6.0 Introduction

This chapter examines the behavior of tense in embedded clauses of indirect speech. In particular, this chapter investigates the special access properties of spaces set up for the interpretation of indirect speech. As will be shown in the discussion which follows, access of speech spaces is distinct from access in embedded relatives clauses, for example, in a number of ways. First, embedded speech introduces a strong V-POINT role associated with the reported speaker and that V-POINT is a potential anchor point for tense. Second, spaces in the speech domain are assigned a FACT/PREDICTION status in relation to the strong V-POINT of the reported speaker. A speech space may also be accessed from BASE, but only where the FACT/PREDICTION status assigned the space in relation to BASE is the same FACT/PREDICTION status assigned that space in relation to the V-POINT of the reported speaker. Third, the speech domain sets up a barrier to access from spaces outside the speech domain, with the exception of BASE.

In this discussion, we will look only at indirect speech, but similar examples can be constructed for thought, belief, and perception verbs.

The structure of this chapter is as follows: Section 6.1 outlines the kind of tense phenomena found in indirect speech. Section 6.2 discusses the standard analysis which proposes a sequence-of-tense rule to account for tense in indirect speech. Section 6.3 proposes that the spaces constructed for the interpretation of indirect speech have a
number of special properties, including special access properties. Section 6.4 examines in
detail the kinds of access paths which are available to speech spaces. Section 6.5 presents
the FACT/PREDICTION Principle, which enforces a kind of V-POINT consistency
where two V-POINTs are engaged. The FACT/PREDICTION Principle rules out access
of speech spaces from BASE where the FACT/PREDICTION status assigned that space
in relation to BASE is different from the FACT/PREDICTION status assigned that space
in relation to the V-POINT of the reported speaker. Section 6.6 investigates the behavior
of the embedded PRESENT in indirect speech. A summary and conclusion of the chapter
is provided in section 6.7.

6.1 Problems Posed by Tense in Embedded Indirect Speech

The behavior of tense in the embedded clauses of indirect speech has traditionally
posed a significant descriptive and theoretical challenge for tense theorists. In this section,
we will consider the kinds of facts which an analysis of tense in indirect speech must
account for. The behavior of tense in indirect speech will be compared with the behavior
of tense in embedded relative clauses.

The first challenge posed by embedded clauses of indirect speech is that a variety
of temporal interpretations are available for embedded PASTs and PRESENTs. Consider,
for example, the interpretations available for the embedded PRESENT in (6.1a-c).

(6.1)  a. John said yesterday that he is sick.
       b. John will announce tomorrow that he is sick.
c. John was in San Francisco yesterday.
   I talked to John's secretary (yesterday).
   She said he is in Los Angeles today.

In (6.1a), the PRESENT event ‘he is sick’ is interpreted as being true both ‘now’ and yesterday at the time of the reported speech event. In (6.1b), there are two possible interpretations for the PRESENT event ‘he is sick’. It may be interpreted as true both ‘now’ and ‘tomorrow’ at the time of the reported speech event ‘ANNOUNCE’; or it may be interpreted as true only tomorrow at the time of the reported speech event and not true ‘now’.\footnote{Note that while the PRESENT can refer to a future time period (posterior to the reported speech event) which does not include the present, it cannot refer to a past time period which does not include the present.} In (6.1c), the PRESENT event ‘he is in Los Angeles’ may only be interpreted as true today, and not yesterday.

The embedded PAST also has a number of interpretations. For example:

\begin{enumerate}
\item[6.2] a. John said yesterday that he was sick (yesterday).
\item b. John said (yesterday) he was often sick in his childhood.
\item c. John will announce at midnight that he burned the document.
\end{enumerate}

In (6.2a) the PAST event 'he was sick' belongs to the same time period as the reported speech event 'John said'. In (6.2b), the PAST event 'he was sick' refers only to a time period prior to the reported speech event 'John said'. In (6.2c) the PAST event 'BURN' may be prior to 'now'; it may also be prior only to the future event 'ANNOUNCE', i.e.
'John will announce in 2001 that he burned the document in 2000'.

A second challenge is to account for the greater restrictions on embedded FUTUREs. The embedded FUTURE is more strict than the PAST or PRESENT in the interpretations it allows. For example:

(6.3)   a. John says/said that he will come.

b. John will say tomorrow that he will be happy.

In (6.3a), the FUTURE can only be interpreted as future in relation to now. However, where the main clause verb is future, the embedded FUTURE must be interpreted as future in relation to the time of the speech event. For example, in (6.3b), the FUTURE event 'he will be happy' may only refer to an event which is posterior to the time of the reported speech event 'SAY'. By default the expression 'he will be happy' is also interpreted as future in relation to 'now', but this is not sufficient.

Note that in indirect speech, an embedded FUTURE may not be interpreted as temporally concurrent to the FUTURE reported speech event, as shown by the unacceptability of (6.4).

(6.4)   *?John will say tomorrow that he will be happy (tomorrow).

In (6.4), John's being happy cannot be interpreted as concurrent to the FUTURE reported speech event 'SAY'; it can only be interpreted as being future to in relation to the reported event. Similar examples are discussed in Dowty (1982), Comrie (1985) and Smith (1981), although Smith's discussion is concerned with the behavior of deictics rather than tense.
speech event ‘SAY’.

If we contrast the behavior of the FUTURE with the PAST, we see that the same restriction does not hold. For example:

(6.5)  John said yesterday he was happy (yesterday).

The behavior of the embedded PAST in (6.5) may also be contrasted with the embedded FUTURE in (6.4). With the PAST, the embedded event 'he was happy' and the matrix event 'John said' may be interpreted as concurrent.

The behavior of the FUTURE in indirect speech may also be contrasted with the behavior of the FUTURE in embedded relative clauses.

(6.6)  John will meet a girl tomorrow who will be wearing a green hat (tomorrow).

In relative clauses such as (6.6), the embedded FUTURE may be concurrent to the matrix FUTURE event. This is in contrast to the indirect speech example (6.4), where the embedded FUTURE must be interpreted as posterior to the matrix FUTURE event.

A third challenge for an account of tense in indirect speech is the unacceptability of examples (6.7).

(6.7)  a. *?John said yesterday that he was sick this morning.

       b. *?John will announce tomorrow that he will resign tonight.
In indirect speech, an embedded PAST cannot refer to a time period which is past in relation to speaker reality but future in relation to the reported speech event 'SAY', as in (6.7a). Nor can an embedded FUTURE refer to a time period which is future in relation to 'now' but past in relation to the reported speech event 'ANNOUNCE', as in (6.7b). These examples are left unexplained by the standard account which characterizes tense as indicating the temporal location of an event in relation to the time of utterance.

