the past	+	+	—
Future perfect of the past	+	+	+

The analysis of (7) is going to be rather important later on, and therefore some evidence for it will be cited below.

Firstly it allows description of the rule governing the choice of tense in subordinate clauses introduced by certain temporal conjunctions (cf. Korzen & Vikner 1980: 111-113). Consider

- (8) a. Eliza *reads* the paper when Oscar *does* the washing up  
 has done  
 \*will do  
 \*will have done  
 \*did  
 \*had done  
 \*would do  
 \*would have done

- b. Eliza *read* the paper when Oscar *\*does* the washing up
- \*has done
  - \*will do
  - \*will have done
  - did
  - had done
  - \*would do
  - \*would have done

It seems that the coefficients for [past] and [future] of the subordinate INFL must agree with those of the superordinate INFL (8a: [-past, -future], 8b: [+past, -future]).

However, this is only valid if the superordinate INFL has [-future]. Consider the following where the superordinate INFLs have [+future]:

- (9) a. Eliza *will read* the paper when Oscar *does* the washing up
- has done
  - \*will do
  - \*will have done
  - \*did
  - \*had done
  - \*would do
  - \*would have done

- b. Eliza *would read* the paper when Oscar *\*does* the washing up

- \*has done
- \*will do
- \*will have done
- did
- had done
- \*would do
- \*would have done

Here it appears that even when the superordinate INFL has [+future], the subordinate must have [-future]. The rule must then say that the subordinate INFL must have [-future] and must agree with the superordinate INFL where [past] is concerned. This can be formalised as

- (10) [+tense] →  $\begin{bmatrix} \alpha_{\text{past}} \\ -\text{future} \end{bmatrix} /$   
 $[S \dots \text{INFL}_{[\alpha_{\text{past}}]} \dots [\bar{S} \text{ when } \dots \text{INFL}_{[\_\_\_]} \dots ] \dots ]$

This rule is presumably also valid for other temporal conjunctions, e.g. 'as soon as', 'while', 'before', etc.

Secondly, the constraints that certain time adverbs seem to impose on the tense of the verb can be stated very simply in this framework:

- (11) 'Yesterday' must belong to a clause where the INFL has [+past]

or

- (12) 'Since Monday' must belong to a clause where the INFL has [+perfect]

#### 4. Reichenbach's Symbolization: One Three-place Relation

We now move on from syntactic and morphological considerations concerning tenses systems to semantics, trying to account for the semantic values of tenses.

Reichenbach (1947:290) symbolizes values of tenses by using three points placed on the axis of time:

- (13) S — the point of speech or utterance  
 R — the point of reference  
 E — the point of the event described by the verb

This symbolization works well for the four non-future tenses, e.g. in accounting for the differences between present perfect and past:

- (14) Past                      He worked                       $\xrightarrow{\quad \begin{array}{cc} E, R & S \end{array} \quad}$
- (15) Present perfect      He has worked                       $\xrightarrow{\quad \begin{array}{cc} E & R, S \end{array} \quad}$

where both describe an event which occurs before the time of speech, illustrated by E preceding S in both (14) and (15). The difference is that (14) describes the event with reference to the past, whereas (15) describes it with reference to the time of speech. This is illustrated by R coinciding with E in (14), and with S in (15).

To complete the picture of the non-future tenses: In the present all three points coincide, whereas in the past perfect there are no coincidences at all:

- (16) Present      He works       $\xrightarrow{\text{E,R,S}}$
- (17) Past perfect      He had worked       $\xrightarrow{\text{E} \quad \text{R} \quad \text{S}}$

To simplify the notation Reichenbach omits the arrow and introduces a dash to indicate that two points occur at different times, and a comma to indicate that two points occur at the same time. The four tenses considered above are then shown as:

- (18) Present      E,R,S  
 Present perfect      E – R,S  
 Past      E,R – S  
 Past perfect      E – R – S

### 5. Two Two-place Relations

However, when applied to future tenses, Reichenbach's system, outlined above, is found to be inadequate.

Consider future perfect

- (19) He will have written his essay by Monday

where it is impossible to tell whether the act of writing has already taken place, is taking place at the time of speech, or has yet to take place.

Of course, (19) would sound rather odd if the act of writing was known to have already taken place at the time of speech, but this is a fact of the way language is used (performance) rather than of language itself (competence). The rule violated in this case is not a semantic but a pragmatic rule, viz. the quantity maxim of conversation (cf. Grice 1975:45), as the speaker would be less informative than she had reason to be.

