The Compositionality of Aspect and its Analysis

by

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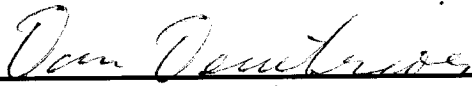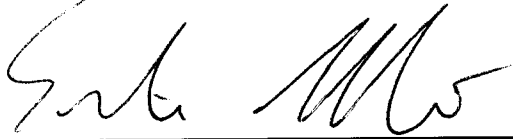
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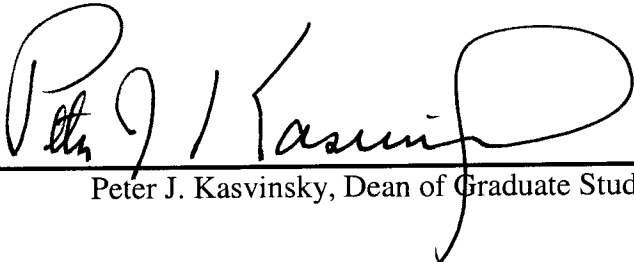The Compositionality of Aspect and its Analysis

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Abstract

Various features (such as the situation type of the verb phrase, mass/count and definite/indefinite nature of the noun phrases, adverbials, aspect, tense, orientation, etc.) combine to create the aspectual nature of sentences. The final aim of this study is to define and categorize as many of these compositions as possible in order to determine how aspect is derived with predictive value.

Although a few of these features, like adverbials and the behavior of mass/count nouns, are well-understood by linguists, other features, like 'orientation' and 'aktionsart,' lie on the frontier of linguistic, semantic, and philosophical study. Thus, much of the space of this study is devoted to these preliminary matters, so as to examine aspectual compositionality in a more coherent way.

The aim of this study is achieved in four steps: First, previous research on aktionsart is utilized in the construction of a new model which, I believe, resolves the linguistic and metaphysical difficulties surrounding verbs like *pop* and *discover*. I then turn my attention to aspect itself in the third chapter, where I pare the category down to the imperfective/perfective distinction alone. Showing that the perfect, long counted among tenses and aspects, is in fact 'orientation' is the third step. I finally turn my attention to aspect and aktionsart composition in the chapter 5, wherein all major constituents of aspectual construction are identified and patterns of their interaction are noted.

Contents

Preface

The original purpose of this work was to investigate the compositional nature of aspect, but a literature review quickly revealed the need for a more fundamental analysis. The constituents of aspect, their order, and the very nature of the category itself are subjects that enjoy little unanimity of opinion in linguistics. As I try to show in this thesis, the little progress that has been made was slowed by the "garbage can" treatment aspect has received, for what is termed 'aspect' in even the best college grammars is actually a hodge-podge of at least three quite distinct categories: aspect, situation-type or 'aktionsart,' and the perfect or 'orientation.' To accommodate the practice of previous studies in the field, I discuss each of these categories under the cover-term 'aspectual.'

Before one can discuss the aspectual nature of a situation, a theory of the nature of situations in language must first be established. I do as much in the first two chapters, in which I review the most relevant explanations of aktionsart in English. All researchers agree that some situations are stative and others dynamic. Some of these dynamic situations tend towards a goal, and are thus 'telic.' But more problematic are 'punctual' situations like *tap* and situations that have no duration at all, like *recognize*. In the second chapter, I use criticisms of previous offerings to support my own ontology of situation types, which has the advantage of being metaphysically defensible as well as linguistically demonstrable. With the features of duration, dynamicity, boundedness, and telicity, I show that situations like *recognize* are quite different from situations like *tap*, and in fact refer to the initiation or termination of other situations, thus deserving the name 'acme.'

With the foundation of situation-types established, I examine aspect itself in the third chapter. After a shorter literature review (aspect is far less complicated than aktionsart), I advance a bare-bones aspect taxonomy consisting of the 'perfective'/ 'imperfective' distinction. The imperfective manifests itself chiefly through the progressive marker -*ing*, but also in the simple form with states and most present-tense sentences. This simple model of aspect is possible only because of the exile of the perfect (not to be confused with the 'perfective').

I conclude my groundwork in the fourth chapter, which defends the exclusion of the perfect from aspect. Tense is obviously independent of the perfect, but so is aspect, a fact many linguists fail to observe. Even scholars who acknowledge the divorce of the perfect from both tense and aspect overlook the fact that aktionsart, aspect, and orientation all work together to locate the event-time relative to the reference-time. It is not the case that this is accomplished by orientation or aspect alone, as is often supposed. I follow the practice of including the 'prospective' (constructed with phrases like *going to* V) under orientation, but recognize that the prospective probably is misplaced there.

The final chapter combines all the possible values for each of these categories, plus a half dozen or so other grammatical and lexical constituents, in the effort to arrive at consistent rules for sentence aspect and aktionsart construction. These compositions support the conclusions of the previous chapters, but also raise issues deserving further study. Like those before it, the purpose of this chapter was less to break new ground than to organize and refine the findings of earlier studies, which were either deep and narrow or pastiche.

I would like to thank the members of my thesis committee, Drs. Salvatore Attardo, J-C Smith, and Steve Brown, for their indulgence towards me and their scrutiny to my prose. They have improved both.

viii

An Analytical Glossary

Aktionsart: The type of situation to which the verb, verb phrase, or main clause refers.
Aktionsart is apparent in the contrast between *I was walking* and **I was knowing*.

> **State**: Aktionsart type referring to properties of things over time (Stich 1982:155).
> *I know the answer.*
>
> **Activity**: Aktionsart type referring to unbounded dynamic situations. Also called
> 'process' by some theorists. *I am running.*
>
> **Performance**: Aktionsart type that involves a telic endpoint, or is an important
> point. Sometimes called 'Event.' *I emptied the tank, I will
> recognize her face.*
>
> > **Accomplishment**: A durative performance. Accomplishments are
> > activities with a telic endpoint. *I emptied the tank.*
> >
> > **Achievement**: A non-durative performance. Here referred to as an
> > 'acme.' *I will recognize her face.*
>
> **Intergressives**: Aktionsart type that refers to bounded activities. *I had a ten-
> minute walk. I punched out.*
>
> **Series**: Aktionsart type referring to a situation repeated on multiple occasions.
> Often used to portray habits. *I like to smoke.*
>
> **Iterative**: Aktionsart type referring to a situation repeated within one occasion. *I
> knocked on the door vigorously.*

Aspect: The portrayal of the situation the aktionsart describes as continuing or complete.
Aspect is apparent in the contrast between *I walked the dog* and *I was walking the dog.*

Perfective: The portrayal of the situation as complete, whole, or concluded. *The policeman pulled me over.*

Imperfective: The portrayal of the situation as incomplete, progressing, or continuing. *The policeman was pulling me over.*

    Progressive: The imperfective form used for dynamic aktionsarten. *The dog was tugging at my pants.*

    Continuative: The imperfective category for non-progressive imperfective aspect. *I prefer Bach to Mozart.*

Tense: The placement of a reference point into the past or future, relative to speaking time. *I drank too much* (reference time: past).

Orientation: The partial placement of a perfective situation relative to the reference point. *I will have drank too much* (reference time: future, orientation: 'anterior'/perfect).

    Perfect: The major orientation type. Locates perfective situations to the left of the reference point on a timeline. In terms of orientation, often called 'anterior.' *I have put my foot in my mouth, haven't I?*

    Prospective: Also called 'posterior,' the prospective places situations to the right of the reference point on a timeline. Because it places both imperfective and perfective situations to the right of the reference point, the prospective's status as 'orientation' is uncertain. *I am going to attend the seminar.*

Chapter 1: Situation types

1.1 Introduction and purpose

The phenomena observed in this study all were, and sometimes still are, referred to as 'aspect.' However, in the past decades scholars of the English verbal system have drawn a line, sometimes distinct and sometimes blurry, between the *portrayal* of a 'situation' (the cover term) and the situation itself. The former is aspect *per se*. The latter, referred to variously as 'lexical aspect,' 'actionality' or 'character,'[1] is most often referred to as 'aktionsart,' a term borrowed from German linguistics. To avoid confusion, I will adopt the mainstream practice using the term 'aktionsart' for the inherent character of the situation, 'aspect' for the subjective portrayal of the situation as complete or continuing, and 'aspectual' as the cover term for both.[2]

'Aktionsart' ("kind of action") originally applied to verbs, alone, and has been studied in Slavic and German philology for over a century.[3] One may find this attitude reflected in examinations of English, especially in the seminal studies of Vendler (1967) and Kenny (1963), who, although never using the term 'aktionsart,' seem to consider the types of action as pertaining to the verb used rather than the entire predication or even main clause. These authors were directed, apparently by Ryle (1948), to various sections in Aristotle's *Metaphysics*, *Nicomachean Ethics*, and *Physics*, in which the philosopher delineates a tripartite division of kinds of actions. Little known to these language philosophers, work on this very subject was being done by linguists, for example Garey

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[1] "Actionality" is Bache's (1995) term, "character" is used by Lyons (1977), but others are "inherent aspect" (Carlson 1981) or "verb type" (Freed 1979).
[2] cf. Brinton (1988)
[3] cf. Streitberg (1891)

(1957), who referred to the temporal properties of verbs as "lexical aspect." However, it has become obvious that aktionsart must be understood as pertaining to *situation* types rather than *verb* types (see Brinton 1988:30-32; Bache 1995:125-38; Mourelatos 1981:196-200, among many), although it is true that each type has prototypical verbs. How various other linguistic variations affect the verbs to create a situation type constitutes much of the "compositional" concerns of this study. For now, let us assume that a situation can only be determined by evaluating the predication as a whole.