Note that the restrictions on tense evidenced in (6.7) do not apply to embedded relative clauses. For example:

(6.8)  a. Yesterday John met the girl who was here this morning.

           b. Tomorrow John will meet the girl that we will interview tonight.

The behavior of tense in the relative clause of (6.8) may be contrasted with that of the embedded speech clauses in (6.7) above. The restrictions which apply to the temporal arrangement of the events in indirect speech in (6.7), do not apply to the embedded relative clauses in (6.8).

6.2 Standard Treatment: Sequence-of-Tense Rule

Under the standard treatment of indirect speech, tense in the embedded clause is derived via a formal syntactic sequence-of-tense rule, which adjusts the tense of the embedded verb in concordance with the tense of the matrix clause. Comrie (1985), for example, proposes a syntactic sequence-of-tense rule, which applies only where the main clause verb is past. Where the main clause verb is a past tense, the sequence-of-tense rule
takes the original speaker's words and shifts the tense of the subordinate clause back one step into the past in relation to the past tense of the main clause. The direct speech in (6.9), for example, may be transformed via the sequence-of-tense rule into indirect speech, as in (6.10).

(6.9)  
  a. Mary said: "I am sick".
  b. Mary said: "I will be sick".
  c. Mary said: "I was sick".
  d. Mary said: "I had been sick".

(6.10)  
  a. Mary said she was sick.
  b. Mary said she would be sick.
  c. Mary said she had been/was sick.
  d. Mary said she had been sick.

Under the sequence-of-tense account, the tense in the embedded clauses of (6.10a) through (6.10d) is derived by a syntactic agreement rule, which forces the embedded tense to agree with the matrix tense. To account for the different tenses available in (6.10c), Comrie proposes that there are two variations on the sequence-of-tense rule. In the first variation, the embedded tense shifts an additional step back to the Pluperfect. In the second variation, the tense in (6.10c) does not have to shift further because it is already a Past tense. For (6.10d), there is no tense change, since no further remoteness distinction is available in English.

Where the matrix tense is Future, the rule does not apply and the tense remains the same, as illustrated in the direct speech examples (6.11) and their indirect speech
counterparts in (6.12).

(6.11)  a. Mary will say: "I will be sick".
       b. Mary will say: "I am sick".
       c. Mary will say: "I was sick".

(6.12)  a. Mary will say she will be sick.
       b. Mary will say she is sick.
       c. Mary will say she was sick.

Since the matrix verb is Future in these examples, the tense does not change.

One difficulty for the sequence of tense approach is the behavior of the embedded Present in (6.13), an apparent exception to the sequence-of-tense rule.

(6.13)  John said he is sick

Comrie handles (6.13) by proposing that the syntactic sequence-of-tense rule is relaxed for verbs on certain semantic grounds, namely for verbs that have continuing validity. Hence, (6.13) is an acceptable paraphrase of 'John said: "I am sick", where his being sick still holds 'now'. Since 'he is sick' still holds, the sequence-of-tense rule does not apply and the original embedded Present remains unchanged.

There are also a number of unsolved problems for Comrie's analysis. First, where the matrix verb is Future as in (6.12b), the embedded Present tense event is not necessarily temporally equivalent to the future reported speech event. Second, to account
for the behavior of the embedded Present in examples such as (6.13), he must propose
that a purely syntactic rule be relaxed on semantic/pragmatic grounds. Third, two
variations on the sequence-of-tense rule are needed to account for embedded pasts in
(6.10c). Fourth, Comrie presumes that all indirect speech represents a paraphrase of
actual speech. However, for examples such as (6.14) below, there is no direct speech
counterpart.

(6.14) I heard you're going to that concert tonight. You'll have to tell me how it was.

Finally, Comrie's account does not capture the similarity of tense behavior in
embedded relative clauses to indirect speech, as in (6.15).

(6.15) She is going to write a letter to the President.

But tomorrow she will burn the letter that she wrote.

In (6.15), the embedded past is used for a future event, just as in the indirect speech
examples. The expression 'she wrote' anchors to some future reference point, but no
direct or indirect speech is involved.

In the remainder of this chapter, a mental space account of tense in indirect speech
which is an alternative to the traditional sequence-of-tense approach will be presented.
We will begin in section 6.3 by discussing the special properties, in particular the special
access properties of spaces in the speech domain.
6.3 Special Properties of Speech Spaces

Speech verbs (such as 'say', 'announce', 'tell', etc...), when occurring with an embedded object noun clause, cue the construction of a speech space. This speech space has a number of special properties:

(6.16) \textit{Special properties of speech spaces:}

i) the initial speech space has an inherent strong V-POINT role associated with an experiencer (Sells 1987). This V-POINT role, labeled here as $\@$, is filled by the speaker or experiencer of the reported speech event.

ii) the V-POINT role of the initial speech space, V-POINT/@, is assigned the time value of the reported speech event (although that value may not be precisely defined). Hence, the initial speech space represents a time period which minimally includes the time of the reported speech event, but may be much larger.

Let us illustrate these properties with a simple example.

(6.17) John said he was sick.

The expression 'John said' results in the space configuration in Figure 6.1:
In a minimal context, the expression 'John said' will cue the construction of three spaces. A PAST FOCUS space M is set up and internally structured by the expression '__ SAY __'. Space M's parent space, BASE space R is constructed by default. The space-builder '__ SAY __' also sets up an initial speech space, space M1. The initial speech space, space M1, is a daughter of space M and has an inherent V-POINT role, labeled here as ‘@’. This strong V-POINT role, V-POINT/@, is filled by the speaker of the reported speech event, the entity a named 'John'. V-POINT/@ is assigned the time value of the reported speech event 'SAY' in space M. So for example, if the reported speech event is located precisely at 5 o'clock yesterday, the V-POINT/@ is also located precisely at 5 o'clock yesterday. Since the temporal location of the reported speech event in (6.17) is only relationally defined, but not precisely defined, the time value of V-POINT/@ is also only relationally defined. The initial speech space M1 must represent a time period which minimally includes the time period of the speech event 'SAY', but which may be much
larger. The actual size of the time periods represented in space M and space M1 may differ.107

The initial speech space represents a time period which includes V-POINT/@. Additional spaces may be set up as daughters (and granddaughters) of the initial speech space, as cued by the contents of the embedded clause. The resulting structure looks something like:

107 In the sentence, ‘John said (yesterday) he was sick (with pneumonia)’, for example, if we assume the interpretation where ‘John said he was sick’ is a paraphrase of a direct speech counterpart ‘John said: “I am sick”’, then the time period represented in space M1, the space structured by the expression ‘he was sick’ will be larger than the time period ‘yesterday’ represented in space M, the space structured by the event ‘John said’.
We may refer to the initial speech/thought space and its children as the 'speech domain'. The grammatical embedding of the noun clause reflects the structure of the space embedding.

