4.4 The PAST

PAST identifies or cues construction of some space N. It indicates that:

- i) N is in FOCUS
- ii) N's parent is V-POINT
- iii) N's time is prior to V-POINT (parent)
- iv) events or properties represented in N are FACT from V-POINT (parent)
- v) N has certain relational properties vis-a-vis other spaces (accessibility)

We may say that a PAST space is one which represents a temporal frame construed as prior to V-POINT. Prototypically, the V-POINT will be the initial V-POINT of the BASE. A PAST space may also be prior to some non-BASE V-POINT. Like all time spaces, a PAST space may represent a temporal frame, a slice of time of any size.

4.4.1 The English Simple Past: PAST of V-POINT/BASE

In English, the PAST is coded by the Simple Past, as in (4.25).

(4.25) This morning Max made scrambled eggs.

The space-builder 'this morning' cues construction of a PAST FOCUS space M, which is prior to V-POINT/BASE. This is diagrammed in Figure 4.13.

FIGURE 4.13

'This morning Max made scrambled eggs'



The English Simple Past is neutral in terms of perfectivity; a verb so marked may be perfective or imperfective. In mental space terms, the English Simple Past is neutral as to the arrangement of V-POINT, although perfectivity may be determined by the aktionsart of the verb and other lexical information. The English Simple Past may be contrasted with the French Imparfait and Passe Simple, discussed in section 4.5, which are not neutral in this respect.

4.4.2 Simple Past: Habituals and Generics

The Simple Past may also have an habitual or generic interpretation. For example:

(4.26) a. In high school, I swam twice a week.

b. In those days, men were men and women were women.

Just as with PRESENT time spaces, PAST FOCUS spaces may be generic or habitual

spaces, which are available for mapping over a certain domain. Examples such as (4.26) are handled in the same way as PRESENT and FUTURE habitual and generic expressions, by construction of an additional habitual or generic space which operates like a frame.⁶⁶ The work is done by space partitioning, and no further mechanism is needed. In (4.26a), for example, the space-builder 'in high school' cues the construction of a space. The habitual expression assigns the subject entity T' a certain habitual property within that domain, that of swimming twice a week. The information in the habitual space is available for mapping into any space which represents the time period or some part of the time period over which the frame holds. The frame holds over the past time period delimited by the space builder 'in high school'. The mapping is by default, but given contradictory information is defeasible. For example, for any particular week where the T' did not swim, mapping is defeasible.

In (4.26b), the space-builder 'in those days' sets up a generic space which operates much as a frame. In the generic space, a role for "man" is set up and assigned the property of being a man and a role for "woman" is set up and assigned the property of being a woman. The frame holds over the time period delimited by 'in those days'. The information in the frame is available to map onto any particular instance of a man or woman in a space which represents the time period or some part of the time period over which the frame holds. The mapping is by default; in this way, all members of the class 'men' in the relevant time period are assigned the property of being women. Again the mapping is defeasible given conflicting information, for example, the presence in the PAST domain of a man who is not "a real man".

⁶⁶ See section 4.1.2 for a discussion of PRESENT habituals and generics and chapter 2 for a discussion of frames and mapping between domains.

4.4.3 Simple Past for present or future Events

4.4.3.1 Simple Past in Counterfactuals and Politeness Forms:

The Simple Past may appear in a number of constructions with present or future interpretations. For example:

(4.27) a. If I had time tomorrow, I would come to the party.

(but I don't have time tomorrow, so I won't).

b. If I had time now, I would help you.

(but I don't have time now, so I won't)

(4.28) a. She would want to come, wouldn't she? She's always a pain.

(Given the chance/ If she had the chance...)

b. You would think she would have finished her PhD by now. (If you thought about it...)

(4.29) a. I wish he were here.

b. I wish I lived closer to my family.

c. It's high time that child went to bed.

(4.30) a. I wanted to ask you a favor, (if I could).

b. Could you help me with this?

c. I hoped you might come tomorrow.

The Simple Past appears in counterfactual conditional constructions with a present or

future reading, as in (4.27). In some cases the conditionality is unexpressed as in (4.28). The Simple Past also appears with a present counterfactual interpretation in wishing expressions as in (4.29). The Simple Past also occurs with a present or future interpretation in politeness forms as in (4.30).

A number of researchers have claimed that temporal distance in such examples serves to express distance in other domains (Imbs 1960, James 1982, Klein-Andreu 1986, Fleischman 1989). Fleischman (1989) claims that the concept of temporal distance serves as an important metaphorical template cross-linguistically for expression of distance along other axes. Temporal distance, i.e. the PAST (or PAST of PAST), is used to express: the present non-actuality of a situation or event; and/or the lesser probability that the situation or event will be realized. In conditional and counterfactual constructions, for example, the greater the likelihood that a situation will actually be realized, the closer to reality the speaker perceives it to be, then the closer to 'now' the tense will be. The greater the likelihood that a situation will not be realized, the further from reality the speaker perceives it to be, then the more past the tense form will be (Fleischman 1989). In politeness forms, the temporal distance has the effect of removing the request from 'actuality'.

The approach to the PAST in counterfactuals and politeness forms taken here is consonant with the idea that temporal distance extends to express non-actuality or nonprobability. Added to this idea is the notion of space partitioning and space accessibility. One of the functions of tense and moods is to partition information into separate domains; PAST domains are separate from PRESENT ones, subjunctive domains from indicative ones. Domains are more or less accessible to each other depending on their particular properties. Research by Mejias-Vicandi (1993, to appear) and Sweetser (to appear) shows that subjunctive and conditional forms function to limit the accessibility of spaces. Mejias-Vicandi (1993, to appear) shows that the Spanish subjunctive is used to limit access to referents and presuppositions which would be accessible in an indicative clause. Sweetser (to appear) shows that English "backshifted" counterfactual forms mark definite descriptions as applying in a conditional domain rather than speaker reality.

Cross-linguistically, the most common environment for use of Past tenses to signal counterfactuality or irrealis is in conditional constructions. The second most common environment is in contrary to fact wishes (James 1982). The use of Past tense forms to express politeness is also common cross-linguistically. In all three of these environments, subjunctives and conditionals are also common cross-linguistically. This suggests that there is some relationship between the function of Past tense forms, subjunctives, and conditionals in these contexts. The function these forms have in common is the function of limiting space accessibility. Distance as a temporal metaphor is chosen for a reason. In the following sections, counterfactual conditional constructions, counter to fact wishes, and politeness forms will be considered in turn.

4.4.3.2 Simple Past in Counterfactual Conditionals

The Simple Past may appear in conditional constructions with a present or future counterfactual interpretation. For example:

(4.31) If I had time now/tomorrow, I would come to the party (but I don't have time, so I won't). An in-depth discussion of conditional and counterfactual constructions will be given in chapter 5. The general lines of the analysis are given here. Conditional constructions set up a hypothetical domain which is separate from speaker reality. The 'if' separates hypothetical reality from speaker reality and the FACTual domain. The space configuration constructed for the interpretation of the 'if _____ then ____' construction functions as a kind of informational frame which has a mapping potential. In conditional constructions, the 'if' clause sets up a hypothetical space (or set of spaces) which defines the matching conditions⁶⁷ which must be met in order for the information in the apodosis to optimize and map onto speaker reality, (i.e. to transfer out of the hypothetical domain to the "reality" domain).

The output of the dynamic interpretation of (4.31) is diagrammed in Figure 4.14 below:

⁶⁷ The notion 'matching' is proposed in Fauconnier (1990) and discussed in detail in Fauconnier (to appear).



For (4.31), the space builder 'if' cues construction of a hypothetical space M which is structured by the information 'I had time now/tomorrow'. Space M is PAST in relation to V-POINT/BASE and it is FOCUS. The hypothetical space is identified as a counterfactual space, since no space in the "reality" domain can be both PAST and refer to 'now' or 'tomorrow'. With interpretation of the apodosis, V-POINT shifts to space M and a PREDICTION space is set up from the V-POINT of the counterfactual space M where the FACT 'I have time' holds. FOCUS shifts from space M to FUTURE space M1. The counterfactual space defines the matching conditions which must be met in order for the PREDICTION to optimize: the event 'I have time' must hold as a FACT; it must hold as a FACT in a PAST space; and it must hold as a FACT within the temporal domain defined by the time adverb 'tomorrow' or 'now'. With a PAST counterfactual, optimization to speaker reality is not possible, since there is no FACT space which will meet the matching conditions of being both PAST and 'now' or both PAST and 'tomorrow'. The effect of the PAST as a matching conditions is that optimization is blocked. We know that the information belongs only to the counterfactual domain and not to speaker reality.

4.4.3.3 Simple Past in Counter-to-Fact Wishes

The PAST may also appear in wishing expressions with a present or future counterfactual interpretation. Examples (4.29) are repeated here as (4.32).

(4.32) a. I wish he were here.

b. I wish I lived closer to my family.

c. It's high time that child went to bed.

Palmer (1968) and Fillmore (1990) point out the close connection between expressions of wishing and conditional sentences. In Japanese in fact, expressions of wishing and hoping have the same form as conditional sentences; the apodosis is the judgement that the presence of the situation or event in the protasis would be good (Fillmore 1990). In Fillmore's analysis, wishing expressions indicate that the past, present, or future counterfactual state of affairs is positively valued by the speaker ('I wish he would come').

In mental space terms, the expression 'I wish' in (4.32a,b) cues construction of a separate wish space. In (4.32c), the expression 'It's high time' also cues construction of a separate wish type space. In each example, a wish space or domain is constructed for

present or future wishes; the wish domain is separate from speaker reality.⁶⁸ The wish space is structured by the embedded clause, which identifies the space as a PAST one. The wish space is counterfactual, since a there is no space in the domain of reality which is both PAST and 'now'. The temporal distance extends to include distance along the dimension of actuality. The function of the PAST and the counterfactuality derived from structuring the present wish space with the PAST is to limit the accessibility of the wish space. The resultant properties of the event or state of affairs in the wish space will not optimize to the higher parent space. Examples (4.33a) and (4.33b) give an idea of how blocking of optimization works.

- (4.33) a. I wish he were dead.
 - b. He was dead.

