CHAPTER 1

INTRODUCTION

1. OUTLINE

German has the three main perfect constructions which are illustrated in (1.1).\(^1\) In each of these constructions, the verb appears in the past participial form and is combined with an auxiliary - in this case, *haben* ('have'); other verbs form their perfect constructions with the auxiliary *sein* ('be').\(^2\) The auxiliary can then be combined with a tense - i.e. the present tense as in (1.1a), the past tense as in (b), or the future tense as in (c).\(^3\)

(1.1) a. PRESENT PERFECT:
  *Die Eule hat die Schule verlassen.*
  *the owl has the school left*

b. PAST PERFECT:
  *Die Eule hatte die Schule verlassen.*
  *the owl had the school left*

c. FUTURE PERFECT:
  *Die Eule wird die Schule verlassen haben.*
  *the owl will the school left have*

As will shortly become clear, the present perfect is the most intricate of the perfect constructions in German. It has been investigated intensely in the past, with the result that today there is little doubt about what the core problems concerning its semantics are. At least the following points have not yet found a widely accepted analysis:

* whether, or to which extent, the present perfect can be given a compositional semantic analysis;
* whether the present perfect is a tense or an aspect, or a combination of both, or whether it is ambiguous between a temporal and an aspectual reading;

---

1 I am disregarding so-called double perfect constructions - as in *Die Eule hat(te) die Schule verlassen gehabt* ('the owl has/had the school left had') - here.
2 In fact, the choice of the auxiliary does not depend on the verb but on the VP semantics. An important factor in this respect is the telic or atelic situation type of the VP. Thus, while the atelic *gezogen haben* ('to have danced') is constructed with the auxiliary *haben*, the telic *durch den Ballsaal getanzt sein* ('to have danced through the ballroom') is constructed with *sein*.
3 The glosses of the German examples provide word-by-word translations. Note that in the glosses, I translate German occurrences of the present perfect with the English present perfect, regardless of whether the result is acceptable in English or should rather be translated as a simple past. The perfect auxiliaries *haben* and *sein* are both translated as *have* since this is the English perfect auxiliary; and the future tense auxiliary *werden* is translated as *will* although the German auxiliary *werden* is in fact rather related to the verb *werden*, which means 'become', etc.
• how the numerous readings of the construction come about;
• what the relationship between the present perfect and the simple past tense is like, and especially, why they can sometimes be substituted for each other and sometimes not;
• how temporal adverbials interact with the present perfect.

Compared to the number and complexity of the open questions concerning the present perfect, what is known about it for sure is little: it is morphosyntactically complex, and it expresses some kind of anteriority.

The goal of this study is to provide a more or less complete description of the behavior of perfect constructions in German in general and to propose an analysis of perfect constructions that provides answers to the open questions listed above. The study focuses, however, mainly on the present perfect. The idea behind this strategy is that if the semantics of the present perfect - the most difficult of the three perfect constructions - has been figured out, the semantics of the past perfect and the future perfect should fall out automatically as a by-product of the semantics of the present perfect combined with an account of the past tense and the future tense.

In order to investigate the behavior of the present perfect, it will be necessary to illuminate the semantics and the pragmatics of the construction as well as its morphosyntactic composition, and its interaction with temporal adverbials. The relevant literature will be discussed issue by issue throughout the course of the book as we tackle the various problems related to the construction. The book proceeds as follows.

Chapter 2, THE SEMANTICS OF THE PRESENT PERFECT, aims at providing an outline of the semantics of the present perfect. Specifically, it will be shown that the present perfect is not an ambiguous tense/aspect-form. Rather, it has a uniform and, to a surprisingly high extent, compositional semantics. For presentational reasons, the formal semantics that is offered as the result of this chapter will disregard the interaction of the present perfect with temporal adverbials; the idea is that the complete semantics of the form can be better developed step by step in the course of the book. Taking up the null-hypothesis that the present perfect, the past perfect, and the future perfect function analogously, the semantics of these other two perfect constructions will also be sketched.

Chapter 3, THE MEANING EFFECTS OF THE PRESENT PERFECT, is concerned with the different readings of the present perfect. Given the claim that the present perfect is an unambiguous form, the question must be raised how its different readings can be explained. I propose that the different readings can be best explained in a pragmatic account. The idea is that in German present perfect constructions, the reference time as well as the situation time can be assigned topical status. By varying the choice of the topical times of present perfect clauses as well as exploiting different possibilities for assigning them concrete values, many (if not all commonly discussed) readings of the construction can be captured. Since some readings of the present perfect in German are almost identical to the interpretation of past tense constructions, I will discuss the similarities and differences between the present perfect and the past tense in German and sketch the range of readings and uses of both forms where they can substitute each other. The role of topicality suggests that the dependence of present perfect constructions on various concrete types of contexts should also be discussed in this chapter. The chapter ends with an improvement of the formal semantics presented in chapter 2.