Spaces in the speech domain have a number of special properties. The properties of spaces in the embedded speech domain may be summarized as follows:
(6.18) Properties of Spaces in the Embedded Speech Domain

i) any space embedded in the speech domain is assigned a FACT/PREDICTION status in relationship to V-POINT/@, (even though the space may not be accessed via V-POINT/@).

ii) in relation to V-POINT/@, the initial space is a FACT space.

iii) spaces in the speech domain may be accessed via the following access paths:

- V-POINT/@ -->

- V-POINT/BASE -->

- V-POINT/BASE --> V-POINT/@ -->

iv) spaces in the speech domain cannot be accessed via spaces set up for the interpretation of tense in the matrix clause, except for BASE.

v) access from V-POINT/BASE to spaces in the speech domain is subject to the FACT/PREDICTION Principle, which places constraints on direct access from BASE whenever two strong V-POINTs are engaged. The FACT/PREDICTION Principle is presented in section 6.5.

Spaces in the speech domain which are directly related to the initial speech space (daughter spaces) are assigned a FACT/PREDICTION status in relation to the strong V-POINT of the experiencer, V-POINT/@. In Figure 6.2, for example, daughter spaces M2 and M3 will be assigned a FACT/PREDICTION status according to their relationship to the strong V-POINT of the reported speaker, V-POINT/@, in initial speech space M1. The initial speech space, which represents in part the conceptualization of the experiencer, is always FACT in relation to V-POINT/@.

Spaces in the speech domain have special access properties which result from the
presence of a strong V-POINT and the FACT/PREDICTION status which those spaces have in relation to that strong V-POINT. First, access of speech spaces from the BASE is constrained by the FACT/PREDICTION Principle which enforces a certain V-POINT consistency whenever two strong V-POINTs are engaged. Second, spaces in the speech domain may be accessed directly from V-POINT/@, the strong V-POINT set up in the initial speech space. Third, only certain access paths are available. Spaces in the speech domain may not be accessed, for example, via a path which includes spaces outside of the speech domain, with the exception of the BASE.

The remainder of this paper examines in detail these special properties of spaces in the speech domain. We will begin by showing the different access paths which are available for spaces in the speech domain.

6.4 Access of Spaces in the Speech Domain

This section will show how spaces in the speech domain may be accessed via each of the access paths proposed in (6.18) above. The special access properties of speech spaces will also be contrasted with the access properties of embedded relatives.

6.4.1 Access Path: V-POINT/@ --> target

Speech verbs set up a speech space and introduce a strong V-POINT role, V-POINT/@, which becomes available as a potential anchoring point for tense. Thus, one possible access path for a space in the speech domain is directly from V-POINT/@. This access path is the one indicated by the embedded Simple Past tense in the expression 'he
burned' in (6.19).

(6.19) John will announce at midnight that he burned the document 2 hours before/ago at 10 pm.

In (6.19), the expression 'he burned the document' is interpreted as future in relation to 'now', and as prior only to the time of the announcement at midnight. The space targeted by the PAST event 'BURN' is accessed directly from V-POINT/@. Figures 6.3 and 6.4 represent the sequential results of the interpretation of (6.19). Figure 6.3 represents the space configuration which results from the processing of the matrix clause. Figure 6.4 is the space configuration which is the output of processing the entire utterance.

FIGURE 6.3

As a result of the interpretation of the matrix clause, a BASE space R, a FUTURE space M, and a speech space M1 are set up as in Figure 6.3. With the interpretation of the
embedded clause, this configuration of spaces is updated as in Figure 6.4 below.

FIGURE 6.4  ‘... that he burned the document 2 hours before/ago at 10pm’

The space targeted by the PAST marker, the space structured by the expression 'BURN', is space M2. Space M2 is accessed directly from V-POINT/@ in space M1.

The type of tense behavior exhibited by the embedded PAST in (6.19) is not totally surprising since, in the mental space analysis presented here, tense markers can be
accessed from V-POINTs other than BASE. Moreover, a similar type of access path is available for tense in embedded relative clauses, as shown by the embedded tense in (6.20).

(6.20) John will write a letter to the President tonight.

Tomorrow he will burn the letter that he wrote.

In (6.20), the embedded PAST event 'he wrote' must be accessed from a FUTURE V-POINT, although no speech space is involved. The interpretation of the second phrase results in the space configuration in Figure 6.5.

FIGURE 6.5 'Tomorrow he will burn the letter that he wrote'

Access Path to M1: M --> M1
V-POINT target
The expression 'he will burn the letter' results in the construction of a BASE space R, and a FUTURE FOCUS space M. For the interpretation of the embedded clause 'that he wrote', a V-POINT must be set up in FUTURE space M, since no V-POINT is provided by an initial speech space. A PAST FOCUS space which is prior in relation to M is constructed. The anchoring of tense to a FUTURE V-POINT allows the speaker to establish a FACT in relation to the FUTURE V-POINT, a FACT in relation to a PREDICTION.108

6.4.2 Access Path: V-POINT/BASE --> target

Another potential access path for spaces in the speech domain is directly from V-POINT/BASE. Consider for example the access path for the embedded tense in (6.21).

(6.21) John said he will be sick.

The interpretation of (6.21) is diagrammed in Figure 6.6 below.

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108 The anchoring of the PAST to a V-POINT in a FUTURE space is also similar to the Future Anterieur and the Future Perfect discussed in chapter 4.
The space structured by the FUTURE expression 'he will be sick' is accessed directly from V-POINT/ BASE. This access path is reflected in the tense choice.

The initial speech space may also be accessed directly from V-POINT/ BASE. Consider an interpretation of (6.22), where 'he' corefers to John, and the expression 'he was sick' refers to John's state at the time of the reported speech event. In this interpretation, t1 equals the time of SAY', t2 equals the time of the event 'BE', and the two are temporally concurrent.
(6.22) John said he was sick. \( \text{t1} = \text{t2} \)
\[ \text{t1} \quad \text{t2} \]

This reading is made clearer in (6.23) below:

(6.23) 'John said yesterday he was sick (yesterday).

The interpretation of (6.23) results in a space configuration as in Figure 6.7.