In (4.33b), the resultant properties of the PAST event or situation of his being dead may optimize into speaker reality from the PAST space via inferencing. We may assume, barring a resurrection, that he is also dead 'now' in speaker reality. In (4.33a), however, the resultant properties of his being dead will only hold in the counterfactual wish space. They cannot optimize out of the counterfactual space to speaker reality. Although he may in fact be dead 'now', we cannot assume or infer that he is dead 'now' from the information provided in (4.33a). In this way, the counterfactual wish space blocks optimization of information from the wish space to the "reality" domain. Counterfactual wish spaces are similar in function to the counterfactual conditional spaces, but in each case the counterfactual blocks optimization of a different set of information.

⁶⁸ Combined tense forms may set up a domain of spaces.

The Simple Past is also used for politeness forms. Examples (4.34) are repeated here.

- (4.34) a. I wanted to ask you a favor, (if I could).
 - b. Could you help me with this?
 - c. I hoped you might come tomorrow.

In these example, the interpretation is not a counterfactual one. The space set up is simply a PAST one. Rather than assert the request or comment in PRESENT speaker reality, the request is asserted in a PAST domain, in order to attenuate the directness of the request.⁶⁹ The PAST is not so odd in these examples, because unlike the counterfactuals, we may assume that a temporal interpretation of past-ness (of 'want', 'hope' and at least the desire to make the request 'can') is in some sense correct. The 'wanting' and the 'hoping' and the desire to make the request holds temporally both 'now' and at least in the time period immediately prior to 'now'.

Rather than assert the utterance directly in the domain of speaker reality, it is asserted in the PAST domain. The PAST is used to attenuate the request. Temporal distance is perhaps extended to express social distance, although the actual time value is stronger than in the case of counterfactuals. The PAST space is not a PAST counterfactual one, it is only a PAST space. Hence, the resultant properties of the event of state of affairs represented in the PAST domain can optimize to speaker reality. Rather

⁶⁹ (4.32c) has a kind of double attenuation with the PAST marking and the hope space. Pluperfects can also be used for a kind of double attenuation, as in 'I had hoped you might come tomorrow'. Similar examples are discussed in Fleischman (1989).

than make a direct request or comment, the speaker places the request/comment in a PAST domain and counts on optimization and the inferencing abilities of the hearer in order for the request/comment to transfer (i.e. optimize) to speaker reality and be interpreted as a PRESENT one.

4.5 IMPERFECTIVE and PERFECTIVE

The IMPERFECTIVE identifies a FOCUS space N and indicates that:

i) N is V-POINT

The PERFECTIVE identifies a FOCUS space N and indicates that:

i) N is not V-POINT

The IMPERFECTIVE indicates that a FOCUS space is also V-POINT. The PERFECTIVE indicates rigidly that the FOCUS space is not V-POINT. Neither the IMPERFECTIVE nor the PERFECTIVE express a time relation, nor do they put a space in FOCUS. Hence, the categories IMPERFECTIVE/PERFECTIVE are dependent on a tense category for FOCUS.

In many languages, the IMPERFECTIVE and PERFECTIVE are not grammatical categories, but rather, perfectivity is marked lexically by akstionsart of the verb and other lexical information which supports a particular reading. English is one such language. Typically, the IMPERFECTIVE combines with the PAST, as in the case of the French Imparfait.⁷⁰

Cross-linguistically, PRESENT IMPERFECTIVEs are possible but uncommon. I would suggest two reasons for this: First, typically a PRESENT space already has a V-

⁷⁰ The PAST IMPERFECTIVE is a marked category. A language may have a marked IMPERFECTIVE, as well as a marked PERFECTIVE. A language may also have a marked IMPERFECTIVE with an zero marked PERFECTIVE. However, in the cross-linguistic survey of Bybee and Dahl (1994), there was no language with zero marked IMPERFECTIVE and a marked PERFECTIVE. This suggests that the correct analysis of the IMPERFECTIVE is one where it adds information.

POINT. Specification of an additional V-POINT within the FOCUS space is redundant. Second, PRESENT PROGRESSIVEs are common and are able to handle the semantic territory where a V-POINT is needed specifically inside the EVENT. The availability of PRESENT PROGRESSIVE forms may also discourage PRESENT IMPERFECTIVEs, since the PROGRESSIVE form covers part of the semantic territory for which an IMPERFECTIVE might be needed.

4.5.1 French Imparfait vs. Passe Simple:

PAST IMPERFECTIVE and PAST PERFECTIVE

The French Imparfait combines the tense category PAST with the aspectual category IMPERFECTIVE. Interpretation of the PAST IMPERFECTIVE results in a space configuration as in Figure 4.15.

FIGURE 4.15

PAST IMPERFECTIVE

Step 1: PAST



Step 2: IMPERFECTIVE



As a result of the PAST, a PAST FOCUS space is set up in relation to a parent V-POINT space. The PAST FOCUS space may represent a time period of any size. The IMPERFECTIVE indicates that the PAST FOCUS space set up for the PAST, space M1, is also a V-POINT. Note that the V-POINT in space M may still be available, since space M is most likely BASE or perhaps a speech or thought space which carries its own strong V-POINT role.⁷¹

Under this account, the IMPERFECTIVE tells us what the relationship is between V-POINT and FOCUS. It does not tell us what the relationship is between the V-POINT and the structure of the event, although canonically the V-POINT is within the structure of the EVENT. Hence, the Imparfait allows an event, situation, or a series of events to be construed from a V-POINT which is internal to the FOCUS space. It can be used for both imperfective events/states, where the V-POINT is event internal, or with past habituals where the V-POINT is not internal to the event.⁷²

The subjective feelings of closeness to the event or saliency of the event associated with the IMPERFECTIVE arise from the tight pragmatic link which is made between our own V-POINT and the V-POINT indicated by the IMPERFECTIVE.⁷³ The aspectual V-POINT may carry only the deictic dimension of time or it may carry additional deictic

⁷¹ Speech and thought spaces have a number of special properties, including the presence of a strong V-POINT role associated with the experiencer. For a discussion of tense in indirect speech, see chapter 6.

⁷² Doiz (ms., UCSD dissertation in progress) also argues that the central parameter which characterizes the preterite and imperfect in Spanish is the difference in viewing arrangement, i.e. viewpoint. The difference in viewing position is used to account for a wide range of problematic Spanish tense-aspect data.

⁷³ In chapter 7, I investigate pragmatic links which can be established between different V-POINTs.

dimensions which make it a stronger version of V-POINT than that used for combined tense forms such as the PAST or FUTURE PERFECT.⁷⁴

The output of the Imparfait (PAST IMPERFECTIVE) in Figure 4.15 above may be contrasted with the output of the Passe Simple (PAST PERFECTIVE) which results in a space configuration as in Figure 4.16.

FIGURE 4.16

Passe Simple (PAST PERFECTIVE)



The Passe Simple is not an IMPERFECTIVE, so no V-POINT is indicated within the PAST FOCUS space. In contrast to the Imparfait, with the Passe Simple, an event or situation is construed from a V-POINT which is completely external to the FOCUS space. This is in contrast to the English Simple Past, which is only a PAST and hence, is neutral in terms of perfective/imperfective aspect. The English Simple Past will be set up in relation to a V-POINT, but does not specify whether or not a V-POINT is placed in the FOCUS space.

⁷⁴ Imperfectives are often characterized as encoding an experiencing consciousness.

As a true PERFECTIVE, the Passe Simple adheres quite rigidly to a configuration where V-POINT is external to the PAST FOCUS space, external to the PAST domain structured by the Passe Simple. The Passe Simple is the historical tense, par excellence. The subjective feelings of detachment which arise from the use of the Passe Simple are a result of the rather strict restriction which the Passe Simple places on V-POINT and the pragmatic link between our own V-POINT and the V-POINT indicated by the Passe Simple, a V-POINT which is external to the PAST domain. Again, the aspectual V-POINT may carry only the deictic dimension of time or it may carry additional deictic dimensions which make it a stronger version of V-POINT. The Passe Simple may be contrasted with the English Simple Past which is not associated with such strong subjective detachment and which is neutral in terms of whether the FOCUS space is V-POINT.

An analysis where the Imparfait indicates a V-POINT in the FOCUS space and the Passe Simple rigidly indicates a V-POINT external to the FOCUS space will allow us to explain not only commonly acknowledged semantic properties of the Imparfait, but also certain distributional properties of the Imparfait in contrast to the Passe Simple, namely the Imparfait's behavior as a modal in the Future of Past, as an auxiliary in the Plus-que-Parfait, and its behavior in the protasis of conditional constructions.

4.5.2 Imparfait as an Auxiliary/Modal

Certain distributional facts of the Imparfait and the Passe Simple are explained under the analysis proposed here. First, only the Imparfait and not the Passe Simple may used as a modal/auxiliary. For example:

(4.35) a. Il allait [Imparfait] venir.

- b. *Il alla [Passe Simple] venir.
- c. *Il est alle [Passe Compose] venir
 - 'He is going to come'

The Imparfait is the tense chosen for the auxiliary in the case of the Future of the Past (PAST FUTURE). In the PAST FUTURE, the first link (PAST) will set up a PAST space from V-POINT/BASE. The PAST space becomes V-POINT and parent for a FUTURE PREDICTION space set up for the interpretation of the second link (FUTURE). The output of the interpretation of (4.35a) is diagrammed in Figure 4.17 below.

'Il allait venir'



FIGURE 4.17

The fact that the Imparfait and not the Passe Simple (or Passe Compose) is chosen for the FUTURE of the PAST is explained under the analysis where the Imparfait signals a V-POINT in the PAST FOCUS space, but the Passe Simple does not. In order for the FUTURE PREDICTION space, space M1, to be built, V-POINT must be in the parent space. The space construction cued by the Imparfait is consonant with this V-POINT, while the space configuration cued by the Passe Simple is not.

The fact that the Imparfait is also the tense chosen for the auxiliary in the Plusque-Parfait, a PAST PERFECT, is also explained under this analysis. We will return to this point in section 4.8.2.

4.5.3 Imparfait in Conditional Protasis

The analysis of the Imparfait given here is also consonant with the behavior of the Imparfait in conditional constructions. For example:

(4.36) Si elle avait [Imparfait] froid, elle mettrait [Conditional Present] un manteau.'If she were cold, she would put on a coat'.

