Chapter 2

Aspect and Aktionsart: some History

In the previous chapter we introduced some of the basic concepts of aspect in Polish (verb pairs, binary oppositions, suffixisation, prefixisation, and so on) and discussed how the Polish aspectual system evolved. But we are not yet ready to present the positive contribution of this thesis (that must wait until Chapters 4 and 5) as a more pressing task faces us: developing a deeper understanding of the research agendas underlying the study of aspect and Aktionsart. This is a particularly pressing one for this thesis, for the work described here needs to be located not within one research tradition but two.

The study of aspect and Aktionsart has a long history. Nearly two centuries ago, a general concept of aspect was distinguished from tense, and 75 years later this concept was subdivided into something like the modern (narrow) concept of aspect plus the broader category of Aktionsart. This process did not occur within a single research community — it happened as a result of the interactions between two communities facing very different problems, namely Slavic linguists (dealing with morphologically rich languages) and Germanic linguists (investigating morphologically impoverished languages). At times there was strong interaction between the two communities (the key concepts of aspect and Aktionsart emerged as a result of these interactions) but more recently (and in particular, since Western linguistics under the influence of Chomsky and Montague became increasingly formally oriented) the two traditions have tended to go their own way.

As this thesis draws on both the Western and Slavic traditions it is particularly important to have a grasp of the major issues facing both. For example, the verb classification presented in Chapter 4 makes use of empty prefixes. This is something most Germanic linguists would regard as unproblematic (for example, Verkuyl (1999) and Krifka (1989b) routinely discuss examples involving such prefixes) but many Slavic linguists would argue that prefixisation is not a process that gives rise to aspectual pairs. And in the other direction, our verb classification shows that fine-
grained semantic distinctions arise in Polish at the level of the verb, whereas recent Western approaches (for example, by Verkuyl (1972, 1993, 1999) and Krifka (1989b)) have tended to view the level of verb phrase (and the contribution made by direct objects) as aspectually crucial.

In short, one reason for discussing the study of aspect and Aktionsart from a historical perspective is to locate where the approach to Polish verb pairs introduced in this thesis differs from what the reader will find in the various literatures on aspect. But there is another reason why a historical perspective is needed. As we hope to convince the reader (be they readers with Western or Slavic backgrounds), while parts of the approach to aspectual pairs presented in Chapter 4 may initially appear strange, viewed from a historical perspective there is much that is actually quite traditional. In particular, despite the many obvious points of conflict, there are interesting areas of agreement between what we propose and the ideas advanced in Czochralski (1975), the classic study of the Polish verbal system.

We proceed as follows. In Section 2.1 we trace the origins of the study of aspect and Aktionsart. We focus on two developments crucial to later work: Greč’s (1827) distinction between tense and an (extremely broad) concept of aspect, and Agrell’s (1908) influential subdivision of this broad concept into aspect (in a narrower sense) and Aktionsart. In Section 2.2 we briefly discuss the study of aspect in the Germanic tradition, paying particular attention to the impact of Agrell’s ideas. In Section 2.3 we turn to the Slavic tradition. We start by examining the impact of Agrell’s work, and then consider a number of issues relevant to this thesis from a historical perspective: the legitimacy of prefixisation as an aspectual pair forming operation, how to test for aspectual pairs, and whether ‘suffixisation’ is really so different from prefixisation. Section 2.4 continues our discussion of the Slavic tradition, and focuses on another key area: how to draw the line between aspect and Aktionsart in Slavic languages; we pay particular attention to the ideas of Czochralski (1975). In Section 2.5 we discuss contemporary (post Chomsky and Montague) approaches to aspect. Finally, in Section 2.6, we summarize the main points of this history.

### 2.1 The origins of ‘aspect’ and ‘Aktionsart’

The term ‘aspect’ is much younger than the concept of aspect. The term ‘aspect’ appeared in English in 1853, but aspectual distinctions were familiar to Greek and Roman philosophers. The Greeks, for example, were well aware that the difference between the imperfect and the aorist was not of the same kind as the difference between the imperfect and the present. In Plato’s Ion (530AD) Socrates asks “And did you compete [egonizu-imperfect]? And did you succeed [egoniso-perfect]?”. (The opposition between egonizu and egoniso is similar to the Polish opposition between grales ‘to be competing’ and wygrales ‘to have won’.). And four centuries later the Roman writer Marcus Terentius Varro (116 BC-27 BC) described the Latin imperfect as referring to an action that is incomplete (‘imperfectus’), and the Latin perfect as referring to an action that is complete (‘perfectus’). But nearly two thousand more years had to pass till, in 1846, Georg Curtius argued in “Formation of the Tenses and
Moods in Greek and Latin, presented Comparatively” that Greek and Slavic aspect represented the same phenomenon.

But while the distinctions relevant to the study of aspect have long been known (at least, by those who have reflected on language), the term ‘aspect’ appeared only much later. In fact aspect is a calque from the Russian *vid* ‘(a) view’. The etymological root of ‘aspect’, spect, means ‘see’, ‘look (at)’, ‘view’. (Latin *aspectus* ‘a view’; from the past participle of *aspicere* ‘to look at’: *ad-* + *specere*.)

The term ‘vid’ appeared in the early seventeenth-century in the work by Meleity Smetriskiy, but there it did not refer to a binary opposition between perfective and imperfective aspect — a concept of aspect of that kind was first found in Miklosich (1926-73) (reprinted from 1868-1875), and only became firmly established in the early 1930s. Rather, ‘vidy’ were treated as part of the tense system. For example, Lomonosov (1980) (reprinted from 1764) treats the perfective past of *glotnul* ‘swallowed (once)’ as a ‘semelfactive past tense’. In 1812, in a reply to this work, Boldyrev argued that *glotnul* ‘swallowed (once)’ and *glokal* ‘swallowed’ are different verbs, not different tenses, since Russian has only two tenses, namely present and past. Boldyrev seems to have been the first to talk of semantic classes of inchoatives, semelfactives, frequentatives, and so on, without caring whether the relevant meaning was expressed lexically or by morphological marking.1

‘Vidy’ was first used in 1827 to refer to non-tense distinctions in a ‘practical’ Russian grammar by Nikolaj Greč. He clearly separated tenses from aspects, and described the latter as expressing circumstances of the action.

The times are limited in nature to three: the present, past, and future, but in grammatical tenses, that is in the forms of languages by which times are expressed, there can be expressed accessory circumstances by which are more closely defined the signification and the extent of the action. …The forms serving to express these circumstances of the action are called “aspects”. Quoted after (Binnick, 1991, page 140)

Greč’s separation of tenses from aspects introduced a new set of questions, and helped give birth to the systematic study of aspect in Slavic languages. But it also had an effect on Germanic languages. Greč’s conception of ‘circumstances of the action’ was very general, and this generality made it possible to transpose the concept of aspect to Germanic languages, where it became known as *Aktionsart*, a German term for ‘manner of action’. To quote from Brugmann, a grammarian who played a prominent role in incorporating Greč’s insight into Germanic languages:


Aktionsart ist, im Gegensatz zu Zeitstufe, die Art und Weise, wie die Handlung des Verbums vor sich geht. (Brugmann, 1904, page 492-493)
Such a definition of Aktionsart as a verbal category distinct from tense is very broad; clearly far broader than the definition of aspect as a binary opposition between perfective and imperfective aspect.

It is tempting to identify Greč as the starting point for the modern study of aspect and Aktionsart — tempting, but mistaken. The way Brugmann and other Germanic grammarians used the term ‘Aktionsart’ in those days does not correspond to the way it is generally used today (though we might say that Brugmann’s ‘Aktionsart’ corresponds to what some contemporary Western formal semanticists mean when they talk in broad terms about aspectuality; for example, Dowty (1979), Moens (1987), and Moens and Steedman (1987, 1988)). That is, Brugmann’s ‘Aktionsart’ is a catchall phrase that covers all three categories later distinguished by Isačenko (1962): aspect, Aktionsart, and Verbalcharacter. Brugmann did not (as it is often incorrectly assumed) separate Aktionsart from aspect by recognizing the lexical nature of the former. Rather, Brugmann used the name ‘Aktionsart’ for Germanic equivalents of the Slavic semantic distinctions that Greč had described as ‘vidy’. And as we have already noted, Greč’s conception of vidy was extremely broad. So in Brugmann’s time there were two and not three distinct categories: the category of tense and the broad category of vidy/Aktionsart.

The three way distinction between tense, aspect, and Aktionsart that we are used to today comes from the work of Sigurd Agrell, who used the notion of ‘Aktionsart’ in his study of Polish verbs as a notion additional to the notion of aspect. That is, Agrell (1908) was the first to explicitly distinguish aspect and Aktionsart in Slavic:

Unter Aktionsart verstehe ich . . . nicht die beiden Hauptkategorien des slavischen Zeitwortes, die unvollendete und die vollendete Handlungsform (das Imperfektivum und das Perfektivum) — diese nenne ich Aspekte. Mit dem Ausdruck Aktionsart bezeichne ich bisher fast gar nicht beachtete — geschweige denn klasifizierte — Bedeutungsfunktionen der Verbalkomposita (sowie einiger Simplicia und Suffixbildungen), die genauer ausdrücken wie die Handlung vollbracht wird, die Art und Weise ihrer Ausführung markieren. (Agrell, 1908, page 78)

Aspect and Aktionsart, which were one before Agrell, were from now on two different categories — they could be called by name and talked about separately. Both Slavic and the Germanic aspectology had to adjust to the new situation. And this took quite some time. In Slavic aspectology, the distinction between aspect and Aktionsart began accepted in the early 1930s. However, the notion of Aktionsart did not make it into textbooks on Slavic grammars until the second half of the twentieth century, and it did not make it into Slavic dictionaries until very recently. And in Germanic aspectology, the first half of the twentieth century saw linguists devoting considerable energy to discussing the issue of the existence or non-existence of Agrell’s narrow category of aspect in non-Slavic languages.

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2 Isačenko (1962) explicitly distinguished between aspect, Aktionsart and Verbalcharacter. He separated ‘Aktionsart’ from ‘Verbalcharacter’ by defining the former as derived by formal means, and the latter as referring to the lexical meaning of verb.
The distinction between aspect and Aktionsart was problematic from the very beginning — which encouraged a rich fermentation of ideas as scholars tried to find criteria for separating the two categories. Both semantic and morphological criteria were proposed. Important early contributions that worked towards this distinction include, among others, Jacobsohn (1926, 1933), Porzig (1927) (who was inspired by Jacobsohn (1926)), and Hermann (1927). One of the most influential criteria used to distinguish aspect and Aktionsart was the ‘subjective/objective’ distinction.

Walter Porzig’s paper “Zur Aktionsart indogermanischer Präsensbildungen” argues that these two categories are two different “dimensions” of verb meaning: aspect being the point of view from which an action (“Handlung”) or occurrence (“Vorgang”) is viewed, Aktionsart being the manner in which it takes place. Interestingly, he argues that aspect is a binary category, since as a rule, it should be possible to view every event occurrence as in progress or as completed — yet, according to him, whether there indeed is aspect in a concrete language can only be recognized by the morphology, because every meaning must be morphologically encoded:

Der Aspekt ist also seinem Wesen nach streng polar, d.h. wir nennen nur einen solchen Unterschied innerhalb der Verbalbedeutungen Aspekt, der die Vorgänge unter den Gesichtspunkt “Verlauf” und “Ereignis” bringt. Ob es in einer gegebenen Sprache den Aspekt gibt, ist nur zu erkennen durch die Morphologie; denn jede Bedeutungskategorie muss morphologisch fassbar sein. (Porzig, 1927, page 152f.)