In the following section, I will review major contributions in the study of situation types, organized in such a way as to highlight the division, which I see as fundamental in the field, between those scholars accepting a Vendlerian inventory of aktionsart and those who use a Kennyian scheme.

1.2 The states, performances, and activities of Kenny

Every study of aktionsart acknowledges that there are at least three different types of situations, often termed 'states,' 'performances,' and 'activities,' as standardized by philosopher Anthony Kenny in his influential work *Action, Emotion, and Will* (1963). In this section, I will look at some tests Kenny and others use to distinguish these three situations and some qualities of the aktionsarten we can deduce from their linguistic behavior. Throughout, '*' will signify unacceptable usage, '?' questionable usage, and '#' reinterpretation.

Kenny's (1963: 172-177) tripartite division reflects the differences among the following statements:

1) *She can drive*
2) *She drove home*

3) *She drove*

Example (1) describes a state. Some examples of verbs that Kenny sees as prototypically static are *understand, love, mean, fear, exist, be able, be blue, perceive, be taller than* (175).

The linguistic tests that Kenny provides are:

1. States + *–ing* form = ∅ *I am knowing how to swim.*

Kenny calls the *–ing* form the "continuous tense," which confuses the matter (since it is not a tense at all, as will be shown below). Kenny does not defend this test from rare counterexamples like ?*I am loving this weather*, but Comrie (1976:49-50) explains these anomalies by calling the reading of stative verb + *–ing* form "contingent," meaning that it is a state somehow unusual from the normal state of affairs and "difficult to maintain."

2. State + perfect = "current state" (whereas activity + perfect = "ambiguous," and performance + perfect = "completed")

Kenny observes that *I have loved her for seven years* and *I have been afraid of this all day* imply current ongoingness, whereas activity verbs do not necessarily imply that the activity is still extant: *I have acted foolishly.* Performances like *I have built my house* actually exclude the present ongoingness reading.

3. *Quickly* + state = ∅

Adverbs like *quickly* and *slowly* cannot be combined with stative verbs, Kenny observes, because these adverbs describe how long it "takes" to do something. States, however, do not "take" time; they merely "last for a time." We cannot ask how long it "took" a door to be blue, but only "for" how long it was blue. The opposite is true for activities, since

they "go on for" a time and do not "take time" like performances. In the case of states, there is simply nothing "being done," quickly or slowly.

Other linguists have added to the tests for states, as follows:

4a. State + *force, persuade* = ∅ *John forced Mary to know the answer*

4b. State + imperative = ∅

4c. State + *deliberative, carefully* = ∅

These tests come from Dowty (1979:55), and share the common trait of not accepting agency. Ironically, Dowty specifically allowed for [+ agentive] states, as will be discussed below.

5.   State + *start, stop* = ∅ (Freed 1979:57-58). *They started being married.*

Later, we will see that another aktionsart expresses the meaning of states starting and stopping.

6.   State + simple present = no habitual or specialized reading (Dowty 1979: 58-59; Leech 1971:5-12). Leech helpfully lists the usual uses of the simple present, showing how it is only with state verbs that we understand the utterance as applying to the very moment: *I know the answer* vs. *I work* or *I build houses*. The most common alternative is habitual, as in these [- durative] examples, but alternatives are "sports commentary" (*Jordan passes to Rodman*) and past or future reference (*The train leaves at eight tomorrow*).

So, what do we know of states metaphysically? First, we know that, by definition, static activities are not dynamic. By 'dynamic' I mean there is complexity to the situation, which implies that the situation has internal phases or structure. There are no internal phases to states: when you "know X" from t_1 to t_k, at any moment during that

time the one state of K_x obtains fully. Since states "last for a time" (*I was in love with*

her for years), states are [+ durative]; however, states do not actually "take place" (a

dynamic phrase), but rather "obtain." Comrie adds a helpful rubric concerning states:

whereas [+ dynamic] situations require a constant input of energy, states require no

effort,[4] which becomes relevant with sentences like *The oscilloscope is emitting a pure*

tone at 300 cycles per second. As Comrie explains, a state will remain unless it is

changed. The effort may be exerted "from the inside" ([+ agentive]) or "from the

outside" ([- non-agentive]) (49). Strictly speaking, states are probably not 'situations' at

all, but rather "properties of objects during time intervals" (Stich 1982:155).

Nevertheless, I will continue the practice of referring to states as situations in this study.

Aristotle's famous distinction between *energeia* and *kenesis* is still observed by

language philosophers and linguists.[5] What is "making" in the Aristotelian sense (*She*

drove home) exemplifies a 'performance' in the Kenneyian sense (Binnick 1991:172) and

stands in opposition to 'activities' (*She drove*). Other examples of activities include

walk, *spin*, and *expand*.

Tests for activities include the following:

7. If one was V-*ing*, one V-*ed* (Kenny 1963:173, 175)

Since states would not normally occur in the progressive, this is the easiest test to

separate performances from activities. If *I was running*, even just for a moment, *I ran*,

whereas I cannot automatically claim to *have built* X if *I was building* X.

8. Activity + *for an hour* = ok (Dowty 1979:56-57).

---

[4] Whether states of mind require input from chemical processes of the brain should not cloud the everyday practicality of Comrie's observation.
[5] cf. Tobin (1993:27-50), Taylor (1977), and Binnick (1991:170-172)

Compare *I ran a mile for an hour to I ran for an hour. Of course, this test does not

separate activities from states: Since I crammed, I knew the answers for an hour, or I

feared the bully for ten years.

9. Activity + finish = #

Whereas for performances one may "finish," for activities one may at the most say

"stopped" (It stopped/*finished raining) (Vendler 1967:100).

Test (8) proves that activities are [+ durative], and test (7) that they are (relatively)

[+ homogenous].[6] What separates activities from states is that activities are [+ dynamic],

which is evident from their ability to take the progressive. Moreover, they require energy

(Comrie 1976:49-50). They are also [+ dynamic] because they are constituted of

"successive phases following one another through time (Vendler 1967:99), which

demonstrates the qualified homogeneity we must ascribe to them – if we employ

'homogeneity' as a feature at all.

Connected to homogeneity is the fact that no moment is more special than any

other during an activity. Activities have no necessary or implied endpoint (Dahl 1981),

nor do they bring about a new state of affairs, as performances do (Kenny 1963:174-79).

For this reason they are called "atelic" (see test 9).

Kenny's last category of situation types, 'performances,' are exemplified by verbs (and

verb phrases) such as: discover, find, kill, grow up, and build a house.

Tests for performances include the following:

---

[6] 'Homogeneity' is an unfortunate feature that is often used in the literature on aktionsart. Mirroring the mass/count distinction in nouns, a situation type is said to be [+ homogenous] if it lacks a "climax," which stands in distinction to the other phases. Thus activities are [+ homogenous] and performances are not. The feature is vague, however, because [+ dynamic] situations like activities can be seen as heterogeneous in comparison to states.

10. If one was V-*ing*, one has not automatically V-*ed*. Garey (1957:109), Kenny

(1963:172,175)

Drowning does not imply *drowned*, but *swimming* does imply *swam*. Hence, *swim* – by

itself – is not a performative verb.

11. Performance + *in an hour* = ok

Performances take place "in" time as opposed to "for a time," like activites and states: "If

we spend an hour in a successful search for a thimble, then we look for it *for* an hour and

find it *in* an hour" – finding the thimble being the performance (Kenny 1963:176).

Interestingly, any predication combined with *in an hour* becomes a performance, so we

must observe that when we add *in an hour* to a predication otherwise a state or an

activity, the meaning changes to the starting time of a new activity or state: *I will build*

the birdhouse + *in an hour* vs. *I will run* + *in an hour* or *I will know the answer* + *in an*

hour.

12. Performance + *for an hour* = ∅

Basically, this serves as the inverse of the test above: **I built the house for a year* vs. *I*

cried for a year or *I lived there for a year* (Dowty 1979:56). Performances resist the

bounding that is imposed upon them by *for* + [+ durative] adverbial because they have

their own bounds of completion, i.e. their telicity. The addition of *in* + [+ durative]

adverbial is acceptable because it merely reports the obtaining of the actuality of the

performance. Notice this explanation requires performances to be [+ durative], a quality

Kenny does not demand.

13. Performance + passive voice = ok (Kenny 1963:178-79).

All passive sentences appear to be agentive performances: *I was swam* (activity) *vs. I was run over* (performance).

