# Chapter 1 The Linguistic Expression of Temporal Reference



1

## 1.1 Verbal Tenses in English and Romance Languages

This section aims to provide an insight into the semantics of three verbal tenses expressing past time: the simple past, the compound past and the imperfect, in English, French, Italian and Romanian. This description reflects the way in which they are approached in grammar books and in linguistic studies. This synthesis is continued in Chap. 2, where I will give the formal semantic-discursive and pragmatic accounts of their usages and their contribution to discourse interpretation. While Chaps. 1 and 2 introduce a number of specific points related to the predicted usages of these verbal tenses, Chap. 3 presents the results of a contrastive analysis carried out on bilingual and multilingual translation corpora. Moreover, theoretical hypotheses formulated according to the accounts provided in the first two chapters are tested using annotation experiments (Chap. 4), offline acceptability and self-paced reading experiments (Chap. 6). Based on the results of these experiments, Chap. 5 puts forward a re-analysis of the semantics and pragmatics of the simple past, the compound past and the imperfect in English, French, Italian and Romanian.

These languages mark the categories of Mood, Tense and Aspect synthetically (by inflection) and analytically (by periphrasis) on the verb. According to traditional grammars, Romance languages have four moods: the *indicative*, the *subjunctive*, the *conditional* and the *imperative*. Romanian exhibits another paradigm, deriving from the epistemic future, called the *presumptive*. These grammars present a temporal-aspectual system for all moods, but the most complex one belongs to the indicative mood: present, past (the simple past, also called aorist or preterit, the compound past, the imperfect and the pluperfect) and future forms (the future, the future perfect and the future in the past). As for the English verbal system, the indicative mood is the most developed. Subjunctive and conditional interpretations may be expressed through the preterit form V+-ed, and the second form of irregular verbs.

Grammatical category	English	French	Italian	Romanian
Simple past	Simple Past	Passé Simple	Passato Remoto	Perfectul Simplu
Imperfect	Past Progressive	Imparfait	Imperfetto	Imperfectul
Compound past	Present Perfect	Passé Composé	Passato Prossimo	Perfectul Compus
Simple present	Simple Present	Présent	Presente	Prezentul

Table 1.1 Grammatical category and denominations of the target verbal tenses

The classical grammatical accounts of these verbal tenses offer a very heterogeneous picture, which consists, for each verbal tense, of main and secondary 'meanings'. Significant variability is also identifiable in the linguistic terminology used in grammars, such as *value*, *meaning*, *usage*, *utilization*, *meaning effect*, and *contextual effect*. I aim to show that the lack of a common framework makes it impossible to compare the verbal systems of the four languages considered in this research. This comparison is necessary to identify the features to be included in any model that explains and predicts the cross-linguistic variation of the translations of the verbal tenses considered.

In this section, I will use the terms 'simple past', 'compound past' and 'imperfect' when referring to the *grammatical category*, and the denominations of each verbal tense as given in Table 1.1 when referring to the *tensed verbal form* in the languages considered.<sup>1</sup>

## 1.1.1 The Simple Past

The English Simple Past is described in grammar books as having both temporal and non-temporal usages. In this book, I deal only with temporal usages. Classical descriptions of the SP (Quirk et al. 1985; Comrie 1985; Leech and Svartvik 2002; Radden and Dirven 2007) present it as "the deictic time preceding speech time" (Radden and Dirven 2007, 218), which has a main temporal meaning in reference to *past* time. Hence, the English Simple Past is usually described as representing an action or state as having occurred or having existed at a past moment or during a past period of time that is definitely separated from the actual moment of speaking or writing.

Radden and Dirven (2007, 218) note three properties of the Simple Past: focus on the past time; detachment from present; and definiteness. Quirk et al. (1985) also define multiple elements for the Simple Past, which for them combines two features of meaning in reference to past time: the event/state must have taken place

<sup>&</sup>lt;sup>1</sup>The abbreviations used in the interlinear translations are the following: SP simple past, PP pluperfect, IMP imperfect, PRES present, FUT future, SUBJ subjunctive, AUX auxiliary verb, PERF perfective aspect, IMPERF imperfetive aspect, AOR aoristic aspect, RFX reflexive pronoun, 1/2/3 first/second/third person pronoun, SG singular, PL plural.

in the past, with a gap between its completion and the present moment, as in (8); and the speaker must have in mind a definite time at which the event/state took place, as in (9) and (10).

- (8) I stayed in Africa for several months ( $\rightarrow$  I am no longer in Africa)
- (9) Freda started school last year/in 1950.
- (10) Prices slumped last winter/yesterday.

As for the combination of the Simple Past with Aspect, it can express both perfective and imperfective aspect, as in (11) and (12) from Huddlestum and Pullum (2006). The first example has a perfective interpretation: it reports a promise made in the past. The second example can be interpreted perfectively or imperfectively. In the former case, the sentence denotes a single act of mowing the lawn located as a whole in the past time. In the latter case, Sue habitually or regularly mows the lawn, and this state of affairs holds at the moment to which the speaker is referring.

- (11) I promised to be back for lunch.
- (12) Sue *mowed* the lawn.

Aktionsart and types of situations also play a role in the interpretation of the Simple Past. The distinction between states and events gives rise to three interpretations (Leech and Svartvik 2002): *state* in (13); *single event* in (14); and *set of repeated events* (i.e. *habit*) in (15). According to Leech and Svartvik, the 'habit' interpretation combines event interpretation and state interpretation. The *state* interpretation can be specified by adding an adverbial of duration, as in (16), whereas the *habit* interpretation can be specified by adding an adverbial of frequency or duration, as in (17).

- (13) Napoleon *was* a Corsican.
- (14) Columbus discovered America.
- (15) Paganini *played* the violin brilliantly.
- (16) Queen Victoria *reigned* for sixty-four years.
- (17) He *played* the violin every day from the age of five.

The Simple Past may be accompanied by an overt indicator of time (Quirk et al. 1985). The element of definite meaning (a past event/state) must be recoverable through inference from the immediate or larger context, or general world knowledge. Comrie (1985, 41) emphasizes that the Simple Past "only locates the eventuality in the past, without saying anything about whether the situation continues up to the present or into the future". As we have noted above, one of the properties of the Simple Past is *detachment from present*. This is due to a conversational implicature (Grice 1975) based on Grice's maxim of manner, explained as follows by Comrie (1985, 41–42):

Statements about the present moment are more relevant than those about other times, so that the use of a form explicitly locating a situation in the past suggests that that situation does not hold at the present, otherwise the present tense would be used.

The Simple Past may be used in relation to an immediate situation, which has a definite character, as in (18), in a domestic situation where it is known that the front door is locked at bedtime every night. Situational definiteness supplied by general knowledge explains the use of the Simple Past in historical or biographical statements that have specific people, places or objects as their topics, as in (19). The use of the Present Perfect in the preceding sentence provides a context for mentioning the time, and so it allows a Simple Past in the second sentence, as in (20).

- (18) *Did* you *lock* the front door?
- (19) Byron died in Greece.
- (20) They have decided to close down the factory. It took us completely by surprise.

Radden and Dirven (2007, 219) also note the use of the Simple Past to express bounded past situations, presented as a series of events, typically in narratives, as in (21). The individual events from example (21) are temporally ordered (signalled by their coordination and the conjunction *and*), and are thus interpreted as successive. Labov and Waletzky (1967) argued that two sentences, which are interpreted as temporally successive, form a narrative text. The first event is deictically situated in the past time related to the speech moment S, while the subsequent event is related to the first one.

(21) I *grabbed* his arm and I *twisted* it up behind his back and when I *let go* his arm there *was* a knife on the table and he just *picked* it up and *let* me have it and I *started* bleeding like a pig. (Labov and Waletzky 1967, quoted in Radden and Dirven 2007, 219)

According to Quirk et al. (1985, 187) the Simple Past also has special uses that occur in certain contexts, such as (a) in *indirect speech*, where there is a transfer from the past tense of the reporting verb to the verb of the subordinate clause (known as *back shifting* or *harmony of tenses*), as in (22), or *forward shifting*, as in (23), where the sentence containing speech or thought in the future contains reported speech referring to present time.

- (22) A: Did you say you have/had no money? B: Yes, I am completely broke.
- (23) My wife will be sorry that she *missed* seeing you this evening.

One point that arises from these traditional descriptions is that they simply depict intra-linguistically the meanings of the Simple Past—in particular, the main usage that specifically means "true before speech time" (Riddle 1986, 267).

In Romance languages, the simple past is also classically described as having similar main and secondary meanings. The French Passé Simple is defined as expressing a past event, completed in the past with no connection to present time (Grevisse 1980, 873; Wagner and Pinchon 1962, 413).<sup>2</sup> The focus on the accomplishment of the event in the past is the feature that distinguishes the Passé Simple from the Passé Composé, the second of which expresses a link to the speaker's or a

third person's present time. Scholars have argued that the Passé Simple provides an objective interpretation of the situation described. It is also distinguished from the Imparfait, which presents a past situation as not accomplished.

The Italian Passato Remoto is described as having the aoristic aspect: that is, it expresses the eventuality as completely ended (Bertinetto 1986). He argues that aoristic tenses do not present in their semantics a reference moment R, contrary to perfective tenses such as the Passato Prossimo. Consequently, the Passato Prossimo can be used in temporal sentences (i.e. it allows reference to past and future) and in atemporal sentences (i.e. the omnitemporal value), whereas the Passato Remoto necessarily expresses a relation of the eventuality's anteriority with respect to the moment of speech S. Bertinetto (1986, 430) points out that the Passato Remoto in example (24) imposes a temporal and definite interpretation (i.e. an identifiable woman who lost her son, where E < S), whereas the Passato Prossimo in example (25) allows an atemporal and indefinite interpretation (i.e. a hypothetical situation where a woman could lose her son at an imaginary moment).

- (24) Per consolarmi, cercai di pensare ad una madre che *perse* il proprio figlio. To comfort myself, I tried to think of a mother who lose.3SG.PS her son 'To comfort myself, I tried to think of a mother who lost her son.'
- (25) Per consolarmi, cercai di pensare ad una madre che *ha perso* il proprio figlio. To comfort myself, I tried to think of a mother who lose.3SG.PC her son 'To comfort myself, I tried to think of a mother who lost her son.'

There are cases, however, where the Passato Remoto may produce different interpretations. Firstly, it can have a non-deictic usage as in (26), where it behaves like a pluperfect (from Bertinetto 1986, 431). Secondly, the Passato Remoto is used for atemporal expression in sayings and proverbs (i.e. the so-called gnomic usage) as in (27).

- (26) Ritornando dal viaggio che *feci/avevo fatto*, trovai una montagna di posta. Coming back from the journey I do.1SG.PS/PP, I found a mountain of mail 'Coming back from the journey I made/had made, I found lots of mail.'
- (27) Cosa fatta in fretta non *fu* mai buona. Things made in haste not be.1SG.PS ever good 'Things done in haste are never good.'

Bertinetto (1986) and more recently Squartini and Bertinetto (2000) argue that in Italian the Passato Remoto and the Passato Prossimo, being perfective, are more similar than different, and this becomes more visible when compared to the Imperfetto. This is mainly due to the aoristic drift undergone by the compound past.

<sup>&</sup>lt;sup>2</sup>Tahara (2000, 2004) provides a detailed presentation of the various approaches to the French Passé Simple. For other discussions see also Vetters (1996). For a pragmatic account, see de Saussure (1998a, b, 2003).

Zafiu (2013, 59) notes that Perfectul Simplu is used in literary texts with third person pronouns and expresses impersonal remarks (i.e. there is no explicit speaker who commits to what was said). It designates situations prior to the present, without indicating any relation with the moment of speaking S, as in (28). When used in fiction, the Perfectul Simplu cannot be subordinated to verbs of declaration, as shown in (29), and it contrasts with the Perfectul Compus in direct and indirect speech, as shown in (30).

- (28) Monstrul o *văzu* pe prințesă. The monster see.3SG.PS the princess 'The monster saw the princess.'
- (29) \*Spuse că fu acasă. Say.PS.3SG that be.3SG.PS at home. ''He said that he was at home.'
- (30) Am văzut casa, *spuse* el. See.PC.1SG the house, say.PS.3SG 'I saw/have seen the house, he said.'

The Perfectul Simplu used in southern varieties expresses the recent past (i.e. eventualities that took place during the same day) and can be used for all persons, contrary to the literary simple past, which can only be used for the third person, as in example (31).

(31) Unde *fuseși* de dimineață? Mă *dusei* la moară. Where be.PS.2SG this morning. RFX go.PS.1SG to the mill 'Where were you this morning? I went to the mill.'

Similarly to the Perfectul Compus, the Perfectul Simplu expresses the eventuality from a perfective viewpoint, i.e. it expresses a completed situation, as in (32). It can be accompanied by durative and iterative temporal adverbials, as in (33) and (34) respectively.

- (32) *Citi* cartea. read.PS.3SG the book 'She read the book.'
- (33) *Citi* din carte timp de trei ore. read.PS.3SG the book for three hours 'She read from the book for three hours.'
- (34) *Veni* în vizită în fiecare zi. Come.PS.3SG to visit every day 'She came to visit every day.'

Some scholars have analysed the French Passé Simple with respect to its role at the discursive level. For example, the aspectual approach insists on the aspectual—rather than temporal—distinction between the Passé Simple and the Imparfait

(Martin 1971, 93–94). This approach assumes that the perfective aspect of the Passé Simple provides a global view of the event, and the imperfective aspect of the Imparfait offers an interior view of the event in progress.<sup>3</sup> Kamp and Rohrer (1983), following the anaphoric approach, argued that the interpretation of verbal tenses depends on the temporal relations that they establish between discourse segments. They contend that the simple past is used in contexts where time progresses and events are temporally ordered, as in (35). They base their analysis on the three coordinates proposed by Reichenbach (S, R and E), pointing out that sentences with a Passé Simple introduce a new R moment in the discourse that is prior to the event moment E, while sentences with an Imparfait adopt the existing R (introduced by the precedent sentence with a Passé Simple), as in (36). This description has numerous exceptions, as scholars—including Kamp and Rohrer themselves—have pointed out, as in examples (37) and (38).

- (35) Pierre entra. Marie *téléphona*.
  Peter enter. Mary phone.3SG.PS
  'Peter entered. Mary *made* a phone call.'
- (36) Pierre entra. Marie *téléphonait*.

  Peter enter. Mary phone.3SG.IMP

  'Peter entered. Mary *was calling*.'
- (37) Marie *chanta* et Pierre l'*accompagna* au piano. Mary sing.3SG.PS and Peter her accompany.3SG.PS at the piano 'Mary sang and Peter accompanied her on the piano'
- (38) L'été de cette année-là vit plusieurs changements dans la vie de nos héros. François épousa Adèle, Jean-Louis partit pour le Brésil et Paul s'acheta une maison à la campagne.

  The summer of that year see.3SG.PS several changes in our heroes' lives. François marry.3SG.PS Adele, Jean-Louis leave.3SG.PS to Brazil and Paul buy.3SG.PS a house in the countryside.

  'The summer of that year saw several changes in our heroes' lives. François married Adele, Jean-Louis left for Brazil and Paul bought a house.

François married Adele, Jean-Louis left for Brazil and Paul bought a house in the countryside.'

The *pragma-semantic* approach of French verbal tenses aimed to reduce the role of pragmatic (non-linguistic and cognitive) factors in determining the meaning of a verbal tense, and therefore to increase the semantic input (Kleiber and Riegel 1989, 1991; Kleiber 1994; Vetters 1996). Vetters (1996) argues that the Passé Simple vs. Imparfait opposition can be explained according to the pragma-semantic approach using a model with three levels (1996, 142):

<sup>&</sup>lt;sup>3</sup>There have been several attempts to question the perfective aspect of the Passé Simple and the imperfective aspect of the Imparfait, such as Guenthner et al. (1978) and Molendijk (1990) respectively. For counter-arguments, see Vetters (1996).

- i. The perfective/imperfective opposition is semantic, therefore descriptive and truth-conditional:
- ii. The rules for temporal interpretation identified by Kamp and Rohrer (1983) are instructions encoded by the two verbal tenses;
- iii. The communicative principle of relevance guides the pragmatic interpretation of the sentences.

For Vetters, the Passé Simple is aspectually *non-imperfective* (be it perfective or inchoative, as suggested by Guenthner et al. 1978), and encodes instructions for forward temporal sequencing (called *linearity* by Vetters). He suggests that cases where the simple past form is used without forward temporal sequencing, as in examples (37) and (38) above, are interpreted following the principle of optimal relevance. In his words, "the Passé Simple expresses temporal progression except when it is used in contexts where the linear interpretation would be costlier than a non-linear interpretation" (1996, 150), the higher cognitive cost being attributed to world knowledge. For example, in sentence (38), all the events are temporally located during *the summer of that year*, and their order is not specified. The hearer assumes that the speaker does not intend a sequential interpretation, and that the utterance is worth processing despite the lack of a temporal specification of the order.

## 1.1.2 The Imperfect

The imperfect in French (Imparfait), in Italian (Imperfetto) and in Romanian (Imperfectul) described by grammars as existing in opposition to the simple past, on the basis of the aspectual (grammatical aspect) orientations which each displays: imperfective for the former, and perfective for the latter. The French Imparfait is traditionally described as a tense of background information (Weinrich 1973), aspectually unaccomplished and imperfective, which needs a previously presented hosting event (Guillemin-Flescher 1981), as shown in example (39). Most scholars agree that the Imparfait is an anaphoric tense (Ducrot 1979; Kamp and Rohrer 1983; Tasmowski-De Ryck 1985; Molendijk 1990; Kleiber 2003; Berthonneau and Kleiber 1993; Vetters 1996) which must be related to an existing situation.

(39) Pierre entra. Marie *téléphonait*.
Peter entered. Mary call.3SG.IMP
'Peter entered. Mary *was calling*.'

These features situate the Imparfait in opposition to the Passé Simple, which marks a break between the moment of speaking S and the global image of the situation happening before S. The Imparfait provides an interior perspective of the situation, which allows the distinction between what has effectively happened and what has yet to happen. Martin (1971, 70) argued that the Imparfait creates an opposition at a certain moment between 'la partie accomplie du processus avec la partie inac-

complie' ('the accomplished part of the process with the unaccomplished one'), as in (40). The Passé Simple, on the contrary, considers the situation globally without analysing its inherent parts, though a temporal complement can mark the beginning or the end of the situation, as in the following examples from Riegel et al. (1994):

- (40) Coupeau *eut* un accident. Il *sortait* du village.