Porzig (1927) opens up his paper with a statement that ‘the syntax of the Indo-European verb suffers from a frequent confusion of Aktionsart and aspect’ — which, as he explains in a footnote, was clearly made by Jacobsohn (1926).

Interestingly, in the same volume of “Indogermanische Forschungen”, Eduard Hermann independently argues in favour of a distinction between a ‘subjective’ and an ‘objective’ Aktionsart. In a “Korrekturnote” to his paper “Objektive und subjektive Aktionsart”, he notes that that the same ‘subjective/objective’ distinction had actually been proposed a bit earlier by Jacobsohn, in (Jacobsohn, 1926, page 397f.), to distinguish aspect and Aktionsart. Hermann explains that he had come to know about the similar ideas of Jacobsohn’s via Porzig (1927), and only after his paper was written (Hermann, 1927, page 227f.). Note that (as the title of Hermann’s paper suggests) the basis for his distinction is semantic. Recall that Porzig took a different view, arguing that morphology was fundamental to the the category of aspect.

Summing up, the work of Agrell marks a transition from aspectological ‘prehistory’ to aspectology as a mature science: his work established the terminology and distinctions that have been the setting for subsequent work. There were two big changes needed for this transition to take place. The first change was made by Greč, who separated tenses from aspect/Aktionsart; the second change was Agrell’s own separation of aspect from Aktionsart. The two shifts provided the basic conceptual tools that would shape the development of the study of aspect and Aktionsart in the twentieth century.
2.2 Germanic aspectology

While Agrell’s distinction between ‘aspect’ and ‘Aktionsart’ shaped the development of aspectology, it did not ensure that it would develop in a uniform fashion. Then (as now) the study of aspect was divided into two major streams: the Germanic (or nowadays, the Western) and the Slavic. Agrell straddled these two streams (he came from the Germanic tradition but worked on Slavic aspect/Aktionsart), and the two streams mutually influenced each other. Understanding these influences is crucial to understanding the development of aspectology. Nonetheless, each stream has its own identity and concerns (hardly surprising given the differences between Germanic and Slavic languages) so it is also important to try and understand each in its own terms. We start here by briefly looking at the development of the Germanic tradition.

A good place to start with is the work of Jacob Grimm. Grimm was one of the grammarians who pioneered the transposition of the concept of aspect to Germanic languages. Interestingly, he did not think of (Germanic) aspect in the essentially semantic way that nowadays is common in the literature on formal linguistics. Instead, he looked at Germanic oppositions between simple and complex verbs, so his work has a rather Slavic flavour:

It is not impossible to find in the Germanic languages also the traces of a distinction which permeates the Slavic languages. Composites with ver-, be-, hin-, durch-, etc. (as in Slavic po-, do-, na-, etc.) perhaps represent perfectives, uncomposed verbs on the contrary imperfectives.

Grimm’s ideas strongly influenced subsequent Germanic aspectology, and in particular the work of Streitberg and Brugmann.

Streitberg

Streitberg was strongly influenced by Grimm. He wished to establish a link between Germanic and Slavic languages. He has become well-known in Germanic and Slavic aspectology for his famous contribution “Perfektive und imperfektive Aktionsart im Germanischen”. In this study, he tried to show that the Slavic distinction between perfective and imperfective aspect was preserved in Gothic. On the basis of his comparison of Wulfila’s Gothic translation of the Bible with the Greek original, he argues that the Gothic verbs compounded with prefixes, such as du-, us-, at-, etc., and especially prefix ga-, are perfective counterparts of the corresponding simple verbs, which he analyses as imperfective. An example of such opposition is tajan ‘to do, to be doing’ vs. gataujan ‘to have done’, or slepan ‘to sleep’ vs. gaslepan ‘to fall asleep’. Interestingly, Streitberg also regarded a number of simple Gothic verbs as perfective. Streitberg (1891) proposes that the whole verbal system of Slavic, as well as that of the Baltic languages, is governed by the following three main semantic categories:

1. Imperfective/durative/continuous aspect that presents an action in its uninterrupted duration or continuity;
2. **Perfective/resultative** aspect which adds the moment of completion to the meaning of the verb; this category consists of two subcategories:

- *momentaneous-perfective* aspect, which stresses the moment of termination, and
- *durative-perfective* aspect that expresses completion together with the duration of action;

3. **Iterative** aspect expressing iteration.

(Incidentally, our use of the term ‘aspect’ in this explanation is somewhat anachronistic. As an example of the terminology used at that time, we remark that Streitberg’s teacher Leskien, in his “Handbuch der altbulgarischen Sprache”, refers to Slavic verbal categories of ‘imperfective’, ‘perfective’ and ‘iterative’ as “Handlungsarten (Aktiones) des Verbums”; he says: “Durch den Verbalstamm, der die Vorstellung einer Handlung oder eines Vorganges ausdrückt, kann außerdem die besondere Art, wie sich die Handlung vollzieht, mit ausgedrückt werden” (Leskien, 1962, page 170).)

Streitberg’s study had a long-lasting resonance in Germanic research on aspect. It has inspired scholars such as Poutsma (1926) and van Wijk (1928). For instance, Poutsma (1926) proposed the following Streitberg-inspired classification of predications:

1. *momentaneous* predication;

2. *durative* predication, which falls into
   - *indefinitely durative* predication,
   - *ingressively durative* predication, and
   - *terminatively durative* predication,

3. *iterative* predication.

Some Germanic writers criticised Streitberg’s work. Scherer (1954), for instance, speaks of the “complete lack of dependence of Gothic aspect on form”; and more recently, Coleman (1996) argued that the view “of a systematic opposition of perfective and imperfective was strongly overstated” (Coleman, 1996, page 7). And many Slavic linguists strongly objected to Streitberg’s idea that the distinction between perfective and imperfective aspect was preserved in Gothic, and disliked his attempt to transpose the Slavic concept of aspect onto Germanic languages. For instance, Trnka, one of the representatives of the Prague Circle, writes:

It is very hard for a Slavonic philologist to endorse the theory of the eminent German scholar. No period of transition in the system of the Germanic verbal system caused by the supposed loss of verbal aspects has been detected either by Streitberg himself, or by any of his followers, in the history of the Germanic languages, and in modern languages of the
Germanic stock (even in English which has developed since the 15th and 16th centuries some periphrastic forms comparable, from the semasiological point of view, with the Slavonic imperfective aspect). (Trnka, 1982, page 205)

He then refers to other scholars, in particular to Beer and Mourek, who not only objected to Streitberg’s comparison of Slavic with Gothic, but who also strongly argued against Streitberg’s analysis of the Gothic text. Beer for instance counted the cases that Streitberg listed as exceptions to his theory about the perfectivising working of *ga-*, and considers that they make up 66 per cent of the whole number of verbs compounded with *ga-*. In his opinion, the frequent use of this prefix was due to the tendency of the translator to imitate — as is also the case with other prefixes — the compound verbs in the Greek original, and to the analogy of the past participles. Mourek re-analysed the Gothic text and compared it with the Greek original and came to the conclusion that the Gothic prefixes, such as *at-*, *bi-* *dis-* *in-* *us-*, had nothing to do with the perfective or imperfective aspect. Mourek concluded that no Gothic verbal prefix had the power to convert imperfective verbs into perfective ones, their real function being to modify, or to emphasise the basic meaning of the simple verb.

But Trnka’s work on aspect offers more than just criticism of Streitberg. He also proposes a way of relating Germanic languages to Slavic languages. He proposes that within the verbal systems of Czech and English, the word aspect is applied to roughly three different “semasiological series”, of which two are represented in Germanic, and three are represented in Slavic. The two first series refer to distinctions that refer to the internal structure of events (these distinctions can be expressed lexically, by prefixes, adverbs, prepositions, or they can be the effect of a specific contextual placing, typically supported by adverbs). The third series — that is, the imperfective vs. perfective opposition — is represented only in the Slavic languages: “the perfective verb denotes an action as a completed fact, in opposition to the imperfective verb which expresses the action as a process”.

**Brugmann**

Brugmann distinguished five kinds of actions — five ‘Aktionsarten’ (Brugmann, 1904, page 493). They could be expressed by the lexical meaning of the verb, by morphological and syntactical means, and by different tenses. We summarize Brugman’s list as follows:

1. **Punctual (momentaneous, perfective, aoristic) action.** It expresses that the action becomes complete at the moment of its inception, or through one single movement. Some verbs were already “an sich” punctual, for instance the German verb *finden* ‘to find’. In the case of other verbs, this Aktionsart arose through combination with other sentential elements, for instance with prepositions. Among the tense roots, the aorist was the carrier of the punctual Aktionsart.
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2. **Cursive (durative, imperfective)** action. The action is presented as going on, without considering the individual acts within it, and thus the beginning and the end point remain outside the point of view, as for instance in *steigen* ‘to climb’, *leben* ‘to live’. Also for this Aktionsart many verbs had already an “*an sich*”. Apart from this, this Aktionsart was mostly expressed by the present tense root.

3. **Perfect** action. That is, the action of the perfect root: a state of the subject is described which is the result of its preceding action. For instance, *yoide* (Old Indian *veda* and so on) ‘he has discovered and knows now’ = ‘he knows’. Also, an action can be perceived as a state. For instance, Greek *µεµυκϵ* ‘he entered into roaring/shouting and he is in the middle of roaring/shouting now’.

4. **Iterative** action. The action is presented as consisting of repeated uniform acts. This group consists mainly of verb forms with reduplication, which yielded this interpretational effect. (Brugmann gives examples from Indo-European, Latin, and Greek.) Iterative action often changes into intensive action (which is interesting if brought into connection with discussions about classifications of Aktionsarten that involve the class of ‘intensives’, a topic beyond the scope of this thesis).

5. **Terminative (durative-perfective)** action. An action is presented as going on, but in such a way that a “terminus”, the beginning or the endpoint, is contemplated (for instance, *er bohrte das brett durch*). According to Delbrueck, originally, this action was expressed by nasal and the *sko*–praesentia. In each case, there were verbs, which in their very concept tended to be used in this way. And yet, they allow a clear presentation of a terminative action as a rule only through other sentential elements, with which they join together to form partial composita. In general, as a result of a combination with prepositions, all cursive verbs could express the meaning component of completion of the action.

The work of Streitberg and Brugmann (and indeed that of Leskien, Poutsma and other scholars from this period) still has influence (for example, these writers were referred to in Verkuyl (1972), the first post-Chomskian analysis of aspect).

**The first half of the twentieth century**

The work of Brugmann brings us to the beginning of the twentieth century and the impact of the work of Agrell. What effect did Agrell’s distinction between aspect and Aktionsart have on the Germanic tradition? It certainly generated a lot of discussion. During the first half of the twentieth century Germanic aspectology was marked by arguments in favour and against the view that Germanic languages had Agrell’s new narrow category of ‘aspect’. (Nobody doubted that Germanic languages had ‘Aktionsarten’; this was taken as established by the work of Streitberg and Brugmann.) Let us look at what some prominent scholars had to say about this issue.

Deutschbein (1940) and Renicke (1950, 1954a,b, 1961) argued that in spite of the fact that in Germanic languages the category of aspect is not grammatically encoded, speakers of Germanic languages do have a strong ‘feeling’ for aspect:
Im allgemeinen lehnt man das Vorhandensein von Aspekten mit der Begründung ab, daß eine besondere formale Gestaltung der Aspekte im Neuhocheutschen fehlt. Es ergibt sich aber dann das überraschende Resultat, daß unsere Muttersprache ein überraschendes Empfinden für die Aspekte hat. (Deutschbein, 1940, page 76f.)