That (19) is semantically acceptable even in the case where the event precedes the time of speech can be seen from (20), where the correct answer is 'Yes' (20b), not 'No' (20c), as it should have been if the semantic conditions of the tense were not met, cf. (21):

- (20) a. Will you have written your essay by Monday?  
 b. Yes, as a matter of fact, I have already written it  
 c. \*No, as a matter of fact, I have already written it

- (21) a. Have you handed in your essay?  
 b. \*Yes, (but) I will do so tomorrow  
 c. No, but I will do so tomorrow

In other words, in the case of future perfect, (19), there is no way of knowing (from the tense form on its own) where the event point occurs in relation to the speech point (before, at the same time as, or after), and we are therefore left with three possibilities:

- (22) Future perfect      S – E – R or S,E – R or E – S – R

Reichenbach recognizes this himself, saying that 'the position of the event relative to the point of speech ... is usually irrelevant' (p. 296). He goes on to say about the different possibilities of (22) that these 'forms do not differ, and we therefore regard them as representing the same fundamental form'.

Unfortunately he does not change his symbolization accordingly, but still tries to illustrate all three points relative to one another on the axis of time, admitting that some tenses have more than one symbolization (as in (22)).

His observations quoted above seem to me to suggest that not one three-place relation but a chain of two two-place relations is necessary to give one sufficient and non-ambiguous account:

- (23) Future perfect      a.  $\begin{array}{c} S \\ \diagdown \\ R \\ \diagup \\ E \end{array}$       or      b.  $\begin{array}{c} S - R \\ E - R \end{array}$

(23) says that the reference point must follow the speech point, and that the event point must precede the reference point, but nothing else.

In (23a) and (24) coincidence is noted by a vertical line, temporal precedence by an oblique line. This symbolization stresses the hierarchical nature of the relations between S, R and E: S is the most independent, R can only be placed in relation to S, and E is even more dependent, as it can only be placed in relation to R which in turn is dependent on S. It must be stressed that even though S is directly above E in (23a), this does not mean that they coincide. Nothing can be said of the position of E relative to S, as these two points can not be related to each other. E can be related to R, not to S, and this is shown by the line between E and R.

In (23b) and (25) coincidence is noted by a comma, temporal precedence by a dash, as in Reichenbach's abbreviated notation (cf. (18)). This symbolization emphasizes that the points can only be related to each other in two-place relations.

The domain of such a chain is the same as the domain of one of Reichenbach's symbolizations, viz. the finite verb or verb cluster of a tensed sentence (cf. also (6)).

When the other tenses are reconsidered in the light of (23), it appears that nowhere do S and E have to be directly ordered. On the contrary, relating S and E to each other unambiguously has only been possible either because R occurs before one but after the other (past perfect) or because of coincidence between R and one or both of the two other points (the other three tenses considered in section 4). Compare (18) with its revised version(s):

(24)	Past	Present	Future
	$\begin{array}{c} S \\ \diagup \\ R \\   \\ E \end{array}$	$\begin{array}{c} S \\   \\ R \\   \\ E \end{array}$	$\begin{array}{c} S \\ \diagdown \\ R \\   \\ E \end{array}$
	Past perfect	Present perfect	Future perfect
	$\begin{array}{c} S \\ \diagup \\ R \\ \diagdown \\ E \end{array}$	$\begin{array}{c} S \\ \diagup \\ R \\ \diagdown \\ E \end{array}$	$\begin{array}{c} S \\ \diagdown \\ R \\ \diagup \\ E \end{array}$

or to put it in a way more compatible with (18):

(25)	Present	R,S	/	E,R
	Present perfect	R,S	/	E - R
	Future	S - R	/	E,R
	Future perfect	S - R	/	E - R
	Past	R - S	/	E,R
	Past perfect	R - S	/	E - R

## 6. Three Two-place Relations

However, (24) and (25) are still unsatisfactory, for at least three reasons:

a. It is unsatisfactory that there are three ways of combining S and R, whereas only two combinations seem to be exploited where R and E are concerned:

(26)	S & R:	$\begin{array}{c} S \\ \diagup \\ R \end{array}$	$\begin{array}{c} S \\   \\ R \end{array}$	$\begin{array}{c} S \\ \diagdown \\ R \end{array}$
	R & E:	$\begin{array}{c} R \\ \diagup \\ E \end{array}$	$\begin{array}{c} R \\   \\ E \end{array}$	$\begin{array}{c} *R \\ \diagdown \\ E \end{array}$

There seem to be two ways out of this: One is to admit the configuration R - E, but this would reintroduce Reichenbach's nine tense system, which I am trying to abandon. The other is suggested below.

b. Perfect and non-perfect tenses have respectively E - R and E,R. Though it is no absolute demand, it would be nice if future/non-future and past/non-past had similar independent correspondences in the symbolization, instead of being inextricably entangled on the S & R relation.