Interpretation of the protasis of (4.36) sets up a counterfactual space M. That space is structured by the Imparfait expression which sets up a V-POINT in the counterfactual space M. From the V-POINT of the counterfactual space, a PREDICTION is made about a future event. The output of the dynamic interpretation of (4.36) is diagrammed in Figure 4.18.

FIGURE 4.18

'Si elle avait [Imparfait] froid, elle mettrait [Conditional Present] un manteau'



With example (4.36) a PREDICTION is made about an event from a V-POINT in the counterfactual PAST FACT space. Interpretation of the protasis sets up a PAST space M from V-POINT/BASE. V-POINT shifts to space M. Space M becomes parent for space M1 set up for interpretation of the second clause, the apodosis. The structure here is the same as in the case of PRESENT hypotheticals, where a PREDICTION is made from a hypothetical PRESENT FACT space. Since the apodosis 'elle mettrait un manteau' encodes a PREDICTION from a certain V-POINT, namely a V-POINT in the PAST counterfactual space, we would expect the Imparfait (PAST IMPERFECTIVE) to be a suitable tense category for structuring the counterfactual space, since it indicates a V-

In contrast to the Imparfait, the Passe Simple cannot occur in protasis of the typical conditional construction with the structure '*if* FACT --> *then* PREDICTION', where the apodosis is conditioned on the realization of event or situation in the protasis. This is shown by the unacceptability of (4.37).

(4.37) ** Si elle eut [Passe Simple] froid, elle mettrait un manteau.

'If she were cold, she would put on a coat'.

For the PREDICTION to be made from the counterfactual space, a V-POINT in that counterfactual space is needed. The Passe Simple is not a suitable tense category for structuring the counterfactual space because it rigidly indicates a V-POINT external to the space which it structures. In the protasis, the Passe Simple gives instructions for the location of the V-POINT which are in conflict with the V-POINT needed for the PREDICTION space set up for interpretation of the apodosis.

Although its occurrence is rare, the Passe Simple may appear in certain hypothetical conditional constructions where the conditional relationship is an epistemic one (Sweetser 1990), between a FACT and a FACTual conclusion, as in (4.38).

(4.38) S'il eut beaucoup d'enfants, il fut sans doute heureux.

'If he had a lot of children, he was no doubt happy'.

⁷⁵ An in-depth discussion of conditional constructions and counterfactuals is given in the following chapter.

(4.38) may be paraphrased: "If I know that he had children, then I conclude that he was no doubt happy". Hypothetical conditionals such as (4.38) have a different space embedding structure than counterfactuals such as (4.36) and (4.37), and hence exhibit looser restrictions on the possible tense combinations. The structure proposed for (4.38) is diagrammed in Figure 4.19 below.







In this structure, the V-POINT is external to both spaces. These structures of different types of conditional constructions will be discussed in detail in chapter 5. Since the

conditional relationship is an epistemic one, there is no PREDICTION from a counterfactual space. Only a conclusion made based on a FACT in a hypothetical domain. The V-POINT is exterior to both spaces and hence, the Passe Simple in the protasis does not result in a V-POINT conflict.

4.6 The PRESENT PERFECT

4.6.1 The PERFECT

PERFECT identifies or cues construction of an EVENT space N. It indicates that:

- i) N is not in FOCUS
- ii) N's parent is V-POINT
- iii) N's time is prior to that of V-POINT⁷⁶
- iv) space N has certain relational properties vis-a-vis its parent space (accessibility)

The PERFECT combines with tense categories PAST, PRESENT, and FUTURE, which provide a parent FOCUS space. From the FOCUS parent space (which is V-POINT or which becomes V-POINT), the PERFECT sets up or identifies a non-focus EVENT space. The EVENT space is prior to the parent V-POINT, though not necessarily prior to the whole time period represented in the parent space. The PERFECT specifies a temporal relationship between V-POINT and an EVENT space; that relationship is a "prior" one. Like all time spaces, an EVENT space may represent a time period, a slice of time of any size. The EVENT space may include a time period up to the V-POINT of its parent space. Properties in the EVENT space may be inherited into the parent space, including properties associated with completion of the event.⁷⁷

⁷⁶ N's time is prior to V-POINT, but not necessarily prior to the whole temporal frame of the parent V-POINT space.

⁷⁷ The PERFECT is similar to the PROGRESSIVE in certain respects. Both the PROGRESSIVE and the PERFECT specify a temporal relationship between V-POINT and the EVENT space. With both the PROGRESSIVE and the PERFECT, certain

Our basic conception of time is in terms of single time periods, however, speakers sometimes need to express events or situations which involve two (or three) distinct, adjacent time periods. The PERFECT offers the speaker a way to do just that. By cueing the construction of an additional non-FOCUS EVENT space, the PERFECT allows the separation of EVENT from FOCUS. By establishing a link between V-POINT and EVENT, the PERFECT gives the speaker a way to link two time periods together, while still maintaining the partitioning between the two.⁷⁸

4.6.2 English Present Perfect

The PRESENT PERFECT is a combined tense-aspect category, encoded in English by the Present Perfect. The internal structure of the English Present Perfect, composed of the auxiliary 'have' in the Simple Present tense and a Past Participle, as in (4.39), reflects this combination.

(4.39) George has bought a new Mercedes.

The output of the PRESENT PERFECT expression (4.39) is diagrammed in Figure 4.20. The treatment here adds to Dinsmore's (1991) account of the Present Perfect, which

properties are inherited from the EVENT space to the parent FOCUS/V-POINT space.

⁷⁸ Other "tricks" for linking time periods are possible. For example, the English Present Perfect 'I have been here for 2 months' would be translated in French as 'je suis ici depuis 2 mois' ('I am here for two months/since two months ago'). In French, in order to link past and present the whole past/present time period is construed as PRESENT.

subsumes Reichenbach's (1947) notion of reference time as a special case of FOCUS.79

FIGURE 4.20

'George has bought a new Mercedes'



The PRESENT tense marking, carried by the auxiliary 'HAVE' identifies or cues construction of a PRESENT FOCUS space. In this de-contextualized sentence, the PRESENT space is speaker reality, space R, by default. The PRESENT FOCUS space R serves as parent and V-POINT; from space R the PERFECT cues construction of an EVENT space M, which is prior to V-POINT. The full structure of the event 'BUY' is represented only in space M. An entity **a**, named George, is constructed in space R and linked to its counterpart **a'** in space M. The object entity **b**, a 'Mercedes', is constructed in space M. Via default inferencing, a counterpart of **b**, entity **b'**, is constructed in space R. We know that if George bought a new Mercedes, it exists as an entity in speaker reality, barring some terrible mishap. Properties in the EVENT space associated with completion of the event may also be inherited into the parent space. Again, optimization is defeasible in the case of conflicting information.

⁷⁹ Reference time is defined as the temporal value of the space which is FOCUS.

Since the EVENT space is a time space, the time period represented in the EVENT space may vary in size. It may represent any prior time period up until V-POINT. The EVENT space is prior to the V-POINT in the parent space, although not necessarily prior to the whole time period represented in the parent FOCUS space. This point may be illustrated with the following examples:

(4.40) a. John has arrived.

- b. Sam has visited Sweden (many times).
- c. I've lived in San Diego for 7 years.
- d. George has seen a psychiatrist for years.

For (4.40a), the time period represented in the EVENT space need only be large enough to accommodate the arrival. For (4.40b), the EVENT space need only be large enough to accommodate the visit (or set of visits) to Sweden. For (4.40c), the EVENT space represents a time period of 7 years up until V-POINT. The EVENT space may also be an habitual space, as in the case of (4.40d), with all the usual frame-like properties of habitual spaces. The expression 'for years' defines the time period over which the habitual frame applies.

The distinction between the PERFECT/non-PERFECT allows the speaker to refer to past events without shifting the FOCUS from a PRESENT to a PAST space. The Present Perfect may be used to encode a past event, a series of past events, a habitual property, or an event or situation which belongs to both past and present temporal frames. In terms of the space it puts in FOCUS, the Present Perfect functions as a PRESENT tense. In certain respects, this mental space treatment of the Present Perfect is similar to the analysis of Klein (1992), although it differs in several important respects. In the following two sections, some evidence in support of the mental space analysis will be offered. In section 4.6.5, I will briefly discuss the approach of Klein (1992), and point out the advantages of the mental space analysis presented here.

4.6.3 Evidence for Mental Space Analysis: Time Adverbs

One strong piece of evidence for the mental space analysis of the Present Perfect is provided by the ungrammaticality of combining certain adverbials with the Present Perfect. Researchers have often noted that the Present Perfect cannot cooccur with time adverbials which give a specific time reference. Dahl (1985), for instance, tells us that "the English Present Perfect does not in general go very well together with definite time adverbials". He gives the following example as an illustration:

(4.41) *I have read this book yesterday.

The Present Perfect may however cooccur with temporal adverbs which refer to the present temporal frame. For example:

(4.42) a. I have read this book today.

b. I have discovered many things today.

c. Now I have finished my coffee and we can go.

Under the mental space analysis given here, the unacceptability of example (4.41) and the acceptability of examples (4.42) may be explained in a simple manner. The Present Perfect may cooccur with present temporal adverbs quite acceptably because the tense/adverb combination cues construction of a unified structure. Both the tense and the temporal adverb put the same PRESENT space in FOCUS. In contrast, the Present Perfect and a past time adverbial as in *'*I have read the book yesterday*' do not constitute a unified utterance, because they do not cue construction a unified mental space configuration. The output of the interpretation of (4.41) is given in Figure 4.21.

FIGURE 4.21

* 'I have read this book yesterday'



This utterance is unacceptable for a number of reasons. First, the time adverbial "yesterday" and the Present Perfect event signal two different FOCUS spaces. While the Present Perfect indicates a PRESENT FOCUS space, the space builder "yesterday" indicates that the FOCUS space is PAST. Second, the past EVENT space is assigned both a FOCUS and a non-focus status.

Similar principles are at work in discourse, explaining the difficulty in the following interchange (from Dahl 1985):

(4.43) What happened yesterday at 2 o'clock?

- *? I have met your brother.

The question sets up a PAST FOCUS space and we expect the response to be about that PAST FOCUS space. The response given in (4.43), however, sets up a PRESENT FOCUS space (speaker reality by default), and a defocalized EVENT space which is prior to the PRESENT FOCUS space. Even though both utterances are "about" the same past event or situation, each assigns a different status to the EVENT space, and puts a different space in FOCUS.