  Coupeau have.3SG.PS an accident. He get out.3SG.IMP of the village 'Coupeau had an accident. He was getting out of the village.'
- (41) Après son accident, Coupeau *se mit* à boire. After his accident, Coupeau RFX start.3SG.PS to drink 'After his accident, Coupeau started to drink.'
- (42) Gervaise *attendit* le retour de Lantier jusqu'à l'aube. Gervaise wait.3SG.PS the return of Lantier until daybreak 'Gervaise waited until daybreak for Lantier to come back.'

Temporal reference in an utterance containing an Imparfait is generally calculated by taking into account three observations (Sthioul 1998, 207). Firstly, temporal reference is fixed in relation to an existing reference period R. Accordingly, a sentence containing an Imparfait cannot be interpreted in isolation, as in (43). The anchoring reference period can be provided by a temporal adverbial, as in (44), or another event, as in (45).

- (43) ?Marie *buvait* un café. Mary drink.3SG.IMP a coffee 'Mary was drinking a coffee.'
- (44) Hier à huit heures, Marie *buvait* un café. Yesterday at o'clock, Mary drink.3SG.IMP a coffee 'Yesterday, at eight o'clock Mary was drinking a coffee.'
- (45) Paul *entra*. Marie *buvait* un café. Paul enter.3SG.PS. Mary drink.3SG.IMP a coffee 'Paul entered. Mary was drinking a coffee.'

Secondly, the reference period is prior to S, as shown by the compatibility of a past temporal adverbial in example (46), and the incompatibility with a present time adverbial in (47) or future time adverbial in (48).

(46) Il y a une heure, Paul *lisait* le journal, et ça n'est pas prêt de changer.An hour ago, Paul read.3SG.IMP the newspaper, and this is not going to change soon.

'An hour ago, Paul was reading the newspaper, and this is not going to change soon.'

- (47) \*Au moment où je vous parle, Paul *lisait* le journal.

  \*At the moment when I speak to you, Paul read.3SG.IMP the newspaper
- (48) \* Dans une heure, Paul *lisait* le journal.
  - \* In an hour, Paul read.3SG.IMP the newspaper

Thirdly, the period during which E holds is longer than the reference period, as in example (46) where it continues up to present, and cannot be shorter than the reference period, as in example (49), from Ducrot (1979). In contrast, this is possible with both the Passé Simple and the Passé Composé, as shown in example (50). The Imparfait therefore presents the situation as unbounded (R included in E) and locates it prior to S. The consequences of R being included in E are that achievement implicatures are impossible even for telic situations, as in (51), and that the interpretation that the event expressed with the Imparfait includes the event expressed with the Passé Simple or Passé Composé, as in (39) or (45).

- (49) L'année dernière, Paul *habitait* à Paris (\*mais seulement en mai). Last year, Paul live.3SG.IMP in Paris (\*but only in May) 'Last year, Paul was living in Paris (\*but only in May).'
- (50) L'année dernière, Paul *habitala habité* à Paris, mais seulement en mai. Last year, Paul live.3SG.PS/PC in Paris (but only in May) 'Last year, Paul lived in Paris (but only in May).'
- (51) Pendant la reunion, Marie *buvait* un café, qu'elle n'a d'ailleurs jamais *fini*.
  During the meeting, Mary drink.3SG.IMP a coffee, which by the way, she never finish.3SG.PC
  'During the meeting, Mary was drinking a coffee, which by the way, she has yet to finish.'

De Saussure and Sthioul (2005, 105) suggested that the basic semantic features that can be attributed to the Imparfait, regardless of its discursive context, are the dislocation of the referential anchoring of S and the inclusion of this reference point within the eventuality denoted by the verb.

The Italian Imperfetto is, for Bertinetto, a 'clearly imperfective' verbal tense (1986, 345). It presents all three aspectual oppositions recognized in the literature—namely, progressive, continuous and habitual (Comrie 1976), though the continuous aspect seems to be most representative. The progressive aspect of the Imperfetto is shown by the contrast between the examples in (52) and (53), where the Imperfetto indicates that the eventuality of having breakfast started before the moment when the news arrived, where in (54), the Passato Remoto expresses that the eventuality of having breakfast started exactly at the same moment as the news arrived. The habitual aspect is shown in (54), where there is no information about the total duration of the eventuality without explicitly marking it by an adverbial or by contextual information. The same holds for the continuous aspect in (55) from Bertinetto (1986, 347, 349).

(52) Quando arrivò la notizia, Andrea *faceva* tranquillamente colazione come ogni mattina.

When the news arrived, Andrea make.3SG.IMP calmly breakfast as every morning

'When he heard the news, Andrea was having breakfast, as he did every morning.'

(53) Quando arrivò la notizia, Andrea *fece* tranquillamente colazione come ogni mattina.

When the news arrived, Andrea make.3SG.PS calmly breakfast as every morning

'When he heard the news, Andrea had breakfast, as he did every morning.'

(54) Tino *pedalava* ogni giorno per due ore.
Tino pedal.3SG.IMP every day for two hours
'Tino used to pedal/was pedaling every day for two hours.'

(55) Cosa *facevi* ieri dalla 2 alle 4? *Dormivo*.

What do.2SG.IMP yesterday from 2 to 4? Sleep.1SG.IMP

'What were you doing yesterday from 2 to 4? I was sleeping.'

Bertinetto (1986, 352) points out that the aspectual information expressed by the Imperfetto is linked to the notion of *indetermination*, evaluated in relation to the continuation of the eventuality beyond the interval considered, to the delimitation of the interval considered, and to the number of iterations. This indetermination is most often resolved by contextual knowledge.

The main temporal interpretations of the Imperfetto are: *simultaneity in the past* and *sequentiality of events* known as the narrative Imperfetto. The interpretation as simultaneity in the past is linked to the notion of *temporal anchoring*. Both the progressive and the continuous versions of the Imperfetto require temporal anchoring, which cannot be provided by a temporal adverbial alone, as shown in (56) and (58) respectively. Examples (57) and (59), on the other hand, show that temporal anchoring can be established with respect to another eventuality. This is linked to the fact that temporal adverbials do not necessarily signal a reference moment R.

- (56) ?Ieri *giocavo* a carte. Yesterday play.1SG.IMP at cards 'Yesterday, I was playing cards.'
- (57) Ieri a quest'ora *giocavo* a carte; come passa il tempo! Yesterday, at this time play.1SG.IMP cards; how pass the time 'Yesterday, at this time, I was playing cards; time flies.'
- (58) ?La settimana scorsa *mi vedevo* un film dopo l'altro. Last week RFX watch.1SG.IMP a movie after another 'Last week I was watching one movie after another.'
- (59) La settimana scorsa, mentre tu passavi tutto il tempo sui libri, *mi vedevo* un film dop l'altro.

Last week, while you spend.IMP all your time on books, watch.1SG.IMP a movie after another

'Last week, while you were spending all your time on books, I was watching one movie after another.'

Bertinetto points out that the Imperfetto can carry out the interpretation of simultaneity in the past independently of the occurrence of explicit markers such as *at the same time, when* and *simultaneously*, markers that are necessary for the compound

or simple past forms, as shown in examples (60) and (61), from Bertinetto (1986, 357). In the absence of an explicit marker or an appropriate context, the compound past has an inceptive and then sequential interpretation as in (62).

- (60) Quando Luca è caduto, Marco faceva le scale assieme a lui. When Luca fall.3SG.PC, Marco make.3SG.IMP the stairs with him 'When Luca fell, Marco was walking down the stairs with him.'
- (61) Quando Luca è caduto, Marco ha fatto le scale assieme a lui al tempo stesso.
  - When Luca fall.3SG.PC, Marco make.3SG.PC the stairs with him at the same time
  - 'When Luca fell, Marco was walking down the stairs with him at the same time.'
- (62) Quando Luca è caduto, Marco ha fatto le scale assieme a lui. When Luca fall.3SG.PC, Marco make.3SG.PC the stairs with him 'When Luca fell, Marco went down the stairs with him.'

Nevertheless, the Imperfetto can also be used to express temporal sequencing; this can be observed with the habitual Imperfetto in (63), and when triggered by context, as shown by the contrast between (64) and (65) from Bertinetto (1986, 358, 359).

- (63) Il professore *si alzava* alle 7 e un quarto, *si rasava*, *raccoglieva* le sue cose, e *scendeva* al bar per fare colazione.
  - The professor himself wake up.3SG.IMP at a quarter past seven, himself shave.3SG.IMP, gather.3SG.IMP his things and go down.3SG.IMP at the café to have breakfast
  - 'The professor woke up at a quarter past seven, shaved, gathered his things and went down at the café to have breakfast.'
- (64) Suonavano le 8 ed egli si alzò. Ring.3PL.IMP 8 and himself wake up.3SG.PS 'The alarm clock rang at 8 and he woke up.'
- (65) *Suonavano* le 8. Egli si *alzò*, si *lavò*, si *vestì*. Ring.3PL.IMP 8. He himself wake up.3SG.PS, himself wash.3SG.PS, himself dress.3SG.PS
  - 'The alarm clock rang at 8. He woke up, washed himself and got dressed.'

Probably the best known and most often discussed exception to the description of the imperfect in these terms is the so-called *breaking* or *narrative* imperfect, attested in all Romance languages (Savić 1979; Tasmowski-De Ryck 1985; Vetters 1996, Comrie 1976), in English (Klum 1961,190) and in ancient Greek (Kiparsky 1968,40). The narrative imperfect has features completely opposed to the first type of imperfect, as illustrated in examples (66) and (67) for the French imperfect, and (68) for Italian.

- (66) Comme elle avait été à l'opéra, une nuit d'hiver, elle rentra toute frissonnante de froid. Le lendemain elle toussait. Huit jours plus tard elle *mourait* d'une fluxion de poitrine.
  - Since she go.3SG.PP to the opera, one winter evening, she come.3SG.PS back all shivering. The day after, she cough.3SG.IMP. Eight days later, she die.3SG.IMP of tuberculosis
  - 'Since she had gone to the opera, one winter evening, she came back all shivering. The day after, she was coughing. Eight days later, she died of tuberculosis.'
- (67) Le lendemain, il *partait*.

  The next day, he leave.3SG.IMP

  'The next day, he left.'
- (68) L'indomani, a mezzogiorno in punto, egli *usciva* dalla città. The next day at noon precisely, get out.3SG.IMP of the town 'The next day, at noon precisely, he got out of the town.'

Classically, the narrative imperfect is defined in opposition to the imperfect, mainly because of three features: the perfective aspect triggering a perfective interpretation of the eventuality, the temporal sequencing of the eventualities expressed, and the presence of a temporal adverbial which sets the reference moment R. However, Imbs (1960, cited in Bertinetto 1986, 393) gives examples of the narrative Imparfait from Flaubert's *Bouvard et Pécuchet* whose perfective aspect can be questioned. Bertinetto therefore suggests that the aspectual nature of the narrative imperfect can only be determined contextually, and this is due to:

[...] la forte tensione imperfettiva che questo Tempo possiede nelle sue accezioni standard, e le possibili neutralizzazioni aspettuali cui esso va incontro in certi particolari contesti [...] ma normalmente esso non giunge fino ad annullare del tutto le connotazioni aspettualli primarie. (Bertinetto 1986, 393–394).

In other words, the narrative imperfect can rarely be replaced by a simple past form without any loss, and, more specifically, a 'temporal dilation of the event' that triggers a focalization on that event during the interpretation process. It is a psychological dimension rather than a discursive one.<sup>5</sup> Bertinetto points out that the 'narrative' interpretation is therefore mainly due to both linguistic and pragmatic factors, and occurs only when the context is taken in consideration. The narrative Imperfetto

<sup>&</sup>lt;sup>4</sup> '...collision between the strong imperfective force that this tense has in its standard usages, and the possibility of aspectual neutralization in certain contexts [...] but normally this cannot completely cancel the primary aspectual connotations.' (my translation)

<sup>&</sup>lt;sup>5</sup>Bertinetto exemplifies this idea with the following passage from the novel *La cognizione del dolore* by C.E. Gadda: "*Ebbe* per il dottore, che non vedeva da tempo, espressioni cordiali ma brevi; e gli *demonstrava* la sua stima. Con garbo native *diede* senz'altro per inavvertiti i quattro millimetri di barba...". This passage describes an important moment in the existential development of the protagonist. The use of the narrative imperfect instead of the simple past form transfers what is said from the discursive level to the psychological level.

is used as a tool to focus on the eventuality expressed, an interpretative effect that does not occur with the simple past, as in (69).

(69) L'indomani, a mezzogiorno in punto, egli *uscì* dalla città. The next day at noon precisely, get out.3SG.PS of the town 'The next day at noon precisely, he got out of the town.'

Scholars investigating the imperfect had to suggest a model that would explain the existence of both the imperfect and the narrative imperfect. In the pragmasemantic approach, Vetters (1996, 142) argues that the Imparfait exists in opposition to the Passé Simple in relation to aspectual information and the instructions for temporal sequencing where the Imparfait is imperfective, and instructs the hearer to relate the situation to another past situation meronymically. He does not include simultaneity in the procedural meaning of the Imparfait, since the narrative Imparfait does not express it. The interpretative process is finalized at the pragmatic level under the guidance of the principle of optimal relevance. As for the narrative Imparfait, it is characterized as it follows (Vetters 1996, 128):

- It provides instructions on temporal progression
- It can be replaced by the Passé Simple
- It is favoured when accompagnied by an anteposed temporal adverbial
- With states, it expresses an inchoative meaning (as in (70))
- (70) Quelques secondes plus tard, Luc *était* sous le chapiteau. A few seconds later, Luc be.3SG.IMP under the tent 'A few seconds later, Luc was under the tent.'

There are two aspectual values of the narrative Imparfait. The inability to interpret a unique and entire event in (71)—possible with the Passé Simple as in (72)—shows that the Imparfait can be imperfective. However, the Imparfait can also be undetermined for aspectual information, due to the Principle of Optimal Relevance (Sperber and Wilson 1986/1995). In other words, the hearer can correctly interpret an utterance with a narrative imperfect without determining its aspectual value, and this interpretation produces the necessary cognitive effects.

(71) Le lendemain, il *travaillait* de 5h à 8h.

The next day, he work.3SG.IMP from 5am to 8am.

'The next day, he was working from 5am to 8am.'

<sup>&</sup>lt;sup>6</sup>In a different framework, Molendijk (2002) reduces the semantics of the Passé Composé, Passé Simple and Imparfait to a series of logical-temporal relations expressed by these verbal tenses in a sequence of sentences, the semantics of the Imparfait being the relation of temporal simultaneity.

<sup>&</sup>lt;sup>7</sup>Bethonneau and Kleiber (1993, 73) argue that the relation between a situation expressed by the Imparfait and another past time situation is similar to associative anaphora, where a part is linked to the whole.

(72) Le lendemain, il *travailla* de 5h à 8h.

The next day, he work.3SG.PS from 5am to 8am

'The next day, he worked from 5am to 8am.

According to Vetters (1996, 144), the pragma-semantic approach explains both descriptive and interpretative usages of the Imparfait, without any need for a split analysis of the two types of Imparfait. For example, in all its instances in (73), the narrative Imparfait needs a reference situation recoverable from the context, i.e. the Imparfait difficult to interpret unless there is a logical link between the two events, as shown in (74), where it is not Mr. Chisnutt who shows up but Mr. Brown (Tasmowski-De Ryck 1985, 66).

(73) Le commandant se jeta sur l'interphone et hurla qu'il *avait* à parler à M. Chisnutt. Trois minutes plus tard, M. Chisnutt *se présentait* chez le commandant.

The commandant threw himself at the intercom and screamed that he have.3SG.IMP to speak to Mr Chisnutt. Three minutes later, Mr Chisnutt show up.3SG.IMP to see the commandant.

'The commandant threw himself at the intercom and screamed that he had to speak to Mr Chisnutt. Three minutes later, Mr Chisnutt showed up to see the commandant.'

\* ?Le commandant se jeta sur l'interphone et hurla qu'il avait à parler à M. Chisnutt. Trois minutes plus tard, M. Brown se présentait chez le commandant.

The commandant threw himself at the intercom and screamed that he have.3SG.IMP to speak to Mr Chisnutt. Three minutes later, Mr Brown show up.3SG.IMP to see the commandant.

'The commandant threw himself at the intercom and screamed that he had to speak to Mr Chisnutt. Three minutes later, Mr Brown showed up to see the commandant.'

Classically, the Romanian Imperfectul is described as presenting eventualities from an imperfective viewpoint. Zafiu (2013, 60) argues that the Imperfectul is better described as a means of marking the aspect in the past rather than a proper tense. The Imperfectul expresses durative (continuous) and iterative aspect, as in (75) and (76) respectively, from Zafiu (2013, 60–61).

- (75) Afară *ploua* iar tu *stăteai* în casă și *citeai*.

  Outside rain.IMP and you stay.2SG.IMP in the house and read.2SG.IMP 'It was raining outside and you stayed indoors and read.'
- (76) Deschidea şi închidea uşa de mai multe ori pe zi.
  Open.3SG.IMP and close.3SG.IMP the door several times a day
  'He opened and closed the door several times a day.'

To sum up, the imperfect in Romance languages is presented as mixed between Tense and Aspect. There is an ongoing debate among linguists on whether the imperfective usages of the imperfect are part of its semantics or pragmatically derived.

## 1.1.3 The Compound Past

The compound past is a verbal tense that presents a very different form of behaviour in English (Present Perfect) than it does in the Romance languages analysed: French (Passé Composé), Italian (Passato Prossismo) and Romanian (Perfectul Compus). In English, there is significant competition between the Simple Past and the Present Perfect for expressing reference to past time. The Present Perfect is a compound form that expresses the *perfect* aspect and makes reference to past time: it locates an eventuality in the past (E < S), and this is expressed from a reference moment that is in the present (R = S). The Simple Past, on the other hand, expresses the preterit (i.e. aorist) aspect and locates eventualities prior to S (E < S). This is expressed from a reference moment that is in the past (R = E). Traditionally, grammars of English distinguish between different adverbials: those only compatible with the Simple Past, which point to a moment or period of time that finished in the past, such as yesterday, last night, in June and the other day; those only compatible with the Present Perfect, which point to the period leading up to the present or recent past time, such as since Tuesday, since yesterday and lately; and those compatible with both verbal tenses, such as today, this week and recently (Leech and Svartvik 1975).

Klein (1992) describes the Present Perfect's inability to occur with a definite temporal adverbial (such as *at 4 o'clock*) as the *Present Perfect puzzle*. Giorgi and Pianesi (1997) point out that there are [+Present Perfect puzzle] languages, such as English, Norwegian, Danish and Swedish, and [-Present Perfect puzzle] languages, such as Romance languages, German, Dutch and Icelandic. Kamp and Reyle (1993) argued that, in languages that exhibit the Present Perfect puzzle, the perfect form expresses only the last of the three stages of a complete event (*preparatory stage*, *culmination point* and *result stage*). This characteristic explains the incompatibility of the form with past time adverbials, <sup>8</sup> as in (77), and their absence in narratives, <sup>9</sup> as in (78).