This mirrors earlier remarks by Jacobsohn (1933):

Aber wenn es im Nhd. auch an Verbalformen fehlt, die im deutlichen Gegensatz zueinander oder in deutlicher Bezogenheit aufeinander die Handlung als durativ oder perfektiv angeschaut charakterisieren, so werden diese Aspekte doch in einer ganzen Reihe von Fällen bei uns sprachlich mit anderen Mitteln dargestellt. (Jacobsohn, 1933, page 295)

Petkov (1965) tried to explain why this was so:

...gehen wir von der Tatsache aus, daß die grammatischen Abstraktionen einer Sprache als indirektes Produkt eines langwierigen Erkenntnisprozesses im philosophischen Sinne des Wortes objektiv sind, und da das menschliche Denken als Widerspiegelung der materiellen Wirklichkeit einheitlich ist, müssen sie auch in jeder anderen Sprache ausdrücklich sein. (Petkov, 1965, page 551)

As the quotation from the work of Petkov illustrates, the concerns of Germanic linguists in the first half of the twentieth century became increasingly theoretical — the crucial task was now felt to be to determine and motivate the subject of their study in the light of the conceptual changes brought about by Agrell (1908). And this is a difficult task. Agrell’s narrow concept of aspect was inspired by his investigations of Slavic languages. Streitberg’s ingenuity notwithstanding (lesen ‘to read’ vs. durchlesen ‘to read through’, and so on), the fact remains that Germanic aspectual morphology is impoverished compared with Slavic aspectual morphology. It is clear that various ‘aspectual’ oppositions (such as (im)perfectivity, (a)terminativity, (a)telicity, and (un)boundedness) are felt by speakers in Germanic languages, but (as the Germanic grammarians discovered) it is no simple matter to make interesting linguistic generalisations about the mechanisms that support them.

Some writers felt it was simply wrong to import the Slavic notion of aspect into Germanic languages. An early writer who took this view was Porzig (1927); as we have already mentioned, he argued that only Slavic languages have aspect as “jede Bedeutungskategorie muß morphologisch faßbar sein”. This view was revived after a critical contribution by Zandvoort (1962) who explicitly argued that “aspect is a conception which does not exist in English Grammar” (Zandvoort, 1962, page 398).

But in general, Germanic researchers gradually came to the view that temporal and aspectual distinctions can be expressed in different ways in different languages, and tried to systematically investigate the means of expressing aspectual distinctions in Germanic languages (they sometimes talked of different sorts of ‘aspects’ by which they meant different ways in which aspectual distinctions are expressed in Germanic
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They often tried to bring order into their description by reworking concepts from Slavic aspectology. The word ‘reworking’ is important here: in general they consciously re-defined the Slavic definitions for use in German linguistics, and did not attempt to simply transpose them. For example, an important contribution was made by Renicke (1950, 1954a,b, 1961). In his 1961-paper ‘Deutsche Aspektpaare’, he applies the concept of aspectual pairs to German, but he applies this concept to pairs of sentences, not verbs. He argues that transposing the Slavic way of defining aspect to German leads to misunderstandings, since German aspect is a syntactico-stylistic category, and not a verbal category. At a general level he proposes two types of German aspect pairs (‘Vergangenheitsaspekt’ and ‘Zukunftsaspekt’) and seven single aspects (that is, five ‘syntaktische Aspekte’ and four ‘syntaktische Wortbildungsaspekte’).

Another example of such an approach is the work of Hans Pollak. In his 1967 paper he tried to define in a precise way the notions of aspect and Aktionsart (he found the contributions by Renicke imprecise), and to provide an up-to-date presentation of the state of research in the field of German aspectology. He distinguishes between aspects and Aktionsart as follows:

Als "Aspekte" betrachte ich also bestimmte charakteristische Aktionsarten, durch die zwei sonst semantisch identische, morphologisch verwandte Sprachformen (oder Sprachformungen) in ihrer Bedeutungsfunktion von einander abweichen. (Pollak, 1967, page 404)

What can we say at a more general level about the Germanic tradition? Two remarks are worth making. First, the researchers who argued that aspect in Germanic languages is expressed by different stylistic and syntactic means, back up their arguments with an impressive range of examples. In so doing they opened the door to new lines of research, notably the interaction between aspect and direct objects (examples of such interaction were discussed by several researchers over the course of the 20th century, and indeed by earlier researchers). We draw attention to this because when the Western linguistic tradition (under the influence of Chomsky and Montague) assumed an increasingly formal character, the interaction between aspectual constructions and direct objects (that is, what happens at the level of verb phrase) became the primary focus of research in formally oriented work. The pioneering paper here was Verkuyl (1972), and the next chapter of this thesis is devoted to a study of how this work and the related work of Schoorlemmer (1995), Krifka (1989b) and Filip (1993) applies to Polish.

Second, it seems fair to say that over the course of the 20th century the Germanic tradition researchers forged what is nowadays the received view of aspect in the West. We might summarize this received view as follows. First, aspect is to be distinguished from both tense and Aktionsart (though whereas its demarcation from tense is relatively clear, what demarcates it from Aktionsart is rather more problematic). Second, no special status is awarded to morphological criteria (say for distinguishing aspect from Aktionsart). Rather, aspect is viewed as relatively abstract linguistic category that can be realized in many different ways in different languages. Thirdly, this abstract system is viewed as governing a number of important oppositions in natural
language (such as (im)perfectivity, (a)terminativity, (a)telicity, or (un)boundedness) that have to do with the character of events and the way we view them.

Loosely speaking, we might say that this is an essentially *semantic* view of aspect. This is not an entirely satisfactory way of putting matters (though it does seem to be what Renicke was trying to get at when he called aspect a syntactico-stylistic category) but it is useful in two ways. First, it draws attention to the fact that the intuition that holds together the received Western view is the idea that natural languages have developed a number of mechanisms, independent of those used in the tense system, for *structuring the way we view events*. It seems reasonable to call this intuition essentially semantic. Second, while this characterization of the Germanic tradition may not be the best possible, it does have the merit of distinguishing what is important in the received Western view from what important in the Slavic tradition. For, as we shall now see, if ‘semantics’ is the key word in the Germanic tradition, the key word in the Slavic tradition is ‘morphology’.

### 2.3 The Slavic concept of aspect

In this section we discuss the impact of Agrell’s work on the Slavic tradition. As we have just noted, the primary impact of Agrell’s work on the Germanic tradition was to point it in a direction that eventually led to the (Western) received view of aspect: that aspect is an abstract system, independent of the tense system, for structuring the way natural languages encode information about events — a system that can be realized in different ways in different languages. Agrell’s impact on the Slavic tradition was very different: his work inspired deep morphologically oriented research on Slavic aspect. Many of the themes discussed in contemporary Slavic aspectology trace their inspiration to the influence of Agrell. To give the most obvious example, after Agrell divided the broad concept of ‘aspect’ (Greč’s ‘vidy’) into ‘Aktionsart’ and a narrow conception of ‘aspect’, the new identity of ‘aspect’ started to gradually assume a binary shape.

But the road was neither short nor easy — and this may seem surprising. After all, Agrell’s narrow concept of ‘aspect’ was inspired by his work on the morphologically rich Slavic languages; as the concept was born in Slavic languages, why should it be difficult to apply it there?

In fact, there are many difficulties — or rather, problems: the sort of problems that give rise to research traditions. Let us mention two right away. First, many Slavic linguists were uncomfortable with the non-uniform realization of Slavic aspect: why did some verbs form aspectual pairs via prefixisation, and other via suffixisation? Another (tough) problem lay in the cutoff point between aspect (in Agrell’s new narrow sense) and Aktionsart. Where did one end and the other begin? Moreover, given that prefixisation of verbs was often the method used to embody Aktionsartal distinctions, this problem interacted with the previous one. Finally, these problems were made harder (or more interesting) by what seems to have been an implicit consensus by members of the Slavic research community: a morphological solution to these problems was required. At the time of Agrell’s work morphology (along with phonology) was perhaps the most rigorous branch of linguistics. To be sure, semantic ideas were sometimes
appealed to, but it must have seemed that only an account of aspect (and its demarcation from Aktionsart) that was couched in morphological terms would be a truly solid solution.

These remarks only scratch the surface of a complex topic. The purpose of this section (and the next) is to try and give the reader some idea of the themes and problems that have occupied Slavic aspectologists over the course of the twentieth century. Many of these themes (for example, the notion of an empty prefix, various issues surrounding suffixisation in Polish, and the aspect/Aktionsart distinction) will play an important role in this thesis, particularly in Chapters 4 and 5 where we present our own approach to Polish aspectual pairs.

2.3.1 Aspectual pairs

The reader may well have come across the view that perfectivity presents an action ‘from the outside’ whereas imperfectivity presents it ‘from the inside’; such binary views have been influential in Slavic (and indeed Germanic) aspectology, and in his much-quoted textbook on aspect, Comrie (1976), adopts this approach. But where (and when) did these kinds of binary definitions arise?

The earliest of them preceded the work of Agrell. In 1877 Emil Černý characterized perfective aspect as presenting an action as

\[ \ldots \text{gesammelt, geschlossen, in ihrer Gesamtheit, summarisch, in gedrängter Form.} \]

Miklosich (1926-73) introduced the concept of ‘completion’:

\[ \text{Eine Handlung wird entweder als dauernd dargestellt oder als vollendet ausgesagt. (Miklosich, 1926-73, page 247)} \]

Definitions in terms of the opposition between ‘punctual’ and ‘linear’ can be found by Buslajev, Potebnja, Peškovskij, among others. Vinogradov (1947) introduced the concept of ‘inner endpoint’, the goal of an action (‘vnutrennyj predel dejstvija’) (Vinogradov, 1947, page 497).

Such views fitted well with the new ideas of Agrell, which encouraged grammarians to view aspect in terms of binary oppositions and aspectual pairs. Perhaps the most influential of these approaches in Slavic aspectology was Černý’s original definition of perfectivity. (An analogous way of thinking about aspect can be found in de Saussure (1922), who describes perfective aspect as presenting an action ‘in its totality.’) Černý’s view was richly elaborated in subsequent work. For example, from this starting point Růžička (Růžička, 1952, page 4, 165) and Dostál (Dostál, 1954, page 15) arrive at a description of perfective aspect as presenting the process as a whole, located entirely in the field of vision of the speaker, viewed from outside, in a perspectival view. However, whereas Růžička connected the feature of totality of action with the

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3We base our presentation of the definitions of aspectual opposition on Isačenko (1962). A similar, but a more extended presentation can be found in Dostál (1954).
feature of its inner endpoint/temporal limitation, Dostál excluded temporal elements from his definition.

An important example of how Černý’s view was incorporated into contemporary Slavic research, is the work of Maslov. He describes perfective aspect as the ‘positive, strong, intensive’ (that is, the marked) member of the aspect correlation and assigns to it the general meaning of ‘indivisible whole/entirety of the event’ (“unteilbare Ganzheit der Handlung”).

Under the influence of the definitions just described, aspect started to be theorised about in binary terms. Around the beginning of the twentieth century, there gradually arose the concept of an aspectual pair: a pair consisting of an imperfective and perfective form of one and the same verb. This binary view on aspect was for the first time explicitly expressed by Agrell (1908), and became firmly established after Jakobson (1971b).

The notion of aspectual pair needs to be understood in opposition to Aktionsart. In fact, it is precisely the notion of aspectual pair that the Slavic school uses to delimit what is truly aspectual from the merely Aktionsartal. That is, the Slavic school approach views the link between perfective and imperfective aspect as being realized by the existence of an aspectual pair. The two members of the pair are viewed as two forms of the same verb, and (a crucial point) they are viewed as having precisely the same lexical meaning. To be sure, there is certainly a semantic distinction between the perfective and non-perfective forms of any verb: this semantic distinction has something to do with a binary opposition concerning the way an event is viewed, such as the opposition between the completeness and incompleteness of an action. Nonetheless, this semantic distinction (which is usually viewed as the only semantic distinction between the two verbs in the pair) is not viewed as lexical — rather, it is the contribution of the aspectual system. Thus the difference between Agrell’s narrow concept of aspect and Aktionsart is captured by saying that changing aspect does not affect lexical meaning of the verb, whereas deriving an Aktionsartal variant of a verb does result in a ‘modification’ (though not a complete change) of the verb’s lexical semantics.