**FIGURE 6.7**

‘John said yesterday he was sick (yesterday)’

In this reading, the PAST FOCUS space structured by the expression 'he was sick' is
prior to V-POINT/BASE, and concurrent to the time period where the event 'SAY' takes place. The access path to the space targeted by the expression 'he was sick' is from V-POINT/BASE to the initial speech space M1.109

Note that while an initial speech space can be accessed directly from V-POINT/BASE with a PAST marker, the initial speech space cannot be accessed directly from V-POINT/BASE with a FUTURE marker. For example:

(6.24) John will say he will be sick. *? t1=t2

\[ \text{t1} \quad \text{t2} \]

The only interpretation available for (6.24) is one where t1 < t2, where the event 'SAY' precedes 'he will be sick'. The embedded Future must be interpreted as future in relation to the time of the Future speech event 'SAY'. An interpretation is not available for (6.24) where t1 = t2, where the state of being sick is concurrent to the event 'SAY'. As we will see in section 6.5, this possibility is ruled out by the FACT/PREDICTION Principle. We will return to an explanation of this in section 6.5.

109 Again, a similar access path is available for embedded relatives, as in ‘Yesterday John met a man who was sick’. The embedded PAST in the expression ‘BE sick’ accesses a space directly from BASE. Since no speech space is involved, in this case both PAST expression, ‘MEET’ and ‘BE sick’, structure the same space.
6.4.3 Semantic Ambiguity

There are two potential access points, V-POINT/@ and V-POINT/BASE, and more than one potential access path for tense in the embedded clause of indirect speech. Although a particular reading may be ruled out by pragmatic and lexical information, the tense itself is in many cases semantically ambiguous. Consider again the simple example:

(6.25) John said he was sick.

\[ \text{t1} \quad \text{t2} \]

Assuming that 'he' corefers to John, the expression 'he was happy' may refer to John's state at the time of the reported speech event, as in (6.26a). It may also refer to some time frame prior to the reported speech event, as in (6.26b).

(6.26) a. John said yesterday he was sick (yesterday). \( (t1=t2) \)

b. John said he was (often) sick in his childhood. \( (t2<t1) \)

The semantic ambiguity of (6.25) arises from the fact that there are two V-POINTs available (V-POINT/BASE and V-POINT/@) and more than one potential access path. With two V-POINTs and more than one access path available, the grammatical information provided by the PAST marker in the embedded clause does not uniquely determine the space configuration which should be constructed for the interpretation of (6.25), nor how the space structured by the expression 'he was happy' should be accessed.

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\[110\] Adverbs are particularly important in this respect.
In one reading of (6.25), t1 = t2, the time period in which 'he was happy' holds includes the time period where the reported speech event 'SAY' takes place. In this reading, the PAST FOCUS space structured by the expression 'he was happy' is the initial speech space. This initial speech space is temporally concurrent to the time period where the event 'SAY' takes place and both time periods are prior to BASE. This reading was diagrammed in Figure 6.7 above.

In another reading, t2 < t1, the time period where 'he was sick' holds is prior to the time of saying. In this reading, the event 'he was sick' must structure a space which is prior to V-POINT/@. However, the access path to that PAST target space indicated by the PAST marker is still ambiguous in this reading. The PAST marker may indicate an access path to the targeted PAST space from V-POINT/BASE, where 'he was sick' is prior to BASE. The PAST marker may also indicate an access path to the targeted space directly from V-POINT/@, where 'he was sick' is prior to V-POINT/@ and by default also prior to V-POINT/BASE. If we assume that the access path for tense is that of the adverbial expression, these readings are made clearer in (6.27a,b).\footnote{The V-POINT and access path chosen may be indicated or determined by other lexical and/or pragmatic information. Adverbials are particularly important in this respect.}

(6.27) a. John said yesterday he was sick two days ago.

b. John said yesterday he was sick two days before.

In (6.27a), his being sick is two days ago from 'now'. The PAST event 'he was sick' is two days prior to V-POINT/BASE. In (6.27b), his being sick is two days before yesterday. The PAST event 'he was sick' is two days prior to V-POINT/@, located yesterday at the time of the speech event 'SAY'. These different interpretations and the
different possible access paths to the space targeted by the embedded PAST are diagrammed in Figures 6.8 and 6.9 below.

**FIGURE 6.8** ‘John said (yesterday) he was sick (2 days ago)’

In Figure 6.8, the access path for the PAST marker is directly from V-POINT/BASE, following the path of the adverbial '2 days ago'. In Figure 6.9, the access path for the PAST marker is from V-POINT/@ in the initial speech space M1.
One advantage of the analysis where different V-POINTs are available for tense access is that the semantic ambiguity of the embedded tense is inherent in the system and falls out automatically. No alternate or variable sequence-of-tense rules are needed.

Note that the expression 'he was sick' cannot refer to a time period which is prior to V-POINT/BASE but posterior (or FUTURE) in relation to V-POINT/@, as in (6.28).

(6.28) *? John said last week that he was sick yesterday.
This interpretation is diagrammed in Figure 6.10 below.

**FIGURE 6.10**  *? ‘John said last week that he was sick yesterday’

A reading where space M1, structured by the event 'he was sick' is prior to BASE, but posterior to the speech event 'SAY' (and V-POINT/@) is not possible. This reading is also ruled out by the FACT/PREDICTION Principle. We will return to an explanation of this in section 6.5.

An embedded Future may also result in semantic ambiguity. For example:

(6.29) John will announce next Friday that he will resign in two weeks.

Two access paths are available for the embedded Future (FUTURE) in (6.29). If we assume that the embedded tense and the adverbial expression 'in 2 weeks' follow the same access path to the target space, the two interpretations are made clearer. In one interpretation, the resignation is in 2 weeks from 'now'. In this interpretation, the FUTURE reflects an access path to the target space directly from V-POINT/BASE. In another interpretation, the resignation is in two weeks from next Friday, the time announcement. In this interpretation, the FUTURE reflects an access path to the target space directly from V-POINT/@.
Note that the event 'RESIGN' cannot be interpreted as posterior to 'now' (and V-POINT/BASE), but prior to the speech event (and V-POINT/@), as shown by the unacceptability of (6.30).

(6.30) *? John will announce next Friday that he will resign tomorrow.

This unacceptable interpretation is diagrammed in Figure 6.11 below.

**FIGURE 6.11**

*? ‘John will announce next Friday that he will resign tomorrow’

![](image)

The event 'RESIGN' also cannot be interpreted as posterior to V-POINT/BASE, and as concurrent to the speech event 'ANNOUNCE', as in (6.31).

(6.31) *? John will announce at midnight that he will resign (at midnight).

A similar example was discussed in section 6.4.2. Both (6.30) and (6.31), are also ruled out by the FACT/PREDICTION Principle. We will return to an explanation of this in section 6.5.
6.4.4 Access Path: V-POINT/BASE --&gt; V-POINT/@ --&gt; target

Another possible access path for spaces in the speech domain is from V-POINT/BASE to V-POINT/@ to the target space. Consider:

(6.32) John announced yesterday that he had resigned the day before.