- (77) \*Mary has arrived at 5.
- (78) \*Mary has arrived and has started to cook. She then has turned on the TV and she has watched a movie.

<sup>&</sup>lt;sup>8</sup> Spanish and Catalan are, however, subject to a constraint termed by Comrie (1985) the *hodiernal* restriction, also known as the 24 hours rule (Vişan 2006; Aménos-Pons 2011).

<sup>&</sup>lt;sup>9</sup>The Dutch complex past is an exception, as it is compatible with definite past time adverbials but cannot be used in narratives (Boogaart 1999, Vişan 2006).

Languages that do not exhibit the Present Perfect puzzle, such as Romance languages, express more than the *result stage* (Vişan 2006). This is what makes the Present Perfect in these languages compatible with a past time adverbial, as in (79), and what explains its possible usage in narratives, as in (80).

- (79) Marie *est arrivée* à 5 heures. Mary arrive.3SG.PC at 5 o'clock 'Mary arrived at 5 o'clock.'
- (80) Marie *est arrivée* et *a commencé* à cuisiner. Elle *a* ensuite *allumé* la télé et *a regardé* un film.

Mary arrive.3SG.PC and begin. 3SG.PC to cook. She AUX then turn on.3SG.PC. the TV and watch.3SG.PC a movie

'Mary arrived and began to cook. She then turned on the TV and watched a movie.'

The main difference pointed out in grammars with respect to the competition between the Simple Past and the Present Perfect is that the former does not link the past time referred to and the present time, where the latter does. The Simple Past implies a gap between past and present time (i.e. the two moments are disconnected), whereas the Present Perfect implies that the eventuality expressed, be it a state as in (81), a habit as in (82), or an event as in (83), continues at the present time, pointing to the *resultative* eventuality holding at S. In (84) and (85), the Present Perfect makes reference to an indefinite eventuality located in a period leading up to the present (Leech and Svartvik 1975, 66). As for the usage illustrated in (84) and (85), there is a tendency in American English to prefer the Simple Past, as in (86).

- (81) That house *has been* empty for ages.
- (82) He has attended lectures regularly.
- (83) The taxi has arrived.
- (84) Have you ever been to Florence?
- (85) All my family *has had* measles (in the last year).
- (86) *Did* you ever *go* to Florence?

In a cross-linguistic typological analysis, Squartini and Bertinetto (2000) investigate the usages of the compound past and simple past forms in Romance languages. The main hypothesis for explaining the usage variation across Romance languages is the process of *aoristicization*. According to Harris (1982), the aoristicization process consists of a change from a purely perfect (the Present Perfect in English) to an aoristic, passing through several steps, of which the third corresponds to what is known in the French literature as the *accomplishment* compound past, and the fourth to the *anteriority* compound past.

• The compound past is restricted to present states resulting from past actions, and is not used to describe past actions themselves, however recent;

Portuguese	Spanish	Occitan	Standard	Standard	Standard	Northern Italian
_	-	Catalan	Italian	French	Romanian	and French
						vernaculars
perfectal	>		>		>	aoristic

Fig. 1.1 Scalar orientation of Romance languages in the agristicization process

- The compound past occurs in durative or repetitive contexts (similar to the English Present Perfect and the Present Perfect Continuous);
- The compound past expresses the archetypal Present Perfect value of past action with present relevance;
- The compound past expresses the agristic function, while the simple past is restricted to formal registers.

Squartini and Bertinetto (2000) argue against distinct steps in the aoristic drift, and for a continuum stretching from perfect to aorist. Romance languages and dialects can thus be situated on such a continuum, as in Fig. 1.1. Portuguese is the only language that presents the opposite pattern, as the compound past is less used than the simple past for expressing past time reference. In all other languages and vernaculars, the compound past is more frequent than the simple past, a scalar orientation at its maximum in northern Italian and French vernaculars.

The third and the fourth steps were identified in the French literature as the accomplishment and anteriority usages of the compound past. Squartini and Bertinetto argue, as I will show later on, that in Italian there is an important difference between central and northern parts of Italy, where the compound past is used more frequently than the simple past, and the southern part of the country, where the situation is the converse. In Romanian, on the other hand, the compound past is more advanced in its aoristic drift, being the most frequent tense used to express past time reference.

Traditionally, the French Passé Composé is described as a "tense with two faces" (Martin 1971) because of its ability to express both past and present time. When describing the Passé Composé, scholars suggested monoguist and ambiguist analyses. Monoguist analyses consist of a focus either on the past time reference (i.e. the anteriority compound past, as in (87) and (88), such as Brunot 1922), on the present time reference (i.e. the accomplishment compound past, as in (88-91), such as Guillaume 1929), or on both usages, unified and undistinguished (e.g. Reichenbach 1947). The anteriority Passé Composé provides information about E preceding S, whereas the accomplishment compound past allows achievement inferences about a resultative state relevant at the moment of speech S. As for the third type of analysis, Reichenbach assumes a one-to-one correspondence between the Present Perfect and the Passé Composé, which are both characterized by the concomitance of R and S (i.e. E < R = S). As Luscher and Sthioul (1996, 198) point out, however, Reichenbach's analysis is problematic in examples (92) and (94), where the compound past is translated by a Present Perfect—unlike the perfectly acceptable (93) and (95), where the compound past is translated by a Simple Past.

- (87) Une fois, j'ai conduit sans le permis de conduire. Once, I drive.1SG.PC without the driving license 'Once, I drove without a driving license.'
- (88) Victor Hugo a écrit Les Misérables. (Luscher and Sthioul 1996, 206) Victor Hugo write.3SG.PC Les Misérables 'Victor Hugo wrote Les Misérables.'
- (89) Policier: Votre permis de conduire, s'il vous plait? Chauffeur : Je l'*ai oublié* à la maison.

Policeman: You driving license, please? Driver: I forget.1SG.PC at home 'Policeman: You driving license, please? Driver: I left/have left it at home.'

- (90) Isabelle *est sortie*. (de Saussure 2003, 232) Isabelle get out.3SG.PC 'Isabelle has gone out.'
- (91) Il *a plu*. (de Saussure 2003, 232) It rain.PC 'It rained/has rained.'
- (92) Hier, il *a plu*. (Luscher and Sthioul 1996, 199) Yesterday, it rain.PC 'Yesterday, it rained/\*has rained.'
- (93) Yesterday, it rained.
- (94) Le 21 janvier 1976, le Concorde *a atteri* à Rio. (Luscher and Sthioul 1996, 199)

On the 21 of January 1976, the Concorde land.3SG.PC in Rio 'On the 21 of January 1976, the Concorde landed/\*has landed in Rio.'

(95) On the 21 of January 1976, the Concorde landed in Rio.

Ambiguist analyses, on the contrary, argued for the existence of an ambiguous Passé Composé, where only contextual information can disambiguate between its possible interpretations (such as Vet 1980, Luscher and Sthioul 1996, among others). Vet (1980) suggested describing the Passé Composé with two reference points: a main reference point expressing simultaneity to S; and an auxiliary reference point expressing anteriority to S. His second suggestion is that the analysis depends on the lexical aspect of the situation: transitional (i.e. telic) vs. non-transitional (i.e. atelic) situations. Telic situations allow an anteriority interpretation of the Passé Composé accompanied by past time adverbial, as in example (96), and an accomplishment interpretation with a present time adverbial, as in (97). Atelic situations allow only accomplishment interpretations, as in (98), where the Passé Composé is incompatible with a present time adverbial (from Luscher and Sthioul's 1996 discussion of Vet's analysis).

(96) Hier, Chantal est sortie. Yesterday, Chantal go.3SG.PC out. 'Yesterday, Chantal went out.'

- (97) En ce moment, Chantal *est sortie*.

  Today, Chantal be.3SG.PRES out 'Today, Chantal is out.'
- (98) \*L'enfant *a* maintenant *pleuré*.

  The child AUX now cry.3SG.PC

  'The child has just cried.'

The compound past in Italian<sup>10</sup> is described as having two types of usage: *deictic* and *non-deictic*. The deictic usages of the Passato Prossimo corresponds to what has traditionally been called *current relevance*, *experiential* (Comrie 1976) or *existential* (McCawley 1971), and *inclusive* Passato Prossimo (Jespersen 1948/1961). Examples (99–102), from Lepschy and Lepschy (1998, 228–229), illustrate the meaning of *current relevance*. Bertinetto (1986) includes in the first of these cases the so-called *notizia fresca* Passato Prossimo—the 'hot news reading' of the compound past—as in (103).

- (99) Perché sei così arrabbiato con lui? Perché mi *ha dato* un calcio. Why are you so angry with him? Because me give.3SG.PC me a kick 'Why are you so angry with him? Because he kicked me.'
- (100) Mio fratello *è partito* due ore fa. My brother leave.3SG.PC two hours ago 'My brother left two hours ago.'
- (101) Negli ultimi dieci anni *abbiamo cambiato* casa sette volte. In the last ten years change.3PL.PC house seven times 'In the last ten years we have moved seven times.'
- (102) Dante ci *ha dato* nella "Comedia" la maggiore opera della nostra letteratura. Dante us give.3SG.PC in his "Comedy" the greatest work in our literature 'Dante has given us with his "Comedy" the greatest work in our literature.'
- (103) La sai l'ultima? È arrivato Gianni!

  Do you know the latest news? Arrive.3SG.PC John

  'Do you know the latest news? John has just arrived!'

The experiential meaning is illustrated in (104), where the Passato Prossimo expresses an eventuality that covers S. Bertinetto (1986, 418) argues that this case could be considered an extreme case of current relevance, where not only the resultative state but also the eventuality itself continues at, and maybe even beyond, S. He points out that inclusive usages of the Passato Prossimo are restricted as far as lexical aspect is concerned: inclusive interpretations of the Passato Prossimo can occur only with non-telic durative situations, as in (104), and other types of situations which become statives under the scope of negation, as in (105).

<sup>&</sup>lt;sup>10</sup>The use of the Passato Prossimo and the Passato Remoto varies in different parts of Italy. In the north, the Passato Remoto is rarely used in spoken Italian, while in the south, it is more widely used than the Passato Prossimo. In central Italy, a distinction is made between the two tenses, also observed in literary Italian.

- (104) Finora, Gianni *ha vissuto* in questa casa. Until now, John live.3SG.PC in this house 'Until now, John lived in this house.'
- (105) Le donne di questo posto non *hanno* sempre *portato* gonne corte. Women in this position not AUX always wear.3PL.PC skirts short 'Women in this position have not always worn short skirts.'

In (106), the eventuality is part of the life experience of the speaker, and is therefore considered to be linked to the moment of speech S. Bertinetto points out that when the Passato Remoto is used instead of the experiential Passato Prossimo, as in the pair of examples (107) vs. (108), there is an implication that the period of time referred to is completed. This implication could be explicated with temporal adverbials, such as *tra il 1968 e il 1973* 'between 1968 and 1973' or *durante la sua vita* 'during his life'. The Passato Prossimo in (107), on the contrary, does not trigger this type of implication.

- (106) Sei mai stato a Parigi?

  AUX ever be.2SG.PC to Paris

  'Have you ever been to Paris?'
- (107) Luca *fu* tre volte in Francia. Luca be.3SG.PS three time in France 'Luca was in France three times.'
- (108) Luca è stato tre volte in Francia. Luca be.3SG.PC three time in France 'Luca has been to France three times.'

In non-deictic usages, the reference moment R is disconnected from S. In these cases, the Passato Prossimo expresses a relation of an eventuality's anteriority to another past eventuality mentioned in the context, as in (109) and (110), from Bertinetto (1986, 421)

- (109) Ti avevo detto che *è finito* il latte; perché non mi stai mai ad ascoltare? I had told you that finish.3SG.PC the milk; why don't you ever listen to me 'I had told you that the milk is finished; why don't you ever listen to me?'
- (110) La casa è crollata dopo che tu *sei uscito*.

  The house collapsed after that you get out.2SG.PC 'The house collapsed after you got out.'

According to the procedural pragmatics approach, Luscher and Sthioul (1996) argue that Vet's analysis in terms of "two semantics of the Passé Composé" (1996, 202) is not convincing, and suggest a pragmatic analysis consisting of having unique semantic content or a *base value* and two pragmatic or *contextual* usages. The base value consists of the event moment E prior to S, as in (88). In its base value, the French compound past shares semantic information (i.e. reference to past time:

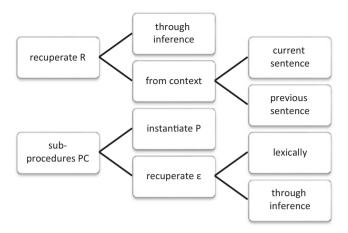


Fig. 1.2 Preliminary sub-procedures for interpreting the Passé Composé

E < S) with the other simple and compound tenses, such as Passé Simple, Imparfait, and Plus-que-parfait. As for the two pragmatic usages, the distinction is made by the position of the reference moment R: in the first type, the Passé Composé points to the event that took place in the past (R = E), whereas in the second, it points to the resultative state relevant in the present time (R = S).

Luscher and Sthioul (1996) propose a complex procedure for interpreting the Passé Composé that consists of a general procedure for recuperating R that is applicable to all tenses, as shown in the left panel of Fig. 1.2, and two sub-procedures specific to the Passé Composé, as shown in the right panel. The temporal interpretation of a sentence involves determining the R point from the context, such as a temporal adverbial from the current sentence or from the previous sentences, or through inference based on the temporal interpretation of previous sentences and world knowledge. The procedure of recuperating R is the same for all tenses, where E can be previous, simultaneous or posterior to R, or where R is previous, simultaneous or posterior to S. The first sub-procedure for interpreting the Passé Composé instructs the hearer to instantiate a P moment such that E < P < S. The second sub-procedure for interpreting the Passé Composé instructs the hearer to recuperate a resultative state, either lexically (for example get out entails be out) or through inference (e.g. having eaten implicates not be hungry). De Saussure (2003) argues that the resultative state is a product of conceptual relations holding between eventualities. The main idea is that accomplishment usages of the Passé Composé communicate that the event is perceived from S, and that the same event produced a resultative state true at S.

The complete procedure for interpreting the French Passé Composé proposed by Luscher and Sthioul (1996) (and reasserted in Luscher 1998) is provided in Fig. 1.3. The compound past has basic semantics according to which E is previous to S. The hearer is instructed to instantiate a P such that E < P < S. P is saturated according to contextual information by way of pragmatic inferences. It can be saturated as a reference moment R, which is simultaneous with either E or S. The former case corresponds to the anteriority usage, whereas the latter corresponds to the accomplishment

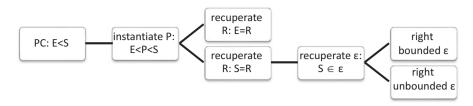


Fig. 1.3 Final procedure for interpreting the compound past

usage. As far as the latter usage is concerned, the hearer can further infer a resultative state true at S which is either right-bounded (e.g. *be out*, in example (97)) or right-unbounded (e.g. *the novel that was written*, as in the second interpretation of (88)).

De Saussure (2003) argues that the compound past, contrary to the simple past, does not provide information regarding temporal progression, and that both backward and forward temporal sequencing inferences are possible, as in (111), where time progresses from the first to the second event, and regresses from the second to the third. The adverb *en plus* 'besides' illustrates that there is no temporal order imposed by the compound past. The compound past can refer to future time when it is accompanied by a future temporal adverbial, as in (112) for the Passé Composé, and (113–114) for the Passato Prossimo. This is an interpretative use of the Passé Composé, where it does not refer to a fact but to a thought: the speaker imagines herself at a moment S' (i.e. two months after S), when she can assert *I finished my thesis* (S < E < S').

(111) Le concierge *a sorti* sa clef, il *a quitté* les lieux, et en plus il *a fermé* la porte.

The concierge take out.3SG.PC his key, he leave.3SG.PC the site, and in addition he lock.3SG.PC the door

'The concierge took out his key, left the premises and then locked the door.'

(112) Dans deux mois j'ai fini ma thèse. In two months, I finish.1SG.PC my thesis. 'In two months, I will have finished my thesis.'

(113) Soltanto fra un mese sarà possibile capire chi *ha avuto* ragione tra noi due.

Only in a month it will be possible to understand who be.3SG.PC right between us two

'Only in a month will it be possible to understand which of the two of us was right.'

(114) Domani ho finito.

Tomorrow finish.1SG.PC

'Tomorrow I will have finished.'

<sup>&</sup>lt;sup>11</sup> 'The main feature opposing the compound past and the simple past is the compound past's ability to activate by way of temporal adverbials a reference moment R—that is, a point of evaluation which follows the event moment E on the time line and at which the eventuality is represented as being completed.' (my translation)

#### Bertinetto (1986, 1996) argues that:

La caratteristica fondamentale che oppone il Passato Prossimo al Passato Remoto, e che accomuna al Passato Prossimo tutti i tempi composti, è la possibilità di attivare per mezzo di eventuali avverbiali temporali un Momento di Riferimento (MR), ossia un punto di valutazione che segue sulla liea del tempo il Momento dell'Avvenimento (MA), e rispetto al quale l'avvenimento stesso viene rappresentato come compiuto. <sup>11</sup> (Bertinetto 1996, 386).

He argues that the semantics of the Passato Prossimo requires instantiating the three temporal coordinates E, R and S on the timeline, where R and S generally coincide. The compatibility of the Passato Prossimo with a temporal adverbial rendering R explicit indicates that R is part of its semantics. R can refer to the moment of speech, as shown in (115), to an adverbial indicating the lapse of time between E and R, as in (116), or to no specific moment (i.e. omnitemporal value), as in (117).

- (115) A quest'ora (adesso, etc.) Gianni è arrivato.

  At this time (now, etc.) John arrive.3SG.PC

  'At this time John has arrived.'
- (116) Gianni è partito da due giorni. John leave.3SG.PC since two days 'John left two days ago.'
- (117) Una persona che *ha studiato* non deve comportarsi così. A person who study.3SG.PC not must behave himself like this 'A person who studied cannot behave like this.'

These three types of examples are incompatible with the simple past form, which imposes a temporal localization of the eventuality before the moment of speech, E < S. Perfectul Compus does not specify the temporal distance between E and S, as shown in (118) and (119) from Zafiu (2013, 58), where both short and long periods are possible.

- (118) Dan *a venit* acum cinci minute și te așteaptă.

