Semantic and pragmatic aspects of the interaction of time and modality in French: an interval-based account

LAURENT GOSSELIN

5.1 Introduction

This chapter aims at a better understanding of the complexities of the interaction between the temporal and modal meanings in French by means of a model inspired by Reichenbach’s (1947) classical apparatus but in which the coordinates are replaced by intervals (among other amendments). Such a replacement, we suggest, bears a number of theoretical consequences that allow a model to encompass a large scope of phenomena dealing with time, modality, and their interaction within a single framework. French shows a particularly complex variety of items where the complex interaction of time and modality have long been problematic for the grammatical tradition. In the argument developed in this chapter, we evoke the notions referred to by French linguists when tackling these objects of study, observing that the literature in the field too often struggles to resolve the semantics of temporal and aspectual markers with the classical but inaccurate assumption that temporal and modal expressions form separate categories. To the contrary, this chapter envisages a very different approach, in which each eventuality referred to in an utterance is not only situated in time and presented with an aspectual viewpoint, but also conveys a semantic modality that specifies that the eventuality is conceived of either as a fact or as a mere possibility. We argue that the modality is derived from the aspectual viewpoint on the basis of the modal asymmetry of linguistic time; that is, that what precedes the point of reference is irrevocable, and belongs to historical

---

I am extremely grateful to Louis de Saussure for his helpful comments and suggestions, which greatly improved this chapter.
necessity, whereas what is posterior to the reference point is represented as merely possible. In this framework, this assumption leads to a set of predictions concerning the modal meaning of tenses and of the so-called ‘aspectual periphrases’ which are used in French to express phasal aspect (see Dik 1989).

In Section 5.2, we argue against the classical conception of relations between time and modality, in particular, in the French tradition. We show that, to the contrary, temporal and modal expressions cannot be considered as strictly separate. Then we present the hypothesis of the modal asymmetry of linguistic time (Section 5.3), and our model using intervals (Section 5.4). The integration of the hypothesis of modal asymmetry of time within this model leads to a new analysis of modal values of aspectual viewpoints, and consequently of tenses (Sections 5.5 and 5.6). Finally, we extend this analysis to a number of ‘aspectual periphrases’ (Sections 5.7–5.9).

5.2 General preliminaries

The French literature usually regards time and modality as strictly distinct,2 that is, it considers that what is temporal cannot be modal and vice versa. The idea stems from the grammatical tradition that reasons in terms of ‘modes’, that is, semantic modalities associated with paradigms of tenses. In this line of thought, all ‘modes’ but the indicative have exclusively non-temporal, modal values, whereas the indicative may have, depending on the context, either (non-modal) temporal values or (non-temporal) modal values, as summarized in Figure 5.1.

A particularly interesting case in this respect is the traditional analysis of the French imperfective past (imparfait, henceforth IMP). This tense is traditionally seen as bearing a temporal meaning in most cases, as in (1a), but also a modal one, indicating irrealis, in a number of specific cases, including if-clauses but not restricted to them; see the examples in (1b–c):3

(1) a. Le 1er janvier 182..., le baron François-Armand de Luizzi était assis au coin du feu, dans son château de Ronquerolles. (opening sentence of Les Mémories du Diable by F. Soulié)

On January 1st, 182..., Baron François-Armand de Luizzi sit-IMP (‘was sitting’) by the fire, in his castle at Ronquerolles.4

---

2 With the exception of Wilmet’s grammar (1997: §414), according to which “each category is attached to a formula that combines a modal variable with a temporal or aspectual variable” [my translation]. This dichotomy can also be found in English linguistics around the question of whether the future will is of a temporal or modal nature (for a criticism, see Vetters and Skibinska 1998: 255).

3 One can read, for example: “The indicative imperfect tense denotes a process situated outside the speaker’s present actuality. It takes on a temporal value when the process is shifted back in time and a modal value when it is considered possible outside the real universe” (Riegel, Pellat, and Rioul 1994: 305 [my translation]).

4 We provide full translations only when the gloss is not clear enough; conversely, we provide glosses only when necessary.
b. Si je gagnais au loto, je m’achèterais une voiture.5
If I win-IMP (‘won’) the lottery, I would buy a car.
c. Sans son intervention, je me trompais de chemin.6
Without his intervention, I make-IMP a mistake about the way to follow
‘Without his help, I would have gone the wrong way.’

By comparison, it is assumed that the French simple past (henceforth SP) always
has a temporal value (inscribing the eventuality, so to speak, in the realm of the
real),7 though a more detailed analysis shows that there are in fact usages where the
simple past expresses only a possibility, as (2) demonstrates:

(2) Quant à Fausta, si cette révélation l’émut, si le visage bouleversé de ce père lui
inspira autre chose que de la curiosité, on ne peut le savoir. (M. Zévaco, La
Fausta)8
As to Fausta, if this revelation move-SP her, if the anguished face of this father
inspire-SP her anything other than curiosity, one could not know it.
‘As to Fausta, there was no way of knowing if this revelation moved her, if the
anguished face of this father inspired anything other than curiosity.’

This alleged dichotomy rests on questionable assumptions, notably that we hold as
temporal that which is certain, proven, known, asserted, but as modal that which is
uncertain, potential, considered, unasserted. It is striking to note that such assumptions
are actually incompatible with the definitions of time and modality that are adopted
even within those studies which posit them. Indeed, the classical view is that tense is
about localization within a time period, determined in relation to the speech point
(‘absolute time’) or to a point of reference (‘relative time’). Modality is itself a concept
that is variously understood from trend to trend, but it is usually conceived of as the
linguistic marking of the speaker’s attitude vis-à-vis the represented content. If we

5 On these usages, see Martin (1991); Gosselin (1999); Bres (2005); Patard (2007).
6 On these usages, see Kleiber and Berthonneau (2003); Berthonneau and Kleiber (2006); Bres (2006).
8 See Brunot (1922: 877–8).
adhere to these definitions, the eventualities expressed in examples (1b–c) and (2) bear not only a temporal meaning but at the same time also a modal one. They are indeed situated on the timeline with regard to the speech point as anterior (past, examples (1a and 1c)), simultaneous (present), or posterior (future, example (1b)), but they are obviously entertained as possible or otherwise unreal, thus bearing a modal meaning.

Two options are then on offer: either we alter the definitions of ‘temporality’ and ‘modality’, which does not seem very sound, or we reject the classical ‘dichotomy’ assumption in favour of a more elaborated account of the interaction of temporal and modal meanings as empirically observed. This, we suggest, amounts to considering time, aspect, and modality as essential components of all utterances, each in its own way, although not implying that their various meanings could not be selected in various circumstances according to pertinent schemes of interpretation.9 If this perspective is correct, then all eventualities, be it a state, an activity or an event, are situated in time—more or less precisely—but also presented under a certain aspect and according to a specific type of modality. Modality, in turn, should not be understood in the rather fuzzy way in which it is understood in the grammatical tradition, but rather as encompassing all possible ways the speaker positions herself vis-à-vis the propositional content, that is, including presenting the eventuality as merely true (what Kant calls ‘assertoric modality’).10

Furthermore, concerning these various levels of meaning, we observe the following:

(a) they are not necessarily marked by morphemes specifically dedicated to expressing them, but generally result from the interaction between several markers (lexical or grammatical morphemes and constructions);
(b) they have a reciprocal influence upon each other.

This is illustrated in Figure 5.2.

