1553. Given his strong Protestant convictions, his next post as Latin secretary to Queen Mary was unexpected but he fulfilled his duties well and engendered sufficient trust to renew his relationship with Elizabeth who, shortly after her accession in 1558, installed him as a prebendary at York. This gave him the financial security to embark on his major work *The Scholemaster*, but recurrent illness meant that progress was slow and he died in 1568 without having completed it. It was finally published in 1570 by his wife Margaret.

At first sight *The Scholemaster* appears to be merely a method for the teaching of Latin ("a plaine and perfecte way of teaching children... the Latin tong"), but in reality it is much more. The primary focus is Ascham's philosophy of a humanist education rooted in the study of the classical languages and their literatures accompanied by a strong emphasis on the development of Christian piety and moral judgment. Aims of this nature were familiar in Renaissance Europe, but they were buried in Latin tracts and had rarely been expressed with such cogency in the vernacular language. The book is famous for promoting the technique of "double translation" (i.e., translating from Latin into English and, after a pause, recreating the original Latin text) but it is not always realized that the purpose of such exercises was not merely to teach Latin but also to develop confidence and elegance of expression in the mother tongue. In many ways Ascham was ahead of his time—he was a firm opponent of corporal punishment, for instance, and a champion of education for girls—but the broad thrust of his curriculum reflected contemporary concerns in seeking to instil in the young, and particularly the young ruler, both soundness of judgment and a forceful eloquence in the use of language.

**Bibliography**


A. P. R. Howatt

Ascoli, Graziaidio Isaia (1829–1907)

Ascoli, one of the outstanding comparative philologists of the nineteenth century, studied a very wide range of Indo-European and other languages. In the later part of his career he concentrated his efforts on Romance and Celtic languages and established, by his example and by the encouragement of others, the foundations of modern Italian dialectology.

Born in Gorizia, Ascoli published as early as 1846 an essay on Friulian and its affinities with Walachian. The first two parts of his *Studi orientali e linguistici* (1854–55) dealt with Indian and Semitic languages and informed Italian readers about the methods of German Indo-European scholars. In 1861 he was appointed to a chair of comparative grammar and Oriental languages in Milan, the first of its kind in Italy. The same year saw the appearance of the first volume of his *Studi cristici*, on Italian dialects, foreign colonies in Italy, and other topics; volume ii (1877) collected earlier articles on Indo-European linguistics. In 1865 he published *Zigeunerisches*, a study of Romany, and *Studi ario–semitici*, which favored a common origin for Indo-European and Semitic.

In 1873 Ascoli founded the journal *Archivio glottologico italiano*. The first volume contained a *Proemio* which examined the linguistic situation of his country. Italy had been recently unified, but the new nation lacked a language—the literary idiom, based on the fourteenth-century Florentine of writers such as Dante, was a means of communication accessible, as yet, only to a small minority. The Minister of Education, Emilio Brogi, wished to propagate the views evolved by the great Milanese writer Alessandro Manzoni (1785–1873): that the language used by Italians should be based on a living idiom and that this should be the spoken usage of cultured Florentines. Ascoli, using his knowledge of historical linguistics, argued that what was in effect a dialect could not be imposed as a national language. Florence did not have the same authority in nineteenth-century Italy as Paris did in France. Instead, the linguistic unity achieved so far on the basis of fourteenth-century Florentine had to become more widespread in a gradual process linked with social change and with the expansion of Italian cultural activity, whose thinness Ascoli lamented (see Ascoli 1975).

In the *Archivio* Ascoli published important articles on Ladin (see *Rhaeto–Romance; Romance Languages*), the Ligurian dialect, Friano–Provençal, and on the Irish codex of the Biblioteca Ambrosiana. In 1880 he contributed to the *Encyclopedia Britannica* the entry ‘*Italian Language*’, the first detailed classification of Italian dialects, attributing the distinction between the Tuscan and Gallo–Italian types to the ethnic substratum (a concept which Ascoli developed and refined and to whose influence he attached much importance), and arguing again that the language of Dante continued to be the Italian of modern speech and literature.

**Bibliography**


B. Richardson

*Aspect*

The term ‘aspect’ is used in both a narrower sense, in which it refers to grammatical categories which have to do with the structure of a situation or the speaker’s perspective on it, and a wider sense, in which it also covers lexical and notional (semantic) categories relating to the classification of situations (states of affairs). The term *Aktionsart* is often used to denote the latter. Crosslinguistically, *grammatical aspect*, alongside the categories tense and mood, plays a central role in verbal morphology.