The interpretation of (6.32) results in the space configuration in Figure 6.12.

**FIGURE 6.12** ‘John announced yesterday that he had resigned the day before’

Access Path to M2: R --&gt; M1 --&gt; M2
V-POINT/BASE V-POINT/@ target
The access path to target space M2, structured by the event 'RESIGN', is from V-POINT/BASE to space M1 (V-POINT/@) to space M2. The Pluperfect in 'he had resigned' reflects the access path chosen to this space. The Pluperfect in this case encodes a PAST of PAST, since the time adverb ‘the day before’ indicates a specific time period for the resignation (‘the day before yesterday’), and hence puts space M2 in FOCUS.

Note that the same access path is not available for embedded Future Perfects. For example:

(6.33) John will announce in two days that he will have resigned tomorrow.

This reading is also ruled out by the FACT/PREDICTION Principle. We will return to an explanation of this in section 6.5.

**6.4.5 Disallowed Access Paths**

Spaces in the speech domain may not be accessed through spaces, other than BASE, outside of the speech domain. In this section, we will consider this access path which is not available for spaces in the speech domain and show how the behavior of tense in indirect speech differs from the behavior of tense in relative clauses.

Consider the interpretations available for the embedded Pluperfect in (6.34), where 'he' corefers to 'John'.
(6.34) John had said that he had resigned.

\[
\begin{array}{cccc}
& t_1 & t_2 & t_3 & t_4 \\
\end{array}
\]

Interpretation of the matrix Pluperfect in (6.34) will result in the construction of three spaces: BASE space R, a PAST space M, and a PAST or EVENT space M1. We assume here a PAST PERFECT reading for the Pluperfects.\(^{112}\) The speech verb 'SAY' also cues construction of a fourth space, a speech space M2. This is represented in Figure 6.13.

**FIGURE 6.13**

‘John had said that ...’

Two access paths are available for the embedded Pluperfect in (6.34). One access path is

\(^{112}\) Pluperfects may also have a PAST of PAST reading, where the target space is FOCUS. See chapter 4, section 4.8 for a discussion of this.
from the V-POINT/@ in space M2 to a daughter and 'granddaughter' space, as discussed in section 6.4.5. The other access path is from V-POINT/BASE to V-POINT/@ in space M2 to a target space M3, structured by 'RESIGN'. Target space M3 would be daughter of M2.

An interpretation is not available where the two Pluperfects take the same access path, where $t_1 = t_3$ and $t_2 = t_4$. This is shown by the unacceptability of (6.35).

(6.35) (This morning I found out that) ... *? John had said at midnight yesterday that he had resigned (at midnight yesterday).

An interpretation is also not available where the embedded Pluperfect takes part of the access path of the matrix Pluperfect, where $t_1 = t_3$ and $t_3 < t_4$. This is shown by the unacceptability of (6.36).

(6.36) (Yesterday at midnight I found out that) ... *? John had said two weeks ago that he had resigned yesterday (before midnight).

What is illustrated by these examples is that spaces in the speech domain may not take an access path through the spaces set up for the matrix clause. Speech spaces cannot be accessed through spaces outside of the speech domain, with the exception, of course, of the BASE space. Spaces in the speech domain in Figure 6.13, for example, cannot be accessed via space M or space M1. The speech domain is a barrier to access from any space outside the speech domain, with the exception of BASE.

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113 This is true regardless of the akstionsart (lexical perfectivity) of the verb.
The behavior of tense in indirect speech may be contrasted with the behavior of tense in embedded relatives, which do allow an access path through the spaces set up for the matrix clause. Compare (6.37) below to (6.34) above.

(6.37) She had met a man that she had liked.

\[
\begin{array}{cccc}
\text{t1} & \text{t2} & \text{t3} & \text{t4} \\
\end{array}
\]

For the embedded relative clause, an interpretation is available where time \( t1 = t3 \) and time \( t2 = t4 \). This interpretation is diagrammed in Figure 6.14 below. We assume a context where ‘the day before’ indicates a particular time period and therefore puts the target space in FOCUS.
In this reading of (6.37), the Pluperfect in the matrix clause cues construction of two spaces, space M and space M1. (We assume here a PAST of PAST reading, although this is not important to the analysis presented here.) The event 'MEET' structures space M1. In this reading, the embedded event 'LIKE' also structures space M1, which is accessed from V-POINT/BASE via space M.

Figures 6.13 and 6.14 illustrate an important difference between tense in indirect speech and in relative clauses. Tense in the embedded relative clause may structure a space accessed via the spaces set up for the interpretation of the matrix event. In contrast, tense in the embedded indirect speech cannot be accessed via the spaces set up for interpretation of the matrix tense, except of course for BASE. The presence of a strong
V-POINT and a speech domain acts as a kind of barrier to access from these spaces and results in special access properties for speech spaces. In this section, we have seen one special access property. In the following section, we will consider another special access property of indirect speech which results from the presence of a strong V-POINT/@.

6.5 Access from BASE and the FACT/PREDICTION Principle

As shown in the previous discussion, both V-POINT/@ and V-POINT(BASE are potential access points for the tense of embedded speech. However, both readings are not always available. A particular reading may be ruled out by pragmatic and lexical information. Access from V-POINT(BASE may also be ruled out by the FACT/PREDICTION Principle. In this section, we will show how the FACT/PREDICTION Principle rules out certain space configurations and hence certain readings.

With indirect speech, two V-POINTs are engaged. As stated in (6.18), spaces embedded in the speech domain which are daughters of the initial speech space are assigned a FACT/PREDICTION status in relation to the V-POINT/@, the V-POINT of the reported speaker, regardless of whether that space is accessed from or via V-POINT/@. If a space is accessed directly from BASE, it will also be assigned a FACT or PREDICTION status in relation to V-POINT(BASE. A space may not be accessed from BASE using a marker which assigns the space a FACT/PREDICTION status which conflicts with the FACT/PREDICTION status already assigned that space in relation to V-POINT/@. This may be stated more formally in (6.38):
(6.38) **FACT/PREDICTION Principle:**

1. a space which is FACT in relation to V-POINT/@ cannot be accessed from V-POINT/BASE with a PREDICTION marker.
2. a space which is PREDICTION in relation to V-POINT/@ cannot be accessed from V-POINT/BASE with a FACT marker.

A space in the speech domain may only be accessed from V-POINT/BASE using a marker which assigns the same FACT/PREDICTION status as that already assigned the space in relation to V-POINT/@. V-POINT/BASE is ruled out as an anchor point for tense where there is a FACT/PREDICTION violation. The FACT/PREDICTION Principle acts to enforce a kind of V-POINT consistancy; however, it is the V-POINT/@ of the reported speaker which has priority. Although the tense choice for indirect speech may not be that of the original speaker, indirect speech guards the status of an event as FACT or PREDICTION in relation to the V-POINT/@, the V-POINT of the reported speaker. In the following sections, we will show how the FACT/PREDICTION Principle rules out certain readings.