With the Present Perfect response, the FOCUS shifts to a PRESENT space. The PAST FOCUS space, also an EVENT space by default, becomes merely an EVENT space. This violates the Discourse Principles laid out in chapter 3. According to Discourse Principle 9, an EVENT space can be FOCUS, or EVENT can shift to FOCUS or to a new space which is daughter of V-POINT. In example (4.43), the EVENT space is not FOCUS, nor does it shift to FOCUS, nor does it shift to a new daughter space. Thus, the move whereby a PAST FOCUS space becomes merely an EVENT space is disallowed.

The opposite is not true. An EVENT space can become a FOCUS space as shown by example (4.44).

(4.44) Have you met my brother?

- I met him yesterday at 2 o'clock.

In this example, the first sentence sets up a PRESENT FOCUS space and a prior EVENT space. With the second sentence, the EVENT space set up by the question becomes a PAST FOCUS space. This move, where FOCUS shifts to EVENT, is allowed by Discourse Principle 7 (see chapter 3). The shift in FOCUS is marked not only by tense but also by the past time adverbials "yesterday" and "at 2 o'clock", which give a precise location to the EVENT/FOCUS space.

4.6.4 Evidence of Analysis: Implication of Existence

A further piece of evidence for the mental space analysis has to do with the oftnoted implication of existence associated with the Present Perfect subject. Consider example (4.45):

(4.45) ??Shakespeare has written a new play.

(4.45) is somewhat odd because it carries the implication that Shakespeare is still living; and this is contrary to what we know about the world. Under the mental space analysis, this implication may be explained quite naturally. If the Present Perfect structures a PRESENT space, in this case space R by default, then the entity, 'Shakespeare', is represented in that PRESENT space. This is represented in Figure 4.22.

FIGURE 4.22

?? 'Shakespeare has written a new play'



The entity **a'** in space M is accessed via its counterpart entity **a**, Shakespeare, in space R. Via inheritance and optimization, the parent and daughter space will be structured so as to be maximally similar. Entity **a** and **a'** are expected to have the same properties in both spaces, the capacity to be the agent of the activity 'WRITE'. Another difficulty is that with the PRESENT PERFECT, the resultant properties associated with the completion of the event represented in the EVENT space are inherited into the parent space. The resultant property of producing a new play will be inherited into space R; but this is bizarre because we know that Shakespeare's plays can no longer be considered as new.

In contrast to (4.45) above, (4.46) is acceptable.

(4.46) Shakespeare has been dead for several centuries.⁸⁰

⁸⁰ This example was provided by Ron Langacker.

In the EVENT space constructed for the interpretation of (4.46), the entity Shakespeare is assigned the property of being dead. This property may be inherited into speaker reality without a problem because it does not conflict with what we know about the world.

4.6.5 Comparison of Mental Space Approach to Klein (1992)

The analysis of the Present Perfect in terms of FOCUS and EVENT space may be contrasted with the analysis of Klein (1992). Klein characterizes the Present Perfect with three temporal notions which represent temporal spans: TU (the time of utterance); Tsit (time of situation); and TT (topic time). Tsit, the time of the situation, refers to the time that the event or situation actually holds. It is linked to INF-time, the time related to the nonfinite component. TT, topic time, is the "time span to which the claim made on a given occasion is constrained" (1992:535). It is linked to FIN-time, the time related to the finite component. TU, Tsit, and TT correspond roughly to the mental space notions of BASE, EVENT, and FOCUS.

In Klein's analysis, tense is a relation between TT and TU, it imposes a temporal constraint on the claim made in the utterance. Aspect is how Tsit corresponds to TT. Perfect tenses combine both tense and aspect. The tense of the auxiliary tells us the relationship between TT and TU. The perfect indicates that TT is "posttime" of Tsit; posttime simple means that it is after Tsit. Aspect does not specify the exact nature of the relationship between TT and Tsit. Tsit may be immediately precede TT, but it may also be in the distant past.

Klein's analysis is aimed at accounting for the different behavior which time

adverbs have with the Past, Present, and Future Perfects, while maintaining the structural parallelism between these different Perfects.

(4.47) a. John had eaten dinner at 6.

b. John will have eaten dinner at 6.

(4.48) a. *John has eaten dinner at 6.

b. John has now eaten dinner.

With the Past and Future Perfect as in (4.41), the time adverb may refer either to TT (time marked by tensed auxiliary) or to Tsit (time of situation 'eat'). With the Present Perfect, however, a time adverb cannot refer to Tsit, as shown by the unacceptability of (4.48a); a time adverb can only refer to TT, as in (4.48b).

In order to account for this difference, he proposes a P-Definiteness Constraint:

(4.49) **P-Definiteness Constraint:**

In an utterance, the expression of TT and the expression of Tsit cannot both be independently p-definite.

An expression is p-definite if it explicitly specifies the position of a time span in relation to TU (time of utterance), if it fixes the event or situation at a definite position on the time axis in relation to TU. The P-Definiteness Constraint rules out examples such as (4.50).

(4.50) *At seven, Chris had left at six.

'At seven' fixes a definite position for TT and 'at six' fixes a definite position for Tsit. Since both TT and Tsit are p-definite, (4.50) is ruled out by the P-Definiteness constraint.

Conveniently, the meaning of the Present tense is p-definite. While Past and Future events may proceed or follow each other, Present events cannot. A set of present time spans must overlap, since Present tense events are fixed in relation to TU. Since the Present tense is p-definite, with the Present Perfect, TT is always p-definite; therefore, time adverbs cannot refer to Tsit, since this would violate the P-Definiteness Constraint. The Past and Future tenses are not p-definite, so with Past and Future Perfects time adverbs may refer to either TT or Tsit but not both.

Klein's analysis is similar in many respects to the mental space analysis proposed here. First, his notions TU, Tsit, and TT correspond roughly to the mental space notions of BASE, EVENT, and FOCUS. Tsit may represent a time space up until TT; EVENT may represent a time space up until FOCUS. Second, as in the mental space approach, Klein views time intervals ('time spans'), rather than time points, as the relevant entities for temporal reference. Third, the effect of the P-Definiteness Constraint is similar in effect to the mental space Discourse Principle 1, which allows only one final FOCUS space can be output for any given clause. In Klein's analysis, two fixed time specifications are not possible within a sentence. In the mental space analysis, two FOCUS spaces are not possible for the output of a single clause. Finally, in Klein's analysis the Present is pdefinite. Similarly, in the mental space account, since the Present is the tense marker, it always indicates FOCUS.

What is different about the two analyses is the handling of the Past and Future
Perfect. No examples of Future Perfects in relation to time adverbs are discussed in Klein's article, so we will not discuss them here. We may assume that the analysis for Future Perfects is parallel to that of Past Perfects. In the mental space account, the Present Perfect is a true PRESENT PERFECT; only the PRESENT space may be FOCUS. The Past Perfect may encode either a PAST PERFECT or a PAST of PAST (see section 4.8 for a discussion of this). In either reading, the Past Perfect sets up two spaces in addition to the space to which the access path anchors, typically space R. One of those spaces is a PAST space, the targeted space is EVENT or FOCUS. As a PAST PERFECT, the targeted space is an EVENT space and its parent is FOCUS. As a PAST of PAST, the targeted space is FOCUS. The different FOCUS possibilities encoded by the Past Perfect accounts for the different anchorings available for the time adverb. Only FOCUS spaces can be, using Klein's term, p-definite.

There are a number of advantages to the mental space approach taken here. First, the P-Definiteness Constraint is a pragmatic constraint proposed only for an analysis of Perfects, and hence, in the manner presented is ad-hoc. In contrast, the notions of FOCUS and EVENT, and Discourse Principle 1 (which allows only one FOCUS space) are independently motivated within the mental space account. In mental space theory, there is no division between the work of the semantic and pragmatic components. The same results are achieved in mental space theory with no need for an extra pragmatic constraint.

Second, it is not clear how Klein would handle the many cases where Present events do not in fact overlap, where the Present encodes a series of perfective events or non-ordered habitual events.⁸¹ In these cases, the Present appears to be non p-definite, since it is not fixed in relation to speech time, but the same restrictions on the time adverbs which may cooccur with the Perfect still hold.

Third, as Klein agrees, temporal semantics are most appropriately represented in terms of time spans rather than time points. With mental space theory, the notion of time spans comes with the theory for free.

Fourth, in the mental space approach, the PERFECT defines a relationship between V-POINT and EVENT, not between FOCUS and EVENT. The EVENT space may represent a time span up until V-POINT; hence, if FOCUS represents a time span and EVENT represents a time span up until V-POINT, parts of the FOCUS and the EVENT may overlap temporally. This is important for examples where the event or situation continues up until now, as in 'I have now lived in San Diego for 7 years'. For Klein, the perfect aspect defines a relationship between TT (i.e. FOCUS) and Tsit (i.e. EVENT). In order to represent an event or situation that continues up until 'now', up until the speech event or the speaker's moment of consciousness, TT can be no larger than TU (time of utterance) or it will result in a gap between the initial boundary for TT and the exact time TU (time of utterance). In this gap, the situation represented in Tsit does not hold, since TT is posttime to Tsit.⁸²

⁸¹ Klein's analysis, which links the Present tense to TU (time of utterance), inherits all of the difficulties of the standard treatment of the Present, which links the Present event to speech time. These difficulties were pointed out in chapter 1 and are treated throughout the dissertation.

⁸² This is important for examples such as 'Today, John has been with the company for 7 years'. TT, topic time, is the time space to which the claim made on a given occasion is constrained, in this case 'today'. It includes but is larger than TU, time of utterance.

Fifth, the mental space approach has the additional advantage of accounting for similar phenomena in discourse, such as (4.51).

(4.51) a. What happened yesterday at 2 o'clock?

- * I have met your brother.

b. I talked to Chris at 7. He had left at 6.

The response in (4.51a) is not ruled out under Klein's account. Presumably, (4.51a) is ungrammatical because TT is fixed time (p-definite) and Tsit is assigned a fixed time '2 o'clock' (p-definite), although this is fixed across clause boundaries. In order to handle (4.51a) Klein would need some kind of P-Definiteness Constraint which applies across clause boundaries. However, such a constraint would incorrectly predict that (4.51b) is unacceptable. With the Past Perfect, both TT and Tsit can be P-definite across clause boundaries.