Chapter 4, TYPES OF TEMPORAL ADVERBIALS presents a simple classification of temporal adverbials and prepares for the following chapters, which are concerned with their behavior.
Chapter 5, INTERACTIONS WITH ADVERBIALS, is about the interaction between perfect constructions and temporal adverbials, i.e. position, duration, and quantificational adverbials. It aims at providing an interpretation that fits their semantics together. It does not, however, aim at specifying the semantics of individual temporal adverbials. Rather, it investigates what temporal adverbials of different types can apply to in principle.

The investigation of the semantics of specific temporal adverbials is the aim of Chapter 6, THE CONTRIBUTION OF PARTICULAR ADVERBIALS. It looks in more detail at the semantic contribution of individual temporal adverbials. It concentrates especially on some adverbials whose semantic contribution is notoriously elusive.

Chapter 7, TEMPORAL SUBORDINATE CLAUSES, CONJUNCTIONS, AND MATRIX CLAUSES, integrates an account of temporal clauses into the theory of the perfect and elaborates the semantics reached in the preceding chapter accordingly.

Chapter 8, ON THE SYNTAX OF TEMPORAL ADVERBIALS, provides a survey of possible underlying and surface syntactic positions of temporal adverbials.

Finally, the CONCLUSION in chapter 9 summarizes the results of the present study.

In the remainder of this chapter, I will introduce a basic framework of temporal semantics. In the following few sections, I will informally characterize the functioning of tense, aspect, and temporal specifications (sections 2 and 3). The simple tenses of German, i.e. the present tense (Präsenz), the past tense (Präteritum), and the future tense (which is, strictly speaking, not a simple tense but composed of the auxiliary werden (will) and the present tense) will be briefly introduced, and some important features of their semantics will be mentioned (section 4). For later purposes, it will also be necessary to introduce some apparent side issues related to tense semantics - namely, some issues of pragmatics that will prove inevitable in order to explain tense effects: the implicatures and presuppositions related to temporal interpretation (section 5). In section 6, I will sketch how the intuitive approach in sections 2-5 may be packed into a formal semantic representation. Section 7 provides a summary of the chapter.

2. TENSE AND ASPECT

Reichenbach (1947) describes tenses as relations holding between three points of time - the UTTERANCE TIME (TU) of an uttered clause; the time at which the situation described in the clause takes place, i.e. its SITUATION TIME (TS); and its REFERENCE TIME (R).4 While the notions of utterance time and situation time are intuitively clear, the notion of reference time is more abstract. It may be characterized as the temporal point of view on the situation. On the basis of TU, TS, and R, Reichenbach defines the set of all possible times. The main idea of this approach is that TU, TS, and R can stand in all logically possible temporal order relations to each other, i.e. each pair of them can in principle precede or follow each other, or coincide. The diagrams in (2.1) illustrate this for the simple tense and

---

4 Reichenbach uses the terms point of speech (S) and point of event (E) instead of utterance time (TU) and situation time (TS). I want to avoid the terminology referring to 'events' because "event" is a term that is still under discussion and used differently in the literature. For example, according to many terminologies, it is only applicable to achievements and accomplishments. Thus the term "situation" seems much less problematic and more general. Since the abbreviation TS for "situation time" could then easily be confused with the abbreviation S for "point of speech", I also switch to the term "utterance time".
complex perfect tense constructions in English, where temporal coincidence is indicated by a comma.\(^5\)

\[(2.1)\]

<table>
<thead>
<tr>
<th>PAST PERFECT</th>
<th>SIMPLE PAST</th>
<th>PRESENT PERFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I had seen John</em></td>
<td><em>I saw John</em></td>
<td><em>I have seen John</em></td>
</tr>
<tr>
<td>TS R TU</td>
<td>R,TS TU</td>
<td>TS TU,R</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRESENT</th>
<th>SIMPLE FUTURE</th>
<th>FUTURE PERFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I see John</em></td>
<td><em>I shall see John</em></td>
<td><em>I shall have seen John</em></td>
</tr>
<tr>
<td>TU,R,TS</td>
<td>TU R,TS</td>
<td>TU TS R</td>
</tr>
</tbody>
</table>

Reichenbach's three point system has been criticized, used, or improved in various versions by many linguists (e.g. Bäuerle (1977, 1979), Declerck (1991), Ehrich (1992), Fabricius-Hansen (1986), Hornstein (1990), Janssen (1988), Kratzer (1978), Néronne (1985), Vater (1983)). Among the criticism, it has been argued repeatedly that systems of temporal interpretation in natural language need to refer to TIME INTERVALS instead of points of time; we will adopt this view here without further discussion.