### 6.5.1 Embedded Future

The FACT/PREDICTION Principle allows us to account for the behavior of the embedded Future (FUTURE) as in (6.39).

(6.39) a. John will announce that he will burn the document.

b. John will announce that he will be happy whatever the outcome.
The only interpretation available for (6.39a) is one where the burning takes place after the announcement. The only interpretation available for (6.39b) is one where John's being happy takes place after the announcement. The matrix and embedded events cannot cooccur, as shown by the unacceptability of (6.40).

(6.40) *? John will announce at midnight that he will be happy (at midnight).

These facts are explained by the FACT/PREDICTION Principle.

The initial speech space is always FACT in relation to V-POINT/@, the V-POINT of the experiencer. Since the initial speech space is FACT in relation to V-POINT/@, it cannot be accessed from V-POINT/BASE with a PREDICTION marker. The embedded FUTURE events 'BURN' and 'he was happy' cannot structure the initial speech space, because access of the initial speech space from V-POINT/BASE with a FUTURE marker would assign the initial speech space a PREDICTION status. This results in a FACT/PREDICTION conflict, as diagrammed in Figure 6.15(a) below. A more schematic version of the diagram is given in Figure 6.15(b).
Spaces which are FACT in relation to V-POINT/@ cannot be accessed from BASE with a PREDICTION marker. Thus the initial speech space cannot be accessed with a FUTURE marker.
Similarly, the FUTURE events 'BURN' and 'he was happy' cannot refer to an event which is prior to the speech event 'SAY', as shown by the unacceptability of (6.41a,b).

(6.41) a. *? John will announce tomorrow that he will burn the document tonight.
   b. *? John will announce next week that he will be happy tomorrow whatever the outcome.

The embedded FUTURE cannot refer to an event which is posterior to V-POINT/BASE but prior to V-POINT/@, because this reading also results in a FACT/PREDICTION conflict. For example, if the reported event 'will burn' in (6.41) is prior to V-POINT/@, then it is FACT in relation to V-POINT/@. If the reported event 'will burn' is encoded by FUTURE, then it is a PREDICTION in relation to V-POINT/BASE. A space which is FACT in relation to V-POINT/@ cannot be accessed from BASE with a PREDICTION marker.

This FACT/PREDICTION conflict can be diagrammed in Figure 6.16 (a) below. A more schematic version of the diagram is given in Figure 6.16 (b).
FIGURE 6.16 (a)  
‘John will announce tomorrow that he will burn the document tonight’

Figure (a) shows the representation of the sentence with an initial speech space: 
- **Space R:** BASE (V-POINT)  
  - **Role:** ANNOUNCE John

**Space M:** FUTURE PREDICTION posterior to R
- **Role:** FACT

**Space M1:** FACT
- **Role:** PREDICTION

**Space M2:** FACT
- **Role:** BURN a’ b document

The FACT/PREDICTION Principle does not rule out a reading where the
reported event is FUTURE in relation to both V-POINT/BASE and V-POINT/@, as in (6.42).

(6.42) John will announce in a few minutes that he will burn the document tomorrow.

In this example, the FOCUS space structured by 'will burn' is FUTURE, and hence a PREDICTION in relation to both V-POINT/@ and V-POINT/BASE. There is no FACT/PREDICTION conflict.

The behavior of the Future (FUTURE) in (6.40) may be contrasted with the behavior of the Simple Past (PAST) in (6.43).

(6.43) John said he was happy.

In contrast to the Future, an embedded PAST can refer to an event or situation which is concurrent to the speech event 'SAY'. The PAST expression 'he was happy' can structure the initial speech space because the PAST is a FACT marker. The initial speech space is also FACT. Hence, there is no FACT/PREDICTION conflict.

Where the matrix verb is FUTURE, in order to access the initial speech space or a space which is concurrent to the initial speech space, the Present (PRESENT) must be used.

(6.44) John will say he is happy with the results.

The PRESENT only specifies that an event is non-prior to BASE, thus it can be used to
structure spaces which are future in real time. The PRESENT is a FACT marker so can be used to access the initial speech space. We will return to discussion of embedded PRESENTs in section 6.6.

6.5.2 Embedded Future Perfect

The FACT/PREDICTION Principle also allows us to account for the behavior of the Future Perfect in embedded indirect speech. Consider the behavior of the Future Perfect in (6.45).

(6.45) a. John will make an announcement at midnight.
   He will already have burned the document.

b. John will make an announcement at midnight. *? John will announce that he will already have burned the document.

c. John will announce at midnight that Bill will have already burned the document.

d. John will announce at midnight that he will have burned the document before next week.

e. John will announce at midnight that he has already burned the document.

The non-embedded Future Perfect ('he will already have burned the document') can be anchored to speaker reality, as in (6.45a). An embedded Future Perfect, however, must be interpreted as a PREDICTION from V-POINT/@, the V-POINT of 'John' at midnight, the time of the reported speech event 'announce'. This results in the oddness of (6.45b), where 'he' corefers to John. From V-POINT/@ at midnight, John might make a
PREDICTION about what someone else will have done before midnight, as in (6.45c).

From V-POINT/@ at midnight, John might make a PREDICTION about what he will have done before some point which is posterior to midnight, as in (6.45d). However, barring a bout of amnesia it is quite odd for John to make a PREDICTION from V-POINT/@ at midnight about his own previous action of burning the document. Hence, the oddness of (6.45b). In order for John to assert from V-POINT/@ at midnight his own prior action of burning the document, the Present Perfect is needed, as in (6.45e).

These facts can also be explained by the FACT/PREDICTION Principle. The embedded Future Perfect in (6.45b) cannot be a PREDICTION from V-POINT/BASE, as can the non-embedded Future Perfect in (6.45a). In order for the embedded Future Perfect in (6.45b) to be a PREDICTION from V-POINT/BASE it must have an access path from BASE space R to V-POINT/@ to a space which is prior to V-POINT/@. This is diagrammed in Figure 6.17 (a). A more schematic version is given in Figure 6.17 (b).
**FIGURE 6.17 (a)**

"John, will announce at midnight that he will already have burned the document"

**FIGURE 6.17 (b)**

"John, will announce at midnight that he will already have burned the document"

An interpretation where the expression 'he will have burned the document' is
accessed directly from V-POINT/BASE, as in (6.45b), is not possible because it results in a FACT/PREDICTION conflict. The V-POINT/@ space, space M1, cannot be accessed by a FUTURE PREDICTION marker because it is FACT. Hence, this FACT/PREDICTION conflict prevents the Future Perfect from taking an access path through the initial speech space, space M1. In order to access the initial speech space M1, the Present Perfect is needed as in (6.45e).