Under the mental space approach, (4.51a) is accounted for as discussed in section 4.6.3 above. The Discourse Principles proposed in chapter 3 prevent an EVENT/FOCUS space from becoming merely an EVENT space. For (4.51b), the expression 'I talked to Chris at 7' structures a PAST FOCUS space, space M. The Pluperfect 'he had left' may encode either a PAST PAST or a PAST PERFECT. In this case, we know that the expression 'he had left at 6' is a PAST of PAST, since 'at 6' defines the time of leaving, not the auxiliary time. The first PAST identifies FOCUS space M. With the second PAST, space M becomes parent and V-POINT for another PAST space M1, set up as a daughter of space M. Space M1, the target space, becomes FOCUS. At 7 refers to the FOCUS space for the first sentence, but FOCUS shifts for the second.

Finally, I raise the question of whether or not it is important to "capture the parallel composition of different perfects", since this is one of the guiding assumptions of Klein's article. We might expect that Present and Past (as well as Future) Perfects to behave in different ways, since each has developed under a different set of diachronic pressures. Cross-linguistically, we know that Present Perfect markers tend to develop into Past Perfective markers. This suggests that EVENT spaces diachronically tend to turn into FOCUS spaces, i.e. allow definite time reference. This is consonant with the synchronic Discourse Principles proposed here. English has no true PAST of PAST marker (besides the Pluperfect). Diachronically, we would expect a the marker of a true PAST PERFECT to take on the additional semantic territory of a PAST of PAST meaning. In contrast, we would expect the PRESENT PERFECT to become a PAST (of PRESENT) more slowly since there are other competing markers which cover the same semantic territory. Since the diachronic pressures are not the same, we might expect the synchronic results to be different.

4.7 French Passe Compose:

4.7.1 PRESENT PERFECT or PAST??

In the standard characterization, the perfective situation or event is viewed as a single, bounded whole (Comrie 1976). Modern French has two non-IMPERFECTIVE past tenses: the Passe Simple and the Passe Compose. The choice is for the most part genre dependent. In standard French, the Passe Simple is found almost exclusively in formal written narrative, although it remains in the language in certain non-standard dialects. The Passe Compose is used principally in the spoken language and in informal written narrative. We will concern ourselves here with the Passe Compose.

The Passe Compose is derived from the Old French Present Perfect, formed by the Present tense of the auxiliary, 'avoir' or 'etre' (to have or to be), followed by a past participle. The Passe Compose typically functions as a preterite/perfective marking past, completed events. For example:

(4.52) Hier, j'ai ecrit deux lettres.

'Yesterday, I wrote two letters.'

However, the diachronic transformation of the Passe Compose from a present perfect to a preterite/perfective appears to be incomplete; the Passe Compose retains significant properties of the Present Perfect. As Imbs (1960) notes, for example, in many cases the Passe Compose may express current relevance.

(4.53) La campagne presque incroyable du Daily Herald et la vivacite des reactions de la presse francaise montrent a l'evidence que la querelle du Marche commun a laisse des traces.

'The almost unbelievable campaign by the Daily Herald and the strength of the reaction from the French press shows that the quarrel of the common market has left after-effects'. (Le Figaro, 8/19/59, cited in Imbs 1960)

(4.54) L'Europe des patries a remplace l'Europe des hautes autorites.'The Europe of motherlands has replaced the Europe of high authorities' (ibid, cited in Imbs 1960)

In these examples, the Passe Compose plays a role in establishing the current relevance of a past event. In mental space terms, it establishes a relationship of relevance between a past event and a PRESENT space. The Passe Compose indicates current relevance in a way that cannot be reproduced if the Passe Compose form is changed to the Passe Simple.

Given that the Passe Compose may function either as a Present Perfect or a preterite, the Passe Compose may be analyzed as cueing the construction of one of two possible space configurations: one which corresponds to a perfective reading, as in Figure 4.23 and one which corresponds to an imperfective reading, as in Figure 4.24.

FIGURE 4.23

Passe Compose: PAST perfective reading





Passe Compose: PRESENT PERFECT reading



In the most common interpretation, the Passe Compose structures a PAST FOCUS space. For example:

(4.55) Hier, j'ai termine/lu le livre.

'Yesterday, I finished/read the book'.

The space configuration set up for (4.55) would correspond to the perfective meaning diagramed in Figure 4.23 above. As a perfective, the Passe Compose structures a PAST FOCUS space, hence the acceptability of the past time adverbial.

The Passe Compose may also structure a PRESENT FOCUS space, given the proper contextual support. Consider:

(4.56) a. ? Maintenant, j'ai lu le livre.

'Now, I read/have read the book.'

b. Maintenant, j'ai lu le livre ... et je vais faire quelque chose d'autre.

'Now, I have read the book .. and I'm going to do something else.

For most speakers, the cooccurence of the Passe Compose with present time adverbials is somewhat odd in the case of a simple, de-contextualized utterance, as in (4.56a). However, a present time adverbial is perfectly acceptable given a contextual setting which primes the current relevance of the past event, as in (4.56b) or in examples (4.53) and (4.54) above. The interpretation of the Passe Compose in (4.56b) corresponds to the PRESENT PERFECT reading diagrammed in Figure 4.24 above.

The behavior of the Passe Compose in (4.56) may be contrasted with that of the

Passe Simple in (4.57).

(4.57) a. *Maintenant, il termina le livre.

'Now, he finished the book'

b. *Maintenant, il termina le livre ... et il va faire quelque chose d'autre.'Now, he finished the book and he is going to do something else'

The Passe Simple does not occur with present time adverbials, where the present time adverb and the Passe Simple refers to 'now' or speaker reality, as illustrated by the unacceptability of (4.57).⁸³

This analysis also allows us to account for the cooccurence of the Passe Compose with future time adverbs as in the following example from (Imbs 1960).

(4.58) J'ai termine [Passe Compose] dans un instant.

'I have finished/will be finished in a second'

In (4.58), the Passe Compose cooccurs with a future time adverbial and has an interpretation of futurity. If the Passe Compose may function as a PRESENT PERFECT and indicate a PRESENT FOCUS space, then this phenomenon is not unexpected. As discussed in section 4.1, the PRESENT designates a space only as non-prior to BASE. Events which are posterior to BASE may be encoded with the PRESENT where those events are construed as FACT. A PRESENT is appropriate for (4.58) because the speaker wants to assert in the strongest possible way the finishing as a FACT, rather than

⁸³ As Vuillaume (1990) has pointed out, the Passe Simple in narrative may in fact cooccur with present time adverbs where the time adverb refers to the 'now' of the past story world.

as a PREDICTION. Since a PRESENT space is non-prior to BASE, the PRESENT can be used for (real-time) future events. The full structure of the event is represented only in the EVENT space. The PRESENT FACT FOCUS space inherits the properties associated with the state which results from completion of the event. Use of the PRESENT PERFECT, in place of a PRESENT, strengthens the notion of completion.

In the analysis given here, the Passe Compose may cue either a PRESENT or a PAST FOCUS space. This analysis allows us to account for the cooccurrence of the Passe Compose with past, present, and future time adverbials. As will be shown in the following section, this analysis also allows us to account for the behavior and distribution of the Passe Compose in conditional constructions.

4.7.2 Passe Compose in Conditional Protasis

In the protasis ('if clause') of content level conditionals, the Passe Compose also behaves like the Present. In content level conditionals, the realization of one event or situation is conditioned on the realization of another event or situation. In mental space terms the conditional relationship has the structure 'if FACT --> then PREDICTION'; a PREDICTION space is set up in relation to a V-POINT in a hypothetical FACT space. The textbook concordance rules for conditionals refer to this type of content level construction. As we will see in the discussion that follows, and in the following chapter, other types of conditional constructions are possible which do not follow these concordance rules.

Modern French has what appears to be a strict set of concordance rules which

apply to content level conditional constructions (4.59).

(4.59) Concordance Rules:

PROTASIS: ('si' clause)		APODOSIS:	
Present		>	Future
Passe Compose	>	Future	
Imparfait	>	Conditional Present	

If the protasis is in the Imparfait, a PAST tense, the apodosis will be in the Conditional. If the protasis is in the Present or Passe Compose, the apodosis is in the Future. These rules are exemplified in (4.60) below:

- (4.60) a. Si demain le mal a empire [Passe Compose], vous me rappellerez [Futur].'If tomorrow the bad has won/wins, you will call/tell me.'
 - b. Si demain le mal empire [Present], vous me rappellerez [Futur].

'If tomorrow the bad wins, you will call/tell me.'

- c. Si le mal empirait [Imparfait], vous me rappelleriez [Conditional Present].'If the bad won, you would call/tell me'.
- d. *? Si le mal empira [Passe Simple], vous me rappellerez [Futur].'If the bad won, you will call/tell me'.
- e. *? Si le mal empira [Passe Simple], vous me rappelleriez [Conditional Present].'If the bad won, you would call/tell me'.

Under an analysis where the Passe Compose may structure a PRESENT space, these distributional facts fall out automatically. In hypothetical constructions, the Passe Compose patterns like a PRESENT, rather a PAST. In contrast, neither the French Passe

Simple nor the Imparfait can pattern like the Passe Compose and Present. The Passe Simple is not allowed in content level conditionals, as shown by the unacceptability of

(4.60d). The Imparfait cooccurs only with a Conditional Present as in (4.60c).

In content level conditionals such as (4.60a), the Passe Compose behaves like a PRESENT, cueing a PRESENT FOCUS space. The Passe Compose may also behave like a PAST, cueing a PAST FOCUS space in conditionals such as (4.61).

(4.61) a. Si vous avez revele [Passe Compose] ca, c'etait [Imparfait] pour nous troubler. 'If you revealed that, (that means) it was (done) in order to trouble us.
b. Si vous etes parti [Passe Compose], vous avez eu [Passe Compose] raison. 'If you left, (that means) you were right/you had good reason to.
c. S'ils se sont recontres, ils se sont parle. 'If they met, (that means) they spoke'

In these conditionals, the conditional relationship is between hypothetical knowledge of a past event and a conclusion which would be drawn based on the knowledge of past event. These are what Sweetser refers to as 'epistemic conditional', the causal link is between knowledge and a conclusion ('if I know X, I can conclude Y'). In mental space terms, the relationship is between a hypothetical PAST FACT and a FACtual conclusion about another PAST FACT.