This abstract concept of an ‘aspectual pair’ is relatively clear, however its concrete realization in Slavic languages is not. The Slavic school views an aspectual pair as a pair of verbs that differ in aspect but not in lexical meaning, and views the pairing operation as being carried out by grammatical/inflectional morphemes. And, ultimately, this is the source of the debate in the Slavic school literature connected to aspectual pairs and Aktionsarten: determining what a legitimate (aspectual) grammatical morpheme actually is. Roughly speaking, the situation is this. Most Slavic school researchers would not see any problems with considering the Polish ‘suffix’ -(y/i)w(a)- as a grammatical morpheme, and would probably be unanimous in agreeing that verb pairs whose members are linked by this operation are indeed true aspectual pairs. The controversy begins when verb pairs linked by prefixisation (by empty prefixes) are considered. To give a simple illustration: all grammarians agree that kupić-kupować ‘to have bought/to be buying’ is an example of an aspectual pair; they disagree as to whether pisać-napisać ‘to be writing/to have written’ is a true aspectual pair as well.
2.3 The Slavic concept of aspect

or should be viewed merely as an example of the (resultative) Aktionsart.

The sense of unease with regard to prefixisation stems from an obvious fact about Polish (and other Slavic languages): prefixisation is a highly productive process, and Polish verbs can typically take a wide variety of prefixes, which have a wide variety of effects. Is it really justifiable to view one of these prefixes, the empty prefix, as having the same grammatical/inflectional status as a suffix? Moreover, the prefixes are clearly morphologically related to Polish prepositions — thus is it not more correct to view the prefixisation process as a word-formational process, and hence a word sense changing process, and hence as an intrinsically Aktionsartal operation? This approach has been robustly defended by many (probably most) Slavic grammarians, but it does have one drawback. Most basic verbs are imperfective and their perfective equivalents are derived by prefixisation. So if only suffixal pairs are aspectual pairs, the Polish verbal system is not correctly characterized as consisting of aspectual pairs.

The choice between admitting empty prefixisation as an aspectual operation, or abandoning the notion of aspectual pairs is fundamental, and of direct relevance to this thesis. In Chapters 4 and 5 we will develop and defend an approach in which most Polish verbs occur in aspectual pairs. This means that we are going to admit certain forms of prefixisation as true aspectual operations. Thus it will be useful if the reader has a deeper grasp of the various issue involved in prefixisation, empty prefixisation, and suffixisation, and we devote the remainder of this section to exploring these ideas from a historical perspective.

2.3.2 Issues concerning prefixisation

Work on verbal prefixisation in Slavic has always wrestled with the question of whether a pair consisting of a verb and a verb derived from it by prefixisation should be regarded as a pair of ‘forms of the same verb’ or a pair of ‘different verbs’. The first Czech grammar “Grammaticae Bohemicae…” from 1603 by Benedikt Nudožersky treats complex verbs derived by prefixisation from a basic verb as forming one group together with that verb. However, in a later Czech grammar written by Rosa in 1672, another view was defended: the different complex verbs derived from one basic verb were regarded as independent of each other (Chatterjee, 1988, page 11). The reason for the controversy between Nudožersky and Rosa lay in their insistence on treating all prefixes in a uniform way: either as grammatical or derivational morphemes.

However, the global view on prefixisation started to be gradually recognized as unsatisfactory. For instance, Agrell (1908) indicated that the combination of prefixes with basic verbs is not arbitrary — rather, certain types of bases combine with certain types of prefixes (Agrell, 1908, page 124f.). There have been attempts made in the literature to capture the relation between a prefix and a basic verb.

Most importantly however, the literature of the field is permeated with attempts to separate the ‘lexical’ from the ‘grammatical’ meaning of a prefix. Prefixes became divided into classes according to different criteria — for instance, according to their

\footnote{We were not able to access the work of Nudožersky and Rosa, hence the reference to the secondary source.}
aspectual role. It was recognized that some prefixes seem to bring about a change in the aspectual value of the basic verb, but do not change its lexical meaning, while some other prefixes clearly change both the aspect and the lexical meaning of the verb to which they apply. This two-way division of prefixes was made more fine-grained by some writers: prefixes were divided into three classes. That is, it was proposed that some prefixes clearly are word-formational morphemes (that is, they change the lexical meaning of the basic verb), some others (namely, the so-called ‘empty’/grammatical prefixes) are means of forming aspectual pairs (that is, they do not affect the lexical meaning of the basic verb but only perfectivise the basic verb), and some are means of forming Aktionsarten (that is, they change aspect but also modify the lexical meaning of the basic verb). However, while the two-way division of prefixes was relatively easy to maintain, the three-way division of prefixes has always been rather unstable. In particular, it has always been problematic to draw a line between the aspectual (‘empty’) and the Aktionsart prefixes. The class of Aktionsart prefixes seems to have been used as a dustbin for all those prefixes which did not really derive a new verb, but which also involved a slight modification of the way an event was presented.

Let’s examine an important three way division proposed in the literature. Bogusławski (1963) distinguishes between three types of possible relations between the prefix and the base: ‘selection’, ‘determination’ and ‘interdependence’. The selection relation between the basic verb and its prefix exists if the prefix completely changes the lexical meaning of the basic verb — that is, the prefix is used as a word-formational means. The determination relation arises if the prefix does not change the lexical meaning of the basic verb, but only changes its aspect — that is, the prefix is used as an aspectual pair forming means. The interdependence relation is proposed as a sort of ‘intermediate’ relation between the first and the second, and Bogusławski postulates it in order to capture the effect of the delimitative prefix po-. However, at the same time he also suggests that very often this prefix can be treated on a par with prefixes that induce a ‘determination’ relation. This is interesting, for it suggests that in Bogusławski’s opinion there may not exist an essential difference between aspectual pair forming prefixes and Aktionsart forming prefixes.

The preceding discussion was rather abstract; let’s illustrate the two/three-fold function of prefixes with a simple example.

Consider the basic imperfective pisać ‘to write’. This verb can combine with a number of different prefixes — for instance, with na-, prze-, od-, pod-, w-, do-, s-, po-, z(a)-. If considered independently of the verb, these prefixes can be associated with a number of meanings, which typically are the meanings of the formally (roughly) identical prepositions from which these prefixes developed. For example,
the preposition _na_ most typically means ‘on’, _przez_ (which gave raise to the prefix _prze-_) typically means ‘through’, _od_ typically means ‘from’. _pod_ means ‘under’, _w_ means ‘in’, _do_ means ‘to/towards’. Prepositions _z_ , _za_ , and _po_ can be ascribed a far wider range of meanings — for instance, _z_ can mean ‘with’, ‘of’, ‘from’, etc.; _za_ can mean ‘behind’, ‘for’, ‘in’, etc.; _po_ can be translated as ‘after’, ‘by’, ‘on’, ‘for’, ‘to’, etc. The result of applying any of these prefixes to the verb _pisać_ is a perfective verb. But apart from this perfectivising effect, the result of their application to the verb _pisać_ is not uniform. Some complex prefixed verbs are new lexical items when compared with the basic non-prefixed verb, some are not. One could treat all the prefixes that do not derive new verbs as aspect or Aktionsart forming prefixes. One could also take a more fine-grained look at the prefixes that do not derive new verbs, and distinguish between the aspectual pair forming prefix (that is, the ‘empty’ prefix), and the Aktionsart forming prefix. Let us illustrate these different possibilities with respect to _pisać_.

Most of the prefixes listed above are word-formational with respect to _pisać_; they derive verbs the lexical meaning of which clearly differs from the lexical meaning of the basic verb. For example: _przepisać_ ‘to copy/to prescribe’, _spisać_ ‘to make a list of/to draw up’, _odpisać_ ‘to copy/to crib/to answer (a letter)’, _wpisać_ ‘to write in’, _podpisać_ ‘sign’, _dopisać_ ‘to add writing’, _zapisać_ ‘to write down/to take down’ etc.

However there are two prefixes among those listed above that are clearly different: the prefix _na_- and the prefix _po_. As we have already discussed, the _na_- prefix serves as what is often called the ‘empty’ prefix of the verb _pisać_; this traditional terminology is meant to suggest that _na_- does not change the lexical meaning of this verb, but only makes it perfective. If combined with the verb _pisać_ ‘to write’, _na_- contributes the meaning of completion of the action of writing: the complex perfective verb _napisać_ means ‘to finish writing’. Of course, if the meaning of completion is considered as a lexical meaning component, then this prefix is analysed as an Aktionsart prefix. For this reason, Czochralski (1975), which takes a ‘suffixisation only’ position on aspectual pairing, says that _na_- derives the ‘resultative Aktionsart’ for _pisać_. In the following section we will examine Czochralski’s views on the aspect/Aktionsart distinction in Polish more closely.6

What about the other special prefix, _po_-? This is usually considered a prototypical example of an Aktionsart prefix. It is analysed as deriving the delimitative Aktionsart, and hence is called the delimitative prefix. This prefix is thought of as ‘delimiting’ the period of time during which the event referred to by the basic verb took place. That is, _popisać_, like _napisać_, asserts that a reading episode has been completed —

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6It should once again be emphasized for non-Polish reader that the prefix _na- _does not serve as empty (or if you prefer, does not serve as the ‘resultative Aktionsart’ prefix) with all verbs to which it applies — rather, it serves as empty (or ‘resultative’) with some verbs, and as a word-forming morpheme with other. To put it another way, in Polish formally different prefixes serve as empty with different verbs, and there is not one single prefix that always serves as empty. For example, in _przeczytać_ ‘to finish reading’ the prefix _prze-_ serves as empty prefix, and in _wpilić_ ‘to finish drinking’ it is _w_. For native speakers of contemporary Polish, the use of a particular prefix as ‘empty’ is something done instinctively, without being aware of the prepositional origin of such a prefix; for non-native speakers it is something (rather painful) that they need to learn ‘by heart’, as knowing the meaning of the basic verb and the original preposition can often be misleading.
but there is a difference in how this completion is conceived. In the case of the empty prefix na- (or if you prefer, in the case of the ‘resultative’ Aktionsart prefix na-) the reading episode is conceived of as ‘naturally’ over. In particular, there is a sense that the natural terminus (say the completion of the book) was achieved. In the case of the ‘delimitative’ Aktionsart po-, the action is conceived of as merely finished — the natural terminus was not reached.

Somewhat ironically, the po- prefix, though most often cited as being Aktionsartal in its function, has also been called ‘the most neutral prefix semantically’ (Comrie, 1976, page 89); the same view is taken by (Vinogradov, 1947, page 553ff.), and according to (Flier, 1977, page 224), this can be explained by the wide applicability of this prefix. So why is this prefix called an Aktionsart prefix? Because it is often described as contributing the meaning ‘for a while’, hence it is thought of as modifying the lexical meaning of the verb to which it applies. However, Isačenko (1962) and Czochralski (1975) argue that although the translation in terms of ‘for a while’ might be helpful, it actually is not fully correct; they argue that all that the delimitative prefix po- does is contribute the meaning of temporal limit of the event is now over.

The verb classification introduced in Chapter 4 determines to what verb classes this prefix can be applied, and it shows that when applied to culminating process verbs, po- expresses that the process ended before the culmination was achieved (whereas achievement of the culmination is expressed by the empty prefix na-).