  Dan come.3SG.PC now five minutes and he waits for you

  'Dan came five minutes ago and he has been waiting for you.'
- (119) Basarab I *a trăit* acum şapte sute de ani. Basarab I live.3SG.PC now seven hundred years 'Basarab I lived seven hundred years ago.'

The Perfectul Compus has deictic usages, as in examples in (118) and (119), and, in certain contexts, it functions as an anaphoric tense, as in examples (120–122) from Zafiu (2013, 58). In (120), the Perfectul Compus anaphorically makes reference to a past time R (i.e. a moment situated a week before the moment of speech). In (121), the Perfectul Compus makes reference to a future time R (i.e. a moment situated somewhere in the future). Finally, in (122), the Perfectul Compus makes reference to a recent past time R (i.e. a moment situated at lunchtime on the day before the moment of speech). Zafiu points out that in these examples, Perfectul Compus replaces the pluperfect, the future perfect and the imperfect, respectively.

- (120) A găsit ieri scrisoarea. A pierdut-o acum o săptămână. Find.3SG.PC yesterday the letter. loose.3SG.PC now a week 'Yesterday, he found the letter. He had lost it a week ago.'
- (121) O să merg la Ploiești și, când *am terminat* treaba, o să mă întorc. I will go to Ploiești, and, when finish.1SG.PC job, I will come back 'I will go to Ploiești, and when I have finished the job, I will come back.'
- (122) Te-am căutat ieri la prânz. Unde-ai fost? you look.3SG.PC yesterday at lunch. Where be.2SG.PC 'I looked for you yesterday at lunch. Where were you?'

The Perfectul Compus can be used to express anticipation (a future value), as in example (123), where the speaker expresses her intention to accomplish an action very quickly in the immediate future (from Zafiu 2013, 58), and the very recent past, as in (124), from Sporis (2012, 70).

(123) Gata, am plecat.
Ready leave.1SG.PC
'I am done and I'm off.'

(124) *A intrat* chiar acum pe poarta liceului. Enter.3SG.PC right now through the gate high school 'He has just entered through the high school gate.'

Vişan (2006) points out that the Perfectul Compus, as well as the compound past in all Romance languages, does not exhibit the Present Perfect puzzle (Klein 1992). In other words, the Perfectul Compus may co-occur with a definite past adverbial, as in (125). The Perfectul Compus is still a perfect, due to its link to S(R=S) and its usage to express resultativity, as shown in (126) from Vişan (2006). At the same time, the Perfectul Compus may be used in narratives, as shown in (127).

- (125) Ion *a plecat* ieri la ora 5. John leave.3SG.PC yesterday at 5 o'clock 'John left yesterday at 5 o'clock.'
- (126) Mi-ai spart capul!

  Me crack.2SG.PC skull

  'You've cracked my skull!'
- (127) Maria şi Ion *au plecat* de acasă devreme şi s-*au întors* seara târziu. După ce *au intrat* în casă, *au făcut* de mâncare, *au luat* cina si s-*au culcat*. Maria and John leave.3PL.PC from home early and come back.3PL.PC in the evening late. After they enter.3PL.PC the house, they prepare.3PL.PC the dinner, eat.3PL.PC and go.3PL.PC to bed. 'Mary and John left home early and came back late in the evening. After they entered the house, they prepared dinner, ate, and went to bed.'

The Perfectul Compus in standard Romanian is fairly advanced in the aoristicization process (the so-called *aoristic drift*), more so than in Italian and French (Squartini and Bertinetto 2000). Previous corpus-based studies have shown that the simple past has a more reduced usage in written cultivated texts, literary style and narratives in Romanian than in French and Italian (Squartini and Bertinetto citing Savić 1979; Călărașu 1992). Squartini and Bertinetto (citing Călărașu 1992) note that the analysis of a contemporary Romanian epistolary novel showed that simple past is completely absent, where it is present in its French translation. As for newspaper texts, Squartini and Bertinetto (citing Savić 1979) also note the absence of the simple past. 12 These results are similar to those found in the analysis of the multilingual corpus described in Sect. 3.4. Visan (2006) therefore suggests that the Perfectul Compus is semantically richer than its English counterpart the Present Perfect, and that it ranks highest in the agristicization process. She furthermore suggests that the Perfectul Compus and Perfectul Simplu have identical functions in narratives and that they are interchangeable. When they alternate in the same text, this takes place without necessarily imposing a change of perspective, as shown in (128) from Vişan (2006, 65). This behaviour is due to the compound past's significant progress along the agristic drift.

(128) Vorbind aşa, *au ajuns* aproape de Tecuci, unde poposiră la o dumbravă. Speaking while, arrive.3PL.PC close to Tecuci, where stopp.3PL.PS in a glen 'As they were speaking, they arrived close to Tecuci, where they stopped in a glen.'

Vişan points out that Romanian data reveal that the Perfectul Compus is frequently used in both spoken and written Romanian, and that 'the narrative value of the Perfectul Compus alternates with the narrative Perfectul Simplu' (Vişan 2006, 66). Her usage of the term *narrative* makes reference to Smith's (2003) notion of *discourse modes*.

Regarding the aspectual information expressed by the Perfectul Compus, the latter presents the situation from a perfective viewpoint, i.e. it expresses a completed situation, as in (129), from Zafiu (2013, 59). It can be accompanied by a durative adverbial, as in (130), and by iterative temporal adverbials, as in (131).

- (129) A citit cartea.

  Read.3SG.PC the book.'
- (130) *A citit* din carte timp de trei ore.

  Read.3SG.PC from the book for three hours.'
- (131) A venit în vizită în fiecare zi. Come.3SG.PC to visite every day 'She came to visit every day.'

<sup>&</sup>lt;sup>12</sup>There is, however, a variety of Romanian spoken in the regions of Oltenia and Muntenia where the simple past is used very often, and expresses temporal proximity (short periods prior to S). The compound past is used to express more distant situations (Squartini and Bertinetto 2000).

The Perfectul Compus can be used both in contexts with temporal progression, as in (132), and with backward temporal sequencing, as shown in (133), from Zafiu (2013, 59), and in (134), from Vişan (2006, 63). As seen in all three examples, explicit temporal connectives are possible, but not necessary for the expression of temporal progression or reverse order. Vişan (2006) makes the hypothesis that temporal ordering is triggered by the sequence of tense forms themselves.

- (132) *Am ajuns* acolo. *Am văzut* dezastrul. *Am chemat* poliția. Get.1SG.PC there. See.1SG.PC the disaster. Call.1SG.PC the police 'I got there. I saw the disaster. I called the police.'
- (133) *Am ajuns* acolo pe la prânz. *A fost* o zi teribilă. Get.1SG.PC there around noon. Be.PC a terrible day 'I got there around noon. It was a terrible day.'
- (134) În acea zi *a plouat* mult. Cu toții *erau* iritați. Maria l-*a lovit* din greșeală pe Mihai. Ion *a căzut*. Martin l-*a împins* și *a căzut* și el. That day it rain.PC a lot. All be.3PL.IMP iritated. Maria hit.3SG.PC by mistake Mihai. Ion fall.3SG.PC. Martin him push.3SG.PC and then fall.3SG.PC he too 'That day it rained a lot. We were all out of sorts. Maria hit Mihai by mistake. Ion fell. Marin pushed him and then he fell too.'

To sum up, the compound past is a verbal tense locating E < S via an R which can be R = E or R = S. In the usage E = R < S, the compound past is similar, but not identical, to the simple past and the imperfect. It can be distinguished from the simple past according to the instructions and constraints on temporal progression encoded by the simple past. Similarly, the compound past can be distinguished from the imperfect according to difference of viewpoint, i.e. perfective for the compound past, and imperfective for the imperfect.

#### 1.1.4 The Present

The simple present in English (Simple Present), in French (Présent), in Italian (Presente) and in Romanian (Prezentul) exists in opposition to the verbal tenses classically described as *expressing past time*, i.e. the simple past, compound past and imperfect, based on E/S relations. The simple present expresses a relation E = S, whereas the simple past, compound past and imperfect express a relation E < S. Similar to the simple past, compound past and imperfect, the simple present can refer to times other than the present time.

Semantically speaking, Quirk et al. (1985, 176) describe the Simple Present as 'the most general and unmarked category'. For example, (135) and (136) contrast with respect to the time span to which the statement applies. The generic statement in (135) applies to past, present and future, whereas the more specific statement in (136) applies to the past, and implies that this bird species is extinct.

- (135) Albatrosses *are* large birds.
- (136) Albatrosses were large birds.

Referentially speaking, the Simple Present locates eventualities simultaneous to the moment of speech, but its usages are highly dependent on its combination with Aktionsart or Aspect: *state present* applies to states; *habitual present* applies to the habitual aspect and dynamic events; and the *instantaneous present* applies to verbs with little or no duration such as achievements, as well as to performative verbs in order to accomplish specific speech acts. According to Quirk et al. (1985, 179), the state present includes generic statements, as in (135), proverbs, as in (137), scientific statements, as in (138), and statements in which the span of time is determined according to our world knowledge, as in (139), in contrast to (140).

- (137) Honesty *is* the best policy.
- (138) The Nile is the longest river in Africa.
- (139) Margaret knows several languages.
- (140) The soup tastes delicious.

The habitual present applied to dynamic eventualities, such as activities and accomplishments, refers to a sequence of events repeated over an unrestricted time span, as in (141). The frequency of the repetition can be specified with frequency adverbials, such as in (142).

- (141) She *makes* her own dresses.
- (142) Bill *drinks* heavily every night.

We find similar descriptions of the simple present in Romance languages. For example, Riegel et al. (1994) note that the French Présent is used to express eventualities that take place at the moment of speech, and for habitual and timeless statements (general truths such as maxims, proverbs, and theorems). They point out that the Présent can place the situation in any period of time, past or future, and even in all periods of time (omnitemporal value). As a simple form, the Présent expresses the process while ongoing, without taking into consideration its delimitations or duration. The limits and duration are provided by the semantics of the verb, as in (143), with a punctual situation, and in (144), with an activity. The omnitemporal value, i.e. the *permanent present*, occurs in definitions, as in (145), in general truths (considered by the speaker to be true at any period of time), as in (146), and in proverbs or maxims, as in (147). Examples (148) and (149) show identical usages for the Romanian Prezentul Simplu.

(143) La bombe *explose*.

The bomb blow up.3SG.PRES

'The bomb blows up.'

- (144) Elle *marche* au milieu de la rue. She walk.3SG.PRES in the middle of the street 'She walks in the middle of the street.'
- (145) Une haquenée *est* un petit cheval ou une jument, de taille moyenne. A hackney be.3SG.PRES a small horse or a mare, of a middle size 'A hackney is a small horse or a mare, of a middle size.'
- (146) Le soleil se lève à l'Est.

  The sun RFX rise.3SG.PRES in the east 'The sun rises in the east.'
- (147) Tous les matins du monde *sont* sans retour.

  All the mornings of world be.3PL.PRES without return 'All the world's mornings never come back.'
- (148) Acum *locuiesc* aici. Now live.1SG.PRES here 'I live here now.'
- (149) Triunghiul *are* trei laturi.
  The triangle have .3SG.PRES three sides 'A triangle has three sides.'

For Bertinetto (1986, 329–331), the Presente is used non-deictically in atemporal statements, as in (150), definitions, proverbs, gnomic statements and omnitemporal assertions, as in (151), and deictically when it expresses simultaneity to the moment of speech—that is, where E = R = S. The Presente has deictic usages when it occurs with temporal adverbials such as *al momento attuale* 'at the present moment' and *in questo preciso istante* 'in this very moment', but only with durative situations, as in (152). When used with non-durative verbs, it expresses a comment about a situation in progress (i.e. the reporting Presente), as in (153). When the Presente is used with non-durative verbs, it expresses the inceptive aspect, as shown by the contrast between examples (154) and (155), where the latter illustrates the impossibility of a progressive interpretation. It can also have a reiterative interpretation, as in (156).

- (150) La verità  $\dot{e}$  un bene supremo, ma non sempre. The truth be.3SG.PRES a good supreme, but not always 'The truth is a supreme good, although not always.'
- (151) Parigi si *trova* in Francia.
  Paris RFX find.3SG.PRES in France
  'Paris is in France.'
- (152) In questo preciso istante, Carlo *dorme*.

  In this very moment, Carlo sleep.3SG.PRES 'At this very moment, Carlo is sleeping.'
- (153) In questo preciso istante, Clara *esce*.
  In this very moment, Carla get out.3SG.PRES 'At this very moment, Carlo is getting out.'

(154) Ora *piange*; lo sapevo!
Now cry.3SG.PRES. it know.1SG.IMP
'Now he's crying. I knew it!'

(155) ??Adesso Edoardo *piange*.

Now Eduard cry.3SG.PRES

'Eduardo is crying now.'

(156) In questo momento, Gaetano *raccoglie* le biglie che Monica ha sparso per terra.

In this moment, Gaetano pick up.3SG.PRES the marbles that Monica scattered on the floor

'At this moment, Gaetano picks up the marbles that Monica scattered on the floor.

The simple present can also express habitual situations, as in (157), interpreted as 'every time I go to the mountains, I feel another like person', and in (158).

(157) In montagna *mi sento* un altro. In the mountains RFX feel.1SG.PRES another person 'In the mountains I feel like another person.'

(158) Amedeo *viaggia* sempre in prima classe. Amedeo travel.3SG.PRES always in the first class 'Amedeo always travels in the first class.'

An utterance in the French Présent may also express the iterative aspect with an appropriate temporal adverbial, as in (159) and (160). Sentences without a temporal adverbial can sometimes remain ambiguous between a present action and a habitual activity.

(159) Elle *regarde* la télévision parfois/souvent /tous les soirs. She watch.3SG.PRES TV sometimes/often/every evening 'She watches TV sometimes/often/every evening.'

(160) Claire *joue* au tennis. Claire play.3SG.PRES tennis 'Claire plays tennis.'

With respect to Aspect, the Italian Presente views an eventuality from both imperfective and perfective points of view. The imperfective simple present can be easily be replaced by the progressive periphrases stare + gerund and stare a + infinitive ('be + -ing'), whereas the perfective simple present occurs mainly in deictic non-standard usages where it expresses reference to past time. Similarly, the Prezentul Simplu expresses the situation while it is happening, without taking into consideration its delimitations or duration. The limits and the duration are provided by the semantics of the verb, or by adverbials in the context. Hence, sentences with the verb in the simple present may express imperfective and continuous, as in (161), iterative, as in

(162) and perfective with an achievement (punctual situation), as in (163) (from Zafiu (2013, 57)). Contemporary Romanian, like French, does not have grammaticalized periphrases with a progressive meaning, contrary to other Romance languages such as Italian. The distinction between progressive and non-progressive present must therefore be made based according to other lexical items or contextual information.

- (161) *Aşteptă* în stradă. wait.3SG.PRES in the street 'He is waiting in the street.'
- (162) El îşi *verifică* mesageria telefonică de trei ori pe zi. He RFX check.3SG.PRES voicemail three times a day 'He checks his voicemail three times a day.'
- (163) Deodată, fotografia îi *cade* din mâini. Suddenly, the photograph RFX drop.PRES from his hands 'Suddenly, the photograph drops from his hands.'

The simple present can also express reference to times other than the present, which can be observed both in English and Romance languages. For example, it can make reference to past or future times (i.e. R is located before or after S) with the help of a temporal adverbial or according to contextual knowledge. The utterance is related to S, but the event is shifted into the past, as in (164), or the future, as in (165) and (166), from French.

- (164) Je *sors* à l'instant du lycée.

  I get out.1SG.PRES at the moment from the high school 'I have just gotten out of high school.'
- (165) Elle *part* demain pour le Pérou. She leave.3SG.PRES tomorrow for the Peru 'She leaves tomorrow for Peru.'
- (166) J'arrive dans cinq minutes.
  I arrive.1SG.PRES in five minutes
  'I will be arriving in five minutes.'

Similarly, the French Présente can locate the eventuality in the future, as in examples (167–171), where the posteriority of R with respect to S is expressed explicitly by an adverbial or inferred in the context, as in (170) and (171) in Italian, and (172) and (173) in Romanian. Authors studying the futurate present in Romance languages (Rebotier 2009; Salvi and Vanelli 2004; Manea 2008) note that the futurate present is used more often in Romanian and Italian than in French.

(167) Resto a casa nel pomeriggio. Stay.1SG.PRES at home this afternoon 'I'll stay at home this afternoon.'

- (168) *Parto* domani. Leave.1SG.PRES tomorrow 'I am leaving tomorrow.'
- (169) Fra un anno *mi trasferisco* a Milano. In a year RFX move.1SG.PRES to Milan 'In a year's time I will move to Milan.'
- (170) Adesso *esco*. Now get out.1SG.PRES. 'I'm getting out in a second.'
- (171) Vengo subito.

  Come.1SG.PRES at once 'I'll come at once.'
- (172) Măine *plec* la Ploiești.

  Tomorrow leave.1SG.PRES to Ploiești

  'Tomorrow I am leaving to Ploiești.'
- (173) *Citesc* şi eu toate textele primite. Read.1SG.PRES also I all texts received. 'I am also reading all the texts received.'

As for the English Simple Past, it expresses reference to the future with time adverbials when the event is 'unalterably fixed in advance, and is certain as it would be, were it taking place in the present' (Quirk et al. 1985, 182) as in (174).

(174) The plane *leaves* for Ankara at eight o'clock tonight.

Temporal adverbials may express a shorter or a longer period of time, whether in the past or the future. They can also mention an initial or a final boundary of the process. In example (175), the temporal adverbial marks the initial boundary, while the final boundary is indefinite. In example (176), the initial boundary of the period of time beginning in the past is specified, while the final boundary remains unspecified. On the contrary, example (177) indicates that the process is oriented towards the future, starting with the initial boundary marked by *désormais* 'from now on'.

- (175) Il *neige* depuis vingt-quatre heures. It snow.PRES for twenty-four hours 'It has been snowing for the last twenty-four hours.'
- (176) Je me *lève* à cinq heures depuis vingt ans.

  I RFX wake up.1SG.PRES at five o'clock since twenty years 'I have been waking up at five o'clock for the last twenty years.'
- (177) Désormais, je me *lève* à cinq heures. From now on, I wake up.1SG.PRES at five o'clock 'From now on, I will wake up at five o'clock.'

One of the best known usages of the simple present is where it makes reference to non-present, termed the *historical* or the *narrative present*. It is used to make reference to real or fictional past events, whether in an independent phrase or a whole paragraph. In contrast to the simple present, which may express an immediate past event with the appropriate temporal adverbials, the narrative present shifts the event into the past, as in (178) from English, (178) from French, (180) and (181) from Italian, and (182) and (183) from Romanian.