Performances are [+ dynamic], like activities, but not [+ homogenous], for the terminal point commands much of the attention in the performance; in fact, it can be said of the situation that if the end-point is not reached, there was no performance at all. If one was *writing a letter* but never finishes, can one afterward even say that one was *writing a letter* (let alone *wrote a letter*), when the particular letter never existed? This knot is called the "imperfective paradox," paradoxical because the statement *John is writing the letter* is not true until the letter is finished and John is no longer writing. As interesting as this semantic problem is, this study is unconcerned with it. However, the paradox is useful at least in highlighting the importance of the culmination of performances. In linguistics today, this culmination is universally referred to as the 'telic' property of performances, a phrase adopted from the Greek *telos* (by Garey, who, in a 1957 article independent of work of Kenny or Vendler (and apparently Aristotle), coined the term). Lastly, we can observe, from the examples given, that Kenny did not consider it problematic to place [- durative] verbs under performances. Since his main concern was to highlight the fact that performances concern new states, predications like *enter* or *vanish* worked just as well as *built a house*.

We can summarize the above with a table of relevant features:

Kenny	*durativity*	*dynamicity*	*telicity*
State	+	-	-
Performance	+/-	+	+
Activity	+	+	-

-table 1-

1.3 Vendler's fourth term: achievements

One may readily see that the tripartite scheme developed by Kenny allows for

performances to be [+ durative] or not. However, many scholars found a use for

[durativity] as a major feature of aktionsarten (cf. Brinton (1988) and Freed (1979)).

Thus, many have adopted or subsumed Zeno Vendler's four-fold scheme, which

separates what Kenny calls 'performances' into two categories defined by their

[durativity]: 'accomplishments' and 'achievements.'

Vendler	durativity	dynamicity	Telicity
State	+	-	-
Activity	+	+	-
Accomplishment	+	+	+
Achievement	-	-	?

-table 2-

One may see that Kenny (1963) and Vendler (1967) agree on states and activities. The

key differences are Vendler's division of Kenny's performances into 'accomplishments'

and 'achievements' and Vendler's attribution of [- dynamicity] to achievements.

Vendler's (1967:100-102) reasoning for his partition was simply this: some verbs

admit "continuous tenses," like *running* or *drawing a circle*. Other verbs do not:

knowing or *recognizing*. Among the first group, Vendler makes many of the same

observations as Kenny, such as that whereas one *ran* if it was true one *was running*, it

cannot be said that one *drew a circle* if it were merely true that one *was drawing a circle*.

In regard to the second group, Vendler observes that neither states nor achievements are

"processes going on in time, yet they may be predicated of a subject for a given time with

truth or falsity." However, some may only be predicated for "single moments in time

(strictly speaking) while others can be predicated for shorter or longer periods of time."

The [durative] value is the only difference between Vendler's states and achievements.

Of much more consequence is Vendler's lack of concern for describing achievements as [+ telic] or [- telic]. Since he was not aware of the term (though certainly of the concept) it seems that he regarded achievements as [- telic]. Vendler does not set forth tests for telicity but merely 'accomplishments,' so we may not deduce from Vendler's account whether his achievements *in-and-of-themselves* are [+ telic]. If we accept the assertion by Comrie that situations must have "a process leading up to the terminal point as well as the terminal point" to be [+ telic] (1976:47), then the best argument for seeing achievements as [+ telic] can be found summarized in Bauer (1970), who asks us to see achievements as "processual" in the sense that they have phases, "the only peculiarity about [achievements] being that the initial phase of the action, which leads up to the goal or conclusion, is minimal or nil" (192). But how are phases actually phases when they take up no time? Hence I see achievements as [- telic] (cf. section 2.3 for more explanation on why telic situations must be [+ durative]).

Although Vendler felt his paradigm had an "air of completeness" to it, subsequent revisions of his four-fold division reveal some useful observations made by scholars of the past two decades. I will first examine those who basically accept it and add to it, and then turn to those who question it in more fundamental ways.

1.4 Dowty's refinements to Vendler

Of the linguists who advanced and refined the Vendlerian paradigm, Dowty (1979) is the most referred to and comprehensive. While accepting Vendler's four-fold scheme and terms, he refines each category (66-71). Since I am concerned with the controversy over

the basic inventory of event-types, I will ignore his detailed subcategories to focus on his

relevant features (184):

Dowty	Non-agentive	Agentive
States	1a. *be asleep, know* 1b. *sit, stand, lie*	2a. *be polite, be a hero* 2b. *sit, stand, lie* (with human subjects)
Activities	3. *make noise, roll*	4. *walk, laugh, dance*
Single change of state	5. *notice, realize*	6. *kill, point out (to someone)*
Complex change of state	7. *flow from x to y, dissolve*	8.*build (a house), walk form x to y*

- table 3-

Dowty's inclusion of [+/- agentive] as a relevant feature of situation types is

effectively critiqued by Brinton (1988), who points out that "states are always non-

agentive" since predicates like *be a hero* are either intrinsic qualities or [+ agentive]

activities (*He is being a hero. Don't be a hero*). Likewise, Brinton identifies *sit, stand,*

and *lie* as [+ agentive] activities, not states. Given this, Brinton also sees Dowty's

division of states into two types as unnecessary, since (1a) is left as the only remaining

type of state after the above corrections (Brinton 1988:35-36). Moreover, even if each

situation type included [+ agentive] and [-agentive] cases, it would only serve to

demonstrate that 'agency' is not a critical term in defining situation types.

After [agentivity], Dowty uses four features to distinguish his situation types. The

first is "momentary vs. interval," which essentially means that with some situations, one

moment of evaluation is sufficient for truth claims, whereas for others, two points are

needed.[7] Easier to explain are [+/- change of state] (basically [+/- dynamic]) and

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[7] 1a and all habituals are 'momentary.' 1b, 2b, and 3-8 are 'interval' predicates. For more on this distinction see Marcus Egg's taxonomy in the next chapter.

[+/- definite change of state] (apparently [+/- telic]). The last, [+/- complex change],

reflects Dowty's "interval semantic" operators of DO, BECOME, and CAUSE. Whereas

a simple change is one which reflects a mere change of state alone (situation 1: *I didn't*

notice; situation 2, *I did notice*), complex changes contain the *cause* of the change of state

in the first situation (situation 1: *I didn't build the house*; situation 2: *I did build the*

house). These features remained mostly unique to Dowty until Egg (1995) employed

them in his taxonomy, which I consider to come very close to the mark. One

troublesome aspect of the Dowty system, which has its roots in Kenny (remember that

Kenny allowed for [- durative] [+ telic] performances), is that [+/- change of state] makes

no reference to durativity. I will show in the following chapter how this will haunt any

inventory since durativity ultimately cannot be avoided as a feature.

1.5 Carlson

Lauri Carlson (1981:37-39) examines situations in English using the following

grammatical criteria: 1) momentaneous adverbials like *at once, at that very moment, at*

8:30, etc., in combination with a "simple" tense; 2) the progressive aspect; and 3)

durative adverbials like *for a while, all day*, etc., in combination with the simple tenses.

For example, Carlson's accomplishment clause, *He ran a mile*, yields:

1) **He ran a mile at that moment.*
2) *He was running a mile at that moment.*
3)**He ran a mile for a while.*

This examination results in the following:

Carlson	momentaneous adverbials	progressive aspect	durative adverbials	example situations:
Momentaneous	+	-	-	*I hit him*
Stative	+	-	+	*He was a full-grown man*
Achievement	+	+	-	*He closed the door*
Dynamic	+	+	+	*The caravan stood in its old place*
Accomplishment	-	+	-	*He ran a mile*
Activity	-	+	+	*The children played*

- table 4-

Carlson places a "+" if the sentence "needed no further comment" when combined with the three feature forms (Carlson is careful to mention that marked uses, which are here identified with "-," do not always represent impossibilities in the language, but merely reflect a difference in meaning of the main verb, or are rare).

As we can see from the table above, Carlson divides punctual verbs into 'momentaneous' situations and achievements proper. Carlson judges this to be so on the basis that the 'momentaneous' verbs, like *close, win, attack,* and *take off* admit the progressive, while *hit, notice,* and *blink,* Carlson's achievement verbs, do not without iterative reinterpretation. Although Carlson's attempt to distinguish punctual situations from each other based upon their performance with the progressive is wise, Carlson's results are incorrect. Carlson lists as 'momentaneous' *hit, notice,* and *blink.* Although each *may* be iterative with the progressive and multiple objects, *notice* performs differently: whereas one may say *I was hitting the bag,* one cannot say **I was noticing the pretty girl at the other table.* This is because *notice* is not dynamic, as is *hitting* or *blinking.* This is even more evident with adverbs of manner or frequency: *I was hitting the bag fiercely* and *I was blinking quickly* vs. **I was noticing intently* or **I was noticing the car quickly.* Carlson's examples of 'achievements' are even more misplaced than these: *close, win,* and *attack. Attack* is an activity and makes perfect sense with durative

adverbials; despite Carlson's objection to *The dog attacked me for quite a while, The dog attacked me for at least a minute* is just fine. Since accomplishments fail the test of "If one was V-*ing*, then one has V-*ed*," *closing* must be an accomplishment, not achievement. The last verb, *win*, is properly placed, but should share company with *notice.*

Carlson's other addition to Vendler, 'dynamic,' is given only one example: *(At seven o'clock) the caravan stood/was standing in its old place (for days).* Verbs like *stand, sit,* and *lie* are often referred to as "verbs of posture." They behave like activities, in that they accept the progressive and pass the durative *for* test, but, metaphysically speaking, are more like states, in that they do not have distinct sub-phases, or are dynamic. Their analysis is further clouded by the fact that they may refer to changes in posture (*sit down*) or states of posture (*he sat for hours*). Because of their similarity to states in reality, I suggest not seeing verbs of posture as a situation types of their own.