1. The Distinction between Aspect and *Aktionsart*

The term ‘aspect,’ like its companion term *Aktionsart*, has a long and tangled history, the details of which deserve at least a monograph. There remains little consensus about their use.
The origin of the term ‘aspect’ is somewhat curious in that it seems to have undergone a two-step loan translation process, during which the meaning has been significantly changed. The Russian term *vid*, which the English word *(type)* derives from, most frequently means ‘kind, type,’ and in its grammatical use is a translation of the Greek *eidos* which also has that meaning. In connection with verbs, it was originally used to refer to the distinction between simple and derived lexical items. *Aktionsart*, on the other hand, is a late nineteenth-century substitute for the term *Zeitart* introduced by G. Curtius, used to refer to the distinction between the different verbal stems in Greek, and was not clearly separated from aspect until S. Agrèll in 1908 made the distinction between the terms that subsequently work in the area builds on. Thus the two terms have developed in opposite directions, and with some exaggeration could be said to have swapped places in conceptual space. No acceptable English translation of *Aktionsart* has yet been found, so the German term is commonly used, with or without a capital A.

The general fact which the study of aspect and *Aktionsart* sets out from is that most linguistic utterances concern situations or states of affairs and their manifestation in time. The first possible way of defining the two terms builds on a distinction in how these phenomena may be approached. According to this view, *Aktionsart* would be a classification of states of affairs, whereas aspect would refer to different perspectives or ways of viewing one and the same state of affairs. The difference is sometimes described in terms of the distinction between ‘objectivity’ and ‘subjectivity,’ in that aspect would depend on the individual perceiving or conceiving of the state of affairs rather than on properties of the state of affairs itself. Alternatively, aspect would refer to the ways in which states of affairs may be related to time. On this hypothesis, aspect might still be an objective category.

The other major ways of distinguishing aspect and *Aktionsart* are not purely semantic or notional but involve also the ways in which the concepts in question are reflected in language, in particular the level of description to which they pertain. Thus, *Aktionsart* may be seen as a category pertaining to the lexicon, where aspect is defined as a grammatical category. Alternatively, *Aktionsart* may be restricted to the domain of derivational morphology. Below, these different levels will be distinguished as lexical, grammatical, and derivational aspect.

One may also encounter definitions which restrict the two terms to more specific distinctions, grammatical or notional. Thus, especially in Slavic linguistics, the term ‘aspect’ is constrained to denote only the opposition between perfective and imperfective aspect (often only in the specific manifestation found in Slavic). The term *Aktionsart*, on the other hand, is sometimes regarded as primarily denoting the distinction ‘telic/telic’ or ‘bounded/unbounded.’ In addition, many scholars do without the term *Aktionsart*, either by letting aspect cover the whole area, or by using ‘aspectuality’ or ‘actionality’ for the general semantic domain.

The various definitions listed above are not necessarily incompatible with each other. The view of the distinction as one between ‘lexical’ and ‘grammatical,’ for instance, is often connected with the idea that there is a definite distribution of labour between lexicon and grammar, for example, that ‘objective’ distinctions are taken care of by the former and ‘subjective’ distinctions by the latter. Whether this is in fact the case is, however, an empirical question.

The view taken here can be summarized as follows. The sum of the phenomena for which people have been using the terms ‘aspect’ and *Aktionsart* forms a conceptual domain which is reflected linguistically both lexically and grammatically. Categories described as ‘grammatical aspect’ arise diachronically by processes of grammaticalization which may be of different types. One common type of grammaticalization, and the one that has attracted most attention, gives rise to morphemes which serve as grammatical markers of aspect from lexical items. In another type of grammaticalization process, sets of lexical items, distinguishable by their meaning or derivational structure, are integrated into aspeptual paradigms. Since such processes are gradual, the result may be a layered structure of increasingly grammaticalized categories, displaying a continuum of meanings from more ‘*Aktionsart*-like’ to more ‘aspect-like’ ones. This somewhat abstract account will be fleshed out with concrete examples below.

2. Lexical Aspect and Situation Taxonomy

Central to the notion of lexical aspect is what Comrie (1976) calls the ‘inherent aspectual meaning’ of verbs. Different verbs seem to denote different kinds of situations or states of affairs. Thus, *die* denotes a punctual event, whereas *sleep* denotes a prolonged state. On the basis of this, one may construct a taxonomy of verbs according to their inherent *Aktionsart* or aspectual meaning (see *Predicates: Aspectual Types*). However, the type of state of affairs talked about depends not only on the choice of verb but also on several other factors. A phenomenon that has received considerable attention since the 1980s is the interaction between verb meaning and the quantification of verb complements. Thus, (1a) is naturally interpreted as a non-bound (telic) event, whereas (1b) is bounded (telic).

He walked.

He walked to the door.