In content level conditionals, the Passe Compose cues a PRESENT FOCUS space. In epistemic conditionals, the Passe Compose cues a PAST FOCUS space. The dual function of the Passe Compose proposed here allows us to account for these facts. A more in-depth discussion of conditional constructions will be given in chapter 5.

4.8 PAST PERFECT and PAST PAST (PAST of PAST)

4.8.1 English Pluperfect

Both the PAST PERFECT and the PAST PAST are encoded in English by the Pluperfect, composed of the auxiliary 'have' in the Simple Past followed by the Past Participle.⁸⁴ For example:

(4.62) Leopold had finished his project last Friday at 6.

In contrast to the Present Perfect, with the English Pluperfect a time adverbial can refer either to the time of the auxiliary 'have', in this case some point posterior to the finishing, or the time adverbial may specify the temporal location of the actual event, in this case the finishing.

Two readings are available for (4.62). In one interpretation, the PAST PERFECT reading, 'last Friday' serves as a V-POINT prior to which Leopold finished his project. This reading is made clearer by the context in example (4.63).

(4.63) Today is Tuesday. I talked to Leopold last Friday.

Last Friday, he had already finished his project. (He finished it Thursday).

The output of the PAST PERFECT interpretation of (4.63) is represented in Figure 4.25.

⁸⁴ The structure of the combined category, at least in the case of the PAST PERFECT, is reflected in the morphological structure of the Pluperfect. We would not expect morphological encoding to reflect the structure in all cases or in all languages.

FIGURE 4.25

PAST PERFECT (V-POINT/FOCUS) reading: 'Last Friday, he had already finished his project'



In the PAST PERFECT interpretation, a PAST FOCUS space M is set up in relation to the V-POINT/BASE. As a result of the PERFECT, V-POINT shifts to space M and a non-FOCUS EVENT space, space M1, is created. These spaces, M and M1, are internally structured by the information in (4.62). With the PAST PERFECT, the targeted space is an EVENT space which is prior to a V-POINT in a PAST FOCUS space. The access path to that EVENT space is a complex one, from BASE space R to space M to space M1. The PAST PERFECT interpretation may be referred to as the V-POINT/FOCUS reading.

In the second possible interpretation of (4.62), the PAST of PAST reading, 'last Friday at 6' refers to the time at which Leopold finished his project. This reading is made clearer by the context in (4.64) which provides a V-POINT.

(4.64) Today is Tuesday. Natasha talked to Leopold yesterday.

He had finished his project last Friday at 6.

The output of the PAST of PAST interpretation of (4.64) is diagrammed in Figure 4.26 below:



The first PAST identifies or cues construction of a PAST FOCUS space which is prior to V-POINT/BASE. With the second PAST, space M becomes V-POINT and a new PAST FOCUS space is set up in relation to the V-POINT of space M. With the second PAST, the FOCUS shifts from space M (put in FOCUS by the first PAST) to space M1. With

the PAST of PAST, the targeted space is a PAST FOCUS space prior to a V-POINT in a PAST space. The PAST of PAST interpretation may be referred to as the EVENT/FOCUS reading.

The EVENT/FOCUS (PAST of PAST) reading is more difficult to achieve in the simple sentence like (4.62) and typically requires further context. The reason for this is simple. In either reading, the Pluperfect sets up 3 spaces: space R, space M, and space M1. The purpose of the Pluperfect is to allow the speaker to compare two time spaces, two time periods which are both distinct from the time period represented in space R. If in the simple sentence, such as (4.62), the temporal adverb refers to EVENT/FOCUS space M1, then the value of space M is undefined. This situation is semantically and pragmatically infelicitous, since there is no reason for the speaker to compare a precisely located time period represented in space M1 as being prior to some unspecified, undefined time period represented in space M. In a context where the temporal value of space M is defined, such as (4.64), a PAST of PAST reading is semantically and pragmatically felicitous. Needless to say, this reading is often overlooked by linguists, since it typically arises only in context and is semantically and pragmatically infelicitous in the simple sentence.

With the Pluperfect, the temporal adverb may give a temporal specification to the V-POINT space (the V-POINT/FOCUS reading) or it may give a temporal specification to the EVENT space (the EVENT/FOCUS reading). Note that V-POINT space M and space M1 cannot both be given a precise temporal specification, i.e. they cannot both be output as FOCUS, by the same clause. This is shown by the ungrammaticality of (4.65a). Both may, however, be given a precise temporal specification, across a sentence boundary, as is shown in (4.65b). The V-POINT space is given a precise temporal specification and

put in FOCUS in one clause ('Natasha talked to Leopold yesterday'). The target EVENT space is given a precise temporal specification in the following clause ('He had finished his project last Friday at 6').

(4.65) a. * Yesterday, he had finished his project last Friday.

b. Today is Tuesday. Natasha talked to Leopold yesterday.He had finished his project last Friday (3 days before).

Under the mental space analysis, (4.65a) is ruled out by Discourse Principle 1 (presented in chapter 3), since the final output of a single clause cannot result in more than one FOCUS space. 'Yesterday' puts the V-POINT space M in FOCUS; 'last Friday' puts EVENT space M1 in FOCUS. For this example, Discourse Principle 1 is similar in effect to the P-Definiteness Constraint proposed by Klein (1992), discussed in section 4.6.5. (4.65a) is ruled out by the P-Definiteness Constraint, which does not allow both TT (i.e. V-POINT space) and Tsit (i.e. EVENT space) to be fixed in relation to speech time.

One advantage of the mental space solution over Klein's analysis is that it also allows us to account for discourse data such as (4.65b) with no further constructs or principles. With 'Natasha talked to Leopold yesterday', a PAST FOCUS is set up to represent the time frame 'yesterday'. That FOCUS space serves as V-POINT from which another PAST space, daughter space M1, is set up to represent 'last Friday'. FOCUS shifts to space M1. The mental space approach gives a more general account which can handle tense and temporal adverbs in discourse context with no need for further constructs and principles. In addition, the constructs and principles used in the analysis are independently motivated and theory internal. Before turning to a discussion of the Pluperfect in French, we leave the reader with two observations about the interaction of temporal adverbials and the Past Perfect which merit further inquiry. First, position of the adverb affects the interpretation. A sentence initial adverbial, as in (4.66a), seems to force the V-POINT/FOCUS reading, while a sentence final adverbial, as in (4.66b), is ambiguous.

- (4.66) a. Last Friday at 6, Leopold had finished his project.
 - b. Leopold had finished his project last Friday at 6.

This is consonant with the analysis where the PAST PERFECT and PAST of PAST are built componentially. The adverbial 'last Friday at 6' sets up a space which we expect to be FOCUS. In the componential construction of the combined links PAST PAST, a PAST FOCUS space is set up for interpretation of the first link PAST. This FOCUS space becomes V-POINT and parent for the PAST daughter space, set up for interpretation of the second link PAST. FOCUS shifts from the V-POINT space to daughter space, the space targeted by the combined links PAST PAST. It appears that the sentence initial adverbial is assigned to (and "gets stuck at") the first FOCUS space which is established. With a sentence final adverbial, as in (4.66b), the whole construction is set up; the adverbial is assigned after the fact to whichever space is in FOCUS.

Second, temporal adverbs such as 'last Friday' or 'yesterday' can be overarching. Both the V-POINT space M and the EVENT space M1 may be included in the time period 'last Friday' or 'yesterday'. Consider again example (4.67).

(4.67) Last Friday/yesterday, Leopold had finished his project.

An expression such as (4.67) might be used to compare two time periods within the time period 'last Friday' or 'yesterday'. This interpretation could possibly be analyzed as embedding the V-POINT and EVENT spaces under an overarching temporal space which represents 'last Friday' or 'yesterday'. The behavior of temporal adverbs with Perfect constructions is an interesting area for further research.

4.8.2 French Plus-que-Parfait and Passe Anterieur

Just as in English, both the PAST PERFECT and the PAST of PAST are encoded by the French Plus-que-Parfait (Imparfait of avoir/etre + Past Participle).⁸⁵ The time adverbial may refer to either the time of finishing or to a temporal point which is posterior to the finishing.

(4.68) Leopold avait termine son projet hier a 6 heures'.

'Leopold had finished his project at yesterday at 6 o'clock'

One interesting difference from English is that in French the perfectivity of the auxiliary is grammatically marked. In English, the auxiliary is in the Simple Past; the tense category encoded by the auxiliary is PAST. In French, the auxiliary is in the Imparfait; the tense category encoded by the auxiliary is PAST IMPERFECTIVE.

Where perfectivity is grammatically marked, we would expect the grammatical

⁸⁵ As in English, the structure of the combined category at least of the PAST PERFECT is reflected in the morphological structure of the Plus-que-Parfait. We would not expect this to be so for all languages or for all combined categories.

marking of perfectivity to be consonant with the analysis of the PAST PERFECT and PAST PAST proposed above. Given a choice between a PERFECTIVE and an IMPERFECTIVE, we would expect the first link PAST, which structures the parent V-POINT space needed to interpret the second link, to be IMPERFECTIVE. The IMPERFECTIVE appropriately indicates a V-POINT within that space. This is illustrated in Figure 4.27 below, which represents the output of (4.68) in its V-POINT/FOCUS (PAST PERFECT) reading.

FIGURE 4.27





With the PAST IMPERFECTIVE, a PAST space M is set up from V-POINT/BASE. The IMPERFECTIVE indicates that space M becomes V-POINT. In the case of the PAST PERFECT, a PAST V-POINT set up by the Imparfait serves as the anchoring point for the link set up for the PERFECT. The work of setting up the V-POINT for the second link PERFECT or PAST is already accomplished by the IMPERFECTIVE auxiliary.

The behavior of the Plus-que-Parfait (Imparfait of avoir/etre + Past Participle) can be contrasted with the Passe Anterieur (Passe Simple of avoir/etre + Past Participle) in (4.69).

(4.69) a. Leopold avait termine [Plus-que-Parfait] son projet... quand nous sommes arrives [Passe Compose].'Leopold had finished his work when we arrived.'

b. * Leopold eut termine [Passe Anterieur] son travail,
...quand nous sommes arrives [Passe Compose].
'Leopold had finished his work when we arrived.'