This and the previous objection are but minor ones concerned with irregularities within the system. The last objection however is more substantial, concerned as it is with the system's ability to describe the tenses.

c. The problem of describing the two tenses not discussed so far, in particular future perfect of the past.

If we consider an example like

(27) She promised in November that they *would have received* her paper by the first day of term

it is apparent that there are not one but two points of reference: *November* as well as *the first day of term*, and that neither of these coincides with either S or E. (Even though *in November* is in the higher clause, the point in time to which it refers is clearly relevant to the interpretation of *would have received*.)

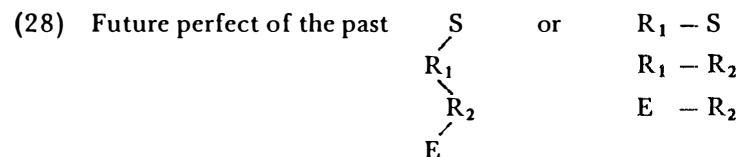
Let us try to untangle the knot of different points in time tied by (27):

If we start with the speech point, S, as the given, then the first point of reference, R<sub>1</sub>, *November*, must occur before S. Next, the second reference point, R<sub>2</sub>, *the first day of term*, must occur later

than  $R_1$ , *November*, even though nothing can be said of the relative positions of  $S$  and  $R_2$ , i.e.  $R_2$  may occur before, at the same time as, or after the time of speech. Finally, the event described by the verb,  $E$ , the reception of the paper, must occur before  $R_2$ , *the first day of term*, although nothing can be said of  $E$  in relation to either  $R_1$  or to  $S$ .

It is interesting to note that this interpretation of future perfect of the past can be found in Mikkelsen (1911:443), who says that the future perfect of the past ('fortids förfremtid') expresses what has been accomplished in relation to what is coming relative to the past ('hvad der er afsluttet i forhold til hvad der er tilkommende for det forbigangne').

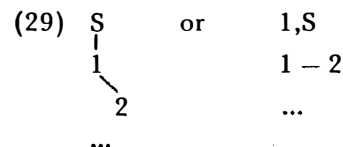
As with (22) and (23), here we find that the points can only be related to each other in pairs, and as four points are needed, three pairs will also be necessary, resulting in three two-place relations:



Also parallel to (23), as consequence of (28) is that the other tenses may now be reconsidered in a new light.

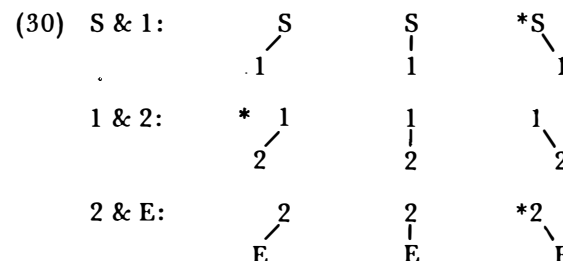
Having discussed the objection c., I shall go on to objection a. before giving the now twice revised system in (31) and (32), and discussing objection b.

As one reference point,  $R$ , has been discarded in favour of two,  $R_1$  and  $R_2$ , and as none of the reference points in (28) are both directly related to  $S$  and following  $S$  in time, the configuration for the future tenses in (25),  $S - R$ , will have to go. For future and future perfect I will introduce the following configurations instead, with the change of notation that '1' and '2' replace ' $R_1$ ' and ' $R_2$ ' respectively:



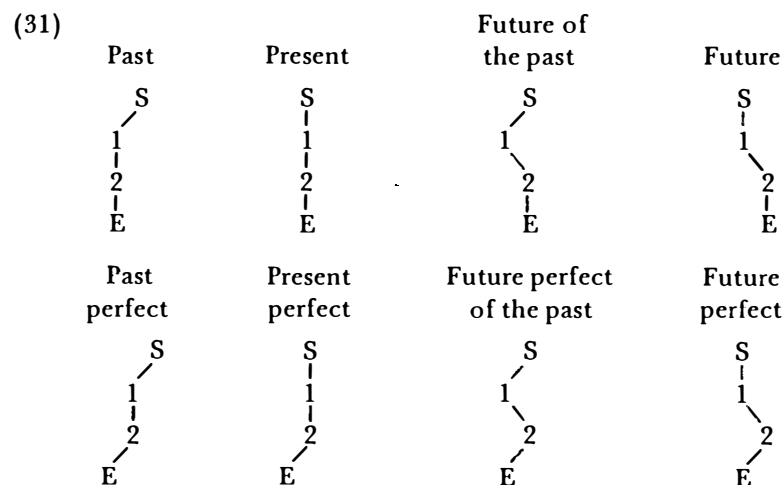
as this will give the same result, and as it is parallel to (28), giving as it does a reference point following  $S$  in time, even though the reference point in question, 2, is only indirectly related to  $S$ .

When this approach, the  $S$  &  $R$  relation being replaced by two relations:  $S$  & 1 and 1 & 2, is carried through, my objection a. can be dispensed with, as the system is now more strict than before, there being only two possible configurations for each relation:



compared to a similar table for the previous approach (26).

Following the above, the new analysis of all eight tenses in terms of the three two-place relations, the revised extended version of (24) and (25) looks like this:



or putting it the other way:

(32) Present	1,S	/	1,2	/	E,2
Present perfect	1,S	/	1,2	/	E-2
Future	1,S	/	1-2	/	E,2
Future perfect	1,S	/	1-2	/	E-2
Past	1-S	/	1,2	/	E,2
Past perfect	1-S	/	1,2	/	E-2
Future of the past	1-S	/	1-2	/	E,2
Future perfect of the past	1-S	/	1-2	/	E-2

As can be seen from (32), the remaining objection, b., has also been taken care of, past/non-past and future/non-future have been completely divorced. Past/non-past is connected with whether or not reference point 1 coincides with the speech point, and future/non-future with whether or not the two reference points coincide. As was the case before, perfect/non-perfect is linked to the relation between E and 2.

Now each of the three relations clearly correspond to one of the three basic concepts past, future, and perfect, and thereby also to one of the three features of (7) (compare (7) and (32)):

(33) -past	S   1	+past	S   1
-future	1   2	+future	1   2
-perfect	2   E	+perfect	2   E

This seems to suggest a connection between markedness and coincidence between points: In any of the three relations coincidence is the unmarked option, as the tense intuitively felt to be the least marked, present, has coincidences in all three relations, whereas the most marked tense, future perfect of the past, has no coincidences at all.

## 7. Some Problems and Consequences of the Three Relations Approach

What is the evidence for more than one reference point? In the majority of tensed sentences, there is no direct evidence, the existence of two reference points can only be inferred by analogy. However,

evidence of two reference points does exist outside future perfect of the past.

Reichenbach (1947:294) assumes that time adverbials correspond to the reference point, and there is no reason to question this assumption applied to the new analysis.

In Reichenbach (1947:295) the following two sentences, which may both be considered future tense forms:

(34) Now I shall go

(35) I shall go tomorrow

force him to adopt two different analyses of the future tense, S,R-E versus S-R,E (cf. my objection a. in section 2). In a three relations approach, where future is analysed

(36)	S	or	1,S
			1-2
	1		E,2
	2		
	E		

there is the option of saying that 'now' of (34) corresponds to reference point 1, whereas 'tomorrow' of (35) corresponds to reference point 2. This has the advantage that one symbolization, (36), corresponds to one tense form, *shall go*.

Why just two reference points? If more than one, why not fourteen? Logically there is no reason why fourteen reference points should be impossible, but there seems to be evidence that two is the maximum number of reference points, viz. that two is the maximum number of non-coreferent time adverbials possible in a sentence:

(37) *Yesterday* she would hand in her essay *today*

(38) *Now* she will do it *tomorrow*

To continue the discussion of time adverbials, restrictions on compatibility between tense and time adverbial, of the kind mentioned in (11) and (12), will have a natural explanation under the three relations approach, if we in addition to Reichenbach's assumption of correspondence between reference points and time adverbials also assume that the semantics of time adverbials can be described in terms of real time.