- (178) I couldn't believe it! Just as we arrived, up *comes* Ben and *slaps* me on the back as if we'*re* life-long friends. 'Come on, old pal,' he *says*, 'Let me buy you a drink!' I am telling you, I nearly fainted on the spot.
- (179) En 1789, le peuple de Paris *prend* la Bastille. In 1789, people from Paris take.3SG.PRES the Bastille. 'In 1789, people from Paris took the Bastille.'
- (180) In armonia con questo giudizio, Andreotti *compie* con regolarità, a Firenze, dove era nato il 15 marzo 1924, gli studi medi...

  According to this opinion, Andreotti carry out.3SG.PRES regularly in Florence, where born.3SG.PC on 15th of March 1924, his medical studies 'According to this opinion, Andreotti regularly carried out his medical studies in Florence, where he was born on 15th of March 1924.'
- (181) Ieri *vado* al cinema, e chi ti *trovo*?

  Cinzia e Mario, naturalmente!

  Yesterday, go.1SG.PRES to cinema, and who RFX find.1SG.PRES?

  Cynthia and Mario, naturally

  'Yesterday I went to the cinema, and who did I find there? Cynthia and Mario, naturally.'
- (182) Ieri *am fost* la Ploiești. *Am mers* cu trenul. În compartiment, *văd* o figură cunoscută.

  Yesterday go.1SG.PC to Ploiești. go.1SG.PC by train. In the compartment, see.1SG.PRES a familiar face

  'Yesterday I went to Ploiești. I went by train. In the compartment I saw a familiar face.'
- (183) Cuza *moare* în 1873. Cuza die.3SG.PRES in 1873 'Cuza died in 1873.'

The past time reference is provided by the context, such as temporal sequences like the alternation with past time verbal tenses, as in (182), or by temporal adverbials whose past time interpretation is based on contextual knowledge, as in (183), from Zafiu (2013, 56). The past time reference of the simple present is impossible out of context, as shown by the incompatibility of the Prezentul with an indexical past time adverbial in (184).

(184) \*Ieri *plec* la Ploiești. Yesterday leave.1SG.PRES for Ploiești 'Yesterday I left for Ploiești.'

From a procedural pragmatics perspective, Luscher (1998) proposes an interpretative procedure for the simple present. He suggests that the simple present has unique semantics identified in descriptive usages, which is preserved in interpretative usages. When interpreting a narrative present utterance, the hearer is instructed to instantiate a moment of perspective P such that P = S. In some cases, the identification P = S does not correspond to the situation described, as in (185), where the speaker has already arrived, and as in (186), where the speaker has yet to arrive (from Luscher 1998, 203).

- (185) Tu es là depuis longtemps? Non, j'arrive.

  Are you here for a long time? No, I arrive.1SG.PRES

  'Are you here for a long time? No, I have just arrived.'
- (186) Commencez sans moi, j'arrive.

  Begin without me, I arrive.1SG.PRES
  'Begin without me, I'm coming.'

He points out that the hearer's assumption is that the speaker used the simple present rather than another possible form ( $venir\ de$  corresponding to a recent past and immediate future respectively) so that her interlocutor could make a set of specific inferences using the instruction P = S. To interpret the utterances in (185) and (186), the hearer must build a moment of conscience S', distinct from S, such that S' is included in E. The hearer must instantiate S' as a moment that produces the largest cognitive effect. The interpretation of (185) is that it corresponds to the speaker's thought at the moment at which he arrived, which occurred in the recent past, whereas for (186), the preferred interpretation is that it corresponds to the hearer's perception of the moment when the speaker will be arriving (in the next few minutes). The same process occurs in (187), where the hearer builds a posterior moment of conscience S', corresponding to the speaker's thought about E.

(187) Dans dix ans, je *suis* à la retraite. In ten years, I be.1SG.PRES retired 'In ten years, I will be retired.'

As far as the narrative present is concerned, the interpretative process is similar. Because there is a constraint on the hearer such that the semantics of the simple present is S = P, he interprets the utterance as being the thought of an external observer occurring at a moment of conscience S' given by the temporal adverbial. An alternative analysis is proposed in Moeschler (2014), who suggests that the usages of the narrative present may be characterized by three pragmatic features:  $[\pm narrative]$ ,  $[\pm subjective]$  and  $[\pm explicit]$ . For Moeschler, the narrative present displays five of

the six possible combinations of these features. As such, he proposes a minimal basic Reichenbachian semantics shared by the simple and the narrative present, combined with different groupings of pragmatic features (cf. the discussion in Sect. 5.4).

In this section, I have provided a description of the various contextual usages of the simple past, the imperfect, the compound past and the present in English, French, Italian and Romanian. This description shows that grammars and linguistic studies have addressed each verbal tense as a whole, hence without necessarily distinguishing between the information from the categories of Tense, Aktionsart and Aspect. In order to understand their input better, I review them in Sect. 1.2, from the point of view of grammars and linguistic studies. Later, in Chap. 4, these categories and their meanings are tested in annotation experiments and interpreted with respect to their conceptual and procedural types of encoded content. As will be shown, the results of the annotation experiments indicate that Tense encodes both conceptual and procedural types of information, Aspect is of a procedural nature, and Aktionsart is of a conceptual nature. A re-analysis of these categories in these terms is provided in Chap. 5.

## 1.2 Temporal Cohesive Ties

#### 1.2.1 Tense

Tense has played a central role in analyses of temporal reference ever since the beginning of the formal study of meaning in the early 1970s, where it was defined as a *temporal operator* (Prior 1967, 1968). Prior's tense logic offered an *internal* perspective on time (i.e. humans stand inside time, at the point of speech, which is the deictic centre). The major debate in philosophy on the metaphysics of time is between the *A-theory* (known as the *tensed* theory) and the *B-theory* (known as the tenseless theory of time) (cf. Prosser 2013; Ludlow 2013). Prior's logic is based on the A-theory (or *A-series* of time as proposed by McTaggart 1908), which postulated that one time is *present* while other times are ordered degrees of *pastness* and *futurity*. *Pastness*, *presentness* and *futurity* are therefore properties of time, and change as time passes. In the B-theory, in contrast, time is ordered according to three relations: *being earlier than, later than*, or *being simultaneous with*. No time is objectively *past*, *present*, or *future*, and the apparent passage of time is an illusion (cf. Prosser 2013).

As a temporal operator, Tense applies to the basic form of a sentence, and shifts the evaluated time of that sentence to the past or to the future. The so-called Priorian tense operators (corresponding to definite verbal tenses) are (from Binnick 1991, 243):

F= def 'It will be the case that'

G= def 'It will always be the case that'

 $P = _{def}$  'It has been the case that'

H= def 'It has always been the case that'

A sentence p, as in (188), would be symbolized as in (189). Binnick (1991, 244) argues that the tense-logical language proposed by Prior is, one the one hand, much richer than is necessary to describe verbal tenses in natural language, as shown by the operators in (190) corresponding to (191), and, on the other hand, insufficient or too reductionist because it accounts for neither the present tense, the preterit nor the inter-relations between Tense, Aspect and Aktionsart.

- (188) John leaves home.
- (189) Fp
- (190) FFp
- (191) It will be the case that it will be the case that John leaves home.

The treatment of tenses in logic assumed that the present tense did not provide an essential contribution, corresponding to *p* itself. However, Binnick (1991) points to the fact that an operator for the present tense is necessary, because in natural language the present tense is distinguished from the other verbal tenses, and contributes to the compositional treatment of other verbal tenses. Similarly, other operators such as *Past* or *Perf* should be introduced to describe the English verb system accurately (cf. Bennett and Partee 1978; Dowty 1972; Nerbonne 1986).

However, as Nerbonne (1986) points out, the semantics of the Priorian *Past* operator, formulated in (192), poses a problem if it is applied to two sequences  $p_1$  and  $p_2$  in a narrative text; this is because it would trigger an indefinite interpretation, due to the fact that no order between  $t_1$  and  $t_2$  can be established using (192).

### (192) PAST (p) holds at t iff $\exists t' < t$ and p holds at t'

Nerbonne's suggestion is to give the indefinite interpretation embodied in (192), and to find a model that allows for the specification of the ordering of the time periods in which successive sentences hold. In other words, Tense should refer to definite time periods, which are to be specified in the context. So, the logic-based models, in which Tense was analysed in terms of operators with truth-conditions, were replaced with the *referential* model of Tense, which refers directly to temporal entities and expresses temporal relations (Arnauld and Lancelot 1660/1972; Beauzée 1767; Reichenbach 1947; McCawley 1971; Dowty 1979; Kamp 1979; Kamp and Reyle 1993; Partee 1973, 1984; Hinrichs 1986; Nerbonne 1986; Steedman 1997; Hornstein 1990; Klein 1994; among others).

In the referential approach, Tense is a deictic category, in that it relates entities to a deictic centre, which is usually the moment of speech S (i.e. the *now* of the speaker). Described in these terms, expressing reference to a temporal point seems to be both the meaning and the function of Tense in discourse. According to this approach, it is assumed that Tense, also referred to as *verbal tense*, expresses a relation between two or three coordinates (in Reichenbach's system): the moment of speech, the event moment and the reference moment, respectively.

Both the Port-Royal Grammar and Beauzée attempt to formalize the meaning of French verbal tenses, addressing the intuitive idea that they express a relation between the moment of speech and the moment of the eventuality. Arnauld and Lancelot (1660/1975) propose a system of two coordinates: the moment of speech, and the event moment (in Reichenbach's terminology). These two coordinates can be linked by a relation of anteriority (for example, E < S for the simple past) or by a relation of simultaneity (for example, E = S for the simple present). This model, even though it was innovative for its time, had a significant drawback: several verbal tenses received the same formal description, whether expressing past (such as the Passé Simple, Passé Composé and Imparfait in French), present or future time. These need to be further differentiated, based criteria other than the E/S relation. An example of a plausible criterion is the 24 hours rule proposed to distinguish between the simple and the compound past. According to this rule, the simple past expresses eventualities that took place 24 hours or more before the moment of speech (called a definite past time), and the compound past expresses eventualities that took place fewer than 24 hours before the moment of speech (called an indefinite past time).

It is the French linguist who offered a solution to Port Royal's problem. He suggests using a third coordinate called *comparison term* (a reference point in Reichenbach's terminology) corresponding to *the moment from which the eventuality is considered*. This comparison term is the concretization of the need to have secondary criteria to distinguish between several verbal tenses. Beauzée's model establishes two pairs of coordinates: on the one hand, *existence period/moment* (event moment S, in Reichenbach's terminology) and comparison term R; and on the other hand, R and the moment of enunciation E. These three coordinates can exist in a relation of *anteriority, simultaneity* or *posteriority*. The combination of the pairs of coordinates and relations leads to nine tenses, which could be discriminated more specifically with the help of other secondary criteria.

The introduction of this third coordinate allowed for better discrimination between the simple and the compound past, where the former expresses an eventuality seen from the past and the latter an eventuality seen from the present. Beauzée focused on another important opposition, between the simple past and the imperfect. As the distinction between the two verbal tenses is a problem of Aspect, he tried to express it using the comparison term, which can be either a point (i.e. a moment) or an interval. This idea exposes the first limitation of his model, which is the imprecise nature of the comparison term and the need to identify these specific data in the cotext. According to de Saussure (1998a, b), the comparison term can be interpreted as either a mental projection of S, an aspectual point of perspective, or a time interval concomitant with the event itself. A second limitation is the circular

<sup>&</sup>lt;sup>13</sup>Klein (1994) also proposes three parameters to explain the relationships between Tense and Aspect, namely topic time TT, time of situation TSit and time of utterance TU. These correspond more or less to what Reichenbach called R, E and S, but there are some theoretical differences. In the sentence *The light was on*, TSit corresponds to the time at which the light was on, and TT corresponds to the time at which such a claim was made. Both TT and TSit are distinct from the time when the utterance was made, which is time of utterance TU. According to Klein, TT precedes TU, and TU is included in TSit, since it is possible that the light was one before, during and after the time of utterance. In Klein's words, 'TT is the time span to which the speaker's claim on this occasion is confined' (Klein 1994, 4).

explanation of the distinction between the simple past and the imperfect: the former provides a comparison point to the latter, and the latter provides an interval of comparison for the former (see de Saussure 1998a, b for an extensive discussion).

As research into verbal tenses in French emerged, Reichenbach (1947) proposed an abstract formalization of the English verbal system. His framework includes three temporal coordinates used for the temporal anchoring of eventualities. Reichenbach assumes that there is a timeline (represented graphically from left to right), and argues that 'tenses determine time in reference to the time point of the act of speech, i.e. of the token uttered', called the *point of speech* S (1947, 288). His model—like Beauzée's—includes the moment when the eventuality occurred, called the *point of event* E, and a third point, called the *point of reference* R, which is a temporal point of view. The point of reference is a key notion in Reichenbach's model.<sup>13</sup>

R is a parameter necessary for temporal anchoring, as shown by the semantics of the Past Perfect. Reichenbach (1947, 288) notes that:

For a sentence as 'Peter had gone' we see that the time order expressed in the tense does not concern one event, but two events, whose positions are determined with respect to the point of speech. [...] In the example the point of the event is the time when Peter went; the point of reference is a time between this point and the point of speech.

Reichenbach did not describe the nature of R in a detailed manner: this is given by the context (i.e. covert expression of R) or in the cotext by a temporal adverbial (i.e. overt expression of R), and temporally anchors one or more eventualities (p.288). In his words:

In an individual sentence like the one given it is not clear which time point is used as the point of reference. This determination is rather given by the context of speech. In a story, for instance, the series of events recounted determines the point of reference, which in this case is in the past, seen from the point of speech. Some individual events lying outside this point are then referred, not directly to the moment of speech, but to this point of reference determined by the story.

De Saussure (1998a, 38) argues that this lack of specification on the nature of R leads to several possible interpretations. R could be a *projection of S* and thus an *observation/evaluation point* situated on the timeline. De Saussure (1998a) assumes that the addressee establishes the point of reference starting from contextual hypotheses, and if more specific information is provided, he either confirms or re-evaluates the initial calculation of R. Reichenbach did not specify whether R should be seen a point, as an interval, or as both, but his analysis of extended tenses seems to indicate that the notion of *temporal extension* is linked to the speaker's aspectual viewpoint (i.e. Aspect) rather than to R. Reichenbach's system is not designed to accommodate Aspect, so much as considering that "in some tenses, an additional indication is given concerning the time extension of the event" (pp. 290). He notes that, in languages as French, two verbal tenses are used to express this aspectual difference: the Imparfait for extended events; and the Passé Simple ("passé défini") for events that are not extended. This aspectual difference corresponds to the *imperfective/perfective* distinction.

For Reichenbach, all three temporal coordinates are necessary for each verbal tense, in order to establish the temporal reference of one or more eventualities. However, S and E play a crucial role in defining the semantics of the so-called *simple* tenses (past, present and future). He assumed that:

- The present tense conveys that S and E are simultaneous;
- The past tense conveys that E precedes S;
- The future tenses convey that E follows S.

Moreover, the three coordinates are linked by three possible temporal relations, i.e. *precedence*, *simultaneity* and *succession*. The anchoring procedure begins with the relation between R and S, and continues to that between E and R. This leads to *relative* and *absolute* tenses, where R coincides with S in the former, and R is distinct from S in the latter.

Reichenbach's system uses R to account for the difference between the Present Perfect (periphrastic construction) and the Simple Past. In both cases, E precedes S (the eventuality took place in the past), but it is the position of temporal point of reference R and its relation to E and S which discriminates between the two tenses: for the Simple Past, R coincides with E and precedes S, and for the Present Perfect, R coincides with S while E precedes them. This distinction between the simple and the compound past is also made in French, where the simultaneity of R and S illustrates the relevance of the resulting state in the present for the Passé Composé. According to Reichenbach, the English Present Perfect is often used as an extended tense, with the specification that the duration of the event reaches up to S (pp. 292), as in (193) and (194). If the speaker does not intend to communicate the duration of the event then the Simple Past is used, as in (195).

- (193) I have seen him.
- (194) I have known him for 10 years.
- (195) I saw him ten years ago.

Reichenbach's system also provides an interesting account of the sequence-oftense phenomenon (SOT). According to Reichenbach, when sentences are combined to form a compound sentence, the verbal tenses of the relevant clauses are adjusted in relation to one another according to certain rules. He proposed two rules: (a) the permanence of the reference point (R is the same for all clauses, as in (196)); and (b) the positional use of the reference point (R is the carrier of the temporal position). When temporal localization is provided by an adverbial, it refers not to E but to R. In example (197), the adverb yesterday refers to both R and to E, which are simultaneous, whereas in (198) the adverb refers only to R.

- (196) I mailed the letter when John came and told me the news.
- (197) I met him yesterday.
- (198) I had met him yesterday.

In example (196), the connective when signals that the eventualities mailing the letter, John's coming and John's telling the news have the same reference moment R. However, the eventualities are temporally sequenced: the event of the first clause precedes that of the second and third clauses. If the temporal relation is explicitly specified in the sentence by way of connectives such as before or after, the rule of the permanence of R is replaced by the more general rule, the positional use of R. In example (199), R changes incrementally:  $R_1$  in the first clause changes in  $R_2$  in the second clause, and finally in  $R_3$  in the third clause.

#### (199) He was healthier when I saw him than he is now.

In English, the simple past is used in contexts where the compound form is used in other languages, such as French in example (201) and German as in example (202). According to Reichenbach, this is due to the strict adherence to the principle of the positional use of R in English. In this way, the sentence in (200) is possible in French, even in the absence of a definite temporal adverb, as in example (201), while in German the compound past (Perfekt) would be used, as in (202). Reichenbach notes that a language is compelled to satisfy one of the two principles, but not both (pp. 295).

- (200) This is the man who *drove* the car yesterday.
- (201) C'est l'homme qui *a conduit* la voiture (hier).
- (202) Dies ist der Mann, der den Wagen *gefahren hat*. 'This is the man who has driven the car'

Reichenbach's system has several limitations that have received particular attention in the literature, leading in turn to various amendments (such as Comrie 1976, 1981, 1985; Hornstein 1990; Declerck 1986; see Giorgi and Pianesi 1997 for a discussion). However, these reduce neither the importance nor the wide application of Reichenbach's model. Most of the criticisms made of Reichenbach's system concern the nature and the functions of the reference moment R.

One of the first problems to be pointed out concerns Reichenbach's suggestion that R and S are included in the semantics of all tensed constructions. This forced him to provide a complex description of simple tenses, such as E=R< S for the simple past and E=R=S for the present tense. Only complex verbal tensed constructions provide evidence that R is distinct from S and E, as is the case in the past perfect and future perfect.