The reading of (4.69a) is a PAST PERFECT one. The Passe Anterieur is not allowed in the same construction. With the Passe Anterieur, the auxiliary 'eut' is in the Passe Simple, a PAST PERFECTIVE. The PERFECTIVE indicates a V-POINT external to the FOCUS space.

The Imparfait, a PAST IMPERFECTIVE, is most consonant with the space configuration which may be built for either the PAST PERFECT or the PAST of PAST since it signals a V-POINT within the PAST V-POINT space M. The Passe Simple is inappropriate for the space configurations built for the PAST PERFECT or PAST of PAST, since it indicates that the PAST V-POINT space M is not V-POINT. The Passe Anterieur (Passe Simple of avoir/etre + PP) is possible in certain semantically restricted instances, namely after a limited set of temporal conjunctions {quand/lorsque ('when'), aussitot que/des que ('as soon as'), a peine ...que ('hardly')}. The Passe Anterieur can only be used for actions which are immediately prior to some past point of reference. For example:

(4.70) Des qu'il eut pris la decision, il se sentit mieux.

'As soon as he made the decision, he felt better.'

I propose, tentatively, that the Passe Anterieur (a PAST (PERFECTIVE) PERFECT) is possible in this construction because the temporal conjunctions force a V-POINT in the PAST FOCUS space which is structured by the resultant properties associated with completion of the event. The semantics of immediacy of the past action arises from the time boundaries and the notion of completion associated with the PERFECTIVE.

4.9 PRESENT FUTURE PERFECT

4.9.1 English Future Perfect

Both the PRESENT FUTURE PERFECT and the PRESENT FUTURE PAST (PAST of FUTURE) are encoded in English by the Future Perfect (composed of the auxiliary 'have' in the 'will' Future + the Past Participle). For example:

(4.71) I will have eaten at 6.

Two interpretations are available for (4.71). In one interpretation, the event 'EAT' occurs before 6. This is the PRESENT FUTURE PERFECT (V-POINT/FOCUS) reading. In the second interpretation, the event 'EAT' occurs at 6 prior to some other time period or point, which in this example is unspecified. This is the PRESENT FUTURE PAST (EVENT/FOCUS) reading. The Future Perfect patterns like the Past Perfect in allowing time adverbs to refer to two different time frames. Both the Past and Future Perfect are distinct from the Present Perfect (which only encodes a PRESENT PERFECT and not a PAST of PRESENT) in this respect. The output of the V-POINT/FOCUS reading of the Future Perfect is diagrammed in Figure 4.28. The output of the EVENT/FOCUS reading is diagrammed in Figure 4.29 below.







With the V-POINT/FOCUS (PRESENT FUTURE PERFECT) reading, the target space is the EVENT space M1. With the EVENT/FOCUS (PRESENT FUTURE PAST) reading, the target space is the FOCUS EVENT space M1. The access path is the same in both cases.

Typically, in the single sentence such as (4.71), the Future Perfect has a V-POINT/FOCUS reading for pragmatic reasons. An EVENT/FOCUS reading is more difficult in the single sentence for the same reasons that it is difficult to get an EVENT/FOCUS (PAST PAST) reading with the Past Perfect. The function of the Future Perfect is to allow the speaker to compare two time periods, both of which are separate from BASE. If in the simple sentence, such as (4.71), the time adverb refers to the

EVENT/FOCUS space M1, then the value of the V-POINT space is undefined. This situation is pragmatically infelicitous, since it is odd to compare a precise time period as being prior to some undefined posterior time period or point. A felicitous EVENT/FOCUS reading is possible in context, where the temporal value of the V-POINT space has already been established in the preceding discourse.

The EVENT/FOCUS reading is more obvious in context, as in (4.72).

(4.72) I'll see you next July.

I will have graduated in June, so I'll have more free time.

In this example, the time adverb 'in June' refers to the PAST FOCUS EVENT space M1.

One difficulty presented by the FUTURE PAST (PAST of FUTURE) is that not all time adverbs are appropriate for structuring the EVENT/FOCUS space M1. Consider again example (4.72) above as well as examples (4.73) below.

(4.73) a. Jill always likes to get to the top of the hill before Jack.

Jack will get to the top the hill at midnight.

But Jill will have gotten there 2 hours before.

b. Jill always likes to get to the top of the hill before Jack.Jack will get to the top of the hill tomorrow.?? Jill will have gotten there tonight.

In examples (4.72) and (4.73), the context forces an EVENT/FOCUS reading. The EVENT/FOCUS space may be comfortably structured by the time adverbs 'in June', and

'2 hours before'. In example (4.73b), the EVENT/FOCUS space may be structured by the time adverb 'tonight' but this is somewhat strange.

I would suggest that this results from the processing difficulties posed by the different nature of the access path for tense and the access path for the time adverb. For tense, the access path to the EVENT/FOCUS space is temporally bi-directional. It goes both forward and backward in time. In example (4.72), the time adverb is calendrical rather than truly deictic. In (4.73a), the time adverb is not deictic and it traces only the backwards part of the access path. In (4.73b), the time adverb is deictic and its access path to the target space is unidirectional. The directionality of the tense-aspect access path and the time adverb access path are in conflict and cause processing difficulties for many speakers. Similar effects are found with the PAST FUTURE (FUTURE of PAST).

(4.74) Claire went to the park last month, where she saw a strange man.

She would see him again two weeks later/*two weeks ago outside of her apartment.

The interaction between tense and temporal adverbs and their access paths is beyond the scope of this thesis but is again an interesting area for further research.

4.9.2 Future Perfect for Prior Events

Both the English Future Perfect and the French version, the Future Anterieur (composed of avoir/etre in the Future + the Past Participle), may be used to express prior events. Consider the interpretations available for examples (4.75) and (4.76) below.

(4.75) a. By next week, Penelope will have gotten divorced.

b. By the end of the year, John will probably have finished his dissertation.

(4.76) a. By now, Penelope will most likely have gotten married.

b. John will probably have finished his dissertation by now.

The Future Perfect can be used to express events which are prior to some future point, as in (4.75). The Future Perfect may also be used to express events which are prior to 'now', as in (4.76).

The French Futur Anterieur is quite productive in the latter sense; it is commonly used to express supposition about or the probability of a past event.

(4.77) a. Elle est en retard; elle aura eu [Futur Anterieur] un accident! 'She's late. She must have had an accident!'

- b. Il n'est pas dans le train; il l'aura manque [Futur Anterieur].'He isn't on the train. He must have missed it!'
- c. Esperons qu'ils se seront bien amuses [Futur Anterieur] a la fete. 'Let's hope that they will have had a good time at the party.'

d. Elle a l'air contente; elle aura reussi a son examen.

'She looks happy; she must have passed the exam.'

In these examples, the Futur Anterieur is used to express a PREDICTION about an event which is posterior to now. We may interpret examples (4.76) and (4.77) to mean that at some point in the future, the correctness of the PREDICTION about a prior event will be verified.

The use of the Future Perfect or the Future Anterieur for events which are prior to now is motivated by the structure of the (PRESENT) FUTURE PERFECT or (PRESENT) FUTURE PAST. With the FUTURE PERFECT, the EVENT space is prior to some FUTURE FOCUS space, but its relationship to V-POINT/BASE, to 'now' is unspecified. With the FUTURE PAST, the PAST FOCUS space is prior to some FUTURE V-POINT space, but its relationship to V-POINT/BASE, to 'now' is unspecified. The discourse links set up only local time relations between two spaces. Since the discourse links set up only local time relations, the target space set up by the PERFECT or PAST need only be prior to its parent space. Hence, it can refer to any time period prior to its parent; that time period may be future or past or even concurrent to 'now', to V-POINT/BASE.

4.10 PAST FUTURE and PAST FUTURE PERFECT

4.10.1 PAST FUTURE (FUTURE of the PAST): English 'would ____'

In section 4.3 above, the English 'will' Future was analyzed as encoding the PRESENT FUTURE (FUTURE of the PRESENT) and PRESENT volitionality. As a FUTURE (of the PRESENT), the 'will' Future does work of setting up a FOCUS space which is posterior to a PRESENT V-POINT. The 'will' Future was analyzed as a PRESENT FUTURE because its morphological form includes the PRESENT of 'will', and because the 'will' Future can only anchor to a PRESENT V-POINT.

A PAST FUTURE (FUTURE of the PAST) counterpart is also possible, in English it is encoded by the expression 'would ____' (PAST of 'will' + basic verb form). For example:

(4.78) a. Margaret would eat all of the ice cream before dinner.

b. He was short, fat, pale. He had bad teeth. His hair was dirty.
Later, she would freeze this frame in her mind and study it.
She would say he seemed frightened and defeated and trapped ... (Kate Braverman, Tall Tales from the Mekong Delta, from Kennison, Katrina, Best American Short Stories)

Interpretation of the PAST FUTURE results in a space configuration as diagrammed in Figure 4.30.



FIGURE 4.30

The expression 'would ____', the PAST of 'will ____', sets up a PAST FOCUS space M which serves as V-POINT for a FUTURE PREDICTION daughter space M1 which becomes FOCUS. Space M1 is a PREDICTION from and is posterior to a PAST V-POINT. The access path marked by the PAST FUTURE is from BASE space R M to a PAST V-POINT space M to the target FUTURE FOCUS space M1. Since the time relations are local, the target space need only be posterior to its parent. Its relationship to 'now', to V-POINT/BASE is unspecified. Hence, it may refer to a time period which is prior, posterior, or even concurrent to 'now'.

Frequently, the PAST FUTURE is used in counterfactual constructions, where the PAST V-POINT is a counterfactual space, as in (4.79).

(4.79) If Leopold were here, Natasha would be happy.

In (4.79), the expression 'would be' marks an access path from BASE to a PAST counterfactual space to the targeted FUTURE FOCUS space. The expression 'Natasha would be happy' is a PREDICTION from the V-POINT of a PAST counterfactual space. See chapter 5 for an in-depth discussion of conditional and counterfactual constructions.

Like its PRESENT counterpart, the 'would' Future has more than one function. Consider:

(4.80) a. She said she would make some coffee.

b. In high school, she would often sleep in class.

c. I asked her why she had bought that paint.

*She said she would paint her house.