A taxonomy of verb lexemes will therefore at best yield the basic or typical state of affairs that a verb will be used about. Generally, there is great flexibility in the ways in which individual lexemes can be used, but there are often language-specific limitations to this flexibility. Thus, whereas the English verb *cough* may be used both to talk about a single cough—a basically punctual event—or about a prolonged activity, analyzable as a series of such individual cough events, many languages will have two verb lexemes for the two types of state of affairs. For instance, in Hungarian, the sentence ‘He coughed’ might be translated in two ways, as in (2).

Köhunit ‘He coughed (once).’

Köbőgött ‘He coughed (more than once).’

Typically, the verbs in such verb pairs are derivationally related. Derivational processes, then, may influence the aspectual character of a word. In Sect. 3, the interaction
between derivation and aspect/Aktionsart will be examined more closely.

3. Derivational Aspect

Derivational aspect, often identified with the notion of Aktionsart, has been relatively little studied from a comparative point of view. Given also the fact that derivational processes, by their nature, lend themselves less easily to systematization than inflectional categories, the best way of displaying the range of derivational aspect may be to look at an individual example of a language with a rich inventory of derivational aspectual processes. The following is a selected subset of the Russian Aktionsarten found in Isačenko (1962), according to whom the additional meanings carried by the Aktionsarten relate to different phases or to quantitative or qualitative gradations of a process, or to its inner structure:

<table>
<thead>
<tr>
<th>I.</th>
<th>'Phrasal meaning':</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Inceptive: <em>pet</em> 'sing' → <em>zapat</em> 'begin to sing'</td>
</tr>
<tr>
<td>B.</td>
<td>Evolutive: <em>krčat</em> 'shout' → <em>raskrčat</em> 'start shouting, raise a cry'</td>
</tr>
<tr>
<td>C.</td>
<td>Delimitative <em>sidet</em> → <em>posidet</em> 'sit for a little while'</td>
</tr>
<tr>
<td>D.</td>
<td>Resultative:</td>
</tr>
<tr>
<td>(a)</td>
<td>resultative proper ('the action is led to a successful completion'): <em>bršťjat</em> 'shove'</td>
</tr>
<tr>
<td>(b)</td>
<td>terminative ('completion of action'): <em>pet</em> 'sing' → <em>propet</em> 'to sing the whole of'</td>
</tr>
<tr>
<td>(c)</td>
<td>perdurative (duration of an action throughout a given period of time): <em>spat</em> 'to sleep' → <em>prosplant</em> 'sleep through (the whole night)'</td>
</tr>
<tr>
<td>(d)</td>
<td>finite (action is complete and has stopped): <em>obedral</em> 'have dinner' → <em>obodelat</em> 'finish having dinner'</td>
</tr>
<tr>
<td>(e)</td>
<td>total (action comprises the whole object or all objects, exhausts the object): <em>pisat</em> 'write' → <em>ipsitat</em> (saju bumagu) 'write (the whole paper)'</td>
</tr>
<tr>
<td>(f)</td>
<td>cumulative:</td>
</tr>
<tr>
<td>(i)</td>
<td>cumulative proper: <em>ezdit</em> 'ride, drive' → <em>naezdit</em> (10 kilometro) 'obtain a milage of (100 kilometers)'</td>
</tr>
<tr>
<td>(ii)</td>
<td>partitive-cumulative: <em>kupit</em> 'to buy' → <em>nakupit</em> (massu večki) 'to buy (a lot of things)'</td>
</tr>
<tr>
<td>(iii)</td>
<td>cumulative-distributive: <em>streit</em> 'to build' → (nastroit) (domon) 'build a whole lot of (houses)' → (ponastroit) (domon) 'by and by build a whole lot of (houses)'</td>
</tr>
<tr>
<td>II.</td>
<td>Quantitative meaning:</td>
</tr>
<tr>
<td>A.</td>
<td>Attenuative: <em>raszolec</em> 'to entertain' → <em>poraszolec</em> 'entertain a little'</td>
</tr>
<tr>
<td>B.</td>
<td>Momentaneous: <em>vrazvat</em> 'yawn' → <em>zerazvat</em> 'yawn once'</td>
</tr>
<tr>
<td>III.</td>
<td>Iterative:</td>
</tr>
<tr>
<td>A.</td>
<td>Iterative proper: <em>sidet</em> 'sit' → <em>sizyvat</em> 'sit now and then'</td>
</tr>
<tr>
<td>B.</td>
<td>Diminutive iteratives: <em>kašijat</em> 'cough' → <em>pokašilat</em> 'cough a little now and then'</td>
</tr>
<tr>
<td>IV.</td>
<td>Distributive:</td>
</tr>
<tr>
<td>(a)</td>
<td>object-distributive: <em>kust</em> 'bite' → <em>perekust</em> 'bite each member of a set (in turn)'</td>
</tr>
<tr>
<td>(b)</td>
<td>subject-distributive: *toko čit' 'jump' → <em>povskakat</em> 'jump (of each member in a set)'</td>
</tr>
</tbody>
</table>