The behavior of the Future Perfect in (6.45) may be contrasted with that of the Past Perfect in (6.46), which does not present the same set of complications.

(6.46) a. John made an announcement at midnight. He had already burned the document.
   b. John made an announcement at midnight. John announced that he had already burned the document.

In contrast to the Future Perfect, the Past Perfect can take an access path from V-POINT/BASE through the initial speech space because it does not create a FACT/PREDICTION conflict. This was shown in section 6.4.4.

6.5.3 Embedded PAST

The FACT/PREDICTION Principle also accounts for the behavior of the Simple Past, in (6.47).

(6.47) *? John said last week he was happy yesterday.
As pointed out in section 6.4.3, an embedded PAST cannot refer to a time period which is prior to V-POINT/\textsc{base} but posterior to V-POINT/@, as diagrammed in Figure 6.18(a) below. A more schematic version is given in Figure 6.18(b).

\textbf{FIGURE 6.18 (a)} \hspace{1cm} ‘*John said last week he was happy yesterday’
FIGURE 6.18 (b)  ‘*John said last week he was happy yesterday’

In this interpretation, the reported event 'he was happy' is assigned a PREDICTION status in relation to V-POINT/@. If the space structured by 'he was happy' is accessed from V-POINT/BASE with the PAST, then it would be assigned a FACT status in relation to BASE, resulting in a FACT/PREDICTION conflict. Hence, a reading where the reported event 'he was happy' is prior to BASE, but posterior to V-POINT/@ is not possible.

In order to access a space which is posterior to and PREDICTION in relation to V-POINT/@, the Future of the Past is required, as in 'John said he would be happy'.

(6.48) John said he would be happy.

The interpretation of (6.48) results in the configuration of spaces diagrammed in Figure 6.19(a). Again a more schematic version is given in 6.19(b).
FIGURE 6.19 (a)  
‘John said he would be happy’

Access Path to M2:  R --> M1 --> M2  
BASE V-PT/@ target

FIGURE 6.19 (b)  
‘John said he would be happy’
The Future of the Past (PAST FUTURE) accesses space M2 from V-POINT/Base via V-POINT/@ space M1. There is no FACT/PREDICTION conflict, since the PAST is a FACT marker.

The same ordering restriction does not apply to tense in embedded relatives. With embedded relatives the embedded event can be posterior to the matrix event. For example:

(6.49) Last week, John talked to the a girl who was sick this morning.

The embedded PAST event 'he was sick' is posterior to the matrix event 'TALK'. The embedded event only has to be prior in relation to V-POINT/Base. There is no strong V-POINT at work constraining this as a possible interpretation.

6.5.4 Unidirectionality of FACT/PREDICTION Principle

The constraints imposed by the FACT/PREDICTION Principle are unidirectional. A space which is FACT in relation to BASE can be accessed from V-POINT/@ with a PREDICTION marker, as in (6.50a) below. A space which is PREDICTION in relation to BASE can be accessed from V-POINT/@ with a FACT marker, as in (6.50b).

(6.50) a. She said last week that he would leave the next day.

   b. He will announce at midnight that he burned the document two hours before (at 10pm).

In (6.50a), the space targeted by the embedded FUTURE of the PAST is a time space
which represents 'the next day'. This space is prior to BASE and thus, FACT in relation to BASE. Yet with the FUTURE of the PAST the target space is accessed from V-POINT/@ with a PREDICTION marker. In the now familiar example (6.50b), the space targeted by the embedded PAST is posterior to and PREDICTION in relation to BASE. Yet with the PAST, the target space is accessed from V-POINT/@ with a FACT marker.

What is important for indirect speech is not complete V-POINT consistency, but that the FACT/PREDICTION status of the event in relation to V-POINT/@, the V-POINT of the reported speaker, be retained. In this respect, the V-POINT of the reported speaker has priority over the V-POINT of the BASE.

This section has shown how the FACT/PREDICTION Principle rules access from V-POINT/BASE where there is a FACT/PREDICTION conflict. We turn now to a discussion of the PRESENT in embedded clauses of speech verbs.

6.6 Embedded PRESENT

In this section, we will consider the temporal interpretations which are available for the embedded PRESENT. Discussion of the embedded PRESENT has been reserved until the last, because the PRESENT, in contrast to the PAST and FUTURE, has special properties in relation to BASE. The PAST and FUTURE, as characterized in chapters 3 and 4, have a relationship only to a V-POINT, although in the canonical case this V-POINT is BASE. The PRESENT, however, always guards a relationship to BASE. The PRESENT identifies or cues construction of a PRESENT FOCUS space which represents FACT. The time period represented in the PRESENT FOCUS space is
specified only as not prior to V-POINT/BASE.

The time space structured by the embedded PRESENT event may represent a time period which includes both V-POINT/BASE and V-POINT/@, both the 'now' of the BASE and the 'now' of the speech event. For example:

(6.51)  a. John said that he is very happy about his new job.
        b. John had said that he is very happy about his new job.
        c. Tomorrow, John will tell Mary that he wants a divorce.

In (6.51a) and (6.51b), where the matrix verb is a type of PAST, we may interpret the expression 'he is very happy' to mean both that John is happy 'now' about his new job and that John was happy about his new job at the time of the past speech event 'SAY'. In (6.51c), where the matrix verb is a type of FUTURE, we may interpret the expression 'he wants a divorce' to mean that John's wanting a divorce holds both now and tomorrow. In these interpretations, the PRESENT space, (the space structured by the PRESENT event 'he is very happy' or 'he wants a divorce'), represents a time period which includes both V-POINT/BASE and V-POINT/@.

The fact that the PRESENT space may represent a time period which includes both V-POINT/BASE and V-POINT/@ in examples (6.51a-c) is explained by the nature of time spaces. As a time space, a PRESENT space may represents a time period of any size. We may conceptualize the present as including part of the past and/or part of the future. Hence, a PRESENT space may include part of what is past or future in real time, as long as the time period represented in the PRESENT space is not completely prior to BASE and it represents what is construed as FACT. Where the matrix verb is PAST, a
PRESENT space may include unlimited parts of the PAST, but it cannot represent a temporal period completely prior to V-POINT/BASE.

Where the matrix verb is FUTURE, the temporal interpretation of the PRESENT event 'he was happy x' may include both V-POINT/BASE and V-POINT/@, as in (6.51c) above. The temporal interpretation of the PRESENT event may also include only V-POINT/@, as in (6.52a), or only V-POINT/BASE, as in (6.52b) below.