1.6 Freed

Although somewhat skeptical of Carlson's additions to Vendler's four-fold explanation, I feel Freed (1979) and Brinton (1988) advance compelling arguments for adding the situation type 'series.' Freed, after defending and sharpening the Vendlerian classes, says that series is a situation where an activity, accomplishment, achievement, or even state is repeated. By "repeated," however, Freed intends "repeated on different intervals of time." To demonstrate it graphically:

situation: *John kept ringing today.*

timeline:
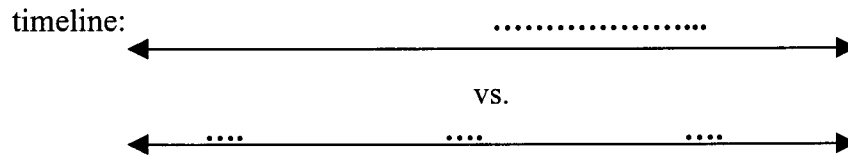
-figure 1-

Although either reading is possible, only the second represents a series. (Freed (1979:18-19) calls the first situation "iterative," but she does not consider iterative to be a situation type.) For example, *Ellen kept smoking despite the doctor's orders* is a series of activities; *Marsha kept taking naps* designates a series of accomplishments; and *Gerry kept losing his glasses* is a series of achievements. Interestingly, a series can take aspectualizers that modify the whole: *Gerry started losing his glasses after the accident* (Freed 1979:53-54). Freed disagrees with Vendler's assertion (1967:108) that when activities, accomplishments, or achievements are repeated, they become states. However, Freed immediately admits series to be "a special type of state." One formal test for distinguishing states from series is use of the aspectualizer *keep*: **They kept being married*, vs. *They kept going to the restaurant*, for example.

1.7 Brinton

Brinton (1988), though accepting Freed's distinction between series and iteratives, allows an ambiguity in her terminology between 'habits,' which, for Brinton, form a fundamental category of aspect proper, and 'series,' which is a category of aktionsart

composed of habit + activity, accomplishment, or achievement[8] (see pp.54-57 and fn 56, p. 256).

Also, Brinton, like Freed, leaves out the 'iterative' from her scheme. I do not see why this should be so. It seems that iterative verbs, like *wiggle*, may or may not help construct an activity, e.g., *The carpenter hammered in the nail* or *The dog wiggled free of its leash*, accomplishments both. Likewise, non-iterative verbs may become iterative: *She kept falling on the icy parking lot while walking to class* (achievement verb), or *My nephew composed some ribald e-mails on my account while I was away from my computer* (accomplishment verb). So, if the iterative is independent of activities and need not require an iterative verb for its construction, what keeps it from being another composed situation type?

Brinton offers the following table of relevant features and situation types (1988:57):

Brinton	*Dynamicity*	*Durativity*	*Homogeneity*	*Telicity*	*Multiplicity*
State	-	+	+	-	-
Achievement	+	-	-	(+)	-
Activity	+	+	+	-	-
Accomplishment*	+	+	-	+	-
Series*	+	+	+	-	+

*compositional categories

- table 5-

The three features of [dynamicity] (possibility in the progressive), [durativity] (covers a stretch of time), and [telicity] (implied end)[9] were relevant to Kenny and Vendler (see

---

[8] This problem is explored more fully in the third chapter.

[9] Inexplicably, Brinton seemingly contradicts, by placing a qualified (?) "+" in the [telic] column for achievements, an earlier admonition of hers to see achievements as [-telic]: "Punctual verbs do not meet the tests for telicity . . ... Telic situations are those in which there is a process leading up to a goal *as well as* a goal" (1988:27, emphasis Brinton's).

above). Brinton adds the feature [homogeneity], which is the verbal corollary to the [+/- count] distinction in nouns (cf. Mourelatos 1981:202-210, Verkuyl 1993:91-110, among others). Brinton claims this feature divides, in the perfective, those predicates that have come to an arbitrary end from [- homogenous ones], which came to a necessary end.[10] She includes [multiplicity] to reflect the inclusion of 'series' into situation types.

Brinton sees accomplishments as being "composed" in the sense that *building* is not by itself an accomplishment like *building the house*. I consider, however, most categories as having prototypical members, and understand *build* as naturally [+ telic]. If one asked a painter what he did today and got the response *I painted*, the assumption is that the painting done was contributing towards a goal of a completed project. Series, however, is more clearly a "composed category" of aktionsart because it lacks prototypical verbs.

1.8 Bache

One of the most recent major investigations of aktionsart is found in Bache (1995). Maintaining, as does Brinton, a strict distinction between aspect and 'actionality' (aktionsart), Bache proposes the following binary hierarchy:

---

[10] I find 'homogeneity' to be redundant since it mirrors the results for telicity.

```
                    complex
                      |
 +ACTIONAL  ————————|         punctual
      |               |           |
      |               |  simplex ——|         telic
      |               |            |           |
 -ACTIONAL            | durative———|         directed
                                   |           |
                                   | atelic ——|
                                   |           |
                                               self-contained
```
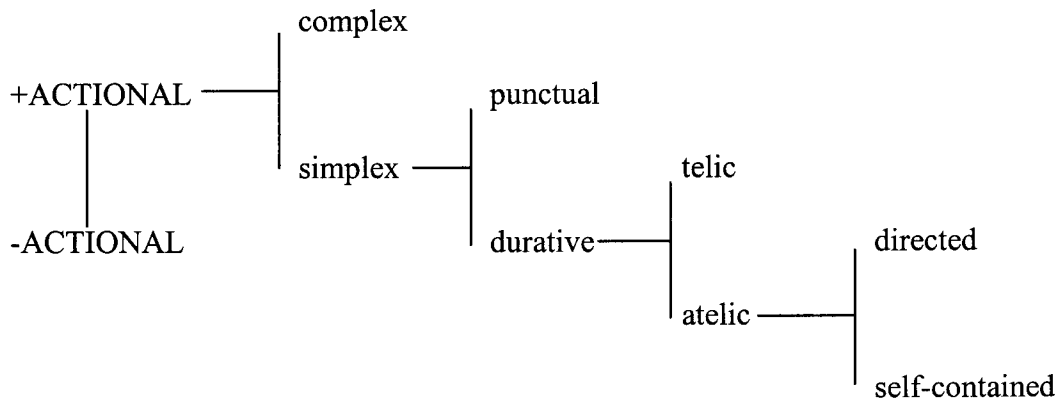
- figure 2-

Vendler's state falls inside Bache's [–ACTIONAL], for states do not "take place," are not

processual, and do not "happen." Accomplishments are here [+ telic] [durative]

[simplex] [+ACTIONAL] situations, and activities are [- telic] [+ durative] [simplex]

[+ACTIONAL] situations. Achievements are more fundamental, being represented as

[punctual] [simplex] [+ACTIONAL] situations. Bache is careful to define his 'complex'

category as pertaining not to multiple occurrences of an event on different occasions (*He*

wrote four letters to her last week), but instead to situations that are iterative (*The*

telephone was ringing), distributive (*They were busting balloons all over the place*), or a

combination of the two. The key difference is that the multiple simple actions are

thought of on one level:

He wrote four letters to her last week
completed letters
last week: ————| ————| ————| ————|

- figure 3-

However, complex situations demand two levels:

The telephone was ringing
super-ordinate situation: *ringing*
sub-situations: ⌐ .... ⌐
timeline: ◄————————————————————————————►
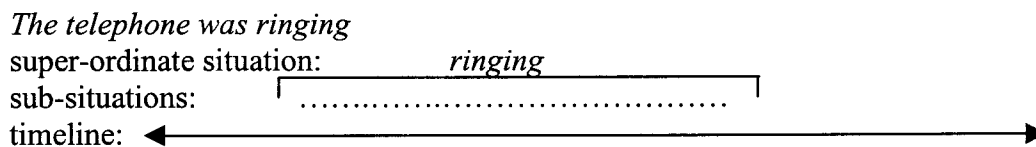
-figure 4-

'Complex' subsumes iterative and distributive situations, but I think it also has the

architecture to include 'series' in Freed's and Brinton's sense, since, in this example, the

individual cigarette-smokings appear as a whole, and therefore qualify as complex and

not separate multiple occurrences:
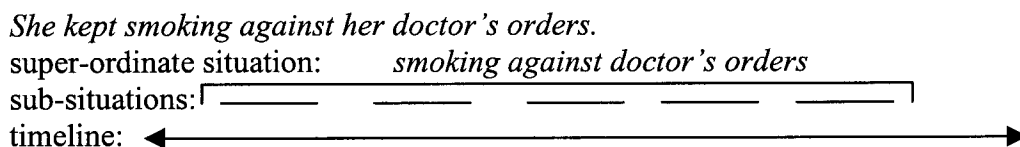
She kept smoking against her doctor's orders.
super-ordinate situation: *smoking against doctor's orders*
sub-situations: ⌐ ———   ———   ———   ———   ——— ⌐
timeline: ◄————————————————————————————►
- figure 5-

Bache claims that quantified expressions fail to be complex because they occur on

different occasions, as surely *smoking* would. However, *kept smoking against doctor's*

orders is not quantified, while at the same time appears qualitatively homogenous

compared to *wrote four letters*.