In addition to the Aktionsarten listed above, Isačenko also lists a number of formations with rather more specific meanings, such as 'saturative': *pljasat* 'dance' → *napljasat* 'dance to one's heart's content.' Many of these are somewhat difficult to encompass fully within the characterization which he gives of the possible meanings of the Aktionsarten, something which suggests a certain fluidity in this notion (see below for further discussion).

The range of meanings expressed by the Russian derivational Aktionsarten actually fairly well covers most of the types of derivational aspect found among languages. An example (noted above) of a distinction commonly made derivationally is that between 'single punctual event' and 'prolonged activity analyzable as a series of simple events.' In Russian, example (2) would come out as in (3):

(3a) On kašijanul 'He coughed.'
(3b) On (po)kašijal 'He coughed.'

To show a similar distinction from some unrelated languages, consider Navajo, example (4):

(4a) yis'iz 'pedal (a bicycle)'
(4b) yil'iz 'give it a single tap with the foot'

or what Whorf (1956) called the 'punctual and segmentative aspects' in Hopi (5):

(5a) he'ro 'he gives out a sudden hollow gurgle from within'
(5b) htrro 'rota 'he is snoring.'

This 'semelfactedurative' distinction is one example of the general semantic domain aptly termed 'verbal plurality' by Dressler (1968). Verbal plurality crosslinguistically forms a central part of processes of derivational aspect, but at the same time it shows the difficulties involved in delimiting the notion of derivational aspect (Aktionsart) already mentioned. Consider the notion of 'distributive.' The meaning element common to most formations for which this term is used is that an action is distributed with respect to some parameter, which may be identified by some argument of the verb (subject, direct object, indirect object) or may be the time or place of the action. In Russian, distributive formations are often said to be connected with an implication of successivity ('in turn,' 'after each other'). However, in many languages, the same derivational morphemes may be used to express successive and nonsuccessive action. Thus, in Pomo (Hokan), the morpheme glossed as 'plural action' may express that an action is performed 'either simultaneously by different agents or sequentially by the same agent' (Moshinsky 1974: 64), as in example (6):

(6a) ñkó-w-čit 'many feed the fire'
(6b) qmú-w-šit 'he tastes them sequentially (as at a wine-tasting)'
Sometimes, different derivational processes in the same language exploit different types of reduplication, as in the examples (7) from Mokilese (Micronesian): 

\[
\begin{align*}
\text{boun-d} & \quad \text{bou-nce} \\
\text{hak-tak} & \quad \text{bou-nce} \, \text{more} \, \text{than} \, \text{once}, \, \text{continuously} \\
\text{hak-tak-tak} & \quad \text{keep} \, \text{bouncing}
\end{align*}
\]

(7)

4. Grammatical (Periphrastic and Inflectional) Aspect

In the area of grammatical aspect, one may distinguish a number of major types of categories on the basis of their semantics, viz. (a) progressive, (b) habitual, (c) completive, and (d) imperfective-perfective. All these may be expressed either periphrastically (analytically) or inflectionally (synthetically), but the proportions differ widely for the four types, inflectional expression being dominant only for imperfective-perfective categories. The types (b–d) may also exhibit derivational-like properties to varying extents.

The category of ‘perfect’ (to be distinguished from ‘perfective’), which is variously regarded as an aspect or as a tense, is treated in a separate article (see Perfect).

4.1 Progressives

Constructions with roughly the semantics of the English ‘progressive’ (I am writing), that is, with the basic meaning on-going process, are found in a wide range of languages from all parts of the world. The most common case is perhaps that of the use of progressives is optional, although a fair number of cases behave like the English progressive in being more or less obligatory whenever an on-going process (most typically with reference to the moment of speech is referred to. Progressives tend to be restricted to nonstatic verbs. The overwhelming majority of progressive constructions in the world’s languages are periphrastic and originate in various types of phraseological constructions, often with an original spatial meaning, such as be at doing something. Progressives often develop into imperfectives (see Sect. 4.4).

4.2 Habituals

Most, perhaps all, languages have means of indicating that a state of affairs occurs habitually or regularly. These means may become grammaticalized to a greater or lesser degree, in the end forcing anything that occurs on more than one occasion to be marked grammatically. Habitual meaning, which in English is most clearly expressed by the adverb usually, should be distinguished on the one hand from iterativity, that is, repeated occurrences of an action on one and the same occasion (John jumped up and down), and on the other from genericity, that is, the statement of lawlike properties of species and individuals (Beavers build dams).