![Figure 5.2 Relations between markers and temporal, aspectual, and modal meanings.](image_url)

---

9 This entails in turn a conception where types of meanings are discriminated into, for example, ‘standard’ versus ‘derived’ meanings (or ‘values’), as in Gosselin (1996); ‘prototypical’ versus ‘non-prototypical’ meanings (de Mulder and Brisard 2006); or ‘descriptive’ versus ‘interpretative’ usages (de Saussure 2003, 2010 following Sperber and Wilson’s 1995 classic pragmatic distinction).

10 See Kronning (2004: 44).
In what follows, we will focus on the influence exerted by time and aspect on the modal status of the eventuality in French.\(^{11}\)

### 5.3 Modal asymmetries in pragmatic and semantic times

In numerous works, time is considered to have what may be called an ‘asymmetrical’ modal structure: the present and the past pertain to the irrevocable\(^{12}\) (‘historical necessity’\(^{13}\)), while the future is conceived of as open, undetermined, simply possible. This asymmetrical structure accounts for the fact that time presents itself as an irreversible flux, which continuously converts the possible into the irrevocable; this conversion occurs at a specific modal breakpoint involving a modal change. We represent this structure in Figure 5.3.\(^{14}\)

\[
\begin{array}{c|c}
\text{Past} & \text{Modal breakpoint} & \text{Future} \\
\hline
\text{Irrevocable} & \text{Possible} \\
\end{array}
\]

**Figure 5.3** The modal breakpoint.

or, according to branching time theory, in Figure 5.4:

\[
\begin{array}{c}
\text{Past} \\
\hline
\text{Irrevocable} \\
\text{Possible} \\
\end{array}
\]

**Figure 5.4** Structure of branching time.

This modal structure has received various interpretations. In possible-worlds semantics, the general assumption is that it is of a metaphysical nature,\(^{15}\) that is, it expresses the objective structure of reality. However, this metaphysical conception is, contrary to what is sometimes claimed, far from obvious. It corresponds in fact to a vision of the structure of reality, both occidental and relatively recent, for which there is no omniscient God, no prophets, no divination, no destiny or determinism. According to another interpretation, this asymmetrical structure is that of subjective

\(^{11}\) I have analysed the interaction of temporal and aspectual markers in Gosselin (1996), of modal markers in Gosselin (2010a), and the interaction of time, aspect, and modality in Gosselin (2005, 2010a).


\(^{13}\) See Thomason (1984).

\(^{14}\) See Gosselin (2005: 89); Lagerqvist (2009: 52–3).

\(^{15}\) See Condoravdi (2002); Kaufman, Condoravdi, and Harizanov (2006: 99).
time, and the modalities in question thus take on an epistemic value. For Culioli (1978) and Desclés (1994: 61), the modal breakpoint separates the certain (the past and present) from the uncertain (the future). In a more complex model,\(^\text{16}\) Langacker (1991) opposes known reality, present or past (defined as that which the speaker accepts as constituting reality), to irreality, which encompasses part of the present and past and the totality of the future. According to this perspective, we cannot entertain any certainties about the future, while the past and the present, so long as they are known, correspond to certainty.

This division can also be correlated with the subject’s cognitive abilities. According to Chafe (1995), an individual accesses the present via perception, the past via memory, and the future via imagination—and imagination seems incompatible with certainty. But this analysis does not seem adequate, since in real life we do in fact feel certain of many things about the future—especially the immediate future. We can even say that many voluntary movements of our bodies are guided by such a certainty. And, on the other hand, we do also feel a great deal of uncertainty about the past\(^\text{17}\)—especially the remote past—even if we have knowledge of it (so long as we’ve heard about it), and it seems that we access it just as much by the imagination as we do by memory.

In fact, the modal asymmetry of time is considered obvious only from the perspective of practical philosophy, from the point of view of deliberation and action. The argument is a classical one (see Plato, Protagoras 324b; Aristotle, Ethica Nicomachea VI, 2, 1139b 6–11; Alexander of Aphrodisias, De Fato, 11–12): one cannot modify the past, one can only deliberate and act upon the future. In this respect, the modal difference is clear-cut and certainly unquestionable. In so far as this structure fundamentally concerns action, we will henceforth call this the pragmatic time. The modal asymmetry of pragmatic time is the fundamental condition for the possibility of free action (whether physical or verbal), and thus for all that presupposes acting freely: deliberation, rhetoric, ethics, and so forth. Even the recourse to Theory of Mind presupposes the modal asymmetry of pragmatic time: speech acts as well as mental states are themselves oriented towards the irrevocable, and thus towards the present or the past (e.g. admonition, repentance, or nostalgia), or towards the possible and thus the future (e.g. suggestions and all directive acts, hope, or fear). Argumentation itself entails the possibility of acting upon the beliefs of an audience, insofar as even a philosophy that would refuse to give any kind of credit to the obvious fact of modal asymmetry would nonetheless need to concede that—from a pragmatic angle—the future is open. Otherwise, a ‘performative contradiction’ would undermine it.\(^\text{18}\)

\(^{16}\) For a critical discussion, see Gosselin (2005: 79–82).

\(^{17}\) See Jaszczolt (2009: 50). On the past–future asymmetry, see also Jaszczolt, this volume.

\(^{18}\) See Apel (1986).
In this perspective, it is the present moment (being the time of the decision about a projected action) that brings about the modal change between the possible and the irrevocable. The present moment thus introduces a modal breakpoint.

The issue then is to assess whether and how much this asymmetrical structure of pragmatic time affects linguistic time. Since temporal semantics concerns the way utterances represent eventualities and not what we think we know of the world we live in, we must first point out that linguistic time mirrors neither pragmatic time, nor metaphysical time, nor a ‘subjective’ notion of time. Language does allow a speaker to evoke past possibilities (i.e. not only facts) and to present future events otherwise than as merely undetermined, or even as inevitable, even when they are not naturally plausible, as in the following ‘prophetic’ usage of the future:19

(3) Aussitôt après la détresse de ces jours-là, le soleil s’obscurcira, la lune perdra de son éclat, les étoiles tomberont du ciel . . . (The Gospel according to Matthew, 24:29, French version, Bible de Jérusalem)

Immediately after the despair of those days, the sun darken-FUT, the moon lose-FUT its shining, the stars fall-FUT from heaven . . .

‘Immediately after the tribulation of those days shall the sun be darkened, and the moon shall not give her light, and the stars shall fall from heaven . . .’ (Holy Bible, King James Version)

Some have been able to use the asymmetrical structure to give an account of temporal semantics with some success.20 Yet this is because such proposals posit a modal asymmetry comparable to that of pragmatic time, with a difference regarding the moment taken to create the modal breakpoint. Vet (1981), for example, interfaces Reichenbach’s model with possible-worlds semantics and takes the reference point R as the key moment, explaining: “The course of events, which is real up to R, can take various paths after R” (pp. 112–13). At the level of semantic time, it is thus R which is assumed as creating the modal breakpoint. We draw upon this assumption within our own framework, the Interval-semantic model of time (Gosselin 1996, 2005), which in turn leads to further predictions.