In its original version, Reichenbach's account captures any tense construction as a combination of the ordering relations between all three time parameters TU, TS, and R, regardless of whether the tense construction is simple or morphosyntactically complex. Yet the simple tenses in particular strongly suggest that the relation between TU and TS constitutes the core meaning of tenses, i.e. the present tense locates TS at TU, the past tense before TU, and the future tense after TU. Intuitively this seems plausible; in fact, most naive speakers share this intuition. Thus, at first glance, one might think that the function of tense is to locate the situation time TS of the main predicate of an uttered clause relative to its utterance time. For instance, the sentences in (2.2) seem to express that Stefan's calling me, Claudia's getting an appointment, and Uta's winning the marathon are located before the time at which these sentences are uttered.

\[(2.2)\]

a. Stefan rief mich an.
\textit{Stefan called me PARTICLE}

b. Claudia bekam einen Termin.
\textit{Claudia got an appointment}

c. Uta gewann den Marathon.
\textit{Uta won the marathon}

However, other sentences clearly show that this cannot be quite right. Thus, the second clauses in the examples in (2.3) are certainly not meant to say that Borsche's being dead, Juliane's not being a child anymore, and the flowers being dry are located in the past but not in the present.

\[\text{5 Cf. Binnick (1991:111ff).}\]
(2.3) a. Sie fanden Barschel in der Badewanne. Er war tot.
   *they found Barschel in the bathtub. he was dead*

   *last year met I Juliane again. she was no child anymore*

c. Ich warf die Blumen raus, weil sie trocken waren.
   *I threw the flowers out because they dry were*

Rather, the clauses are used to assert something about what was the case at a certain time in the past - the time when Barschel was found in the bathtub, the time when I met Juliane again, and the time when I threw out the flowers, respectively. For instance, in (2.3a), the speaker asserts about the time when Barschel was found in the bathtub that Barschel was dead at that time. The time about which the assertions are made in each of the cases above is the reference time R. Using a traditional term from information-structural theories, one may also say that the reference time R functions as a topic in the examples above.

On the basis of observations like this, Klein (1992a, 1992b, 1994) proposes that TENSE locates the time about which an utterance asserts something - the TOPIC TIME - with respect to the time of utterance. Deviating from Klein, I will use the notion 'tense time' in this book instead of the notion 'topic time', where the TENSE TIME (TT) of an uttered clause is the time which the speaker locates by the tense. The motivation for this change of terminology will become clear in chapter 3; roughly speaking the main reason is that the time which is located by the tense does not have to be topical in every case. The tense time is often definite (cf. Partee (1973)), though - in the sense that the speaker usually has a particular time in mind. Because of this, the tense time has a strong tendency to be topical, but its topicality is by no means obligatory. Insofar the tense time behaves like a definite noun phrase: definite noun phrases have a strong tendency to be topical, too, but can also be non-topical.

Specifically, in accordance with standard assumptions, the past tense ('Präteritum') in German locates the tense time before the time of utterance, the present tense ('Präsenz') locates it around or after (i.e. not before) the time of utterance, and the future tense locates it at a time after the time of utterance. Let us assume that this holds for at least the canonical usage of the tenses. Later, we will have to say more about the semantics of the tenses, especially about the present tense (cf. section 4). Note that the notion of tense time in terms of assertion is based on a subjective, speaker-oriented view: the tense time of an utterance is the time the speaker has in mind as the time about which she wants to say what is, was, or will be, the case then.

The diagram in (2.4) illustrates the effect of the past tense in the second sentence of (2.3a). While the first sentence suggests the time when Barschel was found in the bathtub as the tense time of the second sentence, the past tense in the second sentence tells us that this tense time is located before the time of utterance and asserts about this time that Barschel is dead.

(2.4) Sie fanden Barschel in der Badewanne. Er war tot.
   *they found Barschel in the bathtub. he was dead*

   --------------------------[___]----------------------------TU-based---

---

6 This may not be the most adequate analysis for the future tense, though. There is evidence that the present tense, which is clearly morphosyntactically present in future tense constructions, has to be taken seriously on the semantic level, too. For some details, see Musan (1999) on *werden*. 
The German Perfect
Its semantic composition and its interactions with temporal adverbials
Musan, R.
2002, XI, 275 p., Hardcover
ISBN: 978-1-4020-0719-4