Consider 'yesterday', cf. (11). The semantics of yesterday is restricted to the past, it can not refer to the present, nor to the future.



Therefore it can only be used with tenses where at least one reference point may precede the speech point. These are the tenses with

(39)	S	or	1 - S
	1		...
	...		...
	...		

or as stated in (11), the tenses with [+past].

As I am not otherwise concerned with time adverbials here, I only mention the above to suggest an area where further insights might be gained with the three relations approach.

Another issue worth mentioning here is the difference in status between past and future. In a three relations approach only past/non-past is directly related to the speech point, whereas future/non-future is only indirectly related to S.

Could this be connected with the difference in status between past and future, 'the cognitively more abstract, irrealis nature of future as an ontological category vis-a-vis the more tangible and empirical past' (Fleischman 1982:22-23), apparent from various facts: many languages have a morphological distinction past/non-past but not one future/non-future (e.g. English and Danish), whereas no languages have a morphological distinction future/non-future without having one past/non-past; also that children appear to acquire future tenses later than past; and that future tense forms more often undergo semantic changes, i.e. acquire modal interpretations.

## 8. Conclusion

Having examined Reichenbach's system of nine tenses, two of his tenses have been rejected, and another one is to be introduced, resulting in an eight tense system. This new system is also organised differently, so that 3 x 3 tenses are replaced by 2 x 2 x 2 tenses.

Reichenbach's symbolization is based on the idea of illustrating the temporal relations between various points in time. The attempt to relate all points to one another (and to real time), in one linear sequence, is unfortunate, and Reichenbach himself recognizes this. Distributing the points on a chain of two temporal relations, two linear sequences, seems to work, until the tenses involving both future and

past are examined. These however clearly show that three is the number of temporal relations necessary to account satisfactorily for the semantic values of the system of tenses in English (and French and Danish), and in particular the differences between the tenses.

The three two-place relations approach results in a systematically very strict (and non-overgenerating) account, and correlates these temporal relations directly to the binary features suggested by an approach along more transformational lines. Furthermore the three relations approach would seem to have interesting consequences for related areas, a.o. time adverbials.

It has been suggested before that two reference points are necessary to account for e.g. future perfect of the past (e.g. Vet 1980:8), but it is essential for the approach outlined here that the analysis with two reference points (i.e. the one with three two-place relations) is carried out for every one of the eight tenses. Only in this way is the result a consistent analysis, which accounts semantically for each of the three basic concepts, past, future, and perfect, and which is easy to relate directly to the syntactic-morphological rules of (3)-(5).

The important direct consequence of the above is that past and future are completely separated and recognized as belonging to two mutually independent relations (this is the 'divorce' of past and future mentioned under b. in section 5). This is an alternative to the tripartite past-present-future view that a.o. Madvig (1875), Jespersen (1924), and Reichenbach (1947) all adhered to. (Similar and other arguments against this view may be found in Vet 1980). This separation is also to my mind a very satisfactory account of why past and future may combine, as they do in e.g. future perfect of the past.

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## REVIEW ARTICLE

Jane-Odile Halmøy: *Le gérondif. Eléments pour une description syntaxique et sémantique*. Tapir. Université de Trondheim 1983 (450 p.).

reviewed by

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«Aucune grammaire du français moderne ne nous renseigne suffisamment sur la nature du gérondif et du participe présent», écrivait déjà Sneyders de Vogel en 1919. Comme le fait remarquer Odile Halmøy dans son introduction (p. 1), il n'est peut-être pas exagéré de dire que la situation n'a pas beaucoup changé depuis.

Par exemple les grammaires ne nous expliquent pas pourquoi des phrases comme les suivantes sont agrammaticales ou douteuses

- (1) a. \**En étant* intelligent,  $\left\{ \begin{smallmatrix} \text{on} \\ \text{Pierre} \end{smallmatrix} \right\}$  a des chances de réussir à l'examen  
 b. ?Elle entra *en portant* un plateau  
 c. \*Elle était déjà dans le vestibule *en mettant* son manteau  
 d. \*On dit qu'il a été longtemps berger en Argentine *en gardant* des troupeaux
- (2) a. \**En parlant*, vous serez punis!  
       \**En parlant*, mon frère a été puni  
 b. \**En tombant* d'une échelle, on doit se faire radiographier  
       \**En tombant* d'une échelle mon frère s'est fait radiographier