5.4 The Interval-semantic model

ISM—for Interval-semantic model—is a Reichenbach-inspired model which was initially designed with the aim of accounting for the semantics of tenses in French;21

---

19 Contrary to Copley (2009: 11), we observe that although the indeterminacy of the future is unquestionable at the pragmatic level, it is not so at the semantic level.
20 See, among others, Beaver and Condoravdi (2003).
21 This model has been applied to other languages; see, among others, Hamdani Kadri (2006).
its *raison d’être* comes basically from the identification of two major shortcomings of the original framework by Reichenbach which (i) is too simplistic as regards representations of the temporality of eventualities and (ii) suffers from inaccurate computational principles. Unsurprisingly, then, the ISM model presents two fundamental innovations that concern precisely representational format on the one hand and computational principles on the other.

As regards representation, Reichenbach’s coordinates are replaced by intervals, which increases the number of potential relations. The ISM model implements four types of interval positioned along the temporal axis:22

- \([B_1, B_2]\): the eventuality’s interval, corresponding to the categorization and construction of an eventuality;
- \([I, II]\): the reference-time interval, designating the ‘window of exhibition’, i.e. what is manifested, or shown, about the eventuality;
- \([01, 02]\): the speech-time interval every utterance implies as a speech act;
- \([c_1, c_2]\): the circumstantial-time interval, whose construction is set off only by the presence of adverbials of time (of duration and/or location).

In this framework, **absolute time** can be defined by the relation between \([I, II]\) and \([01, 02]\).23 We can distinguish three types of absolute time:

- Past: \([I, II]\) previous to \([01, 02]\);
- Present: \([I, II]\) simultaneous with \([01, 02]\);
- Future: \([I, II]\) subsequent to \([01, 02]\).

The **aspectual viewpoint**24 corresponds to the relation between \([I, II]\) and \([B_1, B_2]\). Four basic aspectual viewpoints can be distinguished (in what follows, SP stands for *simple past*, IMP for *imperfective past*, CP for *composed past/present perfect*, PR for *present*, FUT for *future*, FP for *future in the past*, PP for *past perfect*):

(i) Perfective viewpoint: \([B_1, B_2]\) coincides with \([I, II]\) (Figure 5.5):

\[(4)\] *Il traversa le carrefour*

He cross-SP the intersection

‘He crossed the intersection.’

---

22 This model is, in certain respects, comparable to Klein’s (1994): \([B_1, B_2]\) corresponds to TSit (‘time of situation’), \([I, II]\) to TT (‘topic time’), and \([01, 02]\) to TU (‘time of utterance’).

23 We conform to the non-standard definition of time proposed by Reichenbach, for which Klein (1994: 21–4) advances decisive arguments.

24 For elaboration, see Smith (1991).
(ii) Imperfective viewpoint: \([B_1, B_2]\) includes \([I, II]\) (Figure 5.6):

(5) Il traversait le carrefour

He cross-IMP the intersection

'He was crossing the intersection.'\textsuperscript{25}

\[
\begin{array}{c|c|c}
B_1 & I & B_2 \\
\end{array}
\]

Figure 5.6 Imperfective viewpoint.

(iii) Perfect viewpoint: \([B_1, B_2]\) precedes \([I, II]\) (Figure 5.7):

(6) Il a traversé le carrefour depuis dix minutes

He cross-CP the intersection since ten minutes

'He crossed the intersection ten minutes ago.'\textsuperscript{26}

\[
\begin{array}{c|c|c|c}
B_1 & B_2 & I & II \\
\end{array}
\]

Figure 5.7 Perfect viewpoint.

(iv) Prospective viewpoint: \([B_1, B_2]\) follows \([I, II]\) (Figure 5.8):

(7) Il allait traverser le carrefour

He cross-FP the intersection

'He was going to cross the intersection.'

\[
\begin{array}{c|c|c|c}
I & II & B_1 & B_2 \\
\end{array}
\]

Figure 5.8 Prospective viewpoint.

\textsuperscript{25} The English progressive allows only dynamic aspect, whereas the French IMP also licenses states; see Molendijk (2010) for a comparison of English and French in this respect.

\textsuperscript{26} English normally forbids combining a present perfect with a temporal adverb (a problem known as the 'present perfect puzzle'); see Klein (1992). Our English translation does not render the perfect meaning of (6), and the temporal adverb does not correspond accurately to the French \textit{depuis}; the schema for (6), thus, is not accurate for English while being accurate for French, in the resultative meaning of the composed past.
Three examples with their iconic aspectual–temporal representation are discussed below with further elaborations:

**Past tense with imperfective viewpoint** (Figure 5.9):

(8)  La police recherchait le coupable depuis trois jours.
    The police search-IMP for the culprit since three days.
    'The police have been searching for the culprit for three days.'

---

**Past tense with perfective viewpoint** (Figure 5.10):

(9)  La police rechercha le coupable pendant trois jours.
    The police look-SP for the culprit for three days.
    'The police had sought the culprit for three days.'

---

**Past tense with perfect viewpoint** (Figure 5.11):

(10) La police avait arrêté le coupable depuis trois jours.
    The police arrest-PP the culprit since three days
    'It’s been three days since the police arrested the culprit.'

---

27 Examples are not translated inside the figures. Verbs are indicated in the infinitive.
These interval structures are computed from instructions coded by various items in the utterance in interaction with temporal–aspectual compositional rules and with background information (encyclopaedic and situational). Technically, a temporal–aspectual structure results from a network of constraints that apply to interval variables—a process which the above schemata only sketch for the sake of clarity.

When several eventualities are in relation with each other (for example in a text), computational rules determine the relations that are set up between intervals. We represent such relations, still for the sake of clarity, by duplicating the temporal axis. For instance, when an eventuality with imperfective aspectual viewpoint provides the background for a foreground perfective one, as in example (11) and Figure 5.12, we take the latter's interval (interval of the eventuality) to be established as identical with the interval of reference associated with the former.28

(11) Il pleuvait. Pierre prit son imperméable.
It rain-IMP. Pierre take-SP his raincoat.
'It was raining. Pierre took his raincoat.'

We account for the (at least apparent) contextual polysemy of temporal and aspectual markers by a notion of conflict resolution: the instructions encoded by

---

28 For more on background relations and the imperfective aspect, see Weinrich (1973); Reinhart (1986); Kamp and Rohrer (1983); Asher and Bras (1993).
the items may occasionally conflict, either with one another, or with direct compositional rules. These conflicts prompt the regular and predictable conflict-resolution mechanisms, which, we suggest, have to do with a higher level of compositionality. A typical case in point is the combination of items deprived of frequentative meaning that nevertheless lead to an frequentative interpretation. This occurs in example (12), displaying a famous sentence by Proust (the beginning of his *Remembrance of Things Past*):

(12) Longtemps, je me suis couché de bonne heure.
    For a long time, I go-CP to bed early.
    ‘For a long time, I used to go to bed early.’

The frequentative interpretation of (12) (made explicit in the English translation with *used to*) arises despite the fact that no frequentative meaning is associated with the linguistic items themselves. We suggest that the frequentative interpretation precisely obtains through a conflict-resolution mechanism. In fact, neither the French passé composé (roughly a present perfect) nor the verb phrase (*se coucher de bonne heure*) bear frequentative meanings. The reading of (13), without the duration adverb *longtemps* (‘for a long time’), leaves no doubt that the interpretation is not frequentative but singulative; thus iteration has to do with the insertion of *longtemps*.

(13) Je me suis couché de bonne heure.
    I go-PP to bed early.
    ‘I went to bed early.’

However, it has to be noted that the adverb *longtemps* is it is not a frequentative marker either, as the singulative meaning of (14) illustrates:

(14) Longtemps, je t’ai cru mort, perdu! Assassiné! (Villiers de l’Isle-Adam, *Le Prétendant* IV, 5)
    ‘For a long time, I thought you were dead, lost! Assassinated!’