To sum up, as we have seen, many different views on whether prefixisation can be regarded as a ‘true’ aspectual pair forming operation are possible, and the position taken on this matter may well interact with the position taken on the distinction between aspect and Aktionsart in Slavic languages. To round off this discussion, let’s summarize three contrasting views on these issues: that of Czochralski (1975), that of Bogusławski (1963), and that of this thesis.

1. Czochralski (1975) is the classic statement of what is probably the current received view on aspect (and Aktionsart) in Polish: only suffixisation is a legitimate means of forming aspectual pairs, and aspect and Aktionsart can be distinguished. Czochralski’s book is without a doubt the single most important study of the Polish aspectual system, and is interesting for at least two reasons. First, Czochralski backs up his account with a corpus of 9,000 Polish verbs. Second, Czochralski is well aware of the difficulties underlying his approach, namely that it is hard to draw a principled semantic distinction between verb pairs linked by suffixisation and verb pairs linked by prefixisation, and that it is hard to draw the required line between aspect and Aktionsart in Polish. Czochralski does not attempt to hide the difficulties, but wrestles with them openly, which is another reason his book is such a valuable resource.

2. Bogusławski (1963) takes a line that in certain respects is rather like that of this thesis. In particular, Bogusławski argues that verb pairs linked by prefixisation are just as much ‘true aspectual pairs’ as verb pairs linked by suffixisation. However Bogusławski’s approach, unlike the work of this thesis, is not based on word-formational analysis: it is purely semantic. This leads to some interesting
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2.3.3 Testing for aspectual pairs

Are there devices that can help to draw the two/three-way division among the prefixes (that is, devices that determine which prefixes do and which don’t change the lexical meaning of the verb)? Or to put it in a different way: is it possible to check whether a pair consisting of a basic and a complex verb is an aspectual or Aktionsartal pair?

Two major tests have been proposed in the literature, and one of these, the ‘secondary imperfectivisation’ test, plays a crucial role in this thesis. The test is traditionally explained as follows. If a prefix derives a perfective verb that differs from the basic verb with respect to lexical meaning (that is, if it derives a new verb), then that new complex verb should be again imperfectivizable (that is, it should be ‘secondarily imperfectivizable’); the complex perfective verb and its imperfective counterpart derived by the secondary imperfectivisation form an aspectual pair. On the other hand, if the derived verb cannot be secondarily imperfectivised, it means that it already formed a perfective counterpart of the basic imperfective verb.

Let’s illustrate this. Consider the verb *pisać* ‘to write-impf’ and the possibilities of secondary imperfectivisation for complex verbs derived from it by prefixisation:

\[
\begin{align*}
pisać & \quad \text{‘to write-impf’} & \quad \text{napiswać} & \quad \text{*napisywać} \\
popisać & \quad \text{‘to write-perf’} & \quad \text{*popisywać} \\
podpisać & \quad \text{‘to sign-perf’} & \quad \text{podpisywać} & \quad \text{‘to sign-impf’} \\
przepisać & \quad \text{‘copy-perf’} & \quad \text{przepisywać} & \quad \text{‘copy-impf’}
\end{align*}
\]

According to the test, the pair *pisać/napiswać* — and indeed, the pair *pisać/popisać* — are aspectual pairs. The fact that the perfective verbs cannot be again imperfectivised suggests that they form a pair together with the basic verb from which they
were derived. In Chapter 4 we define a generalized form of this test (and introduce a mirror image test that we call the secondary perfectivisation test) and use these test as the basis for determining what the aspectual pairs of Polish are. One of the virtues of these tests is that they reduce to a minimum the role played by semantic intuition.

Another test for aspectual pairs is application of the Historical Present: the forms that can be used in Historical Present as equivalents of the past tense perfective forms are their aspectual counterparts. For example: Wczoraj wróciłam do domu, napisałam list... “Yesterday, I came back home, I wrote a letter...”. If we put this sentence in the Historical Present, we get wczoraj wracam do domu, piszę list... “yesterday, I am coming back home, I am writing a letter...”. The empty prefixised verb napisałam ‘I wrote/finished writing’ in the past tense sentence is replaced by the basic imperfective verb piszę ‘I am writing’. Exactly the same Historical Present sentence can substitute Wczoraj wróciłam do domu, popisałam list... “yesterday, I came back home, I wrote a letter (for some time)...” . That is, the delimitative prefixed verb popisałam ‘I wrote (for some time)’ can be replaced by piszę ‘I am writing’. This use of the test does not detect any difference in the lexical meaning of the two perfective forms napisać ‘to finish writing’ and popisać ‘to write (for some time)’. The use of the Historical Present is an appealing and intuitive way of testing for aspectual pairs. However, we will not use it as the basis for our later work as we feel that our generalized Secondary Imperfectivisation (and Perfectivisation) tests get closer to the heart of our formant based approach to aspectual pairing.

What is the status of these tests in the literature? Generally speaking the literature is largely divided on the issue along the lines you might expect. That is, researchers who believe the notion of aspectual pair is fundamental tend to view the tests with favour, for these tests are powerful evidence in favour of the pre-theoretic intuition that Polish verbs typically come in pairs. Similarly, researchers who distrust prefixisation (that is, those who view pairs of verbs formed by means of empty prefixes as examples of Aktionsarten) tend to argue that these tests are unreliable. There are some interesting exceptions to this however. In particular, Bogusławski (1960, 1963) argues that there is no real semantic difference between pairs built by suffixisation and those built by empty prefixes, nonetheless he rejects the use of the secondary imperfectivisation test.

2.3.4 Suffixisation

Many researchers who argue that pairs of Polish verbs derived by empty prefixisation are not aspectual pairs, are not particularly meticulous about the morphology of verbal pairs derived by the so-called ‘suffixisation’ of perfective verbs. In the previous chapter we discussed suffixisation from a diachronic perspective. Now we shall briefly examine what two of the most important ‘suffixisation only’ writers on Slavic aspect have said about suffixisation from a synchronic perspective. As we shall see, both Isačenko (one of the most important 20th century writers on Slavic aspect) and Czochralski (author of the classic study of the Polish aspectual system) were well aware that Slavic ‘suffixisation’ is far from simple. We return to the topic of ‘suffixisation’ in more detail in Chapter 4.
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Pairs of verbs established by imperfectivising ‘suffixisation’ of the perfective member have always been regarded as true aspectual pairs, since ‘suffixisation’ has been always regarded as indisputably a grammatical process. Perfectivisation by empty prefixes, on the other hand, is often regarded as fundamentally different from imperfectivisation, because empty prefixes are not a formally uniform class of formants, and because formants formally identical to them can function as word-forming morphemes. But in reality, matters are far more nuanced. A more careful look shows that (like empty prefixisation) the process of imperfectivisation is not formally uniform either, and the ‘suffixal’ formants it employs can have word-formational functions as well. That is, an examination of the morphology of perfectivisation by empty prefixes and imperfectivisation by suffixes, does not fully support a principled formal separation between imperfectivisation and perfectivisation — as the more sophisticated writers on aspect (such as Isačenko and Czochralski) were aware.

For a start, it is not even clear whether one can describe the process of imperfectivisation of perfective verbs in terms of ‘suffixisation’. Isačenko (1962) observes that the so-called ‘suffixisation’ does not even always involve a suffix, and he speaks in such a case of a ‘suffixless imperfectivisation’ ("suffixlose Imperfekativierung") (Isačenko, 1962, page 368). Moreover, Isačenko observes that there is not just one single suffix that imperfectivizes a perfective verb — instead, there are several suffixes, and it is not obvious which suffix applies to which verbal form, or verbal stem. Finally, suffixisation is connected to vowel and consonant changes in the verbal root (which suggests a link with the lexicon) (Isačenko, 1962, page 366). Consider the following quotation from Isačenko:


The imperfectivisation process is complex and can involve suffixisation as well as vowel alternations. Czochralski (1975), who investigated the morphology of the imperfectivisation process in Polish, comes to similar conclusions as Isačenko (1962). Since, as he argues, the process of imperfectivisation does not simply consist in suffixation, but involves several morphological and phonological changes, he calls it ‘morphonological change’. When we present our Polish verb classification in Chapter 4 we shall follow Czochralski (1975) in referring to the imperfectivisation mechanism as morphonological change.

But recognizing the complex (roughly speaking, two-component) structure of the imperfectivising process does not yet make it completely transparent. There exists plenty of stereotypes and confusion about the shape of the mechanism of morphonological change in the literature. As Isačenko puts it:

Isačenko points out several problems connected to the way the mechanism of morphonological change is commonly analysed in the literature of the field. He shows that it is not at all clear what an imperfectivising formant is actually applied to. He discusses the status of the vowel -a- that very often precedes the infinitive ending of an imperfective member of an aspectual pair; he argues that although this -a- has been given several names in the literature (since the 1957-contribution by Jakobson, it is called a “Stammsuffix” (Jakobson, 1971a, page 10), and traditional grammars call it a “theme-vowel”), it is not clear what it really is and which function it plays; how does this -a- relate to the regular ‘suffixes’, and why is it not always present? He also provides examples of imperfectivisation, which involve changes in the root; he points out, that it is unwise to ignore them, as they are rather systematic.

In short, Isačenko clearly shows that the process of morphonological change is not uniform from a formal point of view; and more than that: he argues that this process is often intransparent and induces many questions. We cannot present the details of Isačenko’s fascinating discussion, but refer the reader to the source.

As we said at the beginning of this section, many writers who argue against viewing prefixal pairs as aspectual pairs have not been particularly meticulous about the morphology of pairs based on imperfectivisation. As we have seen, Isačenko is exempt from this criticism, and another noteworthy exception is Czochralski. Czochralski sees that there are difficulties, and presents morphological and semantic grounds for differentiating between prefixal and ‘suffixal’ verb pairs. There are two major morphological grounds. First, he argues that what he calls morphonological change is a grammatical process that serves exclusively the purpose of aspectual pairing — and in this context, he calls the imperfectivising formants “aspect suffixes”:


Another ground is that the aspect category forms pairs and not triples. Interestingly though, just before presenting this as the distinctive property of aspect (in contrast to
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Aktionsart), Czochralski says that he wishes to leave open the question whether some Aktionsarten maybe do come in pairs:


But as we shall see in the next section, Czochralski also recognizes that the same means (namely morphonological change) which is used to build what he regards ‘true’ aspectual pairs is also used in order to derive iterative verbs. That is, the argument referring to the exclusivity of the ‘suffixisation’ as an imperfectivising operation is undermined by Czochralski himself. We have also seen that not only verbs built by morphonological change, but also verbs built by empty prefixisation may, and indeed do, come in binary oppositions (that is, they cannot be secondarily imperfectivized). Moreover, in the next section we shall discuss Czochralski’s attempt at distinguishing between aspect and Aktionsart as two distinct semantic categories (“Begriffskategorien”). In particular, we shall show that the pairs of verbs that Czochralski describes as related to each other by the resultative Aktionsart relation are based on exactly the same semantic distinction as the true aspectual pairs: namely, ongoing vs. completed (“pre-resultative” vs. “resultative”) (Czochralski, 1975, page 25).

Before discussing this, however, let us briefly mention the views of Bogusławski. As we have already mentioned, Bogusławski (1960, 1963) argues that there is no real semantic difference between ‘suffixal’ and ‘prefixal’ pairs. Bogusławski believes the apparent difference can be explained by the possibility of an association of prefixes with formally (roughly) corresponding prepositions. That is, where some ‘suffixisation only’ authors are tempted to point to the existence of related prepositions as evidence that prefixisation induces lexical meaning shifts, Bogusławski neatly turns this argument on its head — the existence of such prepositions has simply distracted linguists from what would otherwise be completely (semantically) obvious: no principled distinction exists.