  Bache's division of activities into 'directed' and 'self-contained' seems to be his

response to Dahl's (1981:86) "problematic case" of *The submarine moved toward the*

North Pole. Dahl wonders how a sentence like this, containing a potential terminal point

([+ telic]) of the North Pole, fails the behavioral tests for telicity by accepting *for*-phrases,

as in *The submarine moved towards the North Pole for hours*, but yet is true at any point

in the process: If it is true that the submarine was moving toward the North Pole, then at

any moment during that time it was moving toward the North Pole. Bache corrects the

faulty assumption that situations like these include any goal at all – they merely indicate a

direction for the activity, just as in the non-spatial *John studies for a bachelor's degree.* Yet, it is true that were the submarine to reach the North Pole, the situation would "exhaust itself" and no longer be able to continue, so Bache considers it a terminal point *outside* of the situation. The situation itself, then, is [- telic] (1995:241-254).

The above figure shows that Bache is unequivocal in stating that telic events are durative, but his 'punctual' class, like Brinton (1988), lumps verbs like *learn* and *arrive* (which have no duration and are semelfactive in the progressive) with verbs like *cough* and *spit* (which have very limited duration and are iterative with the progressive). This conflation, if rectified, renders Bache's otherwise excellent taxonomy unrecognizable, as will become evident in the next chapter.

1.9 Mourelatos

Like Bache, Mourelatos (1981) orders the Vendler classes hierarchically, in what Verkuyl (1989) calls a "partial ordering." Whereas the situation types in Vendler's account are each equally fundamental, Kenny's are not. Instead, Kenny divides states from all other situations because states did not allow "continuous" tenses, then divided those which allowed continuous tenses into activities and performances. So we should contrast Vendler and Kenny as follows:

Vendler: situation types

[- continuous tenses]   [+ continuous tense]

[+ duration] (state)   [- duration] (achievement)

[+ telic] (accomplishment)]   [- telic] (activity)

- figure 6-

Kenny:

situation types

states   [+ continuous tense] situations

activities   performances
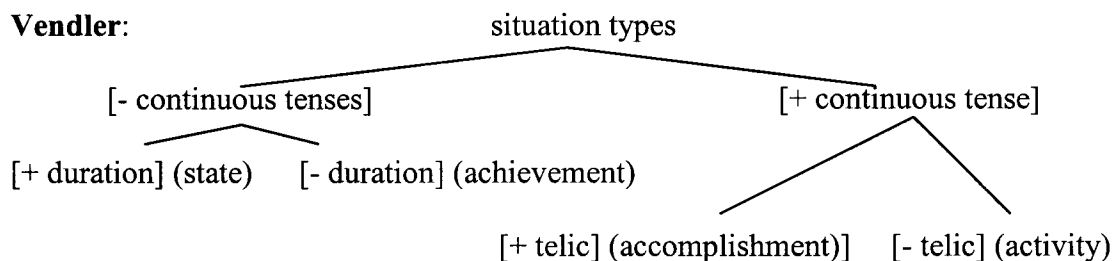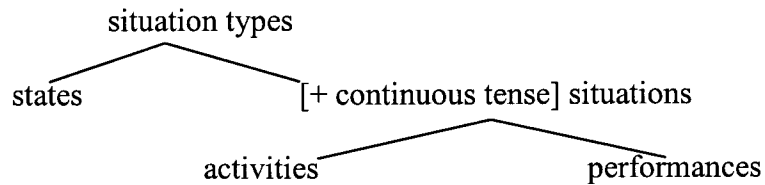
- figure 7-

Mourelatos' aim is to reconcile Vendler with Kenny. To do so, Mourelatos modifies both theories. First, he removes Vendler's accomplishments from the [– continuous] branch to the [+ continuous], which Mourelatos justifies with counterexamples like *He is winning the race*. The needed adjustment in Kenny's theory is the removal of one of Kenny's tests for performances, that performances take *finish*, which is indeed nonsensical in regard to semelfactive achievements (and ruled out some of Kenny's own examples of punctual performances). Verkuyl (1989:61) is right in claiming that Mourelatos' synthesis is more Kennyian than Vendlerian, for it amounts to patching up Kenny's argument while performing major surgery on Vendler's. Mourelatos concurs with Kenny that 1) achievements involve an outcome, 2) accomplishments require an end-point, and 3) both accomplishments and achievements take time: "[B]oth [are] admissible into the contexts of the form, 'It took him *N T*s to *V*,' where *N* is a count expression and *T* is a unit of time" (Mourelatos 1981:194). Mourelatos understands Kenny's 'performances,' as "an individuated something that took place," however protracted (200). Finally, Mourelatos (and Verkuyl) use the neutral terms below in an effort to remove the agentive bias present in previous paradigms (Aristotle's *making* and *doing*, for example):

Mourelatos   situations

states   occurrences
                               (actions)

processes   events
(activities)   (performances)

developments   punctual occurrences
(accomplishments)   (achievements)
- figure 8-
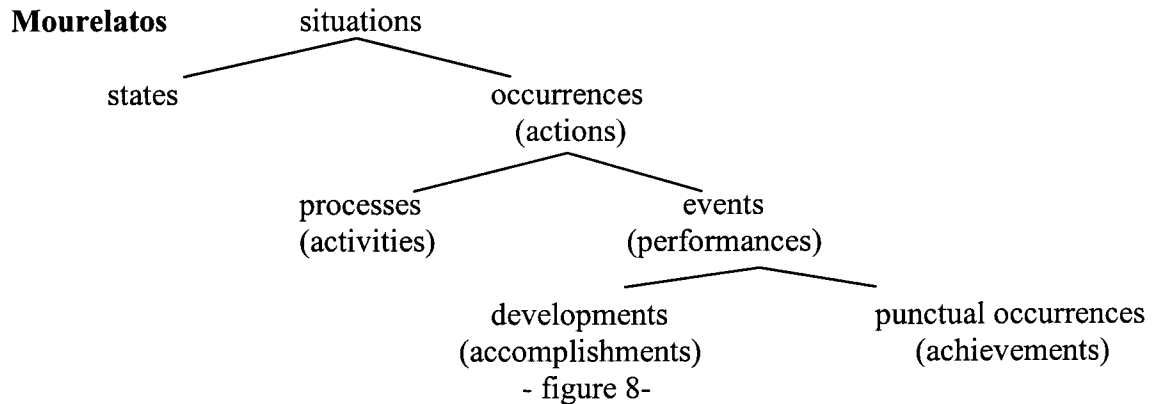
Mourelatos terms his hierarchy an "ontological trichotomy," revealing to us that the last level is properly considered a less crucial sub-class of events.

Why Mourelatos calls his scheme a "trichotomy" is never explained, and leaves the reader wondering what it is about the final distinction between accomplishments and achievements such that Mourelatos does not label his inventory a quadripartition. Although the ordering, like Bache's, has the advantage of being a binary one of [dynamicity], [telicity], and [duration], his use of the features is unclear. Is the division between 'developments' and 'punctual occurrences' one of [duration] absolutely or relatively? It seems that since Mourelatos considers "spit-second events" (*pop*, *tap*) as members of 'punctual occurrences' (along with "various starts, resumptions . . . stoppings, and climaxes)" (201), we must conclude that the final division is one of relative duration. However, is *arrive* [durative] at all? If not, then Mourelatos' scheme cannot be accurate.

1.10 Verkuyl

Verkuyl (1993) adopts Mourelatos' terminology of states, processes, and events for his trichotomy, but uses two features to construct the following model (1993:67):

	[-ADD TO]	[+ADD TO]
[+SQA]		Processes
	States	
[-SQA]		Events

Temporality   a t e m p o r a l i t y
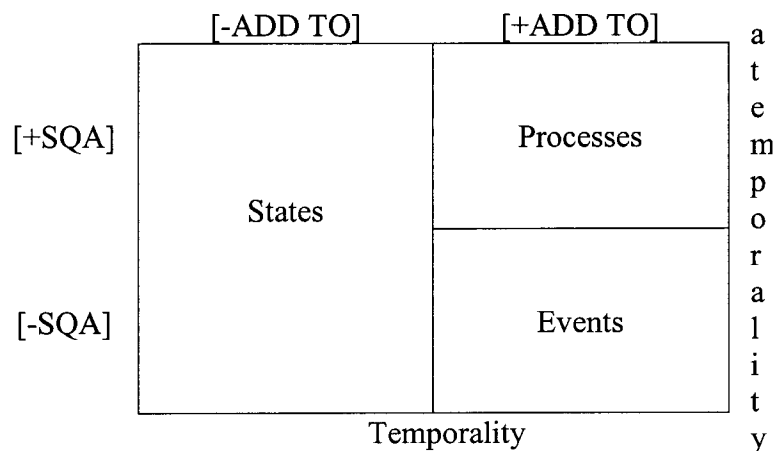
- figure 9-

The ADD TO feature refers to the verbs: if a verb has a dynamic or procedural sense, if it

goes on "in time" as opposed to simply "for a time," then it is [+ADD TO]. SQA, or

Specified Quantity of X, refers to the argument noun phrases, since they affect the

situation type:

1) *Judith ate* ([+ADD TO]) *sandwiches* ([-SQA])
2) *Judith ate* ([+ADD TO]) *three sandwiches* ([+SQA])
3) *Judith wanted* ([-ADD TO]) *nothing* ([-SQA])
4) *Judith wanted* ([-ADD TO]) *a sandwich* ([+SQA])

Verkuyl's model reflects his theory of aspect as being a category composed from

the interactions of various syntactic, lexical, and grammatical features – a theory he

helped pioneer in his 1972 work *On the Compositional Nature of the Aspects*. For present

purposes, it is worthwhile to glance at his rejection of achievements, which is often cited

whenever such an attempt is made (cf. Egg 1995, for example). In a subsection entitled

"On the alleged punctual nature of Achievements," Verkuyl provides counterexamples to

a few of Vendler's tests for achievements before launching into his main arguments.