At this point, two options are available. Either (i) we postulate the presence of an ‘invisible’ (Vlach 1981: 71) or ‘silent’ (van Geenhoven 2004, 2005) frequentative operator within these structures that is endowed with a semantic content yet deprived of a morphological and phonetic realization, or (ii) we consider iteration to be a value that emerges from the interaction between various constitutive markers in the utterance. The first solution is obviously unfalsifiable, if not circular. The second type of analysis (adopted by, among others, Vet 1981, Kleiber 1987, and Moens and Steedman 1988) considers iteration to be a means of resolving the conflict between discordant elements. In this example, it is the conflict between the duration adverb *longtemps* and the isolated eventuality that is resolved by the construction of an iterative series: the adverb no longer scopes over the eventuality, but, instead, over the series of eventualities. In such cases, we assume, compositionality is not ‘direct’
(Barker and Jacobson 2007) but ‘holistic’ (Gosselin 1996, 2005), ‘Gestaltist’ (Victorri and Fuchs 1996), or ‘interactionist’ (Recanati 2004).

5.5 Modal values of aspectual viewpoints

Rephrased in the framework of the ISM model, Vet’s hypothesis (Vet 1981) about the modal asymmetry of time (saying that the modal change occurs at R) takes the following form: in the indicative, it is the final bound of the reference interval (II) which brings about the modal break between the irrevocable and the possible. A simple test is associated with this hypothesis: if the right-bound context may indicate that the eventuality did not occur (or wasn’t completed), then the eventuality belongs entirely (or partially if it wasn’t completed) to the realm of the mere possible.

With regard to the types of aspectual viewpoints identified above, this leads to the following predictions, which relate to what we shall henceforth call ‘aspectual modal values’:

(a) With perfective (‘il traversa la route’ ‘he cross-SP the road’) and perfect (‘il a traversé la route depuis 5 minutes’ ‘he cross-CP the road five minutes ago’) viewpoints, the eventualities are entirely situated within the irrevocable, as in Figures 5.13 and 5.14, respectively:

\[
\begin{array}{c|c|c}
I & & II \\
B1 & & B2 \\
\hline
\end{array}
\]

**Figure 5.13** Aspectual modal values with perfective viewpoint.

(b) With the imperfective viewpoint (Figure 5.15), the end of the eventuality is situated in the realm of the possible; hence, with telic eventualities, the occurrence of the well-known ‘imperfective paradox’29 (it remains unknown, unless there is further indication, whether the eventuality was completed or not: ‘il traversait la route (quand soudain . . . )’ ‘he was crossing the road (when suddenly . . . )’):

\[
\begin{array}{c|c|c|c|c|c}
& & & & \\
B1 & B2 & I & II \\
\hline
\end{array}
\]

**Figure 5.14** Aspectual modal values with perfect viewpoint.

29 See Dowty (1979), and, for a recent restatement, Portner (2009: 243–5).
With atelic eventualities, the same configuration simply leads to considering as possible only the fact that the imperfective eventuality, taken as a background, may continue after the completion of the foreground eventuality. For example, with *Les élèves parlaient quand le proviseur entra* ‘the students were talking when the principal entered the room’, whether the students continued to talk remains unknown in the absence of further indication, as is represented in Figure 5.16.30

(c) The prospective viewpoint leaves the entire eventuality within the realm of the possible (*il allait traverser la route (quand soudain . . .)* ‘he was going to cross the road (when suddenly . . .)’), as in Figure 5.17.

5.6 Relations between temporal modal values and aspectual modal values

We posited earlier that semantic time is relatively independent of pragmatic time. However, we suggest that specific meanings arise in the confrontation of these two temporalities, which are both asymmetrical but for which the modal breakpoint occurs at different times. We shall speak of ‘temporal modal values’ when the representation is built upon the speech time (02), corresponding to

---

30 The context can imply that the imperfective event is interrupted by the front-stage event (*Ils réveillèrent ceux qui dormaient* ‘They woke those who were asleep’) or, conversely—and especially when interpreted in the discourse as expressing perception (see Bres 2003; de Mulder 2003)—that the imperfective event continues beyond the modal breakpoint (e.g. *Il s’approcha de la fenêtre. Il neigeait abondamment. ‘He approached the window. It was snowing abundantly.’*).
pragmatic time, and of ‘aspectual modal values’, as above, when the representation is built upon the reference time (II), corresponding to the semantic time. Divergences between these two types of representations appear in two kinds of situations:

(a) First, the speaker presents a future eventuality as determinate at the semantic level, that is, pertaining to the possible at the pragmatic level.

(b) Second, the speaker presents a past eventuality, pertaining to the irrevocable at the pragmatic level, as indeterminate (either partially or totally).

The first case typically corresponds to the simple future, as in (15) and (16), and Figure 5.18:

(15) La cavalerie attaquera à l’aube (Fauconnier 1979: 13)
‘The cavalry will attack at dawn.’

(16) Et Lady Helena ? Miss Grant ?
Je ne les préviendrai qu’au dernier moment, lorsque tout espoir sera perdu de tenir la mer. Vous m’avertirez.
Je vous avertirai, mylord. (J. Verne, Les enfants du capitaine Grant, Le Livre de Poche, 2004: 380–1)
‘And Lady Helena? Miss Grant?
I will only tell them at the last moment, when all hope to stay at sea is lost. You will warn me.
I will warn you, milord.’

This clash is usually resolved by the utterance bringing about particular commitment on the part of the speaker, whether an epistemic one (of certainty) or a pragmatic one to do something or to make someone do something (as long as the social situation warrants it). Contrary to what is often said, the epistemic value does not specifically belong to the future tense’s linguistic meaning (otherwise it would always be attached to it): it is merely inferred starting from the divergence between semantic and pragmatic time and with regard to contextual factors. Thus, in (15), depending on whether the speaker is Julius Caesar or a simple observer, the future

---

will take on an injunctive or predictive illocutionary force. Likewise, in example (16), the future alternatively marks the speaker’s commitment to act (je les préviendrai ‘I will tell them; je vous avertirai ‘I will warn you’), belief (tout espoir sera perdu ‘when all hope . . . is lost’), and an order (vous m’avezertiez ‘You will warn me’). The case of the ‘prophetic’ meaning with the future tense (cf. example (3) above) is different, in so far as the prophet and those who consider him such admit that the future is (pre)determined and non-modifiable, so that there is a convergence, not a divergence, between pragmatic time and semantic time.

The second case, which consists in presenting past events (thus temporally irrevocable) as (partially or totally) possible, is typical of narrative texts. It illustrates the capacity of the language to represent (that is, rendering as present, to simulate presence)32 past eventualities, by attributing a characteristic of the present—bringing about the modal breakpoint in pragmatic time—to a past moment (the Reference point). This device is particularly used in popular fiction to create suspense, as in (17):

(17) Antoine Laho allait lâcher l’homme qu’il tenait vaincu sous son genou et se relever. (P. Féval fils, Les chevauchées de Lagardère, Presses de la Cité, 1991: 964)
‘Antoine Laho was going to let go the man he’d pinned down with his knee and get back on his feet.’