<sup>&</sup>lt;sup>14</sup>One of Comrie's amendments of Reichenbach's framework was to modify the distinction between *absolute* (deictic) and *relative* tenses. Deictic tenses have S as one of their arguments, where relative tenses use an unanchored reference time instead of S. Both types have E as a second argument: thus, deictic tenses convey the relation between S and E, while relative tenses convey the relation between R and E. Whereas S refers deictically to the moment of utterance, R is determined anaphorically in the context.

A second limitation is the lack of specification of the nature of R, which permits several hypotheses about how Reichenbach conceived of R, and what its exact function is (a limitation already identified in Beauzée's system, as well). This limitation has lead to several proposed improvements, such as Comrie (1981), who proposed removing R for absolute tenses (present, past and future), keeping it for relative tenses (such as the Present Perfect or the Past Perfect), and duplicating it for the Past Conditional. Another proposal was Vetter's (1996), which considered R to be an aspectual point of perspective that would allow for the perfective vs. imperfective distinction. Bertinetto (1986) made two propositions: a temporal adverbial does not necessarily signal the reference moment; and R must necessarily be posterior to E. Therefore, temporal adverbials have two functions: (i) when the temporal adverbial expresses simultaneity with E, it has the function of *temporal localization*; and (ii) when the temporal adverbial expresses posteriority with respect to E, it coincides with R. The second case can also be expressed in aspectual terms (i.e. Aspect): E < R conveys a meaning of perfectness (i.e. *compiutezza* in Italian and *accompli* in French).

According to Reichenbach's view of the relation between R and a temporal adverbial, examples (203) and (204) receive the same description, E < R < S, where the adverb *exactly* could be inserted in the first example where *already* could be inserted in the second one. In other words, R has a complex function: (i) the temporal localization of E with absolute tenses, as in (203); and (ii) signalling of a subsequent interval of time, when the resultative state of R still holds with relative tenses, as in (204).

- (203) Giovanni *uscì* a mezzogiorno. John go out.PS at noon. 'John went out at noon.'
- (204) Giovanni *era uscito* a mezzogiorno John go out.PC at noon. 'John was out at noon.'

However, Bertinetto (1986, 47) argues against this interpretation, and suggests that in both (203) and (204) the temporal adverbial has the function of temporal localization, with R explicitly expressed in neither of these two utterances. Hence, R is implicitly determined in the context. Additionally, the temporal adverbial in (203) has the function of temporal localization, whereas in (204) it signals R. According to him, the Passato Remoto in (203) does not require an R, whereas the Passato Prossimo in (204) does; as a result, it is either implicitly determined in the context, or provided by the temporal adverbial. In addition, Bertinetto introduces a closely linked notion, which is *temporal anchoring* (TA). In (205) and (206), the second clause is temporally anchored on the first one. However, the temporal organization of the events is very different, with temporal simultaneity in the former example, and temporal sequencing in the latter.

- (205) Quando dormo bene, russo fragorosamente.
  - 'When I sleep well, I snore vociferously.'
- (206) Quando dormo bene, lavoro meglio. 'When I sleep well, I work better'.

Another revision of the initial Reichenbachian system is that suggested by Reichenbach himself, which is further discussed by Comrie (1985) and Hornstein (1990). It has been suggested that the relation between the three points should be split into two distinct relations, one between R and S, and one between E and R. The relation between E and S is never realized directly: it is inferred (cf. Moeschler et al. 2012 for a pragmatic model of verbal tenses in French suggesting a three-paired division). R is thus pivot information between E and S. For example, as Giorgi and Pianesi (1997, 88) argue, R can explain the incompatibility of present time adverbials with the SP, as in (207–210), and their compatibility with the compound past, as in (211–214), whether in English, Italian, French and Romanian, or many other languages besides.

- (207) \*Now I ate enough.
- (208) \*Adesso *mangiai* abbastanza.
- (209) \*Maintenant je mangeai assez.
- (210) \*Acum mâncai destul.
- (211) Now I have eaten enough.
- (212) Adesso ho mangiato abbastanza.
- (213) Maintenant j'ai mangé assez.
- (214) Acum am mâncat destul.

The prediction states that if R is the temporal specification of S but not of E, then the compound past described by Reichenbach as E < R = S is compatible with present time adverbials, whereas the simple past is not.

In his instructive exploration of the semantics of temporality in French, Gosselin (1996) also transformed Reichenbach's punctual temporal coordinates into intervals. This semantic framwork consists of a system of rules capable of assigning abstract aspectual-temporal representations to utterances according to their linguistic, lexical and syntactic content. In his words, the instructional semantics model is based on the hypothesis that linguistic expressions encode instructions for building the abstract representations necessary for the subsequent identification of their contextual usages:

Au lieu de décrire la signification hors contexte des différents marqueurs, on admet qu'ils codent des instructions pour la construction d'éléments de représentation, et que c'est de la combinaison des éléments de représentation ainsi construits que résultent, directement ou

<sup>&</sup>lt;sup>15</sup> 'Instead of describing the meaning of different linguistic expressions out of the context, we assume that they code instructions for building elements of representations, and that it is the combination of these elements of representations built in this way that results, directly or indirectly (after the resolution of conflicts), in global representations, from which the linguistic expression's effects on meaning may be distinguished.' (my translation)

indirectement (à la suite de conflits et de leur résolution), les représentation globales, à partir desquelles les effets de sens des marqueurs peuvent être distingués. <sup>15</sup> (Gosselin 1996, 13).

His model assumes that temporal-aspectual abstract representations make use of four types of *temporal intervals*: (i) the interval of the eventuality itself, corresponding to the four classes of Aktionsart; (ii) the interval of enunciation, corresponding to the beginning and the end of the utterance; (iii) the interval of what is perceived on the temporal axis, having a function similar to Reichenbach's reference moment R; and (iv) the interval delimited by temporal adverbials, whose function is to identify the interval of the eventuality and/or the reference interval. Every abstract representation of an utterance is associated with an interval of enunciation, at least one interval of the eventuality, and a reference interval. He thus adopts Reichenbach's three mutually exclusive temporal relations (anteriority, posteriority and simultaneity).

Reichenbach's analysis led to the development of several formal semantic-discursive theories, envisaging the interpretation of verbal tenses as temporally related to the preceding sentences, hence as an anaphoric device (Kamp 1979; Hinrichs 1986; Kamp and Rohrer 1983, Partee 1973, 1984; Nerbonne 1986) (cf. discussion in Sect. 2.1).

### 1.2.2 Aktionsart

In her article for the *Oxford Handbook of Tense and Aspect* (Binnick 2012), Hana Filip points to the rich and varied terminology in the literature regarding lexical aspect and its place in the domain of aspect. She distinguishes between *lexical aspect, aspectual class* and *aspectual form*. Lexical aspect is a semantic category that concerns properties of eventualities (in the sense of Bach 1986), which makes reference to Aristotle's distinction of *kinesis* 'motion, change' and *energia* 'actuality, actualization, activity' (cf. Kenny 1963). This notion is used when it is only verbs, taken as lexical items, which are at stake. Aspectual class—also known as *Aktionsart, modes d'action* in French (Vetters 1996) and *azione verbale* in Italian (Bertinetto 1986)—is a wider notion than lexical aspect, and refers to aspectual properties of the verb phrases and sentences. Aspectual form concerns the expression of grammatical aspect (in this book, Aspect).

<sup>&</sup>lt;sup>16</sup>A stative situation is defined as taking place or being done; it is unchanging and therefore homogeneous throughout its duration (i.e., it does not include stages). Situations that are not static are called dynamic situations. Such a situation may be punctual (momentary) or durative. Within the class of dynamic situations, *actions*, *events* and *processes* may be distinguished. Actions are carried out under the control of an agent (e.g. *John dug a hole*) whereas processes and events are not. Moreover, events may be both punctual and durative, whereas processes are only durative. A situation is agentive if it is caused/performed/ instigated by an agent. States are by definition nonagentive (Declerck 2006).

<sup>&</sup>lt;sup>17</sup>It is also worth mentioning Parsons's syntactic and semantic features of events (1990). In his subatomic semantics, English sentences contain three main elements which constrain the event, namely, subject, verb and tense.

In this research, Aktionsart is used in reference to the ontological features used to describe situations expressed by the verb phrase, such as *stativity*, <sup>16</sup> *durativity*, *homogeneity*, *agentivity* and *telicity* (following Dowty 1972; cf. Declerck 2006 for a detailed discussion of ontological features and their application in English). Aktionsart is the expression of these inherent features of a situation represented by a verb phrase, outside of its marking for Aspect and Tense. This is due to the fact that, in many cases, Tense and Aspect modify and override the inherent temporal features of a situation.

Among the classifications of Aktionsart proposed in the literature, I will make reference to Garey (1957), Vendler (1957, 1967) and Lyons (1977). Lyons' fourfold distinction distinguishes *states, actions, processes* and *events*, and makes use of the ontological features of dynamicity, homogeneity and agentivity. Vendler's taxonomy distinguishes *states, activities, accomplishments* and *achievements*. His classification was suggested for English verbs, and makes use of the ontological features of durativity, telicity and homogeneity. A two-fold classification can be made between states and non-states, according to the criterion of compatibility with the progressive. For French verbs, Garey (1957) makes use of the telicity feature to propose a two-fold classification: atelic situations (states and activities) vs. telic situations (accomplishments and achievements). Vendler's four-fold taxonomy was also proposed for Italian (Bertinetto 1986) and for Romanian (Stoicescu 2010, Novakov and Lazović 2009).

Vendler discusses the relation between verbs and time, a relation that can be expressed by Tense on the one hand, and the use of a verb on the other. In his words, it is 'the particular way a verb presupposes and involves the notion of time' (1957, 143). He proposes that English verbs<sup>18</sup> can be grouped into four 'time schemata' or aspectual classes: activities, accomplishments, achievements and states, <sup>19</sup> and distinguishes them by their restrictions with time adverbials, verbal tenses and logical entailments.

- Activities: run, push a cart
- Accomplishments: run a mile, draw a circle
- Achievements: recognize, reach the top, spot the plane, win the race
- · States: love, know, like

Vendler's classification of aspectual classes presents an initial distinction according to the criterion of *compatibility with the progressive*. This criterion provides a coarse-grained classification of Aktionsart as *states* on the one hand and as *events* on the other: events (i.e. accomplishments, achievements and activities) are compatible with the progressive, whereas states are not. However, Žegarac (1991, 195)

<sup>&</sup>lt;sup>18</sup> Scholars (Dowty 1979; Verkuyl 1972, 1996; Comrie 1976) have argued that Vendler's approach was too simplistic and that lexical aspect applies to a verb phrase (verb and objects) rather than the verb alone, since the objects can modify the aspectual class. For example, *sing* is an activity and *sing a song* is an achievement.

<sup>&</sup>lt;sup>19</sup> Mourelatos (1978) argues that Vendler's scheme is too narrow, and instead proposes an ontological typology. For him, all verb predicates are *situations*. Situations can be divided between *states* and *actions* (occurrences). Actions are divided between *activities* (processes) and *events* (performances). Events include *developments* (accomplishments) and *punctual occurrences* (achievements).

points out that the number of verb states in English incompatible with the progressive is reduced, as shown by the following plausible examples:

- (215) Peter is being polite.
- (216) John is living in Muswell Hill.
- (217) Mary is loving the fruit salad.

A finer-grained distinction between the first three types of events can be drawn according to their compatibility with temporal adverbials: activities combine with *for* adverbials, as in (218), accomplishments combine with *in* adverbials, as in (219), and achievements, which are punctual, combine with *at* adverbials, as in (220).

- (218) He ran in the forest *for* thirty minutes.
- (219) He ran five miles *in* one hour.
- (220) He knocked at my door at 4 a.m.

Another discriminating criterion is the notion of *homogeneity*, described by Vendler (1957,145–146) as follows:

...running and its kind go on in time in a homogenous way; any part of the process is of the same nature as the whole. Not so with running a mile or writing a letter; they also go on in time, but they proceed towards a terminus, which is logically necessary for their being what they are.

This can be seen by comparing (221) and (222) with (223) and (224). If it is true that someone has been running for an hour, then it is true that he has been running for every period within that hour. The same is true for loving someone. In these cases, the situations take place in a homogenous way. In case of running a mile in an hour, the mile mark was not reached in the first quarter of that hour, but only at its end. Running a mile consists of several internal phases oriented towards the natural end. Reaching the top of the mountain is a punctual occurrence with no internal phases, thus the feature of homogeneity is strictly speaking not applicable.

- (221) Max ran for an hour.
- (222) Max loves Mary.
- (223) Max ran a mile in an hour.
- (224) Max reached the top of the mountain.

If compatibility with the progressive and homogeneity criteria is applied, the outcome is that activities and states are atelic and homogeneous while accomplishments are telic and non-homogeneous.

<sup>&</sup>lt;sup>20</sup>Other tests for states are proposed by Lakoff (1965), as noted by Žegarac (1991). States are incompatible with the imperative, complements of the verbs *persuade* and *remind*, the *do-some-thing* construction and use with *instead of*.

<sup>&</sup>lt;sup>21</sup>These cases were described as the *imperfective paradox* (Dowty 1972; Parsons 1990, Moeschler and Reboul 1994; Reboul 1996).

	Punctual	Durative	Telic	Dynamic
States	_	+	_	_
Activities	_	+	_	+
Accomplishments	_	+	+	+
Achievements	+	_	+	+

**Table 1.2** Aktionsart and ontological properties

Generally speaking, the linguistic tests applied for distinguishing aspectual classes (Dowty 1979, 55–60) are:

- non-stative tests to distinguish between states and non-statives verb phrases:
  - iv. states cannot be used with the progressive, with the imperative, in pseudocleft constructions, nor with adverbs such as *deliberately*, *carefully*, *reluctantly*<sup>20</sup>;
  - v. when achievements pass the non-stative tests, it is due to a change in interpretation, in which the focus is on the development of the process, re-categorizing them as activities:
- use of the *for*-adverbials and *in*-adverbials test:
  - vi. states and activities take for-adverbials
  - vii. accomplishments and achievements take in-adverbials
- entailment tests with the progressive:
  - viii. x is V-ing entails x has V-ed for activities but not for accomplishments<sup>21</sup> (i.e. if one stops pushing a cart it still means one pushed it)
    - ix. the test does not apply to states and achievements

Post-Vendlerians, e.g. Dowty (1972), often categorize Vendler's classes using the features [± punctual], [± durative], [± telic], [± dynamic]. Table 1.2 shows that states have duration, are stative and atelic; activities have duration, are dynamic and atelic; accomplishments have duration, are dynamic and telic; achievements are punctual, telic and dynamic.

Stoicescu (2010) argues that the progressive test (cf. Vendler's proposal) does not work in Romanian, since all four aspectual classes may occur with the imperfect, as in examples (225–228).

(225) Ion *iubea* muzica.

John love.IMP the music.

\*John was loving the music.

'John used to love music.'

(226) Ion alerga.

John run.IMP

'John was running.'

<sup>&</sup>lt;sup>22</sup> For a discussion of the criteria and of the classes suggested, see Bertinetto (1986, section 2.2.).

- (227) Ion *săpa* şanţul.

  John dig.IMP the ditch

  'John was digging the ditch.'
- (228) Ieri la ora 5 Ion *găsea* inelul. Yesterday at 5, John find.IMP the ring 'Yesterday at 5, John found the ring.'

She, among many others, adopts the view that *telicity* is a more appropriate criterion for distinguishing between Aktionsart classes (in the sense of Garey 1957). Telicity concerns the realization of the inherent goal of the action expressed by the verb. For example, *to swim* is an atelic verb, because it is realized as soon as it begins, while *to arrive* is a telic verb, because the action expressed has an inherent goal that must be reached for the action to have taken place. Telicity is a criterion that distinguishes between states and activities on the one hand (atelic) and accomplishments and achievements on the other hand (telic). Telic situations have a change of state, which becomes the outcome, or the goal of the eventuality. Telic eventualities have a natural final endpoint, which is an intrinsic boundary. Atelic eventualities have arbitrary final endpoints. For Bertinetto (1986), in Italian telic situations correspond to *azione transformativo* ('achievements<sup>22</sup>') and to *azione risultativo* ('accomplishments'), whereas atelic situations correspond to *azione continuativo* 'activities' and *azione stative* 'states'.

Boundedness is closely related to telicity, as pointed out by scholars like Declerck (1979, 1989, 1991a, b, 2006) and Depraetere (1995a, b). Telicity and boundedness are the two faces of the same coin, i.e. lexical reference.<sup>23</sup> If telicity evokes the potential actualization of a situation, boundedness represents the actual realization of the situation in a context. Situations are telic or atelic, and they can be realized contextually as bounded or unbounded. For example, *running a mile* is a telic situation. In an utterance, it can be expressed as bounded, as in (229), or unbounded, as in (230). These examples indicate that telicity is an inherent feature of eventualities which is not sensitive to linguistic context. Boundedness, in contrast, is sensitive to context, such as the tense of the verb and grammatical aspect, past perfective in (229) and present imperfective in (230).

- (229) Max ran the one-mile race.
- (230) Max is running the one-mile race.

<sup>&</sup>lt;sup>23</sup>The notion of reference goes back to Frege, and was used in linguistics by Milner (1982) for referential expressions. It was developed by Reboul (1994), Moeschler (1994) and Moeschler et al. (1998), and applied to temporal and lexical reference. They suggest the notions of *temporal* and *aspectual* reference which can be *virtual* and *actual*. According to them, when a sentence is uttered, the corresponding utterance receives an actual temporal reference corresponding to the localization of the eventuality in time. As for Aktionsart, telicity represents the virtual lexical reference, whereas boundedness represents the actual lexical reference of a situation.

Depraetere (1995a) comments that '(a)telicity has to do with whether or not a situation is described as having an inherent or intended endpoint; (un)boundedness relates to whether or not a situation is described as having reached a temporary boundary' (pp. 2–3). A situation is bounded if it is presented as having reached a temporal boundary, irrespective of whether the situation has an intended or inherent endpoint, as in examples (231) to (233). A situation is unbounded if it is presented as not having reached a temporal boundary, as in examples (234) to (236).

- (231) I met John at 5 o'clock.
- (232) Judith played in the garden for an hour.
- (233) Julian lived in Paris from 1979 until May 1980.
- (234) I have lived in Paris.
- (235) She lives on the corner of Russell Square.
- (236) She is writing a nursery rhyme.