First, Verkuyl maintains that achievements can be distinguished from accomplishments

only at the lexical level, whereas the other three aktionsarten can be distinguished by the

complement noun phrases alone:

Activities	Accomplishments
She ate *sandwiches*	She ate *a sandwich*
She wrote *at the letter*	She wrote *a letter*
She ate *from the cheese*	She ate *the cheese*

States	Accomplishments
She ate *no sandwiches*	She ate *a sandwich*
She wrote *to nobody*	She wrote *a letter*

States	Activities
She ate *no sandwiches*	She ate *sandwiches*
She wrote *to nobody*	She wrote *to her mother*

-figure 10-

Verkuyl asserts that "such examples cannot be produced with respect to the opposition

between accomplishments and achievements." Since the achievements are "the only

opposition that is completely lexical . . . the way is open to quite arbitrary judgments

concerning the right class" (47). This argument is not convincing, however, because the

states are only constructed out of negations, leaving activities and accomplishments as

the only two categories where the noun phrases used (in terms of count and definiteness)

matter. Moreover, although it is certainly true that the aktionsart of main clause is often

affected by much more than the verb, the verbs themselves have an aktionsart value that

affects the sentence aktionsart in obvious ways. Such sentences, as demonstrated in

chapter 5, are not evaluated in an arbitrary manner.

Moving from linguistic to "technological" evidence, Verkuyl's second major line

of argument rests upon technological grounds: Isn't it possible, with computers, to draw a

circle or write a letter with a (momentaneous) push of a button (47-49)? If so, then the

line between achievements and accomplishments is further blurred. However, Krifka

(1996), in a review of Verkuyl's book, points out that "hard-core" achievement verbs like

arrive do not apply to this last criticism (445). Moreover, it merely delays the question:

the program used to draw the circle is infinitely more an accomplishment than the

drawing of a circle!

1.11 Summary

The preceding literature review demonstrates that the field has arrived at limited

agreement in terms of an inventory of aktionsarten, features employed to distinguish the

situation types from one another, and terminology. The most debated aktionsart is that

one (or are those ones) variously called "achievements," "punctual occurrences,"

"momentaneous verbs" and so on. These verbs are the cause behind the rift between the

Kennyian and Vendlerian traditions, and although divided into two classes themselves in

recent studies like Smith (1997) and Olsen (1996), are still misunderstood. Whether these

predications should be separated from the others, each other, or both, will be examined in

the next chapter.

Chapter 2: 'Acme' and achievements

2.1 The Problem of 'Achievements'

The above literature review examined how the tradition of linguistics and language philosophy defined, ordered, and justified various situation types. From the two sources of Vendler and Kenny sprang two corresponding trends in aktionsart taxonomies: quadripartite (or more, in the case of Brinton, Carlson, and Freed) inventories, which accept Vendler's achievements as a basic category of aktionsart, and tripartite schemes (descending from Kenny), which see achievements as a minor subcategory of performances.

The following three questions are key in deciding where, if at all, to place achievements:

1) Are achievements [+ durative]? Vendler, who proposed the category, clearly thought not (1967:102), but Mourelatos (1981: 201) and Verkuyl (1993:46-50) assert the opposite by placing what others call achievements under [+ durative] or at least [+ dynamic] events.

2) Are achievements [+ telic]? Vendler seems to suggest that they are not, and Bache's definitions and hierarchy clearly shows his agreement in this, for [+ telic] situations to him are "durative situations leading up to and including a terminal point beyond which the situation cannot progress unless redefined" (1995:249, 245). However, do some, like *vanish*, have an "outcome," or merely imply a change of state?

3) Are the startings, stoppings, and climaxes of events or states, as well as "split-second" occurrences that exist on their own (as in Mourelatos 1981:201), 'achievements'?

In answering these questions, it is worthwhile to examine the two more aktionsart inventories: that of Egg (1995) and Olsen (1996). Egg builds off Herwig (1991) by exploring a category accounting for [bounded], but [- telic] expressions. Olsen contributes to this thesis by exemplifying the dangers involved in not creating a binary ordering of the features [durativity], [dynamicity], and [telicity]. I will examine both offerings with some care before combining the best aspects of each to construct a superior scheme.

2.2 Egg

Egg	interval-based	bounded	Telic
State			
Process	X		
Intergressive	X	x	
Change	X	x	x

- table 6-

Egg (1995:320-322) employs Dowty's feature "interval-based," which is based on the analysis of predicates in regard to either one moment in time ([- interval]) or two ([+ interval]). The basic test to determine whether a predicate is [+ interval] or [− interval] is to restate the predicate in the simple present ('#' indicates reinterpreted meaning):

1) *Nigel is in the kitchen*
2a) *#Nigel sits in the most comfortable chair*
2b) *#Nigel runs*
2c) *#Nigel plays Greensleeves*
2d) *#Nigel drinks a pint of beer*

Only states (1) need not be reinterpreted into a narrative reading (where one narrates

action as it happens) or habitual sense. Examples of [– interval] predicates, or states, are

to know, *to be in the pub*, and *to have a car* (320).

Egg's second feature, 'bounded,' is also familiar territory in aspectual studies and

simply means "that the validity of a predicate is temporally limited." We can test for

boundedness by modifying the predication with adverbs like *twice* or *repeatedly*:

3) *She played a sonata twice*
4) *Felix emptied his tankard twice*
5) *#She ran twice*

Example (5) requires a specialized understanding inevitably involving a boundary of

some kind, similar to *She ran (her usual mile) twice* or *She ran (her race) twice*. Another

test is the "if X is *V-ing*, then it *V-ed*":

6) *She was playing the sonata, therefore she played the sonata.* (cannot be deduced)
7) *She was running, therefore she ran.* (can be deduced)

Unbounded predicates, which are [+ interval], Egg calls "processes." Examples he gives

are: *to walk*, *to sing*, *to dance*.

Egg's final feature is [telicity], which he understands as "introducing a definite

change of state . . .[since] these predicates are characterized by an operator that denotes a

change from the validity of a state or process predicate to the validity of its contrary"

(325). Graphically, Egg's "change" would appear thus:

State or process A	Change predicate	State or process A'
Fritz inside the pub	*Fritz is leaving/left/will leave the pub*	Fritz outside the pub

-figure 11-

The tests Egg employs for telicity are meant to compare the states or processes before and after the given situation: if they are "contrary," the situation is [+ telic]. The first test he offers contrasts bounded and telic expressions in the past or past perfect with the same situation using the *to be going to* V construction:

8a) *Fritz is going to enter the pub*
8b) *Fritz has entered the pub*
9a) *Fritz is going to run a mile*
9b) *Fritz has run a mile*

Egg rightly surmises that one cannot deduce from (9a) that Fritz is not running miles already, whereas one may deduce from (8a) that Fritz is outside the pub. Because (8a) and (8b) have Fritz in opposite states, (8) is [+ telic] ('change' predication in Egg's taxonomy). On the other hand, (9a) and (9b) do not show Fritz in opposite states, so (9) is [- telic] (an 'intergressive' predication) (327). However, the whole effect hinges upon the definite article. Compare the entailment of *Fritz is going to run a mile* to *Fritz is going to run the mile*. In the latter case, it is still true that Fritz may have run miles already, or presently be running, but he certainly has not begun the running of *that* mile. So we know that the situation preceding the state in question is the contrary of the final situation, making this sentence [+ telic]. What I have just said does not criticize the test so much as underline an old mistake Egg makes in listing double-duty verbs (verbs that are as often used in activity sentences as accomplishment sentences, like *run (the mile)* and *paint (the house)*) as 'change' or 'intergressive.' For example, Egg claims that *build a house* is a 'change' predicate (320), but when we employ this test, we see that there is nothing in *John is going to build a house* that implies he has not built a house already; we only get that impression with *John is going to build the house.*

Egg's second test involves examining the predicate for information on "what is going on during the time for which the event predicate holds," for "if the semantic description of the predicate entails no such information, the predicate is telic." Egg quickly points out that this is not a bi-conditional test, since predications like *to walk to the station* are telic (327). There are so many predications like *walk to the station*, however, this test is not worthwhile.