While the eventualities are portrayed in the past, they are presented as possible because of the prospective aspect which situates the Reference point and thus the modal breakpoint before the eventuality-intervals. This is why what follows the utterance may indicate, without any incoherence, that they have in fact not occurred, as (18) illustrates:

(18) (immediately follows (17)): Il n’en eut pas le temps et tomba la face contre terre avec un gémissement sourd. Un long couteau catalan était planté entre ses deux épaules !
‘He didn’t have the time [to do this] and fell face first with a muffled moan. A long Catalan knife was planted between his shoulders!’

While reading, the reader can thus feel mental states that are normally oriented towards the future, such as expectation, hope, or fear, despite them being about past events.

We will now confront these general principles in more complex structures in which certain eventuality-phases are selected. But it is necessary to explain beforehand how this selection of phases functions in French.

5.7 Phasal aspect

Each eventuality (state or event) is effectively decomposable into five phases:33 three phases (initial, median, and final) constitutive of ‘internal’ aspect, and two peripheral

33 See Dik (1989); Vet (2002); Tournadre (2004: 23).
phases (preparatory and resultant phases) corresponding to the ‘external’ aspect (Borillo 2005: 67). This phasal structure concerns the eventuality once grasped, and should not be confused with the internal pre-conceptual structure of changes and intermediate situations directly related to aspectual categories (states, activities, achievements, or accomplishments) as such. A state, for instance, corresponds to an absence of change (it is not dynamic) and is thus adequately represented with the absence of bounds. But what concerns us here is that, once a particular state is conceptualized in a predicate (for example be ill), it becomes virtually decomposable into five phases according to the general mereotopologic structure, as in Figure 5.19.

![Figure 5.19](image)

**Figure 5.19** The phasal structure of eventualities.

Phases can be picked up through various means. (19)–(21) give examples of phasal selection by aspectual periphrases:

(19) Il était sur le point d’être malade. (preparatory phase)
   ‘He was about to be ill.’

(20) Il commençait à être malade. (initial phase)
   ‘He was starting to become ill.’

(21) Il venait d’être malade. (resultant phase)
   ‘He’d just been ill.’

The same holds of punctual eventualities, since even if it is true that a punctual eventuality does not allow for the observation of its internal aspect, all forms of dilation of these eventualities demonstrate their virtual decomposition into three internal phases.

Traditionally, two main ways of selecting the phases of an eventuality in French are considered: **verbal inflection** and **aspectual periphrases** (typically comprising a

---

34 See Moens and Steedman (1988); Kamp and Reyle (1993: 58ff.); Gosselin (1996: 50ff.); or Croft (2011). This aspectual phasal structure varies with each aspectual category.

35 Mereotopology deals with the disposition of the parts within a whole (see Casati and Varzi 1999).

36 Victor Hugo especially favours such **grossisements fantastiques** ‘fantastic zooms’ (see Gosselin 1996: 68–9 for a full page example we cannot reproduce here).
semi-auxiliary\(^{37}\) followed by an infinitive verb or a participle).\(^{38}\) Yet these aspectual periphrases do not form a homogeneous class (François 1993, 2003). Gosselin (2010b, 2010c, 2011) posits that two classes of French aspectual periphrases must be distinguished for their syntactic and semantic behaviour, as specified in what follows.

It is widely acknowledged that the general category of *aspect* subsumes two distinct operations: a categorization operation that constructs entities in time (‘conceptual aspect’) and an operation of ‘monstration’ (‘aspectual viewpoint’) which makes visible all or part of the entities constructed beforehand by the categorization.\(^{39}\) The categorization constructs eventualities—noted [B1,B2]—while ‘monstration’ determines an aspectual viewpoint, defined by the position of the Reference interval’s [I,II], relative to that of the eventuality. We hypothesize that periphrases of the first type select eventuality-phases through categorization; that is they extract subparts of eventualities as referents and involve semi-auxiliaries which we label ‘V-MAP’, bearing meanings of motion,\(^{40}\) mode of action,\(^{41}\) and phase, such as *cesser de* (roughly ‘stop to’), *s’apprêter à* (roughly ‘getting ready to’), *partir* (‘leave’), or *rentrer de X* (roughly ‘getting back from X’). A second type of periphrase, which we label ‘aux-AV’, introduces an aspectual viewpoint with recourse to aspectual viewpoint auxiliaries; that is, these define an interval of reference which marks off a visible zone of the eventualities (or a subpart of them) constructed beforehand. Of this type are periphrastic constructions such as *venir de P* (roughly ‘having just P’), *être sur le point de* (roughly ‘be about to’), or *être en train de* (roughly equivalent to progressive forms in English).

With these distinctions and tools, a whole array of converging syntactic and semantic regularities can be explained; in particular: (a) that aux-AV can scope over V-MAP but not the reverse; (b) that only V-MAPs are recursive; (c) that only V-MAPs can be focused and thus occur naturally at the end of an utterance; and (d) that sub-eventualities (constructed by V-MAPs) can be specified with adverbs of manner. We elaborate on these regularities below.

---

37 Or ‘coverb’—a term used by Roy (1976), Wilmet (1997), and Kronning (2003).
38 To which certain prefixes can be added, like *en* considered inchoative with *s’endormir* or *s’envoler* (Martin 1971: 53), as well as ‘aspectual support verbs’ (see Borillo 2006), which also allow for the selection of an eventuality’s phase (e.g. *être en larmes* — *fondre en larmes*, ‘be in tears — burst into tears’; *faire une recherche* — *entamer/poursuivre une recherche* ‘do research — begin/continue research’). On the other hand, the presence (under certain conditions) of a temporal adverbial normally incompatible with the intrinsic structure of the eventuality may bring about conflict resolution consisting of keeping one of the latter’s phases (the one compatible with the adverbial; see Gosselin 1996: 56–63). Thus the presence of a duration adverbial scoping over an inherently punctual eventuality can lead to a shift towards the preparatory phase (e.g. *il s’arrêtà en dix secondes* ‘he stopped in ten seconds’) or towards the eventuality’s resultant phase (e.g. *il s’arrêta pendant dix secondes* ‘he stopped for ten seconds’; see Borillo 1986: 138–9).
39 See Gosselin (1996, 2005). This type of distinction presents affinities not only with the Guillaumian aspectual tradition (Guillaume 1929) and with the cognitive perspective (Langacker 1987, 1991; Col and Victoria 2007), but also with approaches in formal semantics (see Smith 1991; Caudal and Veters 2006; Klein 1994; Demirdache and Uribe-Etxebarria 2002; Laca 2005) and computational semantics (Battistelli 2009).
40 For arguments in favour of the analysis of motion verbs in French as semi-auxiliaries, see Lamiroy (1983); Gross (1986); Gosselin (2010b).
41 See François (2003: Chapter 5).
(a) That aux-AV can have scope over the V-MAP, while the converse is false (François 2003: Chapter 5; Laca 2005), is easy to explain. Monstration can scope over a (sub-)eventuality, but one does not see what could count as a categorization that might affect monstration, given that categorizations, conceptually, have to occur before monstration. (22)–(23) give some examples of French periphrases and their behaviour in this respect.