A situation has two main boundaries, the left-hand one expressing the beginning and the right-hand one expressing the end. Telicity indicates only the right-hand boundary, i.e. at the end of the process. Boundedness indicates either one (beginning or end) or both boundaries. In discourse, other linguistic markers such as temporal adverbials serve to mark the boundaries, such as since, from or as soon as for the left-hand boundary, until or till for the right-hand boundary, and from... until for both boundaries. Boundaries are important for marking the limits of a situation in time, and thus influence the temporal structure of the discourse. Generally speaking, telic verbs take in-adverbials and express non-homogenous and bounded verb phrases (accomplishments and achievements), and atelic verbs take for-adverbials and express homogenous and unbounded verb phrases (states and activities). Depraetere (1995a) discusses factors that influence the classification of situations as accomplishments, achievements, activities or states, such as noun phrases, prepositional phrases, Tense and Aspect. She argues that noun phrases affect telicity (i.e. a noun phrase can turn an atelic situation such as *leak* into a telic one, as in the pair of sentences (237) and (238)). My suggestion is that it is boundedness which is affected, rather than telicity. For example, Aspect influences boundedness, as shown in the pair of examples (238) and (239): in the former, there is a telic unbounded situation which turns into a telic bounded situation, due to the perfective aspect.

- (237) *Petrol* was leaking out of the tank.
- (238) *The petrol* was leaking out of the tank.
- (239) The petrol *leaked* out of the tank.

Numerous scholars have taken interest in the interaction between Tense, Aktionsart and Aspect (Garey 1957; Moens 1987; Dowty 1979; Comrie 1976; Parsons 1989; Smith 1986 and 1997, to name but a few). This interaction consists

<sup>&</sup>lt;sup>24</sup> Garey's analysis takes for granted that the French Passé Simple is perfective and the Imparfait is imperfective.

**Table 1.3** Aktionsart and Aspect: interrelations in French

	Imperfective	Perfective
Telic	Pierre arrivait.	Pierre est arrivé.
Atelic	Pierre jouait.	Pierre a joué.

mainly of two cases: the first is the case when the interpretation of one category depends on the other; and the second is the case of incompatibility. Garey (1957), for example, describes the interrelations between Aspect<sup>24</sup> and Aktionsart for French verbs, as in Table 1.3. He explains that telic situations expressed with imperfective aspect are interpreted as the action of directing oneself towards a goal without knowing if the goal is attained, whereas those expressed with perfective aspect are interpreted as the action of attaining the goal previously established. Atelic situations expressed with imperfective aspect are interpreted in terms of the existence in time of that situation, without saying anything about its beginning or its end, whereas those expressed with perfective aspect are interpreted as the affirmation of the existence in time of an action, including its cessation.

The perfective aspect in (241) and (242) depicts an atelic situation as bounded, whereas the non-perfective Simple Present in (240) depicts the situation as unbounded.

- (240) John loves Mary too.
- (241) John has loved Mary too.
- (242) At that time, it was clear that John had loved Mary too.

Moreover, perfective forms referring to telic situations entail the attainment of the ending point of that situation, as in (243) (Dowty 1979; Comrie 1976). This principle does not apply to atelic situations, such as *push a cart* or *sing songs*, where the sentence does not entail the realization of the ending point of the situation, as in example (244). The imperfective forms do not carry such implications, whether for telic situations, as in (245), or atelic situations, as in (246). The imperfective applied to atelic situations entails a different kind of information, creating subject matter called the *imperfective paradox*. This is not the case for telic situations, such as making a chair.

- (243) Il fabriqua/a fabriqué une chaise. He make.3SG.PS/PC a chair 'He made/has made a chair.'
- (244) Il *poussal* il *a poussé* un chariot. He push.3SG.PS/PC a cart 'He pushed/has pushed a cart.'
- (245) Il *fabriquait* une chaise. He make.3SG.IMP a chair 'He was making a chair.'
- (246) Il *poussait* un chariot. He push.3SG.IMP a cart 'He was pushing a cart.

Comrie (1985) and Smith (1986) observed that states in English are incompatible with the progressive, as in (247), whereas in Russian, the perfective applies only to telic situations. French, on the other hand, does not impose restrictions on the combination between lexical and grammatical aspect.

## (247) \*She was being tired.

Tense plays a significant role in determining the Aktionsart of a sentence (Moens 1987). Example (248) in the SP points to a single event and is a telic bounded situation, whereas (249) is interpreted as a habitual state of affairs and is an atelic unbounded situation (Moens 1987, 54). Depraetere (1995a) argues that it is because the Simple Present triggers a habitual reading that the situation is classified as atelic and unbounded. He therefore suggests that any factor which triggers a habitual reading can affect a situation's classification in terms of (un)boundedness and (a) telicity, as in (250), from Depraetere (1995a, 12).

- (248) John wrote a good book.
- (249) John writes a good book.
- (250) He went to London five times.

The strong relationship between Aktionsart and verb inflection has also been observed for Russian: Dragoy and Bastiaanse (2013) note that Russian children strongly prefer to use perfectives to refer to past time, and imperfectives to refer to the present, as suggested by Gagarina (2004). Moreover, the acquisition of Aspect is dependent on children's developing ability to distinguish aspectual lexical categories, as shown by Stoll (1998). Dragoy and Bastiaanse (2013) emphasize that Russian Aspect is built on lexical aspect, and that the lexical nature of the verb semantically guides time reference assignment in children: "situations with defined boundaries (e.g. punctual events) expressed through perfective verbs naturally refer to the past, and situations focused on internal structure (e.g. on-going activities) as expressed through imperfective verbs refer to the present time frame" (p. 116).

According to Dahl (1985), these correlations are often observed across languages: past and perfective inflections are generally associated with telic and bounded situations (predicates that presuppose an inherent endpoint of the eventuality), while present and imperfective inflections are associated with atelic and unbounded situations (predicates that describe eventualities without an endpoint). For example, in a recent study on language acquisition, Stoicescu (2010) investigated these correlations in Romanian children aged between 1;5 and 2;2. In 70% of cases, she found that atelic situations (states and activities) were used with the Prezentul verbal tense, whereas more telic situations were used with the Perfectul Compus (76%). These patterns decrease with age. For example, after 2;2 years, the correlation between telic situations and the Perfectul Compus decreases to 50% of predicates; the correlation between atelic situations and the Prezentul starts decreasing at the age of 1;10 (Stoicescu 2010, 189). Stoicescu suggests a possible explana-

tion for the correlation between [±telicity], [±perfectivity] and [±pastness], which is the notion of [±boundedness]. In her words:

Telicity, perfectivity and pastness involve the notion of boundedness. It is possible that children operate with this single concept when employing past morphology. Similarly, atelicity, imperfectivity and present tense all involve the notion of unboundedness. Working only with two representations and applying them at several levels of the language seems like a good strategy to relieve pressure on the linguistic system. (Stoicescu 2010, 190).

In this research, Aktionsart was operationalized as the [±boundedness] feature. The linguistic tests used to distinguish between bounded and unbounded eventualities are *in-/for*-adverbials, homogeneity, and entailment with the progressive. For example, the eventuality 'writing the long letter' in (251) is bounded, as shown by its compatibility with an *in*-adverbial, its lack of homogeneity (the writing of the letter took place in several phases, with each phase different from the others) and its lack of entailment with the progressive (had the president stopped in the middle of the writing, the letter would not have been written).

- (251) John entered the president's office. The president wrote the long letter *in 2 hours*.
- (252) John entered the president's office. The president sat behind the desk *for an hour*.

On the contrary, the eventuality 'sitting behind the desk' in (252) is unbounded, as shown by its compatibility with *for*-adverbials ('for an hour/ ten minutes'), its homogeneity (sitting behind the desk does consist of different phases, but the president has been sitting for the whole time) and its entailment with the progressive (had the president stopped sitting at a certain moment, he could say that he had sat).

Stoicescu points out that these mismatches, observed in children older than 2;2 and in adults, are dealt with by *coercion*, an idea previously suggested by de Swart (1998) for French verbal tenses. Stoicescu notes that Romanian verbal tenses are aspectually sensitive (similar to the French Imparfait and Passé Simple, as suggested by de Swart), and select either atelic or telic predicates. In case of mismatches, coercion operators trigger a recategorization into the necessary aspectual class (de Swart 1998). However, aspectual shifts are cognitively costly, and are likely to be avoided. Therefore, speakers produce structures where Aktionsart and Aspect match (Stoicescu 2013).

To sum up, the inherent temporal information of the verb phrase can be categorized into four classes: states, activities, achievements and accomplishments. It seems that a coarser-grained distinction can be made depending on the language. For English, Vendler (1967) suggests a classification according to compatibility

<sup>&</sup>lt;sup>25</sup> Declerck (2006) classifies Aspectual categories with respect to their semantics: the *perfective—imperfective* opposition, the latter consisting of the *ingressive* (inchoative or inceptive), the *progressive* (continuous) and the *egressive* (terminative), and the *semelfactive—iterative* opposition. For him, the pair of verbal tenses Simple Past—Past Continuous points to the aspectual nonprogressive—progressive opposition. For Comrie, the Simple Past may express both the habitual and the non-progressive aspects, but it is excluded from the progressive aspect.

with the progressive: accomplishments and activities can occur with the progressive, whereas states and achievements cannot. For French (and Romance languages in general), Garey (1957) proposes a classification regarding the expression of inherent ending boundaries: states and activities are atelic, whereas accomplishments and achievement are telic.

## 1.2.3 Aspect

Grammatical aspect, or simply Aspect in this book, refers to the possibility of using grammatical forms (i.e. verbal forms) to express the way in which the speaker wants to represent the internal temporal structure of a situation—in other words, her viewpoint of the situation to which she is referring (Declerck 2006, 28). For Comrie (1976), Aspect refers to 'different ways of viewing the internal temporal consistency of a situation'; it is what makes the difference between the English he was reading and he read, or the French il lisait and il lut, since in both cases we have an absolute past tense (Comrie 1976, 3). He divides Aspect according to two main aspectual oppositions: perfective vs. imperfective; and perfect vs. nonperfect. The imperfective aspect is a complex hierarchical category consisting of the habitual and the continuous aspects, and the continuous aspect encompasses the progressive and non-progressive aspects.<sup>25</sup> The perfect vs. nonperfect opposition makes reference to the current relevance of a past situation, as exemplified by the use, or nonuse, of the English Present Perfect. Comrie argues against using the terms perfective and *perfect* interchangeably. The same applies to the terms *perfective* and *aoristic*, where the agrist is restricted to perfectivity in the past tense.

This book considers only the *perfective* vs. *imperfective* distinction when referring the category of Aspect. According to Comrie, the perfective aspect<sup>26</sup> indicates the viewpoint of a situation as a single whole, without internal structure, and with highlighted boundaries. The imperfective aspect expresses the viewpoint of the internal structure of the situation, or of a moment other than the initial or the final moments. Prototypical examples of these two grammatical viewpoints are provided in (253), from Serbian. The second verb presents the totality of the situation referred to (the entirety) without reference to its internal temporal consistency: a single unanalysable and indivisible whole. Such verbal forms have a perfective meaning, and the grammatical verbal forms expressing it are called *perfective* aspect. The forms referring to John's reading, below, do not present the situation in the same way; instead, there is explicit reference to its internal constituency. In this case, reference is made to an internal phase of John's reading, giving explicit information on neither the beginning nor the end of the situation. Such verbal forms have an

<sup>&</sup>lt;sup>26</sup>The *perfective* aspect suggested in studies of Slavic languages is called *boundedness* aspect by Allen (1966). This multiple usage of the same term might lead to some confusion. In this book, boundedness represents bounded and unbounded representations of telic and atelic situations as they are actualized contextually (cf. Declerck 2006, 72).

imperfective meaning and the grammatical verbal forms expressing it are called *imperfective* aspect.

(253) Ivan *čital* kogda ja *vošel*.
John read.IMPERF when I enter.PERF.

This distinction is morphologically marked in Slavic languages, English (only the progressive morpheme *-ing*, as in (254)) and Mandarin Chinese, and periphrastically marked in languages such as Italian (*stare*) and French (*être en train de*), as in (255) and (256). In languages such as Romanian or German, the perfective/imperfective distinction is marked neither grammatically nor lexically (Dahl and Velupillai, 2013).

- (254) John was reading when I entered.
- (255) Jean *était en train de lire* quand je suis entré. John read.3SG.*être en train de* when I enter.1SG.PC
- (256) Gianni *stava leggendo* quando sono entrato. John read.3SG.*stare* when I enter.1SG.PC

Examples (257–259), translating (253) into French, Italian and Romanian respectively, illustrate that the imperfect in Romance languages is associated with the imperfective meaning, and the simple or the compound past are associated with the perfective meaning. As such, the connection between Aspect and temporal reference in Romance languages rests on the general interpretation of perfective verbs referring to a complete situation as expressing past time, and imperfective verbs referring to an incomplete or ongoing situation as expressing present time.

- (257) Jean *lisait* quand j'*entrai/*je *suis entré*. John read.3SG.IMP when enter.1SG.PS/PC
- (258) Gianni *leggeva* quando *entrai/ sono entrato*. John read.3SG.IMP when enter.1SG.PS/PC
- (259) Ion *citea* când *intrai/ am intrat*.

  John read.3SG.IMP when enter.1SG.PS/PC

The difference between perfectivity and imperfectivity is not necessarily an objective difference between situations, nor the speaker's objective perspective of the situation. It is possible for the same speaker to refer to the same situation, once with the perfective aspect and once with the imperfective. Her choice depends on her intention of presenting the situation as a whole and completed, or focusing on an internal phase of an ongoing situation. The verbal system in Slavic languages is organized around the category of Aspect: Trnavac (2006, 24) notes that the tense system is aspectually constrained, in the sense that perfective forms in the non-past (present) cannot have an interpretation of present time, but instead imply future time, as in example (260); this is in contrast with imperfective forms, as in (261).

The verbs in the perfective aspect appear in two tense forms (i.e. past and future), whereas the imperfective aspect allows the derivation of three tense forms.

(260) On pročita*et* knigu. He read.PRES.PERF book. 'He will read the/a book.'

(261) On čita*et* knigu. He read.PRES.IMPERF book. 'He reads/is reading the/a book.'

Tense and Aspect are two distinct and yet interdependent categories. For example, the perfective and imperfective aspects in Serbian are morphologically expressed, and occur with both past and non-past (present and future) verbal tenses. There are four past verbal tenses: past tense (preterit), pluperfect, aorist and imperfect. The past tense and the pluperfect may occur with both imperfective and perfective aspects, as in shown in examples (262) to (265). The aorist verbal tense occurs only with the perfective aspect, as in (266), whereas the imperfect verbal tense occurs with the imperfective, as in (267). However, aorist, imperfect and pluperfect are not very common in modern Serbian. When they do occur, they are regarded as stylistically marked replacements for certain uses of the general simple past. All non-past tenses may occur with both perfective and imperfective aspects. Perfective aspect used with present verbal tense does not refer to the moment of speech. These non-past tenses usually appear in temporal and conditional clauses.

(262) On je pitao. He AUX ask.PRET.IMPERF 'He asked/was asking/has been asking.'

(263) On je *u*pita*o*. He AUX ask.PRET.PERF 'He asked/has asked.'

(264) On je bio pitao. He AUX be.PRET.IMPERF ask.PRET.IMPERF 'He had been asking.'

(265) On je bio upitao. He AUX be.PRET.PERF ask.PRET.PERF 'He had asked.'

(266) On *u*pita. He ask.AOR.PERF 'He asked.'

(267) On pitaše.
He ask.IMPERFECTIVE.IMPERF
'He was asking.'

Similarly, in Russian, the reference to past (the suffix -l) and future can be made with both perfective and imperfective verbs, but only imperfective verbs can be used to express reference to the present (Dragoy and Bastiaanse 2013).

The pragmatic interpretation of Aspect is that the speaker makes use of one or another form in order to express her standpoint regarding the eventuality. For example, in (268), the first verb in the simple past (expressing the perfective aspect) and the second one in the imperfect (expressing the imperfective aspect) refer to the same past time event. However, each of the two forms provides the reader a different viewpoint: from the exterior in the former; and from the interior in the latter.

(268) Quel mattino, Giovanni *andò* a scuola come al solito. Ma mentre *andava*, si avvide di una cosa sconvolgente: era uscito in pantofole. (Bertinetto 1986, 80)

That morning, John go.3SG.PS to school as usual. But while go.3SG.IMO, look up a disturbing thing: get out.3.SG.PC

'That morning, John went to school as usual. But while he was on his way, he noticed a disturbing thing: he had left his slippers on.'

Numerous misconceptions and misuses of the notion *perfective* aspect have led to significant confusion among linguists, and therefore their descriptions of individual languages (as pointed out by Comrie 1976; Žegarac 1991). Firstly, there is the assumption that the perfective vs. imperfective aspects indicate situations of *short* vs. *long* duration. The English sentence (269) can be translated into Russian either with the perfective, in (270), which suggests a (subjectively) short period, with a perfective form, in (271), which suggests a (subjectively) long period, or with the imperfective, in (272), which is neutral (Comrie 1976, 16–17). Another example is the distinction between the French Passé Simple in (273) and Imparfait in (274), where there is no differentiation, objective or subjective, with respect to the period of time. Instead, the former expresses the period of thirty years as a single complete whole, whereas the latter focuses on the internal structuring of the reign, expressing this at any point during the thirty years of reign.

- (269) I stood there for an hour.
- (270) Ja *postojal* tam čas. He stay.PERF.SUBJECTIVE for an hour
- (271) Ja *prostojal* tam čas. He stay.PERF.SUBJECTIVE for an hour
- (272) Ja *stojal* tam čas. He stay.IMPERF for an hour
- (273) Il *régna* pendant trente ans. He reign.PS for thirty years 'He reigned for thirty years.'
- (274) Pendant son mariage avec Lady Ann, il *régnait* trente ans. During his marriage to Lady Ann, he reign.IMP for thirty years 'During his marriage to Lady Ann, he reigned for thirty years.'

Secondly, perfective aspect was associated with *limited*, *punctual* or *momentary* duration, the imperfective expressing *unlimited* duration. The sentences in (269–274) show that both perfective and imperfective forms can be used to express limited periods such as *an hour* or *thirty years*. Comrie argues that the "punctuality" interpretation is due to the fact that the perfective aspect does not give direct expression to the internal structure of a situation, but presents it as a single unit. Moreover, Žegarac (1991, 43) points out that the perfective in Serbian, in (275) and (276), indicates that the eventuality *preplivati* 'swim across' took place within ten minutes, whereas the eventuality *stići* 'arrive' occurred ten minutes after some point in time. These examples illustrate very well the interaction between Aspect and Aktionsart.

(275) *Preplivali* su reku za deset minuta. 'They swam across the river in ten minutes.'