The last test Egg offers involves adding [+ durative] adverbials to the predication in question. If one can (or must) reinterpret the predication as referring to the following state, then the predicate is [+ telic].

10a) *I loved her for one year*
10b) *I worked for one year*
10c) *I knocked on the door for one year*
10d) *#Amelie went to Oxford for one year*

Egg points out that only (10d) can be interpreted as referring to a consequent state, in this case, that Amelie went to Oxford and stayed there for a year (327-28). However, if "Oxford" were the name of a corner store, then the sentence would have an iterative reading and not refer to a consequent state at all (likewise if the real Oxford is close enough to Amelie that she can commute). So there is nothing semantic about this sentence making it telic (by this test). Moreover, as Egg points out, this test does not work for "irreversible" change predicates like *die* (327).

The reason finding a reliable test for [+ telic] in Egg's sense is so difficult is that previously reliable tests contradict the few examples he provides. For instance, Egg cites *to sing a song* as an "intergressive" predicate ([+ interval based], [+ bounded], [- telic]) because it does not portray the proceeding and following states as contrary. However, according to test (10) for the telic performances in the earlier chapter (if one was V-*ing*,

one has not automatically V-*ed*), this predicate is telic. Nor does test (11) work:

performance + *in an hour/minute/year* = ok (providing that the performing is taking place

during that time, and is not merely the length of time preceding the initial point of

activity). The reason this test is ineffective for Egg's ordering is that some of Egg's

'change' predicates include verbs like *vanish* or *enter*, since the situation after *vanish*

opposes the situation before *vanish*. The sentences **He vanished in an*

hour/minute/nanosecond or **He entered in a day/second* are strange, however.

The third test for telicity mentioned in the previous chapter, performance + *for an*

hour/minute/month = ∅, does not work with Egg's taxonomy because no [+ bounded]

expression – [+ telic] or not – can accept second-level bounding: **I popped a balloon for*

a minute, *walked to a store for a minute.

I see a temporal bias in Egg (1995) and another work concerned with

distinguishing boundedness from telicity, Depraetere (1995). Both approach bounded-

ness in strictly temporal terms. For instance, Depraetere claims "(un)boundedness relates

to whether or not a situation is described as having reached a temporal boundary," as

opposed to "(a)telicity" which "has to do with whether or not a situation is described as

having an inherent or intended endpoint" (2). Cannot the same be said for non-temporal,

but spatial relations? If so, then we must determine if *Paul ran a mile* is like *Paul ran the*

marathon, which seems telic, or *Paul ran 4.98 miles*, which seems like an arbitrary

endpoint.[11] Each of these, however, fulfills the common telicity test of "if one was V-

ing, one hasn't necessarily V-*ed*." Further complicating the issue is Egg's semantic

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[11] This problem only occurs in the past, where intention is in question.

comparison of preceding and subsequent states. A graphical representation of telic

situations has already been given. Intergressive situations would appear thus:

?	A	?

Fritz ran a mile

- figure 12-

First, it should be noted that Depraetere would probably consider *Fritz ran a mile* telic

(1995:2). Egg sees it as atelic, because it does not imply the states just before and after

the situation as opposite. I see Egg's methodology as superior to Depraetere's, since with

Depraetere, one must conjecture as to intention when dealing with bounded situations in

the past.[12] It would be better to find a linguistic test to determine the difference. Egg's

will work, even though it is notional, but it has far-reaching effects: for instance *Fritz is*

going to read a book does not entail that Fritz is not already reading a book. The definite

article (or uniqueness operator) seems necessary for every telic predication; i.e. *Fritz is*

going to build the house does entail that Fritz has not built the house.

As mentioned in the beginning of this chapter, a main benefit of Egg's scheme is

that it resolves various problems with those predicates called 'achievement,' 'punctual,'

or 'momentaneous.' These predicates were not only lumped together in Vendler, but

additionally placed with predications like *wash the car* in Kenny (as 'performances').

Egg divides this type of predicate into those that imply a change of state, like *vanish, win,*

reach the top, and those that do not, like *cough* and *tap*. The former are placed with the

change predicates, and the latter with intergressives.

A problem I see with this involves the non-durative 'change' predicates. Although these predicates are often referred to as points, there is some equivocation of the term "point." Mathematically, points take up no space, which would mean they take no time at all, if we think of a point on a timeline. They are merely the borders of situations. For example, if the below represents a timeline, then we have something similar to this:
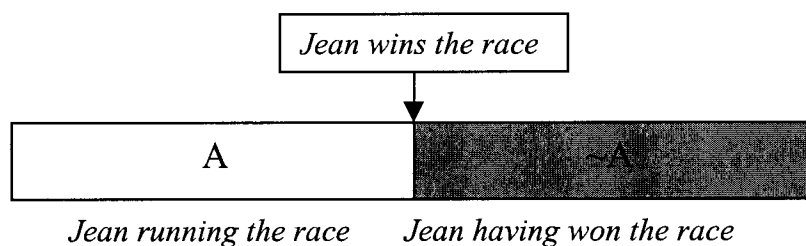
Jean running the race   Jean having won the race
-figure 13-

In the above representation, the arrow marks the predicate *Jean wins the race*; however, there is no time where that statement is true. It seems as if verbs like *win*, *vanish*, and *learn* merely mark the inauguration or conclusion of states, and are semantically similar to phrases like *start* or *begin,* which only appear with dynamic predicates, like *start running* or *begin running a mile.*[13] Predications like *start to run* and *win* are sometimes called 'inchoative' or 'ingressive' and their counterparts, *complete, finish, stopped running* 'terminal' or 'egressive' (Tobin 1993:161-62; Brinton 1985:5).

Predicates like *completed the paper* and *win* are indeed unlike any other predicate in that they are non-durative. Since Egg's scheme understands these predications as 'change' predicates, they are [+interval] (they do indeed fail the [-interval] test:

---

[12] For instance, *John stayed in London for a year* may be telic or atelic, depending upon whether "John's aim was to stay in London for a year, for instance, in order to qualify for a permanent residence permit" (Depraetere 1995:fn 6, p. 7).

[13] Freed (1979:83) mentions that although it is generally true that *start* + state $= \emptyset$, this does not hold with infinitive form: *She started to hate him for his selfishness.*

predication + simple present = ok: *I finish the race). Although the feature 'interval-based' ingeniously separates out states from non-states without using the more common feature 'durativity,' it still refers to two separate times: "[I]nterval-based predicates either apply to non-atomic temporal entities (in other words, [+ durative] –D.D.), or make predications about at least two temporal entities" (322). Thus:

Jean running the race   Jean having won the race
- figure 14-
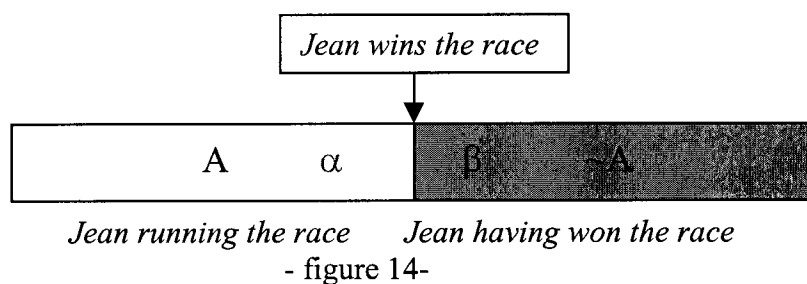
The change predicate passes the test for [+ interval] since it can only be true with reference to two times (marked by α and β).

So these predicates are [+ interval], and even [+ telic] under Egg's definition of telicity (they introduce a definite change of state, as is marked by A and ~A). However, it unclear how predicates like *vanish*, *appear*, *notice*, *win*, *start to move*, and *complete* are [+ bounded]. Egg claims that positive results for bounded mean that "the validity of a predicate is temporally limited" (324). Egg later defends the boundedness of these predicates with a *reductio ad absurdum* argument which "assum[es] to the contrary the existence of a punctual unbounded predicate P" (332). Such a premise is even more absurd than its opposite. As explained above, these predicates are not temporal at all because they are not durative (not only are they perceived as points, like *tap*, but they really are points – totally non-durative). "Boundedness" simply does not apply to these non-temporal predicates. Adding the common-sense assumption that something can only have temporal bounds if it has temporal extension, we must conclude that these

predicates are not bounded. If correct, this criticism has serious consequences for Egg's

taxonomy, which he considers an "ideal ordering" in that each "element cannot have

features 'higher' on the hierarchy unless it has all the lower ones" (319-320). Thus, if the

predications discussed here are not bounded, they cannot be telic either.