(22) aux-AVs taking scope over V-MAPS:
- *venir de* ‘just having VP’
- *être sur le point de* ‘be about to…’
- *être en train de* (progressive)
- *cesser de* ‘quit’ + infinitive
- *finir de* ‘finish’
- *commencer à* ‘start’
- *s’apprêter à* ‘get ready to’
- *partir* ‘go’
- *rentrer de* ‘get back from’

(23) V-MAPS (cannot scope over aux-AVs):
- *cesser de* venir de + infinitive
- *finir de* être sur le point de
- *commencer à* être en train de
- *s’apprêter à* s’apprêter à
- *partir* partir
- *rentrer de* rentrer de

(b) Only V-MAPS are recursive (see Laca 2005) insofar as for every V-MAP there exists at least one subclass of V-MAP capable of scoping over it, while an aux-AV, to the contrary, can never be under the scope of another aux-AV. This is because we can conceptually divide a sub-eventuality within another sub-eventuality, while we cannot conceive of what a ‘viewpoint holding scope over another viewpoint’ could look like. (24)–(25) provide examples.

(24) V-MAPS scoping over V-MAPS:
- *cesser de* ‘quit’
- *commencer à* ‘start’
- *continuer de* ‘continue to’
- *s’apprêter à* ‘get ready to’
- *hésiter à* ‘hesitate to’
- *aller/venir de* + infinitive
- *s’apprêter à* + infinitive
- *hésiter à* ‘hesitate to’
- *commencer à*
- *continuer de*

42 For translations see (22). Let us point out that when a V-MAP has scope over aller/venir de + infinitive, the latter are necessarily interpreted as motion verbs (unlike the aux-AVs): “Au moment où Doremus se disposait à aller remettre sa missive au courrier […] Geroul entra dans la pièce.” ‘Just when Doremus was getting ready to give his letter to the courier, Geroul came in the room.’ (M. Paillet, Les noyées du grau de Narbonne, 10/18: 13).
tarder à ‘put off’ rentrer de + infinitive
se hâter de ‘hurry to’ partir
finir de

(25) aux-AVs that cannot scope over aux-AVs:

#43 venir de être sur le point de + infinitive
être en train de
*être sur le point de venir de + infinitive
être en train de

(c) Only a sub-eventuality, as opposed to an aspectual viewpoint, has the referential status that allows focus (without particular intonational or contextual contrastive marking; cf. Nølke 2001: 137). This explains that V-MAPs alone, as opposed to aux-AVs, may naturally occur in an utterance-final position (subsequent to either a pronominalization or an ellipsis of the infinitive; see Kronning 2003: 237), as in examples (26)–(27).

(26) V-MAPs focused:
Il commence ‘He’ ‘is starting’
continue ‘is continuing’
finit ‘is finishing’
cesse ‘is stopping’
hésite ‘is hesitating’
s’y met ‘is getting to it’
s’y acharne ‘is working hard to’
s’y apprête ‘is getting ready to’
s’y précipite ‘is hurrying to’
en revient ‘is (just) getting back’

(27) aux-AVs, unavailable for focus:
?Il (en) est sur le point ‘is about to’
(en) est en train [progressive/dynamic aspect marking (‘being in the course of’)]
(en) est en passe ‘is about to’
#Il y va ‘is going’
en vient.44 ‘is (just) coming from (there)’

(d) The sub-eventualities (constructed by the V-MAPs), in contrast to aspectual viewpoints, may happen in various ways, which can be expressed by adverb

---

43 This type of construction is possible (Havu 2006 gives an example from Stendhal) though, as long as venir de is interpreted as temporal and not as aspectual; see Section 5.8 below.

44 Indeed it does not seem possible to utter il y va/il en vient without it implying some form of movement (and thus functioning as V-MAPs), as shown by the impossibility of repeating il y va/en vient after Il va/vient de pleuvoir ‘It’s going to rain/has just rained’.
phrases indicating manner (see Damourette and Pichon 1911–1940, V, §1605; Kronning 2003: 241–2) as in (28)–(29).

(28) V-MAPs with adverbial complement:
Il commence avec précaution à + infinitive
continue ‘with precaution to’
s’apprête
Il rentre précipitamment (de/à) + infinitive
part ‘hurriedly (from/to)’
s’acharne

(29) aux-AVs incompatible with adverbial complements:
Il est en train avec précaution de + infinitive
est sur le point
#Il vient avec précaution (de) + infinitive\textsuperscript{45}
va

We thus confirm the existence of two distinct classes of aspectual periphrases that allow the selection of an eventuality’s phases via different routes: (i) categorization and construction of a sub-eventuality versus (ii) an aspectual viewpoint. Here is a (non-exhaustive) list of French verbal periphrases according to this classification:

aux-AVs: aller, être sur le point / en passe / en voie / en train de, (en) être à, se prendre à, venir de\textsuperscript{46}

V-MAPs: être prêt à, s’apprêter à, se préparer à, se proposer de, hésiter à, tarder à, partir, s’installer à, aller, s’arrêter à, s’acharner à, s’efforcer de, se dépêcher de, mettre du temps à, être long à, commencer à, se mettre à, continuer à/de, être occupé à, persévérer à, cesser de, (s’)arrêter de, finir de, (re)venir de, rentrer de, (re)descendre de, sortir de, etc.

The recursiveness of V-MAPs, which follows from the possibility of constructing—via categorization—a sub-eventuality from another sub-eventuality, also testifies to the fact that the phasal structure (illustrated in Figure 5.17) holds equally for eventualities and for parts of eventualities, as well as for parts of parts, as long as they are categorized as sub-eventualities.

5.8 Classification and representation of aspectual periphrases

We can also classify, from a semantic perspective, the aux-AVs and V-MAPs by the type of phase they allow the selection of (according to aspectual viewpoint or categorization of sub-eventualities, respectively) as is summarized in Tables 5.1 and 5.2.

\textsuperscript{45} These last examples would, of course, be acceptable if aller and venir were used as motion verbs.

\textsuperscript{46} This is but one of the usages of aller and venir.
This list is far from exhaustive; see Wilmet (1997: 79).

### Table 5.1 Classification of the aspectual viewpoint auxiliaries (aux-AV)

<table>
<thead>
<tr>
<th>phase</th>
<th>aspectual viewpoint</th>
<th>aux-AV</th>
</tr>
</thead>
<tbody>
<tr>
<td>preparatory</td>
<td>prospective</td>
<td>aller, être sur le point de, être en passe / voie de</td>
</tr>
<tr>
<td>internal aspect, unbounded</td>
<td>imperfective</td>
<td>être en train de (en) être à aller + present participle</td>
</tr>
<tr>
<td>initial</td>
<td>inchoative</td>
<td>se prendre à être/avoir + past participle</td>
</tr>
<tr>
<td>resultant</td>
<td>perfect</td>
<td>être/avoir + past participle</td>
</tr>
</tbody>
</table>

### Table 5.2 Semantic classification of V-MAPs

<table>
<thead>
<tr>
<th>phase</th>
<th>phasal V</th>
<th>V of mode of action</th>
<th>motion V</th>
</tr>
</thead>
<tbody>
<tr>
<td>preparatory</td>
<td>être prêt à</td>
<td>se proposer de</td>
<td>partir</td>
</tr>
<tr>
<td></td>
<td>s’apprêter à</td>
<td>hesiter à</td>
<td>s’installer à</td>
</tr>
<tr>
<td></td>
<td>se préparer à</td>
<td>tarder à</td>
<td>aller</td>
</tr>
<tr>
<td></td>
<td>se disposer à</td>
<td></td>
<td>s’arrêter à</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>monter courir</td>
</tr>
<tr>
<td>internal aspect</td>
<td>s’acharnir à</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>s’efforcer de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>se dépêcher de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mettre du temps à</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>être long à</td>
<td></td>
<td></td>
</tr>
<tr>
<td>initial</td>
<td>commencer à</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>se mettre à</td>
<td></td>
<td></td>
</tr>
<tr>
<td>median</td>
<td>continuer à / de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>être occupé à</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>persévérer à</td>
<td></td>
<td></td>
</tr>
<tr>
<td>final</td>
<td>cesser de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(s’)arrêter de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>finir de</td>
<td></td>
<td></td>
</tr>
<tr>
<td>resultant</td>
<td>(re)venir de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(re)descendre de</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sortir de</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This classification calls for several remarks:

(a) The distinction between verbs indicating phase, mode of action, and motion is not of aspectual nature: the first indicates only the concerned phase, the others also concern the way they happen.