In addition to encoding the PAST FUTURE, it may also express PAST volition (4.80a) and PAST habituals (4.80b). It is not appropriate for PAST plans for posterior events, as shown by the ungrammaticality of (4.80c). In the volitional reading, a volition space is set up for the PAST V-POINT. We may analyze the PAST habitual reading as setting up an additional PAST habitual space from the PAST V-POINT.

4.10.2 PAST FUTURE PERFECT

The PAST FUTURE PERFECT is encoded in English by the expression 'would have + Past Participle'.

(4.81) a. Before his arrival, impatient as she was,

Rapunzel would already have let down her golden hair.

- b. If he had arrived any later, he would have found her asleep.
- c. You would think she would have finished by now.

The space configuration output by PAST FUTURE PERFECT is diagrammed in Figure 4.31. Each parent space serves sequentially as V-POINT for its daughter.



The PAST FUTURE PERFECT frequently appears in hypothetical/ counterfactual constructions. It appears commonly in narrative. But for pure temporal value it is less common in speech, since when we talk about the PAST domain, we usually talk about FACTs rather than PREDICTIONs, and given the number of local time connections, its temporal value in relation to V-POINT/BASE is highly diluted. The behavior of the PAST FUTURE PERFECT in hypothetical/ counterfactual constructions will be discussed in detail in chapter 5.

4.11 Summary and Conclusion

This chapter has provided a detailed account of individual language specific tenseaspect markers, in both English and French and has shown how the distinctions inherent in the characterizations of the discourse categories {PRESENT, PAST, FUTURE, PERFECT, PROGRESSIVE, IMPERFECTIVE, PERFECTIVE} account for a wide variety of tense-aspect data. I will conclude by giving a summary of some of the important points and findings.

In the mental space framework, tense gives information about the distribution of {BASE, FOCUS, EVENT, and V-POINT}; it assigns local time connections; and it assigns the FOCUS space a FACT/PREDICTION status and the temporal property of being {PAST, PRESENT, or FUTURE}. The temporal property, of being PAST, PRESENT, or FUTURE, gives a space a certain accessibility status in relation to other spaces. The aspectual categories {PERFECT, PROGRESSIVE} give information about the arrangement of V-POINT and EVENT and also assign local time connections. The categories {PERFECTIVE, IMPERFECTIVE} give information about the arrangement of V-POINT and FOCUS.

In the mental space framework, time spaces represent time periods which may vary in size. The space framework allows temporal semantics to be handled in terms of time periods rather than temporal points. This is an important contrast to many standard treatments of tense and has important consequences for the analysis of tense, in particular for the analysis of the Simple Present in habitual, generic, omnitemporal or "timeless" expressions, and for 'just prior' events. The Simple Present, which encodes the discourse link category PRESENT, only indicates that the event belongs to a PRESENT space, the event does not necessarily have to coincide with the time of speech. Events which are construed as actually in process at the time of speech are the marked category and will be encoded by a Progressive (PROGRESSIVE). Progressives are cross-linguistically the morphologically marked form.

The prior/non-prior distinction and the FACT/PREDICTION distinction both play a role in delimiting the behavior of the Simple Present (PRESENT). The prior/nonprior distinction, reflected in the characterization of the discourse categories PAST and PRESENT, is the most common tense distinction cross-linguistically. The FACT/PREDICTION distinction reflects a basic cognitive model of the world in which the past and present (in real-time) are fixed and unchangeable, but the future (in real-time) is not. The FACT/PREDICTION distinction separates the FUTURE as having special properties in relation to the other tense categories. Since the PRESENT is a FACT marker and indicates only that an event is non-prior to BASE (and not concurrent to speech time), the Simple Present may be used for events which are posterior to 'now' where those events are construed as FACT, rather than as PREDICTION.

Under the mental space analysis, all habitual and generic expressions, no matter what the tense-aspect category, are handled by space partitioning.⁸⁶ The habitual or generic expression sets up a local frame. The frame holds (i.e. and is available for mapping) over a particular time period, which may be defined specifically by time adverbs or more generally by tense. With habituals, the event may map onto any space which is a relevant time period. With generics, the relevant properties may map onto any relevant

⁸⁶ PRESENT, PAST, FUTURE, and PERFECT forms may all have habitual or generic readings which result in the construction of a generic or habitual space. The PERFECT EVENT space may be a habitual space. The PROGRESSIVE EVENT space may also be embedded in a habitual or generic space.
role filler in a relevant time period. Habituals and generics may also blend. In the case of habituals, the frame and the defeasibility of mapping allows an entity to have different properties in the habit space than its counterpart in the "reality" space (onto which the habitual property maps) for any given time when the habit does not hold as specified in the frame. In the case of generics, the partitioning of information into a generic space, the assignment of the generic property to a role, and the defeasibility of mapping allows a particular member of the class (a role filler in a "reality" space) to have different properties from the role and other members of the class.

The category PROGRESSIVE also uses space partitioning to separate representation of the full structure of the event from the FOCUS space. With the PROGRESSIVE, the full structure of the event is partitioned into an EVENT space. In the FOCUS space, only the subject entity and the verbal property associated with that entity are represented. Optimization from the EVENT space allows us to account for certain inferences about the existence of entities in the FOCUS space. In 'John is reading a letter', for example, the entity 'letter' will optimize to the FOCUS space by default. In 'John is writing a letter', optimization of the entity 'letter' will be blocked by real world knowledge.

The English 'will' Future was analyzed as encoding both PRESENT FUTURE (PREDICTION from a PRESENT V-POINT) and PRESENT volition. In its PREDICTION reading, it can be used for events which are predicted to be true now. The English 'BE going to' Future encodes PRESENT FUTURE and PRESENT in progress plans. The semantics associated with different forms used to express futurity in English is characterized by the differences between the information which structures the PRESENT FOCUS FACT space and therefore, is construed as immutable. Conditional constructions were analyzed as setting up a space configuration, a hypothetical informational frame with mapping potential. The protasis sets up matching conditions under which the apodosis may optimize and map (i.e. anchor) onto V-POINT/BASE. In reference to a present or future domain, a Simple Past protasis sets up a counterfactual space with special temporal properties. As a matching condition it blocks optimization of the apodosis into the "reality" domain, since no space in the PRESENT "reality" domain will have the special temporal properties of the counterfactual space. The Simple Past for present or future wishes also sets up a counterfactual space with special temporal properties of the counterfactual space to the "reality" domain. This analysis of counterfactuals and counter to fact wishes is consonant with the metaphor whereby temporal distance expresses distance in actuality or probability. With politeness forms, temporal distance is used to place a request out of the PRESENT domain, in "non-actuality", in a PAST domain. The speaker counts on optimization and inferencing for the information to optimize into the BASE and receive the correct interpretation.

The IMPERFECTIVE/PERFECTIVE contrast was analyzed in the standard way as indicating a V-POINT distinction. The notion of V-POINT used here, however, has the advantage of being theory internal and having broad applicability to other tense-aspect problems. This chapter showed how the V-POINT distinctions inherent in these categories and the markers which encode them motivates the contrastive distribution of the French Imparfait and Passe Simple in a variety of constructions, as well as of the Plusque-Parfait and Passe Anterieur. The Imparfait, but not the Passe Simple, is used as an auxiliary for the combined categories PAST FUTURE (Future of Past), and the PAST PAST (Plus-que-Parfait) because its imposes a V-POINT in the PAST space; that V- POINT serves as an access point for the second tense link. The Imparfait, and not the Passe Simple, is also appropriate in conditional constructions for structuring counterfactual spaces; the IMPERFECTIVE V-POINT serves as an access point for the PREDICTION made from the counterfactual space.

The Present Perfect was characterized as setting up a PRESENT FOCUS space and a prior EVENT space. The EVENT space can represent an event, a set of events, a continuous state, or it can be an habitual space. Since it is a time space, it can represent a time period of any size up until V-POINT. The PRESENT FOCUS space imposes cooccurrence restrictions on time adverbs clause internally. The Discourse Principles proposed in chapter 3 also allow us to account for the cooccurence restrictions on time adverbs and the Present Perfect across clause boundaries.

The French Passe Compose was analyzed as encoding either a PRESENT PERFECT or a PAST. The cooccurrence of the Passe Compose with present, past, and future time adverbs and the fact that it may have either a past or present interpretation in conditional protasis results from the fact that it may indicate either a PAST or PRESENT FOCUS space.

The Past Perfect was analyzed as encoding either a PAST PAST or a PAST PERFECT. The Future Perfect was analyzed as encoding either a PRESENT FUTURE PAST or PRESENT FUTURE PERFECT. The FOCUS distinctions allow us to account for cooccurence of time adverbs with the Past and Future Perfect in simple sentences. The FOCUS space distinctions and the Discourse Principles proposed in chapter 3 allow us to account for cooccurence of time adverbs with the Perfects at the discourse level, across clause/sentence boundaries. With the Future Perfect, it was noted that its temporally bi-directional access path may restrict the acceptability of time adverbs which take a unidirectional path.

The characterization of tense-aspect in terms of local time connections allows us to account for the fact that the Future Perfect may be used for events which are prior to 'now', prior events which are predicted to be true. The Future Perfect (PRESENT FUTURE PERFECT or PRESENT FUTURE PAST) encodes combined discourse links. Since discourse links are only local time relations between two spaces, the target space set up by the PRESENT FUTURE PERFECT or the PRESENT FUTURE PAST need only be prior to its FUTURE parent space. The target space does not have to be future or posterior in relation to 'now', to V-POINT/BASE. Similar facts hold for the English 'would __' constructions which encodes a PAST FUTURE. Since the discourse link set up by the FUTURE is only a local time connection, the target FUTURE space need only be posterior to its parent, a PAST space. Its relationship to V-POINT/BASE is unspecified.

In this chapter, we have seen that the simple characterizations of the tense-aspect discourse link categories {PRESENT, PAST, FUTURE, PERFECT, PROGRESSIVE, IMPERFECTIVE, PERFECTIVE}, in conjunction with a small set of Discourse Principles, can be used to motivate a very wide range of problematic, sentence level as well as discourse level tense-aspect data. This chapter has demonstrated, it is hoped, that when we look at tense-aspect in terms of its discourse organization and management function, its function in the cognitive construction process, much of what is considered to be problematic under the sentence level approach to linguistics, is no longer problematic.