2.4 The Slavic concept of Aktionsart

The German term ‘Aktionsart’ literally means ‘kind of action’. Introduced by the Germanic tradition, right from the start Aktionsart was treated as something that could be expressed in a variety of ways, such as by verbal lexical semantics, by formal means (morphology and syntax), or by tenses or explicit tense markers (perfect).

Just as the Germanic tradition found it difficult to incorporate the notion of aspect, the Slavic tradition found it difficult to incorporate the notion of Aktionsart. In fact, Isačenko goes as far as to say:
Trotz gewisser Ansätze hat sich in der traditionellen Aspektlehre die Theorie der Aktionsarten nicht durchgesetzt. (Isačenko, 1962, page 361)

Indeed, the notion of Aktionsart cannot be found back in contemporary Slavic dictionaries, and it is hard to find in school grammars. Transposed to Slavic linguistics, the concept of Aktionsart was never as clearly delimited as the concept of aspectual pairs.

The basic idea of Aktionsart in the Slavic tradition was that it should only ‘specify in more detail’ how the action took place — that is, Aktionsart should ‘modify’ the lexical meaning of the basic verb, but not change it completely. This led to the view that Aktionsart could be contributed by several affixes. Another important characteristic ascribed to an Aktionsart verb is that it is ‘unpaired’ — that is, it does not have an aspectual twin. Understood in this way, the concept of Aktionsart was vague and difficult to apply. On the one hand, it was not clear which morphological means might qualify as means of forming Aktionsarten; at the same time, there seems to have existed an assumption that an Aktionsartal formation should represent a productive process — that is, the Aktionsart deriving affix should be applicable to a large number of verbs, and it should yield the same semantic effect. On the other hand, it is not clear to what degree the lexical semantics might be affected; but then, the underlying assumption of the Slavic study of Aktionsart seems to be that the Aktionsartal modification should modify the temporal properties of the event described by the basic verb (Binnick, 1991, page 145ff.). So the key problem was: how much of the lexical meaning of the basic verb may an affix change so that the complex verb neither qualifies as an aspectual form of the basic verb, nor as a new lexical item? If Aktionsart affixes modify the lexical meaning of the basic verb, exactly what components of (temporal) meaning can they change? That is, on the one side, Aktionsart formation was to be distinct from word-formation, and on the other, it was to be distinct from the process of aspectual pairing.

How Aktionsart in Polish can be distinguished from outright word change is not a topic of relevance to this thesis, and we won’t discuss it further. But how Polish aspect and Aktionsart are to be differentiated is of interest (the verb classification presented in Chapter will treat both delimitative po- and semelfactive -nq- as giving

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7 Isačenko (1962) explicitly distinguished between aspect, Aktionsart and Verbalcharacter. He separated ‘Aktionsart’ from ‘Verbalcharacter’ by defining the former as derived by formal means, and the latter in terms of the lexical meaning of verb.

8 The issue is rather delicate. Some of the (perfective) Aktionsart verbs can and some cannot be secondarily imperfectivised. If an ‘Aktionsart verb’ can be secondarily imperfectivised, it should be treated as a new verb, and the ‘Aktionsart affix’ that was used to derive it, should be regarded as a word-formational affix. If, on the other hand, an Aktionsart verb cannot be again imperfectivised, it should, in several cases, be treated as an aspectual twin of the basic verb from which it was derived, and the ‘Aktionsart affix’ should be treated as an aspectual formant. Let us illustrate this. Scholars who apply the concept of Aktionsart argue that the empty prefixes are Aktionsart prefixes; that is, a verb such as napisac ‘to write-perf’ is a resultative Aktionsart, and not an aspectual twin of pisac ‘to write-impf’, since it adds a (lexical) meaning of an achieved result; napisac ‘to write-perf’ cannot indeed be secondarily imperfectivised. However, on the other hand, a Russian verb such as pročitat’ ‘to read-perf’ (but not its Polish correspondent przeczytać!) can be again imperfectivised, and this is taken as an argument for the view that pročitat’ ‘to read-perf’ is a resultative Aktionsart of čitat’, and not its aspectual twin: pročitat’ is then thought of as being paired with the secondarily imperfectivised verb pročítávat’ (Isačenko, 1962, page 363); note that pročítávat’ has an iterative and not a single episode interpretation.
rise to aspectual pairs, not merely to Aktionsartal variants) so let’s discuss some of the received ideas on this topic.

As we have already said, the sharp separation between Slavic aspect and Aktionsart was first proposed and argued for by Agrell (1908), but it became established only in the 1930s (though, as we saw above, as late as in the 1960s, Isačenko could remark that the concept of Aktionsart hadn’t yet carried through to ‘traditional aspect study’). Researchers have given involved morphological and semantic arguments in favour of this distinction. As the reader might recall, examples of important contributions are Jacobsohn (1926, 1933), Porzig (1927), Hermann (1927). One of the main semantic arguments in favour of distinguishing between these categories was the conviction that aspect was a subjective and Aktionsart an objective category. As aspect is often thought of as involving the perspective from which the event is viewed (for example, ‘from the outside’ or ‘from the inside’), it is often described as subjective. Aktionsart, on the other hand, can be described as being a property of an event, so in this sense it could be said to be objective. But the ‘subjective/objective’ distinction is not the only distinction that is thought of as underlying the distinction between aspect and Aktionsart in Slavic. The difference between the two categories is often explained in terms of a number of semantic oppositions. Let’s consider them.

Aktionsart is often thought of as a lexical category. By definition, Aktionsart describes the manner in which the event takes place. Aktionsart is distinguished from aspect by assuming that it changes the lexical meaning of the basic verb. It is often thought of as not related to the tense system. Aktionsart is not considered to be an obligatory or a binary category of a Slavic verb.

Aspect, on the other hand, is thought of as an obligatory, binary category of a Slavic verb — in sharp contrast to Aktionsart, Slavic aspect is described as grammatical. It is typically treated as part of the Slavic temporal system. School grammars as well as traditional grammars describe aspectual opposition as an opposition between complete and incomplete tenses; see for instance Czochralski (1975).

Let’s put all this in a table:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Aktionsart</th>
</tr>
</thead>
<tbody>
<tr>
<td>subjective</td>
<td>objective</td>
</tr>
<tr>
<td>perspective</td>
<td>property of situations</td>
</tr>
<tr>
<td>grammatical</td>
<td>lexical</td>
</tr>
<tr>
<td>temporal</td>
<td>atemporal</td>
</tr>
<tr>
<td>obligatory</td>
<td>facultative</td>
</tr>
<tr>
<td>binary</td>
<td>not binary</td>
</tr>
</tbody>
</table>

Presented in this way, the distinctions may seem clear-cut — but the fact that their correctness has been passionately discussed throughout the twentieth century suggests that they are in fact far from unproblematic. Indeed, objections have been raised against all of the oppositions in terms of which the ‘aspect/Aktionsart’ distinction has been explained. Let us briefly consider the ‘grammatical vs. lexical’, and the ‘subjective vs. objective’ distinction, which have played a particularly important role in trying to determine where the line between aspect and Aktionsart should be drawn.
Some people questioned the ‘grammatical vs. lexical’ distinction, some wondered what it really meant. The distinction is removed automatically if one treats aspectual forms as independent verbs. But if one starts to think about the concrete meaning of calling something a grammatical category, interesting questions arise. The fundamental question has never been conclusively answered: do the formal means of aspectual modification — and in particular, the empty prefixes — belong to inflectional or derivational morphology? This question is in reality rather hard to answer for such a category as Aktionsart. It is not obvious how one can treat Aktionsart as a purely lexical category if at the same time one maintains that it is expressed by explicit formal means that just give a more detailed description of how the action expressed by the basic verb takes place. And perhaps the question cannot be answered definitively, because the distinction between inflection and derivation might in fact be, as Bybee (1985) argues, a (gradual) distinction in the amount of semantic content of a morpheme.

Consider again the ‘subjective vs. objective’ distinction. Many writers have referred to the ‘subjective vs. objective’ distinction when trying to explain the opposition between aspect in Aktionsart — for instance, Hermann (1927), Jakobson (1971b), Maslov (1962), Forsyth (1970), Comrie (1976), among many others. Surprisingly few people have objected to this rather flimsy distinction. An interesting discussion about it can be found in Pollak (1967). Pollak explains how the concepts ‘objective’ and ‘subjective’ might have been transposed to aspectology via the study of mood; the tradition of analysing the category of mood in terms of a ‘subjective’ category comes from the Greek grammarians, and was continued by the great German grammarians such as Wilhelm Wundt and Karl Brugmann (Pollak, 1967, page 409ff.). According to the received view, aspect is called ‘subjective’, because it is thought of as being determined by the speaker’s free choice of the perspective from which he wishes to view an event. Aktionsart, on the other hand, is called ‘objective’, because it is thought of as reflecting properties of the event, which is regarded as a ‘real-world’ entity. But this simple claim doesn’t withstand scrutiny. It is difficult to see how popisać ‘to write for a while’, and napisać ‘to finish writing’ should be objective but not pisać ‘to be writing’. And why would the perfective kupić ‘to have bought’ be subjective but not the perfective napisać ‘to write/to finish writing’?

Czochralski on Aktionsart and aspect

Many attempts have been made to pin down what Aktionsart in Slavic is. Not only morphological criteria, but as we saw above, also semantic distinctions have been invoked in order to separate the two concepts. But none of the attempts seems satisfactory — and given the uneasy way Aktionsart in Slavic languages is balanced between aspect and word change, this is hardly surprising. But one attempt to capture the essence of Polish aspect and Aktionsart cannot be easily dismissed, namely the approach in Czochralski (1975). This book, a detailed examination of the Polish verbal system, gives a classical account of the Slavist’s theoretical account of Aktionsarten, and their relation to aspect. Czochralski’s view on Aktionsarten is based on an Aktionsartal classification proposed by Isačenko (1962). However, there is one crucial
2.4 The Slavic concept of Aktionsart

difference between the two classifications: in contrast to Isačenko, Czochralski does not include under Aktionsarten the ‘semelfactive’ Aktionsart.

We here present and discuss Czochralski’s classification of Polish Aktionsarten and his analysis of the distinction between aspect and Aktionsart. First, we shall identify ‘Aktionsarten’ which actually do not belong to the Aktionsartal system, and we shall rule them out. Most of the Aktionsarten that we shall rule out are actually refused the name ‘Aktionsart’ by Czochralski himself, they do not completely fit the definition of Aktionsart, and moreover they cannot be accounted for within Czochralski’s theoretical setup. What will remain, will be Aktionsarten that encode temporal distinctions on the events denoted by the basic verbs. We shall then consider Czochralski’s semantic analysis of Polish aspect and Aktionsart, and we shall show that it does actually not support a distinction between these two categories. We shall also consider Czochralski’s formal arguments for the aspect versus Aktionsart distinction, and we shall argue that they are not convincing. We shall conclude that what Czochralski analyses as distinctions in Aktionsart are actually reflections of the aspecural class of the basic verb that is perfectised.

Czochralski (1975) divides Aktionsarten into imperfective and perfective Aktionsarten, but he remarks that the perfective Aktionsarten are much more developed than the imperfective ones (Czochralski, 1975, page 24). The translations are direct English correspondents of Czochralski’s German translations (if there are no direct English equivalents available, Czochralski’s German translations are given in brackets); (Czochralski’s translations tend to emphasise the meaning component that is the basis for categorisation of a verb under a certain Aktionsartal class).