(b) A given element can represent various usages in context which relate to different subclasses. This is true, for example, of the verbs aller ‘go’ and venir ‘come’, which have given rise to an abundant literature (for the periphrastic future, see especially Vet 1993 and 2001). It appears that these two verbs can function, among other things, as:

– full verbs (e.g. aller à / venir de Marseille),
– motion verbs (e.g. aller / venir (en voiture) (de) faire les courses),
– temporal auxiliaries with a future meaning (Dans cinq minutes, on va bien rigoler; example quoted by Sundell 1991 and commented on by Vet 1993: 79) or a past value (Nous venons récemment de perdre encore une sœur charmante; Lamartine quoted by Gougenheim 1929: 127),
– aspectual viewpoint auxiliaries with prospective (Je vois que Pierre va se fâcher; Vet 1993: 74) or perfect meanings (Chatterton venait d’expirer depuis peu de jours lorsque parurent à la fois un poème burlesque et un pamphlet sur sa mort; Vigny quoted by Gougenheim 1929: 127; the adverbial [depuis ‘since’ + duration] indicates precisely this type of aspectual viewpoint; see Gosselin 1996: 27).48

When there is a succession of two occurrences of aller in preverbal position (tu vas aller faire les courses), the former works as a temporal auxiliary or an aspectual viewpoint auxiliary (depending on context), while the latter can only be interpreted as a motion verb (e.g. Je vais aller me promener).

(c) The V-MAPs may mark:

– the co-occurrence of a sub-eventuality with an eventuality-phase (e.g. commencer à, continuer à, finir de);
– the inclusion of a sub-eventuality inside a phase (e.g. s’apprêter à, hésiter à…); for instance, rentrer de in the utterance rentrer de faire les courses marks the inclusion of the sub-eventuality in the resultant phase and not its co-occurrence with it, so that a prospective viewpoint on this sub-eventuality does not necessarily entail that the preceding phase still takes place. As a result, we notice that from (30), one cannot infer (31):

48 About the two values of venir de: Havu (2005) gives numerous attested examples which show that venir de sometimes combines with a past-time adverbial, and sometimes with ‘depuis + duration’, marking perfection; see also Vetters (2010).
Paul was about to come back from grocery shopping.

Paul was still (finishing his) grocery shopping.

In effect, it may be the case with (30) that Paul is already in the resultant phase (i.e. that he has finished grocery shopping, but has not begun going back home);

- an overlap, possibly partial, of several phases (i.e. se hâter de, s'acharner à, s'efforcer de...).

The verbs indicating a mode of action which are about the internal aspect (e.g. s'acharner à, se hâter de, se dépêcher de, être long à...) are used to express the preparatory phase of the eventuality if the latter is punctual (i.e. if the internal phases are not accessible). We show in Gosselin (1996: 172–6) that this mode of conflict resolution—by shifting to the preparatory phase—is regular and predictable. This explains, among other things, why se dépêcher de becomes equivalent to ne pas perdre de temps avant de and why être long à is a quasi-synonym of tarder à when the eventuality is punctual, as in (32)–(33).

Il s’est dépêché de sortir ≈ il n’a pas perdu de temps avant de sortir.

Il est long à sortir ≈ il tarde à sortir.

The V-MAPs select specific phases in constructing sub-eventualities, noted [B1, B2], [B'1, B'2], etc. As an example, we may consider the schematic representation associated with hésiter à commencer à manger 'hesitate to start eating' in Figure 5.20. For clarity we duplicate the temporal axes.

The sub-eventuality marked by commencer à coincides with the initial phase of the eventuality manger, while that expressed by hésiter à is included in the
preparatory phase of the sub-eventuality which also corresponds to the preparatory phase of *manger*. This structure thus illustrates both the fact that *hésiter à commencer à manger* is quasi-synonymous with *hésiter à manger*, and that *avoir hésité à commencer à manger* ‘having hesitated to start eating’ does not imply *commencer à manger* ‘start to eat’ in so far as B’2 does not necessarily coincide with B’1 (i.e. the resultant phase of the sub-eventuality *hésiter* can begin before the beginning of the sub-eventuality *commencer*, which coincides in turn with the beginning of the eventuality *manger*).

The aux-AVs, in relation to inflection, serve to indicate the position of the reference/monstration interval relatively to that of the eventuality, thus defining a type of aspectual viewpoint. With the utterance in (34) we associate the aspectual structure in Figure 5.21:

(34) Il était en train de rentrer chez lui
‘He was going (was in the course of going) back home.’

Sub-eventualities (indicated by V-MAPs) can be combined with aspectual viewpoints (indicated by the aux-AVs and/or verbal inflection). The aspectual viewpoint corresponds to the position occupied by the reference interval ([I,II]) that is positioned both in relation to the most embedded sub-eventuality (i.e. the one corresponding to the most fine-grained stage of decomposition of the (sub-)eventualities), which we call the direct aspectual viewpoint, and in relation to the other eventualities and sub-eventualities within the structure, which we call indirect aspectual viewpoint. Thus, in the utterance in (35), the direct viewpoint, marked by the French *imparfait*, is imperfective on the preparatory phase instantiated by *se disposer à (B’1 < I < II < B’2)*, but is prospective on the eventuality (II < B1).

(35) Au moment où il *se disposait à frapper* deux coups discrets à la petite porte, elle s’ouvrit . . . (Ponson du Terrail, *Une fille d’Espagne*, R. Laffont, 1992: 2)
‘At the instant he was readying himself to discreetly knock twice at the small door, it opened.’

Figure 5.22 accounts for this:
Likewise, in example (36), the perfect viewpoint, expressed in this context by the past perfect (plus-que-parfait), targets the sub-eventuality se mettre à ‘begin’, which picks up the initial phase of the eventuality descendre ‘descend’; thus the direct aspectual viewpoint is a perfect viewpoint.

\[
\text{(36)} \quad \ldots \text{un roulement ininterrompu qui venait d’en haut leur fit lever les yeux vers le plafond. Leurs cheveux se hérissèrent… Le plafond s’était mis à descendre} \ldots \text{Il descendait tout d’une pièce, d’un mouvement très lent, mais continu. (M. Zévaco, L’épopée d’amour)}
\]

‘… an uninterrupted rolling sound that was coming from upstairs made them lift their eyes towards the ceiling. Their hair stood on end… The ceiling had begun to descend! It came down as one piece, very slowly, but continuously.

But the indirect viewpoint is imperfective (hence the repetition of descendre in ‘il descendait’ with the imperfective imparfait), as illustrated in Figure 5.23.

5.9 Modal interpretation of phasal aspect

The hypothesis according to which the final bound of the reference interval creates—on the semantic level—a modal breakpoint between the aspectual modal values of
the irrevocable and the possible, also applies to indirect aspectual viewpoints (with a V-MAP).