The borderslines are not very sharp, however, and grammatical markers of habituality may include both iterative and generic uses. In particular, generic sentences tend to be expressed by maximally unmarked members of tense–aspect systems (such as the simple present in English).

Most markers of habituality are periphrastic, but a few examples of inflectional habitualls can be found, for instance, in the Eskimo (Inuit) languages. Derivational iteratives are plausible diachronic sources for inflectional habitualls.

In addition to habitualls that can be used of the present, the past, and the future alike, one also quite often finds ‘past habitualls,’ that is, forms or constructions which are used exclusively to refer to habitually occurring events in the past. These seem to be more prone to be expressed morphologically (examples are Bengali; Bandjalang (Australian)).

A common phenomenon is for habitualls to be restricted to past time reference (cf. the construction used to in English).

4.3 Completives

The label ‘completive’ is used here as an alternative cover term for a rather ill-defined set of phenomena, having in common that at least one of their meanings is to stress the completion of an action, or focus on the concluding phase of a process. For something to be a completive, it should be clearly different from an ordinary perfective, which may well imply that the action is completed, but normally does so without extra emphasis on the completion. (Borderline cases exist, for example, the Russian ‘terminatives’ mentioned in Sect. 3 above, which are regarded as simple perfectives by some scholars.) Completives may have secondary meanings such as suddenness or surprise. They are typically expressed by particles or derivational means, but also by auxiliary constructions (such as done in Black English and English-based Creoles).

4.4 Perfectivity/Imperfectivity

The perfectivity/imperfectivity distinction is a central aspectual category in many verb systems, and is the one most frequently expressed by morphological means. In spite of frequent statements to the contrary, there are no clear crosslinguistic generalizations to be made about markability relations with respect to the perfectivity/imperfectivity distinction, and even within one and the same language there is often confusion here, a fact obviously related to the variety of diachronic sources of the perfectivity/imperfectivity distinction (see Sect. 4.5 below). However, this does not mean that there are no crosslinguistic tendencies in the ways in which the distinction shows up in grammars. It may be illustrative to look at a ‘pure’ case, that is, a system where perfectivity/imperfectivity plays the dominating role, without interference of other tense–aspect categories. Such a system can be found in the Cushitic language Rendille. Nonstatic verbs in Rendille distinguish two basic forms, one which normally ends in -a and one which normally ends in -e, as illustrated by the two sentences in (8):

\[
\begin{align*}
\text{khadaabbe chiirta} & \quad \text{‘he writes/is writing/wrote’} \\
\text{khadaabbe chiirta} & \quad \text{‘he wrote letters’}
\end{align*}
\]

(8a)

The form in (8a), then, is used for reference to the present and future, but also for on-going and habitual actions in the past, and (8b) is basically restricted to single completed actions in the past (with some vacillation for past habitual action). The important generalization is that the distinction ‘perfective/imperfective’ tends to come out as an opposition between two forms (or sets of forms), one of which is basically restricted to ‘past single completed actions.’ The addition of further categories to the system usually does not alter this general picture, although it may obscure it more or less. Thus, if there is a marker of past tense in such a system, it is either restricted to the imperfective (like the
imparfait in French) or added to all forms with past time reference (like the augment in Classical Greek); in both cases, the imperfective/perfective distinction remains basically the same. Complications often arise, however, in subordinate constructions: thus, perfective forms in conditional clauses in many languages may refer to the future, although the same forms in main clauses can only refer to the past.

In a less common type of system than the one described, there is also a distinction between perfective and imperfective in forms with future time reference. This is the case, for instance, in Modern Greek, where the future marker tha combines with both perfective and imperfective forms. In the well-known Slavic type of aspectual system found in, for example, Russian, the distinction between imperfective and perfective forms is independent of the past/nonpast opposition, and perfective nonpast forms normally have future time reference. This does not appear to be a common phenomenon crosslinguistically.

There is about as little agreement on the semantic essence of the perfective/imperfective distinction as on the nature of aspect in general. Popular candidates for a basic meaning of perfective aspect include features such as ‘totality’, ‘completedness’, and ‘attainment of inherent limit.’ It has been argued (Dahl 1985; Bybee and Dahl 1989) that these features may be relevant to different degrees in different languages and that this may be related to the historical sources and degree of grammaticalization of the categories in question (see below for further discussion).

4.5 Paths of Grammaticalization

As noted in Sect. 4.4, there are a number of ways in which a perfectivity/imperfectivity distinction may arise diachronically in languages, and these are also closely linked to the ways this distinction is expressed synchronically. The different sources will be examined in turn.