- Perfective Aktionsarten
  - resultutive
    - zreperować ‘to have repaired’ (“fertig werden mit reparieren”) ⇐ reperować ‘to repair’;
  - ingressive
    - zapachnieć ‘to begin to smell’ ⇐ pachnieć ‘to smell’;
  - delimitative
    - poczytać ‘to read for a while/a bit’ ⇐ czytać ‘to read’;
  - distributive
    - popalić ‘to burn everything, one thing after another’ ⇐ palić ‘to burn’;
  - evolutive
    - rozspiewać się ‘to get into singing’ (“sich freisingen”) ⇐ śpiewać ‘to sing’;
  - partial-resultative
    - leczyć-poleczyć ‘to have cured partly’ ⇐ leczyć ‘to cure’;

- Imperfective Aktionsarten
iterative

czytywać ‘to read from time to time/use to read’ ⇐ czytać ‘to read’;

comitative

przygrywać ‘to play (to something)/accompany by playing’ ⇐ grać ‘to play’;

extended iterative:

(i) diminutive iterative

popadywać ‘to rain a little from time to time’ ⇐ padać ‘to rain’,

(ii) intensive iterative

poszukiwać ‘to look (for something) eagerly’ ⇐ szukać ‘to look (for something)’.

Let us start with a few simple observations about Czochralski’s Aktionsart classification. First, most of the perfective Aktionsarten cannot be again imperfectivised, and the imperfective Aktionsarten cannot be again perfectivised (unless going back to the original verb from which they are derived). Second, with a few exceptions, Czochralski’s Aktionsarten are temporal in nature: they refer to the phasal structure of events (and indeed, these verbs, as a rule, do not allow for secondary imperfectivisation). What we called “exceptions” are unproductive and atemporal Aktionsarten (typically, the unproductive Aktionsarten are atemporal). Third, as we shall soon see, Czochralski analyses Aktionsarten as being built on essentially the same semantic distinctions on which aspectual pairs are built. Since the analysis involves temporal distinctions only, only Aktionsarten that induce temporal distinctions can be accounted for within Czochralski’s theory of aspect and Aktionsart. And now for the last observation. When describing particular Aktionsarten listed above, Czochralski remarks that some of them actually should not be called Aktionsarten: namely, the unproductive Aktionsarten (“Von dem Terminus Aktionsart sehe ich hier bewußt ab. Es gibt nämlich nur wenige Verben dieser Art” (Czochralski, 1975, page 23)). It seems that the unproductive and atemporal Aktionsarten, which we called exceptions, should rather be treated as instances of a word-forming mechanism, as they for instance tend to have secondary imperfectives. So let us rule out the unproductive and atemporal Aktionsarten from Czochralski’s classification.

Some of the Aktionsart verbs listed in Czochralski’s classification presented above, when discussed, are actually explicitly refused the name ‘Aktionsart’. These are the following verbs: iterative, comitative, diminutive and intensive iterative verbs — that is, the imperfective Aktionsarten. Other verbs which are according to Czochralski unproductive, are partial-resultative Aktionsart (Czochralski, 1975, page 22-24). When these quasi-Aktionsarten are ruled out, we are left with resultative, ingressive, delimitative, distributive and evolutive Aktionsart.

Let us now consider the distributive and the evolutive Aktionsarten in order to rule them out as well. The first glance at the (not very extensive) list of ‘distributive Aktionsart’ verbs reveals that they share a lot with the delimitative Aktionsart verbs. For a start, they are both derived by means of the same prefix. Secondly, neither of them can
be secondarily imperfectivised. Furthermore, the distributive verbs have a delimitative interpretation as well — indeed, they seem to have the delimitative interpretation as their basic interpretation. The distributive interpretation can arise in certain contexts, and under certain conditions — for instance, if the direct object is in plural. Consider Czochralski’s example *popalić*, a verb that he translates as ‘to burn everything one thing after another’. Actually, a distributive reading of this verb can arise only in a specific context. Perhaps it can arise in the sentence *Jan popalił wszystkie książki* ‘Jan burned all (the) books’; but then, it is not clear at all that Jan necessarily burned the books one after another. Typically though, this distributive meaning effect does not arise for the verb *popalić*. In any case, it does not arise if the direct object is in singular: *Jan popalił ognisko* ‘Jan made/has been making bonfire (for some time)’, *Jan popalił w piecu* ‘Jan heated/has been heating with a stove (for some time)’, etc. But it also does not necessarily arise when the direct object is in plural: *Jan popalił papierosy* ‘Jan smoked/has been smoking cigarettes (for some time)’. Hence we prefer to think of the verbs listed by Czochralski under the ‘distributive Aktionsart verbs’ as delimitative verbs, which can yield a distributive meaning effect when placed in certain contexts. Verbs that are derived as ‘evolutive Aktionsart’ are more accurately analysed as new lexical items. They have a different argument structure than the verbs to which they are linked within Czochralski’s Aktionsart classification, and they can be secondarily imperfectivised. Consider *rozspiewać się* ‘to get into singing’. It is possible to secondarily imperfectivise this verb: *rozspiewywać się* ‘to be getting into singing’: *Jan rozspiewywał się, kiedy zgasły światła* ‘Jan was getting into singing, when the light went out’. Similarly, *rochorować się* ‘to have become really sick’, becomes secondarily imperfectivised to *rochorowywać się* ‘to be becoming really sick’. But the secondarily imperfectivised forms are rarely needed, and hence rarely created.

The remaining Aktionsarten are the following: the resultative, the ingressive, and the delimitative Aktionsart. Czochralski describes the ingressive and the delimitative Aktionsarten as productive Aktionsarten, and the resultative Aktionsart as an “extraordinarily productive” Aktionsart. As he puts it, the resultative Aktionsart modifies the basic verb with a clear shade of meaning: it emphasizes the achievement of the result of the action. He says that the ingressive Aktionsart emphasizes the onset of the course of the action, and does not say anything about the end result of it. He presents the delimitative Aktionsart as connoting the action as a partly performed one. He notices that this meaning shade can be often, although not precisely, mirrored with expressions such as ‘for a while’, ‘a bit’, ‘to a limited extent’ (Czochralski, 1975, page 20-21). These Aktionsarten follow the Slavic definition of Aktionsart in the following sense: they are productive, they encode temporal distinctions, and verbs expressing them cannot be secondarily imperfectivised. Moreover, the resultative and the delimitative Aktionsart can be accounted for within Czochralski’s semantic analysis of Polish Aktionsarten (this is less clear for the ingressive Aktionsart). By contrast, the Aktionsarten that we have ruled out, cannot be accounted for within Czochralski’s semantic analysis. As we mentioned earlier, Czochralski’s account of the semantics of Polish aspect and Aktionsart does not have notions at its disposal that would capture the unproductive atemporal Aktionsarten. (Incidentally, Czochralski’s analysis does
include the notion of iterativity, but as we said, he refrains from analysing iterative verbs as true Aktionsart verbs.)

Czochralski argues that Polish aspect and Aktionsart can be analysed in terms of the three semantic distinctions (thought of as ‘features’):

<table>
<thead>
<tr>
<th>imperfective</th>
<th>perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>durative</td>
<td>momentaneous/non-durative</td>
</tr>
<tr>
<td>iterative</td>
<td>semelfactive/non-iterative</td>
</tr>
<tr>
<td>pre-resultative</td>
<td>resultative</td>
</tr>
</tbody>
</table>

Czochralski explains that from a semantic perspective, aspect differs from Aktionsart only as to the distribution of these semantic features. In particular, he argues that in the case of an aspectual pair the three semantic features always come together in form of a ‘bundle’. By contrast, an Aktionsart verb is in his view characterized in terms of one single feature. Hence Czochralski defines a true aspectual pair as a polystructural category, and Aktionsart as monostructural category.

But Czochralski does not seem to maintain the semantic analysis of the aspectual pair in terms of a bundle of features. Nowhere do we find a concrete illustration of his view on the semantic difference between aspect and Aktionsart.

Indeed, we shall now show that Czochralski describes the semantics of a true aspectual pair in exactly the same way as he describes the semantics of the resultative Aktionsart: namely in terms of an achieved result. Czochralski illustrates the resultative Aktionsart with the perfective verb *zreperować* ‘to have repaired’ which is derived from the imperfective verb *ruperować* ‘to be repairing’ by applying the empty prefix *z-. As an example, Czochralski uses the sentence *Reperowaneś rower, ale go nie *zruperowanoś* ‘repaired-impf bike, but it-acc not repaired-perf’ ‘You were repairing the bike but you haven’t repaired it’. He argues that the perfective prefix *z-* besides making *reperowaneś* perfective, also contributes the meaning of an achieved result, which he takes as a lexical and not a temporal semantic element. Hence he calls the verb *zruperowaneś* a resultative Aktionsart verb. Czochralski describes the semantics of a true aspectual pair in terms of the same ‘pre-resultative’ versus ‘resultative’ distinction. As an illustration Czochralski uses the sentence *Ojciec już mi dawał pieniądze na rower, ale w końcu nie dał* ‘father already me-dat gave-impf money for bike, but in the end not gave-perf’ ‘Father was already giving me the money for the bike, but finally he didn’t give it to me’. He describes the imperfective *dawać* ‘to be giving’ as ‘pre-resultative’, and the perfective *dać* ‘to have given’ as ‘resultative’ — that is, in exactly the same way as he described the semantics underlyng the opposition between *reperować* ‘to be repairing’ and *zreperować* ‘to have repaired’. And indeed, in another chapter of his book, Czochralski explicitly argues that verbs standing in the resultative Aktionsartal relation, do function as true aspectual pairs in the process of communication. He calls pairs of verbs which theoretically are not true aspectual pairs, but in reality do function as such, “secondary aspectual pairs”. It should be noted that when discussing the aspectual pair *dać-dawać* ‘to give’, Czochralski does not mention the two other features belonging to the bundle. 9

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9This observation seems to support Isačenko’s illuminating remark that the criterion of calling something
We have just seen that Czochralski’s distinction between aspect and Aktionsart is not supported semantically. But Czochralski also provides a formal argument in favour of the aspect/Aktionsart distinction. In particular, he argues that the imperfectivising suffix -yw- is used exclusively for the purpose of the formation of aspectual pairs. According to him, this is an unquestionable argument that aspect, in contrast to Aktionsart, is a morphological, and a grammatical category. As he puts it:


But as we could see above, Czochralski’s own Aktionsartal classification makes explicit that it is not the case that the suffix -yw- that is used for the aspectual purpose, is used for this purpose exclusively. The iterative verbs and their subclasses contain namely formally an identical suffix -yw-. Interestingly, when discussing these verbs, Czochralski says that the reason why he refrains from actually analysing them as Aktionsart verbs is that (except of being unproductive and rare) they do not contain a prefix, but the suffix change — and the suffix change is a means of forming aspectual pairs.

Ein weiterer Grund für diese Auffassung besteht darin, daß diese Verben kein Präfix aufweisen, sondern einen Suffixwechsel im Vergleich mit den Grundverben. Der Suffixwechsel ist aber das aspektbildende Mittel. (Czochralski, 1975, page 23)

Czochralski’s argument for distinguishing between aspect and Aktionsart on the basis of formal criteria does not seem more convincing than his argument based on semantic considerations. It seems that the only argument in favour of the distinction between aspect and Aktionsart is the assumption that the suffix -yw- is a grammatical and a prefix a word-formational morpheme (an indication of this view we could see in the last quotation). But this assumption represents a rather problematic criterion for distinguishing aspect from Aktionsart. For instance, it appears problematic when one compares Slavic languages to each other. For instance, the Polish perfective verb kupić ‘to buy-perf’ is imperfectivised by the suffix -ow- to form kupować ‘to buy-impf’, and hence, it is considered to be an aspectual pair. However, the Russian imperfective equivalent of the basic perfective verb kupit’ ‘to buy-perf’ is pokupat’ ‘to buy-impf’ (that is, except of suffixisation, it undergoes prefixisation).