(6.52) a. When he sees the results tomorrow John will say he is thrilled.
   b. In the 22nd century, he will write that we (in the late 20th century) are
      in a post-modern crisis.

In (6.52a), we may interpret the expression 'he is thrilled' to mean that John's being thrilled holds only tomorrow at the time of the speech event 'say'. In this interpretation, the time period represented in the PRESENT space structured by 'he is thrilled' includes V-POINT/@, but not V-POINT/BASE. With the PRESENT, the initial speech space can be accessed from itself, since it is V-POINT/@. In (6.52b), we may interpret the expression 'we are in a post-modern crisis' to mean only 'now' but not the time of the speech event. In this interpretation, the time period represented in the PRESENT space structured by 'we are in a post-modern crisis' includes V-POINT/BASE but not V-POINT/@. In this reading, PRESENT refers to a time period which is prior to V-POINT/@. A speech space may not be accessed from BASE where there is a conflicting FACT/PREDICTION status, but it may be accessed from BASE where there is a conflicting temporal perspective.

With both PAST and FUTURE matrix verbs, the PRESENT space may also
represent a time period which is completely posterior to V-POINT/BASE, and includes neither V-POINT/BASE nor V-POINT/@.

(6.53)  a. John said the last metro leaves at 12:30.
        b. John will say the last metro leaves at 12:30.

Here the PRESENT expression 'the last metro leaves' encodes an event which is future in real time.

The behavior of the PRESENT in these embedded clauses can be explained quite simply. The time period represented in the PRESENT FOCUS space is not prior to BASE. Hence, the PRESENT FOCUS space may represent a time period which includes only V-POINT/BASE as in (6.52b). It may also represent a time period which is completely posterior to V-POINT/BASE, but which includes V-POINT/@, as in (6.52a). It may also represent a time period which is completely posterior to V-POINT/BASE, but which does not include V-POINT/@, as in (6.53a) and (6.53b).

We would expect the PRESENT for events which are completely posterior to V-POINT/BASE in just such cases where the future event is construed as a FACT. This explains the acceptability of (6.52a) and (6.53). In (6.53), the embedded event is a future scheduled event. Although it is future in real-time, it is construed as FACT rather than PREDICTION. See chapter 4, section 4.1.5 for a discussion of the PRESENT for future scheduled events. In (6.53b), the PRESENT event is construed as FACT in relation to V-POINT/@; the PRESENT event structures the initial speech space which is always construed as FACT.
Where the matrix verb is PAST, we may also interpret the PRESENT space as including only the V-POINT/BASE and not the V-POINT/@. This interpretation is made clearer in the following example.

(6.54) John was in San Francisco yesterday.
I talked to John's secretary (yesterday).
She said he is in Los Angeles today.

In this example, the speaker makes the report 'he is in Los Angeles' concerned only with what holds true in present reality, not with what held true at the time of the speech event 'SAY'. The PRESENT space constructed for the PRESENT situation, 'he is in Los Angeles', includes only the V-POINT/BASE and not V-POINT/@.

In this example, what is future or posterior to the speech event 'she said' is marked as PRESENT FACT, seemingly in violation of the FACT/PREDICTION Principle. This is possible because although the event 'he is in Los Angeles' is posterior or future to the time of saying, the secretary is not making a PREDICTION, she is stating a FACT. In relation to the secretary's V-POINT at the time of speaking yesterday, V-POINT/@, his being in Los Angeles is a future scheduled event. Future scheduled events are construed as FACT rather than PREDICTION. Since the event 'he is in Los Angeles' is FACT in relation to V-POINT/@ and FACT in relation to both V-POINT/@ and V-POINT/BASE, there is no FACT/PREDICTION conflict and the PRESENT is an acceptable tense choice. Again, a speech space may be accessed from BASE where there is a FACT/PREDICTION conflict, but it may be accessed from BASE where there is a conflict in temporal perspective.
We cannot get the same reading in an example such as (6.55) below.

(6.55) John was sick yesterday.
I talked to John's secretary (yesterday).
??She said he is feeling well today.

The event 'he is feeling well' is not a future scheduled event which can be construed as FACT in relation to the secretary's V-POINT yesterday, V-POINT/@. The only semantically felicitous reading is as a PREDICTION. Since his feeling well is a PREDICTION in relation to V-POINT/@, it cannot be stated as a FACT in relation to V-POINT/BASE. Access from V-POINT/BASE using a FACT marker violates the FACT/PREDICTION Principle, hence the unacceptability of (6.55).

In summary, a variety of interpretations are available for the PRESENT in embedded clauses of speech verbs. Given the strong tie which the PRESENT has to BASE, our tendency is to interpret PRESENT events as true 'now' in real time. But this is not necessarily so. The PRESENT only determines that the PRESENT time period is not prior to BASE. The exact time period represented in a PRESENT space, its size and whether it includes V-POINT/BASE and/or V-POINT/@ is determined more by contextual information than by grammatical constraints imposed by the tense category PRESENT.
6.7 Conclusion

This chapter provides a mental space account of tense in the embedded clauses of speech verbs. In summary, we have proposed that spaces in the speech domain set up for the interpretation of the embedded clause of speech verbs have a number of important, special properties. First, the initial speech space contains a V-POINT role, V-POINT/@, associated with the reported speaker, the experiencer. Second, spaces in a speech domain are assigned a FACT/PREDICTION status in relation to V-POINT/@. Third, spaces in the speech domain have special access properties.

Spaces in the speech domain may be accessed via a number of different paths. The V-POINT/@ set up for the reported speaker becomes available as an access point for tense. Spaces may be accessed directly from V-POINT/@, from V-POINT(BASE) via V-POINT/@, or directly from V-POINT(BASE). Spaces in the speech domain may not be accessed via daughter spaces, granddaughter spaces (or other offspring) of the BASE which are outside the speech domain. BASE access is also subject to the FACT/PREDICTION Principle. A space may only be accessed from V-POINT(BASE) with a marker which has the same FACT/PREDICTION status as that assigned the space in relation to V-POINT/@.

The mental space account presented here has a number of advantages: First, it accounts for the behavior of the embedded PRESENT, PAST, and FUTURE tenses and it constrains (without over-constraining) the actual tense combinations which are allowed. Second, it allows us to explain meaning differences inherent in different tense combinations. Third, it does not depend on a transformation from a direct speech. Fourth, the semantic ambiguity of embedded tense is inherent in the system. No alternate
or variable sequence-of-tense rules are needed. Finally, and most importantly, embedded
tense is accounted for using the same characterizations and mechanisms employed to account for tense in simple sentences and in discourse.