4.5.1 Perfectives from Perfects

This is a well-known diachronic path of development, exemplified in the development by which the perfects (passé composé) in several Romance languages have taken over the territory of the old perfective (passé simple). More or less well-documented cases of similar developments can be found in other parts of the world, such as the modern Indo-Aryan languages, Hawaiian, and the Kru languages in West Africa. The most conspicuous result of the transition from perfect to perfective is that the form in question starts being used in narrative texts, which is not normally possible with perfects.

In this way, systems with overtly marked perfectives often arise. However, perfects may sometimes be unmarked (in which case they are usually formally nondistinct from stative), and thus a development is possible in which the result is an unmarked perfective form, although it is hard to find well-documented cases of this. A sizable number of the attested cases of perfectives of this kind retain the periphrastic expression of their origin.

4.5.2 Imperfectives from Progressives

This is another well-documented and widespread path of development, found for instance in Turkic languages, Armenian, Scots Gaelic, various languages in West Africa, and others.

The effect of the transition from progressives to imperfectives is that the forms in question come to be used also in habitual and generic contexts and with stative verbs. From the point of view of the expression, this development gives rise to overtly marked imperfectives. As was noted above, progressives typically have periphrastic expression—this is sometimes retained in the imperfective (e.g., in Eastern Armenian), but there are also examples (e.g., Yoruba) where the transition to imperfective seems to have been connected with a fusion between the marker and the verb.

4.5.3 Perfectivity/Imperfectivity by Accidentalization

The term ‘accidentalization’ will be used here to denote the process by which a formerly independent lexical term is integrated into an inflectional paradigm. The motivation for the term is that the process can be described as one by which a property which is inherent of (‘essential to’) a lexeme is reinterpreted as an ‘accidental’ property, that is, becomes restricted to a set of inflectional forms, and thus comes to belong to ‘accidence’ in the traditional interpretation of that term. Cases of accidentalization have been described in traditional historical linguistics, but it has rarely been studied as a phenomenon per se. Yet, it plays an essential role in the genesis of grammatical aspect, and is highly relevant to the understanding of the aspect Aktionsart continuum.

The inherent semantics of lexemes makes them more or less naturally prone to appear with different temporal and aspectual interpretations. For instance, a verb which in its typical uses denotes a punctual event (such as die) is more likely to be used in a context where also perfective aspect as a grammaticalized category shows up. One possible way in which such a state of affairs may be reflected in grammar is in differentiation of markedness relations. Thus, in many tense-aspect systems, zero-marked forms of active verbs acquire a past perfective interpretation, whereas zero-marked stative verbs are interpreted as referring to the moment of speech. Accidentalization, however, requires further developments, which may take a number of different directions, most of which all, however, lead to the integration of previously independent lexemes into an inflectional paradigm.

(a) Two lexemes may differ with respect to their meaning in such a way that the difference is similar to the content of an inflectional category. Thus, the relation between collective nouns and ‘ordinary’ count nouns is similar to that between plurals and singulants. Pairs of nouns with meanings such as ‘human being’ or ‘people’, ‘bovine animal’, ‘cattle’, etc., may therefore be reinterpreted as suppletive members of the same paradigm. In the Russian aspectual system, there are a number of suppletive pairs, some of which may plausibly be assumed to have an analogous origin. In the pair brat ‘sibling’ and ‘take’, the members have etymological meanings ‘carry’ and ‘take up’, respectively. Similarly, the verbs govorit’ ‘talk’ and ‘say’ are usually seen as forming an imperfective/perfective pair. In both cases, then, one active/telic verb is reinterpreted as to differ only in grammatical aspect.
(b) More commonly, perhaps, the association of an inherent semantic feature with a grammatical category leads to the creation of an incomplete paradigm, that is, the lexeme is restricted to a subset of the possible inflectional forms. Thus, the word *people* in English is treated as a plural in virtue of its collective meaning, but there is no natural singular counterpart to it. Similarly, atelic verbs in Russian are normally 'imperfectiva tantum.'

(c) Often, the reinterpretation of inherent semantic properties applies to classes of lexemes rather than individual ones. If such a class is also distinguished formally in some way, the formal feature may also be reinterpreted. For instance, reduplicated verbs, with an original iterative or durative interpretation, may be reinterpreted as the imperfective counterparts of simple verbs and, consequently, reduplication as a process comes to be reinterpreted as a way of marking imperfective aspect. Fully-fledged inflectionalization of reduplication is found, for example, in Tagalog and other languages in the Pacific area; in other languages, such as Latin and Greek, reduplication is found as an idiosyncrasy in individual tense-aspect paradigms. In other cases, derivational suffixes with similar meanings to reduplication may be reinterpreted as markers of imperfective aspect. This is the plausible origin of the perfectivizing suffixes of the Slavic languages and also many of the present stem formations in Indo-European.