If the indirect viewpoint on the eventuality is prospective, then the eventuality is entirely situated within the realm of the possible, whatever the direct viewpoints of the sub-eventualities (marked by the V-MAP). As a consequence, the right-hand context may invalidate the eventuality’s achievement (see example (35) above).

When the indirect viewpoint is imperfective (on the eventuality), the initial bound belongs to the irrevocable, and the final bound to the possible, which implies that telic eventualities are (at least provisionally) indeterminate as regards their actual completion. This indirect imperfective viewpoint may result from diverse configurations, such as:

- a direct viewpoint, imperfective or perfective, on a sub-eventuality corresponding to the median phase, e.g. *il continuait/continua de faire la vaisselle* ‘he continue-IMP/SP to wash the dishes’;
- an imperfective or perfect viewpoint on the initial phase, e.g. *il commençait/avait commencé à faire la vaisselle* ‘he begin-IMP/PP…’;
- a prospective or imperfective viewpoint on the final phase, e.g. *il allait finir/finissait de faire la vaisselle* ‘he was about to finish/finish-IMP’.

Take, for instance, the following example of an imperfective viewpoint on the initial phase, with an interruption of the eventuality:

(37) La marquise se replaça auprès du feu, et vers minuit le sommeil commençait à la gagner, lorsque la porte s’ouvrit tout à coup… (Ponson du Terrail, Une fille d’Espagne)

The marquise sat near the fire, and around midnight sleep begin-IMP to overcome her, when the door suddenly opened.

It is noteworthy that with verbs of initial phase, this configuration, comparable to the ‘imperfective paradox’, occurs even when the initial phase is viewed from a perfective perspective, since the final bound of the eventuality is not accessible (which shows, by the way, that the imperfective paradox is not directly tied to progressive aspect, contrary to what is usually considered), as example (38) and Figure 5.24 demonstrate.

(38) Arrivé chez lui, Paul se mit à faire la vaisselle, mais il ne la termina pas. (Vetters 2003: 123)

‘Once he had arrived home, Paul began to wash the dishes, but didn’t finish.’

When the indirect aspectual viewpoint is ‘terminative’ (i.e. perfective on the final phase) or perfect, the eventuality is entirely situated within the irrevocable; thus its occurrence and completion cannot be cancelled, e.g. *il acheva de faire les courses/il
rentra de faire les courses ‘he achieve-SP/come-SP back from shopping for groceries’. On the other hand, if the direct viewpoint on the sub-eventuality is imperfective on the final phase, again an ‘imperfective paradox’ situation arises, since the indirect viewpoint on the eventuality is then imperfective, as in example (39) and Figure 5.25.

(39) Il était en train de finir de manger son gâteau (quand soudain…).
He be-IMP in the course of finish eat his cake (when suddenly…).
‘He was finishing eating his cake (when suddenly…).’

Let us illustrate this with a final example, (40), taken from journalistic discourse:

‘Hosni Mubarak had just arrived in Addis Ababa yesterday morning, where he was getting ready to participate in the 31st summit of the Organization of African Unity (OAU). His convoy was crossing through the streets of the Ethiopian capital toward the conference centre…’

The journalist chose a past reference point (situated by hier matin) to show, through the use of various aspectual viewpoints, what was happening at that moment, as if
the scene were occurring before the reader’s eyes. All the elements preceding the final bound of that reference point have irrevocably occurred, while those which follow are merely possible. Thus *arriver à Addis-Abeba* is presented as perfect (by the aspectual auxiliary *venir de*), thus as having occurred. Then *participer au sommet de l’OUA* is viewed prospectively (because of the verb *s’apprêter à*), and thus as possible. On the contrary, *traverser les rues de la capitale…* is presented by means of an imperfective viewpoint (marked by the *imparfait*), which situates only the beginning of the eventuality within the irrevocable, its end (the actual arrival at the conference centre) remaining only possible. The subsequent passage, in (41), indicates precisely that these possibilities did not occur:

(41) … lorsqu’une camionnette est venue se mettre en travers de la route au niveau de la mission diplomatique palestinienne. Des coups de feu ont éclaté …
Le cortège a immédiatement rebroussé chemin et Hosni Mubarak a repris l’avion pour Le Caire ….
‘… when a pick-up truck came to block the road near the Palestinian Diplomatic Mission. Shots rang out… The convoy immediately turned around and Hosni Mubarak took a plane back to Cairo ….

It thus becomes apparent that, contrary to what Reyle, Rossdeutscher, and Kamp (2007: 630) claim, the aspectual viewpoint plays a decisive role at the truth-conditional level, despite the fact that it has no referential status. More precisely, if an eventuality occurred at a certain phase, the preceding phases in the phasal structure necessarily occurred too, whereas those that follow remain open. As a result, the assertion of an eventuality phase entails the presupposition(s) of the preceding phases.\(^{49}\) Since in assertive utterances the reference interval is equivalent to the assertion interval (Klein’s 1994 ‘Topic Time’), the phases on the left-hand side of this interval are presupposed. Thus from (42) we legitimately infer (43), but not (44):

(42) Pierre a continué de manger son gâteau.
‘Pierre continued eating his cake.’

(43) Pierre a commencé à manger son gâteau.
‘Pierre started eating his cake.’

(44) Pierre a fini de manger son gâteau.
‘Pierre finished eating his cake.’

In this perspective, presuppositions such as *Jean used to smoke*, conveyed by utterances like *Jean a cessé de fumer* ‘Jean quit smoking’, are not due to the specific properties of the verb *cesser* ‘quit’ but to general inferences based on the selection of an eventuality’s terminal phase. The same presupposition would occur with other

\(^{49}\) For more on the notion of temporal presupposition, see Molendijk (1993); Molendijk and Vet (1995).
verbs specifically indicating the terminal phase, such as, in French, arrêter de ‘stop’, or, with telic eventualities, finir de/achever de/terminer de ‘finish’, ‘achieve’.

This applies to factive constructions as well. A factive presupposition associated with a phase entails the presupposition of the preceding phases, but not of the following ones. Utterance (45) entails (42) and (43), but not (44).

(45) Luc ignore que Pierre a continué de manger son gâteau.

‘Luc doesn’t know that Pierre continued to eat his cake.’

5.10 Conclusion

We have attempted to show that the relations between temporality and modality in French should not be thought of in the perspective of a clear-cut dichotomy. On the contrary, temporality and modality are two essential, interrelated, dimensions of the utterance. We suggested that their connection is achieved at the semantic level by the aspectual viewpoint. Indeed, it is the aspectual viewpoint, expressed mainly by verbal inflection and aspectual periphrases, which determines the position of the modal breakpoint that opposes the possible to the irrevocable.

The aspectual viewpoint, defined by the position of the reference interval relative to that of the eventuality, constitutes the essential element of the representational semantic–cognitive apparatus which simulates the presentness of a past moment (see also de Saussure, this volume, for other aspects of temporal simulation with modal effects), to which is attributed the basic modal property of the present of hosting the modal breakpoint. In narrative discourse, it is this temporal–modal organization that enables a reader to have mental states oriented towards the future (expectations, fear, hope, and so forth), and at the same time tied to past events.

Aspectual viewpoint is no less important for truth-conditional semantics and inferences; only by taking it into account is it possible to predict legitimate inferences about the completion of eventualities expressed in utterances.