(276) Stigly su za deset minuta. 'They arrived in ten minutes.'

Thirdly, a frequent characterization of perfectivity is that it indicates a *completed* action. The term "completed" was erroneously understood as "complete", in the sense that the former focuses on the ending point of a situation (Comrie 1976, 18). The perfective denotes a complete situation, with a beginning, middle and end, without focusing on any of these. This is the case when it is explicitly contrasted with an imperfective form, which expresses a situation in progress. The perfective can be used to express the beginning of a situation when it is combined with stative verbs (lexical aspect), such as the Russian *ponimat* ("understand"). In (277), the perfective *ponjal* means "come to understand, grasp" (Comrie 1976, 19).

(277) Nakonec on *ponjal*, v čem delo. 'At last he grasped what was up.'

Fourthly, the perfective is associated with a *resultative* interpretation, indicating the successful completion of the situation. Similar to the completion interpretation, the resultative is identified when the perfective in (278) is contrasted with the imperfective form in (279) (Comrie 1976, 20).

(278) Ja *ugovoril* ego.
I persuade.PERF him
'I succeeded in persuading him.'

(279) Ja *ugovarival* ego. I persuade.IMPERF him 'I tried to persuade him.'

<sup>&</sup>lt;sup>27</sup> For the opposition between the progressive and the preterit, Parsons (1989) emphasizes the importance of Aktionsart and of temporal adverbials for the semantics of the progressive (cf. the *imperfective paradox*, Dowty 1979).

The interpretations of *perfective* in terms of *completion* and *resultative* meanings are due to a focus on the final stage of a situation that arises in the opposition to the *imperfective*. In other words, the perfective stands in opposition to the imperfective, being the unmarked member of the binary perfective/imperfective opposition. Most of the descriptions of the perfective do not correspond to an inherent meaning of the perfect, but to its functioning in opposition to the imperfective.

Tense-prominent languages, such as English and Romance languages, do not have morphologically expressed Aspect (except the English progressive  $-ing^{27}$ ). Aspect can be inferred from the use of a certain verbal tense, which can be related to one or the other of the two aspects. If the verbal tense is unmarked for the use of Aspect, then the lexical aspect of the verb phrase is used to determine it (Trnavac 2006). In Romance languages, the distinction between these two aspects is mainly inferred by the distinction between the simple past and the imperfect. The French Passé Simple is used in perfective contexts, whereas the Imparfait is used in imperfective contexts, such as in examples (280) and (281) respectively. Examples (282) and (283) illustrate the Italian Imperfetto and Passato Remoto. As the temporal adverbial indicates, both tenses make reference to past time (E < S). The difference between the two utterances is therefore an aspectual one. In the former, the event is presented as in progress at the moment of reference ('around 5'), whereas in the latter, the event is completed and has a resultative state holding at the moment of reference ('around 5').

- (280) Tout à coup, Jean *tomba*.
  Suddenly, John fall.3SG.PS
  'Suddenly, John fell.'
- (281) A cette époque, Jean *tombait* souvent. At that time, John fall.3SG.IMP often 'At that time, John used to fall often.'
- (282) Ieri, verso le 5, Giovanni *andava* a scuola. Yesterday, around 5, John go.3SG.IMP to school 'Yesterday around 5, John was going to school.'
- (283) Ieri, verso le 5, Giovanni *è andato* a scuola. Yesterday, around 5, John go.3SG.PC to school 'Yesterday around 5, John went to school.'

The English verbal system allows the expression of the habitual aspect only for the past tense, as in (284), and the progressive, as in (285). The Simple Past makes no distinction of aspect, allowing the expression of the habitual, as in (286), but excluding the progressive. The French verbal system makes a clear distinction between perfective and imperfective for the past tense, corresponding to the Passé Simple in (287) and the Imparfait in (288). The Imparfait expresses both habitual and progressive aspect. The construction *être en train de* is a supplementary means of expressing the progressive aspect, and can be used for past and present time, as in (289) and (290). French, like Italian, Spanish or Russian, has a general imperfec-

tive periphrase, corresponding to the habitual and progressive aspects in English. Romanian, on the contrary, does not have an imperfective periphrase.

- (284) John used to work here.
- (285) John was working when I entered.
- (286) John worked there.
- (287) Jean *lut*.

  John read.3SG.PS

  'John read.'
- (288) Jean *lisait* quand le facteur est arrivé.
  John read.3SG.IMP when the postman arrived
  'John used to read/was reading when the postman arrived.'
- (289) Jean *était en train de* lire quand le facteur est arrivé. John be.3SG.IMP.*être en train de* read when the postman arrived 'John was reading when the postman arrived.'
- (290) Jean *est en train* de lire et ne veut pas te parler.

  John be.3SG.PRES.*être en train de* and does not want to talk to you 'John is reading and he does not want to talk to you.'

As far as the continuous aspect is concerned, languages present two categories of continuity in time: progressive, as in (291), and non-progressive, as in (292). There are languages where the two types of meaning must be expressed by means of the progressive and nonprogressive forms, such as English, and others where the use of the specifically progressive form is optional, such as Italian and French. This means that the nonprogressive form does not exclude progressive meaning, as the English translation of the Italian sentence in example (292) illustrates.

- (291) Gianni *sta cantando*. 'John is singing.'
- (292) Gianni *cântă*. 'John sings/John is singing.'

A series of indicators of the perfective and imperfective aspects has been suggested for tense prominent languages, as shown by the following examples in French. Vetters (1996) argues that there are several types of perfective indicators occurring in perfective contexts which are incompatible with the Imparfait: (i) temporal indicators making the end of the situation explicit, such as *jusqu'à 8 heures* 'until 8 o'clock', as in (293), or making the beginning and the end of the situation explicit, such as *du matin jusqu'au soir* 'from morning until night', as in (294); (ii) temporal indicators making the total duration of the situation explicit, such as *en 50 minutes* 'in 50 minutes', as in (295); (iii) the repetition of the situation signalling

<sup>&</sup>lt;sup>28</sup> In this example, and others which follow, the acceptable use of tenses differs between the source and target languages (here, French and English respectively). As such, the unacceptability mark (\*) is not necessarily found in the same places when it comes to the translation of the example.

that it is completed, such as *trois fois* 'three times', as in (296); (iv) temporal indicators making the punctual realization of the situation explicit, such as à *l'instant* 'instantaneously', as in (297); and (v) a change of state or position accompanied by temporal indicators, such as *le jour d'après* 'the next day', or *quelques secondes plus tard* 'a few seconds later', as in (298). In (299), the Imparfait is possible, but is used in its *narrative* or *breaking* interpretation (Tasmowski- De Ryck 1985).

- (293) Le 5 juin 1989, Jules \*attendait/attendit jusqu'à 5 heures.

  'On the 5th of June 1989, Jules was waiting/waited until 5 o'clock.'28
- (294) Le 5 juin 1989, Jules \*étudiait/étudia du matin jusqu'au soir.

  'On the 5th of June 1989, Jules was studying/studied from morning until night.'
- (295) Le 5 juin 1989, Jules \*rentrait/rentra chez lui en 50 minutes. 'On the 5th of June 1989, Jules \*was coming back/came back home in 50 minutes.'
- (296) Le 5 juin 1989, Jules \*sonnait/sonna trois fois à la porte.

  'On the 5th of June 1989, Jules \*was ringing/rang at the door three times.'
- (297) À l'instant, Paul \**trouvaitltrouva* la solution. 'Instantaneously, Paul found the solution.'
- (298) Quelques secondes plus tard, Luc *fut* sous le chapiteau. 'A few seconds later, Luc was under the tent.'
- (299) Quelques secondes plus tard, Luc *était* sous le chapiteau.

  A few seconds later, Luc be.3SG.IMP under the tent

  'A few seconds later, Luc was under the tent.'

As for imperfective indicators signalling that the situation is in progress, there are also several categories: (i) background situations introduced by *quand* 'when', *pendant que* 'while', and *pendant* 'during', as in (300) and (301); (ii) situations interrupted by other events preventing them from being completed, as in (302); (iii) telic situations accompanied by temporal adverbials expressing a long period, such as *pendant la guerre* 'during the war' and *pendant sa jeunesse* 'during his youth', as in (303); and (iv) non-specified repetition of a situation accompanied by temporal adverbials, such as *souvent* 'often', *toujours* 'always', *en général* 'usually' and *regulièrement* 'regularly', as in (304).

- (300) Nous \*fûmes/étions à l'étude quand le proviseur entra. 'We \*studied/were studying when the teacher came in.'
- (301) Elle remonta à sa chambre, et pendant que je l'\*embrassai/embrassais, elle dit (...).
  'She went back up to her room, and while I kissed/was kissing her, she said (...).'
- (302) Il se \*noya/noyait quand l'agent le sauva. 'He \*drowned/was drowning when the agent saved him.'

- (303) Quand il était jeune, Jean \*prit/prenait son café avec moi. 'When he was young, John drank/\*was drinking his coffee with me.'
- (304) A cette époque, Jean \* étudia/étudiait toujours du matin jusqu'au soir. 'At that time, John always studied/was always studying from morning until night.'

As indicated in (299), and in (305) below, there is no one-to-one mapping between the verbal tense and Aspect. The *narrative* Imparfait is used in a perfective context. There are therefore numerous scholars who have criticized the classical distinction between perfective Passé Simple and imperfective Imparfait, as discussed by Vetters (1996) for French; several modern models have been suggested in order to explain this lack of one-to-one correspondence (such as the neutrality of the Imparfait, or the proposal made in this thesis, according to which the tensed verbal form consists of both Tense and Aspect, whose values combine; see Sect. 4.3).

(305) Tout à coup, Jean *tombait*. Suddenly, John fall.IMP 'Suddenly, John fell.'

As far as Romanian is concerned, it is only recently that the Romanian Academy has introduced the category of Aspect (GLR, edited by V. Guţu-Romalo 2005 in 2 volumes). As pointed out by Margan (2009), Romanian grammars traditionally consider aspectual distinctions to be lexicalized, as in aspectual verbs (a începe 'to begin', a înceta 'to begin', a se pune pe 'to start doing something'), aspectual words (deja 'already', tot 'still', mereu 'always, în fiecare zi/lună 'every day/month), and aspectual prefixes (a reciti 'to read again'). GLR proposes the category of aspect (which includes both Aspect and Aktionsart), which is 'specific to the verb and which points to the structure of the time interval when the situation described by the verb takes place' (2005, vol. 1, 449). GLR makes the aspectual distinctions of [±perfectivity], [±durativity], [±genericity], [±iterativity] and [±inchoativity], as illustrated by the following examples from Margan (2009, 52):

- (306) El *a scris*.PC. (perfective) 'He wrote.'
- (307) El *scria*.IMP. (imperfective) 'He was writing.'
- (308) El *scrie*.PRES. (durative) 'He writes.'
- (309) El *intră*.PRES. (punctual) 'He enters.'
- (310) El *ascultă*.PRES muzica anilor 70. (determinate) 'He listens to music from the 70s.'

- (311) El ascultă.PRES muzică. (generic)
- (312) 'He listens to music.'
- (313) El *a scris*.PC o scrisoare saptămâna trecută. (unic) 'He wrote a letter last week.'
- (314) El *a scris*.PC două scrisori saptămâna trecută. (iterative) 'He wrote two letters last week.'
- (315) El *a scris*.PC scrisori în fiecare zi. (repetitive) 'He wrote letters every day.'
- (316) El *începe*.PRES să scrie. (inchoative) 'He starts to write.'
- (317) El *continuă*.PRES să scrie. (continuative) 'He continues to write.'
- (318) El *termină*.PRES de scris. (egressive) 'He finishes writing.'

According to GLR, Romanian expresses only the first of these distinctions—perfective and imperfective—grammatically. All other distinctions are expressed lexically. Aspect in Romanian is only expressed with past and future time verbal tenses, and is associated with 'the interpretation "anterior to the moment of reference R", which is different from S' (GLR 2005, 449). The category of Aspect is, therefore, dependent on Tense, since it can only be expressed when  $R \neq S$ .

The notions of Aspect and temporal reference are only partially overlapping. Grammatical aspectual marking does not provide information about the temporal localization of eventualities with respect to one another, but instead represents the speaker's viewpoint of the eventuality expressed. Bertinetto (1986) suggests that the imperfective aspect provides an *instant of focalization*, and explicitly draws the focus to an instant included within the open time interval when the eventuality takes place. The perfective aspect, in contrast, refers to a closed time interval, and no instant other than the final boundary (or, more rarely, the initial boundary) of the eventuality can be focalized.

To sum up, Aspect consists of a binary distinction expressing a viewpoint of the situation. Where this distinction is expressed morphologically in Slavic languages, in Romance languages it is most often associated with the simple past and the imperfect used in perfective and imperfective contexts. Žegarac (1991, 50) points out that the lack of the perfective-imperfective grammatical distinction in one language has been erroneously taken to indicate the lack of lexical meaning characterizing either the perfective or the imperfective. He supports his claim by citing Ferdinand de Saussure:

<sup>&</sup>lt;sup>29</sup> 'Slavic languages regularly distinguish two aspects of the verb: the perfective represents the action in its totality as a point outside of any becoming; the imperfective presents it in progression on the timeline. These categories are difficult for a French person, whose language neglects them: if they were predetermined, it wouldn't be as it is.'

Les langues slaves distinguent régulièrement deux aspects du verbe : le perfectif représente l'action dans sa totalité comme un point en dehors de tout devenir ; l'imperfectif la montre en train de se faire sur la ligne du temps. Ces catégories font difficulté pour un français parce que sa langue les ignore: si elles étaient prédéterminées, il n'en serait pas ainsi.<sup>29</sup> (1967, 161–162).

To fill this gap, French scholars identified a series of indicators of the perfective and imperfective aspects. Nevertheless, the great variety of these indicators, as well as the lack of one-to-one mapping, represents a significant drawback for their actual usefulness for applicative purposes, such as Natural Language Processing and Machine Translation. A hypothesis could be made that Aspect is a relevant criterion that might explain the cross-linguistic variation of verbal tenses. It seems that numerous languages grammatically encode the [±perfectivity] feature (Dahl and Velupillai 2013), which can be considered a parameter with two values: positive and negative.

The question that arises at this point of the discussion regards the means by which the application of the perfective/imperfective distinction would be possible in contrastive studies. Let's imagine that one or more languages expressing this distinction grammatically are contrasted with one or more languages that do not express it by the same grammatical means. If the contrastive analysis is carried out based on translation corpora, then the target language can be used to infer features of the source language. This is the principle behind the translation spotting and cross-linguistic transfer methods (see Sect. 4.3.3 for an empirical implementation). If a text written in a language where the distinction is not expressed grammatically is translated into a language where this distinction is expressed grammatically, then identifying the aspectual information in the target language makes it possible to transfer it back to the source language. My argument is that this makes it possible to have an abstract perfective/imperfective distinction, which is detached from concrete lexical and language-specific means, such as that suggested by Vetters (1996) for French. Moreover, I will be arguing that operational contrastive analyses of languages, be it from typologically different languages or languages from the same family, can only be carried out if they consider abstract and language-independent features.

# 1.3 Summary

This chapter has given an account of three types of temporal cohesion ties, namely the categories of Tense, Aktionsart and Aspect (Sect. 1.1). Tense was considered by logicians to be an operator that applies to a proposition and it shifts its evaluation time. Furthermore, the referential approach to Tense showed that the meaning of this category is better explained in terms of temporal coordinates (S, R and E) and two temporal relations that may distinguish between these coordinates (precedence and simultaneity). I have argued that, despite its limitations, mainly linked to the notion of R, the most influential model in this form of analysis was Reichenbach's

1.3 Summary 63

(1947). I have also indicated that Reichenbach's analysis led to the development of several formal semantic-discursive theories envisaging the interpretation of verbal tenses as temporally related to the preceding sentences, hence as an anaphoric device. In other words, they have pointed to the fact that temporal information from Tense is not necessarily applied at the sentential level, but goes beyond this. This is an issue that I will tackle in more detail in the next chapter.

I have dedicated a section of this chapter to Aktionsart, defined as a category referring to ontological features of eventualities (that is, a generic term used to refer to states, activities, accomplishments and achievements, without distinguishing between them) expressed by the verb phrase. Aktionsart is considered as a temporal cohesive tie, because of its contribution to the general temporal knowledge provided in a discourse. This temporal information inherent to situation types can be modified and overridden by Tense and Aspect. In this research, I have focused on one of the ontological features of situations—namely, *telicity*, and its contextual component, *boundedness*. Roughly, telicity evokes the potential actualization of a situation, where boundedness represents the actual realization of the situation in a context. I have argued that situation boundaries are important for marking the limits of a situation in time, and have thus an influence on the temporal structure of the discourse. I will discuss this issue from an experimental perspective in Chap. 4 and from a theoretical perspective in Chap. 5.

The third temporal cohesive tie investigated in this chapter, (grammatical) Aspect, refers to the speaker's ability to use grammatical means in order to express how the internal temporal consistency of an eventuality can be viewed. The two main aspects, the imperfective and the perfective, refer to rather complex semantic domains (Comrie 1976). This grammatical marking is expressed morphologically in Slavic languages, and inferred in other languages (such as the Romance family) from a series of indicators. The role of Aspect as a cohesive tie comes from the temporal information it provides on the speaker's viewpoint of an eventuality and its interrelations with Tense and Aktionsart.

However, more classically, the temporal information provided by these categories was mainly referred to using the generic term *verbal tense*. Section 1.1 discussed classical monolingual descriptions of verbal tenses in English, French, Italian and Romanian. This description pointed out several issues. The first is related to the dissimilar manner in which classical grammars and studies describe verbal tenses and their usages. For example, the literature on French addresses verbal tenses in terms of their main and secondary usages, also called descriptive and interpretative usages. The literature on English indicates that verbal tense refers to past, present or future time, and and distinguishes a separate role played by aspectual information, such as the progressive morpheme *-ing* and lexical aspect (states vs. events). Moreover, the literature on Italian and Romanian continues to describe verbal tenses in terms of their deictic and anaphoric usages. The second issue regards the level of analysis adopted in classical and more recent research into verbal tenses in these four languages. Research into verbal tenses is richer in French than it is for

all of the other three languages, as will also be seen in Chap. 2. Thirdly, this dissimilar description is problematic for a systematic contrastive analysis of verbal tenses in English, French, Italian and Romanian. According to the methodology used in the research field of *Contrastive Analysis*, a neutral and cross-linguistically valid *tertium comparationis* is needed in order to compare verbal tenses and establish degrees of similarities and differences. I will propose such a model in Chap. 5, based on the corpus study described in Chap. 3, and the results of annotation experiments provided in Chap. 4.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