(d) Also in the case of derivational affixes, incomplete paradigms may arise: the Russian derivational *Aktionsarten* enumerated above all seem to have the property that they belong to one aspect only, and this is usually predictable from their semantics. Thus, semelfactives are—not unexpectedly—always perfective and are regarded by Russian grammarians as having no imperfective counterparts.

(e) A more complex situation may arise when there are not one but many candidates for reinterpretation. An important case in point is that of bounders. The term 'bounders' here refers to morphemes like the verb particles *up, down,* etc. in English phrasal verbs such as *eat up, burn down,* etc., the original meaning of which is normally spatial and which, by virtue of indicating the endpoint of a movement or—by metaphorical extension—the endstate of a process, entail telicity (boundedness) of the verbal action. The grammatical status of bounders varies from language to language: they may be affixes on verbs, as in Slavic, or particles, as normally in English. Both possibilities may occur in the same language (most Germanic languages; Hungarian).

The first step in the grammaticalization of bounders is that combinations of verbs and bounders (or verbs with bounder affixes) are seen as exclusively perfective. Since there are normally a number of possible bounders with different meanings in a language, this does not by itself entail that a bounder is seen as a marker of perfectivity in the proper sense. However, in a further development, one or more bounder morphemes may lose their lexical meaning and become 'empty,' to use the traditional term used about bounder prefixes in Russian. Thus, one obtains 'paradigms' such as *fotografirovat' (imperfective): *sfotografirovat' (perfective) 'to photograph' (Russian).

More or less grammaticalized bounders have been reported at least from the following: Slavic and Baltic languages, Hungarian, Georgian, Margi (Chadic), and Mokilese (Micronesia).

One possible result of accidentalization processes of the kind described above is a perfectivity/imperfectivity opposition like the one found in older Indo-European languages such as Classical Greek and Sanskrit. The opposition between perfective forms (basically, the aorist) and imperfective forms (the present and imperfect) is manifested by the choice of both endings and stem alternations. The latter show great lexical idiosyncrasy: for some verbs, the imperfective (present) stem is identical to the root; for others, it is the perfective (aorist) stem. For each of the two stems, there is a considerable number of derived types. This synchronic state reveals a diversity of diachronic origins, where the imperfective stems in general seem to be derived from iteratives, duratives, and the like, while the sources of the perfective stems are more obscure. In Latin, the situation has been further complicated by the merger of the Indo-European perfect with the aorist.

An example of a system with partially rather striking similarities to Indo-European is found in the Penutian language Wickhami (Gamble 1978). The main aspectual opposition in Wickhami, which is most probably interpretable as imperfective/perfective, is that between durative and nondurative. The durative forms of a verbal paradigm are typically distinguished from the nondurative ones by the appearance of the verb stem. Even if the choice of stem variant is partly idiosyncratic, durative stems tend to be characterized by (a) lengthening of one of the stem vowels and/or (b) reduplication. The nondurative forms employ stem forms which are either identical to the root or 'reduced forms' where the second vowel is deleted, as illustrated by the examples in (8):

\[
\begin{array}{cccc}
\text{root} & \text{dormative present} & \text{aorist} \\
\text{rušu} & \text{ruša} & \text{nčaša} & \text{‘to steal’} \\
p'iwisa & p'iwisat & p'iwissi & \text{‘to pound’} \\
\end{array}
\]

5. Fused and Layered Aspectual Systems

As was seen in the case of the older Indo-European systems, it is possible for there to be more than one origin of perfectivity/imperfectivity paradigms in one and the same language. At least two possible types of system may be distinguished: in one, referred to here as a fused aspectual system, there is synchronically only one perfectivity/imperfectivity opposition; in the other, called here a layered system, there are two or more distinctions, which are synchronically at least partially separate from each other, and where the 'layers' usually differ in the extent to which they are grammaticalized. The application of this distinction is made more difficult by the fact that, in some layered systems, the layers may themselves be fused.