Nonetheless, Czochralski’s contribution is constructive in two ways: first, through the insight that the notion of perfective and imperfective aspect cannot be exhaustively

an aspectual pair actually depends on the meaning that one ascribes to the opposition between perfective and imperfective aspect (Išačenko, 1962, page 360).
described in terms of one universally-applicable semantic notion (he argues that it involves a ‘bundle’); and second, through his failure to prove that two verbs forming an aspectual pair are indeed based on the bundle of three semantic notions, in contrast to two verbs forming an Aktionsartal pair.

Instead, it seems that the different features that Czochralski proposes in order to analyse Polish aspect and Aktionsart are reflections of the aspectual class of the basic verb to which an aspectual (or for that matter, an ‘Aktionsartal’) formant applies. We can view the resultative, the ingressive, and the delimitative meaning effect as a result of making different sorts of verbs perfective. Intuitively, different events can get completed in different ways. There is no principal distinction between aspect and Aktionsart, and it also does not make sense to speak of there being in Polish two separate though related categories of aspect and Aktionsart. This view on Czochralski’s contribution is revealed by our aspectual classification of Polish verbs, presented in Chapter 4.

As we have seen from this discussion, it is difficult to come to a coherent account of what Aktionsart in Polish actually is. Nonetheless, for a traditional Slavic linguist who believes that only suffixes can give rise to true aspectual pairs, Aktionsart is a very useful category to have around. It gives a convenient name for such inconvenient prefixed pairs as *pisać* vs. *napisać* and *pisać* vs. *popisać*. Of course, calling these pairs ‘Aktionsartal’ means that the story about what Aktionsart is becomes very complicated, as they have to be treated as the resultative Aktionsart and the delimitative Aktionsart, respectively. Nonetheless, the battle to find a concept of Aktionsart that covers all these things probably seems worth while from such a perspective. After all, it allows the concept of aspectual pairs to be restricted to verbs linked by suffixisation, and hence allows aspect to be viewed as an inflectional category. But we think the formant-based approach to aspectual pairing presented in Chapters 4 and 5 is far more simple and revealing.

### 2.5 Aspect and Aktionsart in contemporary linguistics

As we have seen, research on aspect has long been carried out in two separate streams, the Germanic and the Slavic. After 1957 these two streams became even more sharply differentiated. The cause was the publication of Noam Chomsky’s “Syntactic Structures”. Among its other contributions, Chomsky (1957) inaugurated a more formal, mathematically oriented, approach to linguistics, which quickly came to dominate syntactic and phonological research in the West. The new emphasis on mathematical precision was extended to semantics in the early 1970’s by Richard Montague, who showed how the idea of model-theoretic interpretation could be applied to natural languages (see Montague (1974)).

What were the effects on aspectology? In the Germanic tradition, the impact was profound. The work of Chomsky and Montague brought about a complete change of paradigm in the Germanic tradition. Aspect had to be re-discovered and re-located inside this new research territory, and investigated with formal tools. A number

It is worthwhile briefly discussing the work of David Dowty. Not only was his book “Word Meaning and Montague Grammar” one of the earliest in the new paradigm, it was (and remains) one of the most detailed, and influential.

Dowty is quite explicit about his aims. In the opening sentence of the book’s Foreword he states:

The most general goal of this book is to propose and illustrate a program of research in word semantics that combines some of the methodology and results in linguistic semantics, primarily that of the generative semantics school, with the rigorously formalized syntactic and semantic framework for the analysis of natural languages developed by Richard Montague and his associates . . .

His second aim is to

. . . dispel the misconception widely held by philosophers that all interesting and important problems of natural language semantics have to do with so-called logical words and their compositional semantics rather than with word-semantics . . .

To illustrate that these goals are achievable, Dowty shows that Vendler’s “Aristotelian” verb classification of states, activities, accomplishments, and achievements can be incorporated into Montague semantics. The book is devoted to applying these ideas to a wide variety of problems in the temporal semantics of English, particularly those where the semantics of tense and time adverbials is intertwined with verb meaning.

Dowty’s book is rightly regarded as a key contribution to the study of aspect. But two comments should be made. First, there is a sense in which Dowty works with a very broad conception of ‘aspect’. Second, there is a sense in which his conception of ‘aspect’ is actually rather narrow.

Dowty’s conception is broad in an obvious sense. He refers to Vendler’s verb classification as an aspectual classification. This is clearly a long way removed from Agrell’s narrower concept of aspect. Rather, it is a modern relative of Streitberg’s and Brugmann’s broad, Greč-inspired notions of Aktionsart. And indeed, what Dowty calls ‘aspect’ would in terms of traditional aspectology be called ‘Aktionsart’: it is ‘objective’ and ‘stable’ (it has a solid model-theoretic interpretation), and it is ‘lexical’. Dowty’s broad use of the term ‘aspect’ is widespread in post-Montagovian approaches to aspect; for example Moens and Steedman (1987, 1988) use the term ‘aspectual’ in a similarly broad way.10 This broad usage it quite acceptable and under-

10Dowty himself was well aware that he was using the term aspect in broader sense than usual: in his discussion of the matter (page 52) he calls his usage “not a wholly appropriate term”. But he then goes on to give an interesting justification for it, remarking that “It is because of this intricate interaction between classes of verbs and true aspect markers that the term aspect is justified in a wider sense to the problem of understanding these classes of verbs . . .”.
Aspect and Aktionsart: some History

standable. For a start, the formal paradigm is a new one, and its practitioners should be free to choose terminology as they see fit. Moreover, it is worth recalling that Agrell’s narrower conception of ‘aspect’ was inspired by his work on Slavic languages. It is not obvious that a close correlate of Slavic aspect exists in Germanic languages with their far weaker verbal morphology. Indeed, as we have seen, Germanic grammarians devoted more that 50 years after the work of Agrell to debating precisely this point!

But in spite of this expansion of the term ‘aspect’, Dowty’s conception of ‘aspect’ is in another sense quite narrow. Slavic researchers have long emphasized the ‘subjective’, ‘dynamic’, ‘speaker-oriented’ interpretation of aspect. And these ideas can be modeled formally. Hans Kamp (who was investigating the semantics not of a Germanic language but of French; see Kamp (1981a, b), Kamp and Rohrer (1983a)) showed that speaker perspective and the discourse effects could be incorporated into formal semantics; this work culminated in the development of Discourse Representation Theory (DRT) (see Kamp and Reyle (1993)). Now, we are not trying to suggest that Kamp’s views on discourse interpretation can be identified with Agrell’s narrow concept of aspect; indeed this seems quite implausible. Rather, the point is that the new formal paradigm gave rise to a wide range of tools, and these tools have proved capable of modeling a wide range of different themes in ‘aspect’ (construed broadly) — or at least, they have proved capable of doing so when applied to non-Slavic languages.

And this brings us to the next point. What were the effects of the new formal paradigm on the Slavic school? Initially very little. For social and historical reasons, the work of Chomsky and Montague did not resonate in the then East bloc nearly as loudly as it did in the West. So most Slavic aspectologists simply continued to work as descriptive grammarians: they held on to the classical Slavic approach to aspect, which emphasizes morphological rather than semantic work.

The Slavic school carried out a great deal of important work in this period. In particular, the work of Maslov (1962, 1963), and Isačenko (1962) consolidated and extended the existing work of the Slavic school, and became something of a reference point for work in this tradition. Moreover (and of particular relevance to this thesis) Czochralski (1975) was an exhaustive examination of the aspect and Aktionsart in Polish from the traditional Slavic perspective. We might sum up by saying that much of the work of this period is best viewed as the steady continuation (and often, culmination) of work on the traditional Slavic themes that Agrell’s work initiated at the turn of the twentieth century.

But not all work of this period can be viewed this way. There appeared a few papers (never influential) that were semantically rather than morphologically oriented. Interestingly, within this semantic substream, one can even find anticipations of concepts that were later developed in the Western formal semantical tradition. In particular, in the 1970’s, Francesco Antinucci and Lucyna Gebert analyse Polish verbal aspect with the help of what is known after the work of Moens (1987) and Moens and Steedman (1987, 1988) as the ‘nucleus structure’ of an event. The contribution was first published in Italian in Antinucci and Gerbert (1975/76) and later in Polish in Antinucci and Gerbert (1977). Karolak (1996) remarks that the contribution, al-
though a “breakthrough” in the way of the interpretation of the category of aspect as a grammaticalized *semantic* category, did actually not bring about a radical change in the way aspect is investigated in Slavic linguistics. Interestingly, as one of the most probable reasons for the ignorance of this contribution, Karolak (1996) names its ‘crucial distinction from the depictions of the category of aspect characteristic for the contemporary — and especially, Slavic — aspectology’ (Karolak, 1996, page 9).

Moreover, more recently, this period saw the first signs of another transfer (the latest in a long line) between the Germanic and Slavic traditions. In particular, Verkuyl (1972, 1999) and Krifka (1989b) took their Germanically inspired formal accounts of aspect, and attempted to apply them to Slavic languages. Somewhat later, Schoorlemmer (1995) (building on the work of Verkuyl) and Filip (1993) (building on the work of Krifka) further extended this program. Because of its direct relevance to the concerns of this thesis, we shall devote the whole of the following chapter to their investigations. Mention should also be made of Carlota Smith, and her two-component analysis of aspect. Smith (1991) draws a distinction between grammatical aspect and lexical aspect, which is somewhat reminiscent of the distinction between aspect and Aktionsart. However, there are few points of contacts between her work and ours and we won’t discuss her work in our thesis.

2.6 Summary

We have covered a lot of ground in this chapter, and there is a risk that the reader may have lost track of the main stages of the story in the mass of details. So, to conclude, here is a schematic view of some of the main points of the historical narrative:

1. **Before 1908: Aspectology as a pre-science**
   - Slavic aspect originally viewed as part of the tense system.
   - Greč (1827) introduces a broad view of aspect (‘circumstances of action’). This conception is adopted by the Germanic grammarians under the name Aktionsart.
   - Distinct Slavic and Germanic streams of aspectology emerge.
   - In the Germanic stream, Grimm, Streitberg, Brugmann, and others carry out comparative studies (paralleling what Greč did for Slavic).
   - In the Slavic stream, Miklosich, Černý, and others build the beginnings of a binary view of aspect.

2. **After 1908: Aspectology as mature-science**
   - Agrell (1908), drawing on ideas from both the Germanic and Slavic traditions, distinguishes aspect from Aktionsart in essentially the manner used today. Aspectology, using these new conceptual and descriptive tools, becomes a mature science.
• The Germanic stream responds to Agrell’s ideas by becoming increasingly theoretical. Considerable energy is devoted in the first half of the twentieth century to seeing whether Agrell’s new concept of aspect applies to Germanic languages.

• The Slavic stream responds to Agrell’s idea with intensive linguistic investigations, developing the binary view of aspect, and addressing the problems raised by prefixisation and the link between aspect and Aktionsart.

3. **After 1957: Western linguistics enters a formal phase**

• With the publication of “Syntactic Structures” Western linguistics enters a formal phase. The work of Richard Montague extends this phase to semantics in the early 1970s.

• Researchers such as Dowty, Verkuyl, Kamp, Krifka, Moens, and Steedman apply formal methods to the study of aspect and Aktionsart for non-Slavic languages.

• Workers in the Slavic linguistic tradition are relatively untouched by the formal approaches of Chomsky and Montague. For the most part, their work continues to be carried out from a morphological perspective (though there is an interesting substream of semantically oriented work). Notable achievements during this period include the work of Maslov, Isačenko, and Czochralski’s exhaustive examination of the Polish verbal system.

• Researchers from the Western tradition of formal semantics, notably Verkuyl and Krifka, apply modern tools to Slavic aspect. These approaches are later extended by Schoorlemmer and Filip. We discuss the relevance of these works to Polish in the following chapter.