The situation in the Slavic languages provides illustrations of the different possibilities. In early Slavic, as documented for instance in Old Church Slavonic, there was a perfectivity/imperfectivity opposition very much like the Indo-European one described above. Verbs thus had forms (traditionally called 'tenses') such as present, aorist, and imperfect. This system, then, was well integrated into the
general tense–aspect paradigm: the perfectivity/imperfectivity distinction was basically realized only as the opposition between aorist and imperfect, following the cross-linguistic tendencies for this distinction. However, a new layer had been introduced—the specifically Slavic aspectual distinction between perfective and imperfective verbs. This system may in itself be seen as a fusion of several different sources. To start with, there is a lexical differentiation based on semantics, in that although most simplex verbs are imperfective, a sizable number of high-frequency verbs were perfective, and those all seem to have telic meanings (e.g., *dai* ‘give’, *sésti* ‘sit down’). In addition, verbs with semelfactive infixes (–*nq*- and verbs with bound pre- fixes were perfective. From perfective verbs, derived imperfectives were formed by the help of suffixes which were probably originally iterative. Thus, a large number of the verbs formed perfective/imperfective pairs. The new aspectual system was relatively independent of the old tense–aspect system, and even if the aspectual pairs may be seen as quasi-inflectional paradigms, the system retained to a significant extent the lexical character of its origins. In other words, the two perfectivity/imperfectivity layers of Old Church Slavonic arguably display different degrees of grammaticalization.

The members of two binary oppositions may logically be combined in four different ways. In the case of the two Slavic perfective/imperfective oppositions, the following past tense reference forms are in principle possible: imperfective imperfect, perfective aorist, perfective imperfect, and imperfective aorist. Of these, the last two exhibit contradictory values for the two oppositions, and, although their text frequency seems to have been rather low, they did occur in Old Church Slavonic, and still do occur in modern Bulgarian, which has essentially preserved both layers of the Old Church Slavonic system. These unexpected combinations are of particular interest, since they shed light on the semantic differences between the two layers. It appears that a characteristic of the semantics of Slavic perfective verbs—that is, of the newer layer of the aspectual system—that distinguishes them from most perfective categories cross-linguistically is that they normally imply the existence of a nontrivial bound or limit to the action. This shows up, for example, in contexts such as answers to a question like ‘What did you do yesterday evening?’ Thus, in Russian, one natural answer to this might be *My peli* ‘We sang,’ with the past tense of an imperfective verb. To use a perfective verb, one would either have to add a delimiting object, for example, *My speli pesnju* ‘We sang a song,’ or add a delimitative prefix *po*- implying that the singing lasted for a limited time: *My popeli* ‘We sang for a while.’ Most non- Slavic perfective categories do not seem to carry this kind of implication, and neither does the older layer of the Slavic system. Therefore, it is possible in modern Bulgarian to use a form such as *Pjechmo* ‘We sang,’ that is, an aorist of an imperfective verb, as the translation of Russian *My peli*.

In Bulgarian, as seen above, the two perfective/imperfective distinctions of Slavic have been essentially preserved. In other modern Slavic languages, the two layers of the system have been reduced to one, but in different ways. In the majority of the Slavic languages, the older layer disappeared when the perfect took over the functions of the aorist and imperfect. In the West Slavic language Sorbian (Lusatian), the aorist and imperfect paradigms are still preserved, although the aorist forms occur with perfective verbs and the imperfect forms with imperfective forms only. In view of the fact that each verb has only one set of forms, grammars talk of both paradigms as belonging to a single preterite tense. This is, then, a clear example of the fusion of two earlier layers.

Outside the Slavic area, Georgian displays a layered system which exhibits some similarities to the Slavic layers but which seems to be on its way to fusion. A large number of the Georgian verbs form imperfective/perfective pairs where the perfective members have bounder prefixes (so-called ‘preverbs’). In addition, there is an aorist–imperfect inflectional distinction. Again, then, there are four logical possibilities, but the ‘contradictory’ ones seem to be highly marginal if they are used at all. In addition, the present forms of prefixed verbs are used with future meaning but seemingly without any aspectual restrictions.

It was said above that the Old Slavic tense–aspect system was two-layered with respect to the perfectivity/imperfectivity distinction. It may be claimed, however, that there is yet another layer, constituted by the derivational formations discussed in Sect. 3. This layer, then, would be further away from the grammaticalized end of the aspect Aktionsart continuum. At the same time, it is closely linked up with the imperfective/perfective distinction in verbs, since the verbs of each Aktionsart normally belong to one aspect only.

Parallels to this kind of layering are found in the quasi complex tense–aspect systems of the Athapaskan languages. In the Athapaskan tradition, two categories are postulated, usually referred to as ‘mode’ and ‘aspect’ A closer look at these, however, reveals that behind the term ‘mode’ is an inflectional tense–aspect system of a relatively standard kind, including a perfective/imperfective distinction, with the perfective restricted to past time reference. Aspect, on the other hand, is much more like Aktionsart in the sense in which this term is commonly understood in Slavic linguistics, that is, referring to a classification of the lexeme primarily on criteria of derivational structure. As in Slavic, there are ties between the two layers, among other things that some aspects may occur only with some modes.

Bibliography