2.3 Olsen

Olsen (1997) works with the traditional features of dynamicity, durativity, and

telicity to arrive at every possible type of "lexical aspect." She offers the following table

(26-27):

Olsen	+ durative	+ dynamic	+ telic	Examples
Accomplishment	x	x	x	*destroy, create*
Activity	x	x		*run, paint, sing*
Stage-level state	x		x	*be pregnant*
State	x			*know, be, have*
Achievement		x	x	*notice, win*
Semelfactive		x		*wink, tap, cough*
[unattested]			x	
[unattested]				

- table 7-

Olsen's features are very familiar ones, so they need little explanation. I will discuss

Olsen's application of them, however, alongside my criticisms:

1) Nothing [- durative] can be [+ dynamic]. Olsen claims that

> [s]tates, activities, and accomplishments are said to denote durative situations,
>
> that is, situations that take an interval of time, whereas achievements are said to
>
> denote punctiliar situations, that is, situations that take a moment. (41)

We see here once again the equivocation in the use of "points." Here "points" are

non-durative, even though a sneeze, a cough, or a single rap on a door is clearly

durative. If we hold to a strict view of durativity, however, it is not hard to affirm that that which does not have duration does not have internal complexity or internal phases. Without these internal phases, how can change be manifest inside the situation? It is commonsensical to evaluate *I will tap the glass once* as dynamic, precisely because we know that there are phases of the semelfactive tap: the knuckle moving towards the glass, the impact, and the knuckle rebounding off the glass, for example. However, no phases can be imagined inside *I will reach the mountaintop* or *I learned that fact.* Since there is no duration, there is no complexity; if there is no complexity, there can be no change.[14]

2) Nothing [- durative] can be [+ telic]. I did not object to Egg's claim that verbs like *vanish* and *notice* were telic because he defined 'telicity' as that property which "denotes a change from the validity of a state or process predicate to the validity of its contrary" (325). Under those terms, verbs like *notice* and *discover* are [+ telic] (but still misplaced as [+ bounded], as explained above). However, Egg's definition of telicity is the minority view. Most scholars agree with Comrie (1975), who feels "it is important that there should be both a process leading up to the terminal point as well as the terminal point," and "[t]hus . . . *John reached the summit* is not telic, since one cannot speak of the process leading up to John's reaching the summit by saying *John is reaching the summit*" (47). Although Comrie circularly dismisses the concept of a non-durative accomplishment because it does not fit the existing tests, his

---

[14] Olsen (1997) admits to as much with her restriction "A verb must denote a situation with a nucleus." She comments that this rule "captures the observation that even verbs unmarked with for durativity do, in fact, have some duration, as they must have a dynamic nucleus" (53). Two questions immediately arise: 1) why then are any durative situations "unmarked" for durativity, and 2), where is the nucleus of *learn, win,* or *finish?*

conclusion is true, because the meaning of "telicity" is "purpose" (cf. Halper) and

purpose is only relevant if describing the potential, not the actual. If a period of time

must exist where a telic situation is potential, then telic situations must have duration.

3) Nothing that is [- dynamic] can be [+ telic]. Since there is a *change* from the

potential to actual (attainment) in all telic situations, then all telic situations are also

dynamic.

For the above reasons, I would re-order Olsen's table thusly:

	durative	dynamic	telic	Examples
Accomplishment	x	x	x	*destroy, create*
Activity	x	x		*run, paint, sing, wink, tap, cough*
[impossible]	x		x	*be pregnant*
State	x			*know, be, have*
[impossible]		x	x	
[impossible]		x		
[impossible]			x	
Δ				*notice, win*

- table 8-

First, a word about Olsen's "stage-level state"[15] category, not acceptable here, but

supposedly exemplified in *be pregnant*. The distinction seems to separate states that are

not expected to end, like *being intelligent*, from those that are, like *being fatally sick* (48).

As interesting as this class is, it seems that these predicates merely describe states being

acted upon by accomplishments. We must remember that in a "static" world, nothing

would change. In a static pregnancy, birth would never happen. Therefore, there is some

exterior or interior action that makes the state of pregnancy progress and then cease. The

cause of the birth is not the state of pregnancy, but the dynamic processes involved.

---

[15] This term originates in G. Carlson (1977).

Secondly, states are normally described as [- dynamic] and [- telic]. If we allow that there is a [+ telic] state, may we allow there is a [+ dynamic] state? There does seem to be a dynamic element to *being violently sick*, especially when compared to *knowing pi to the tenth decimal*. However, such a state could not take the form of [+ duration] and [+ dynamic], for that is reserved for activities. If states are [- dynamic], then they cannot be [+ telic], for the value [+ telic] (changing towards an end) can only be sensible if the situation is [+ dynamic] (changing).

Next, table 8, representing my adjustments to Olsen (1997), conflates two categories that deserve distinction under 'activity.' The first three examples are activities that are temporally [- bounded], like *walk* (*for a minute/hour/day*) from those that are inherently temporally [+ bounded], like *tap* (*#for a minute/hour/day*). Verbs like *tap the glass* belong with other activities that are temporally bounded, like *walk for an hour*, which we learned in Egg (1995) to call 'intergressive' predicates.

Also, with the feature [+/- bounded] gone, we have no way to separate situations that change the preceding situation to its contrary, like *eat the cake*, from those that do not, as in *walk for ten minutes*. With Olsen and my above correction of Olsen, both appear under accomplishments because of the features chosen.

Lastly, there is no place for predicates like *win, notice,* and *reach the top* (for now marked with Δ) under my re-ordering of Olsen's table. Remember that Olsen called these predicates 'achievements,' and attributed to them positive values for telicity and dynamicity, but not duration. I argue above that such a set of values is logically impossible. Thus, I have tentatively placed it in a category unmarked for Olsen's three features.

Before I present my model of situation types, it is worthwhile to briefly examine

Olsen's rationale for having two impossible classes. First, her last class, which was

unmarked for her three categories, cannot occur because "verbs with no features . . . fail

to occur." This is true; however, the three features she employs are hardly exhaustive.

The second "unattested" group (telic, but non-dynamic and non-durative) is also

impossible, says Olsen, though having "close candidates," like *break off, cease, cut out,*

desist (from), finish, give up/over, knock off, and *stop.* These predicates "denote the end

of a situation," but also "denote the transition to the end" and "are therefore [+ dynamic]"

(51). Some of these examples, like *knock off* and *give over,* seem durative and dynamic.

Cease, finish, and *stop* do not, and only appear telic because we know that contrary states

are ending and beginning. For that reason, they are similar to *start to* V and *learn.*

2.4 A Proposed aktionsart model

We are now in the position to take the best elements from those inventories before us,

and advance the taxonomy employed in the rest of this study.

2.4.1 Deciding on the features

Any successful aktionsart model must include the features [+/- dynamic] and [+/- telic].

The feature [+/- interval-based] came closest to replacing [+/- durative], but since we use

the term 'durative' very strictly, we do not need the less popular [+/- interval-based]

feature to remove ambiguity. With these three features, combined with the rules stated

earlier that all [+ telic] predications are [+ dynamic] and that all [+ dynamic] predications

are [+ durative], we arrive at the following:

	durative	dynamic	telic	Examples:
State	x			*be in love, know*
Activity	x	x		*run, move*
Accomplishment	x	x	x	*Build the house*

- table 9-

However, I see value in Egg's separation of those predicates that are merely bounded and tell nothing about the surrounding states/processes, from the telic predicates, which do.

	durative	dynamic	bounded	Telic	Examples:
State	x				*know*
Activity	x	x			*run*
Intergressive	x	x	x		*run a mile*
Accomplishment	x	x	x	X	*run the mile*

- table 10-

An important class of verbs (*notice, vanish, start to* V, *stop* V-*ing*) are not yet accounted for. I assert that, unlike *tap, type, sneeze,* or *cough,* the referents of these predicates take up no time on the timeline whatsoever. They are rather the beginning or ending boundaries of the other situations, which really do take time. For that reason, what these verbs refer to (in the simple) are not situations in-and-of themselves. It follows that they cannot be considered [+ telic], for they do not change one situation into another; for example, when one *notices,* the noticing hardly results in knowledge, since knowledge is present upon noticing. Thus, *notice* is altogether different from the telic *build,* for *building* can go on without the product. Prototypical verbs for this category mark the boundaries of states, as in *spot* (observe), *recognize* (know), *notice* (be aware of), *win* (being a victor), *remember* (know), *forget* (cease to know). It is unclear whether a corollary exists for dynamic situations. It may be that if we want to mark the beginning or ending point (in the strict sense of the word "point") of a dynamic situation, then we use *begin* (*running/running a mile/running the mile*), or *stop/cease* (*running/running a*

mile/running the mile).[16] However, *begin* does seem to refer to, in Freed's words, an

"initial temporal *segment*" (emphasis mine), and is therefore possibly [+ durative]. If so,

then *begin to* V and *discover* are not equivalent. At the other end of dynamic situations,

concluding verbs of this type (*the alarm stopped*) appear to be similarly [- durative] –

there was no time where the alarm was *stopping*.

Verbs like *realize* (and verb phrases, if *begin/cease* + dynamic verbs are accepted

as similar) are the outside edges of various situations, not the border between situations,

and properly speaking, not situations *per se*. However, they are referred to by simple

verbs, have prototypical members, and therefore demand mention in any investigation of

aktionsart.

2.4.2 The final model:

This leads us to the following model:

Major aktionsart types	durative	dynamic	bounded	telic	Examples:
Acmes					*vanish*
States	x				*know*
Activities	x	x			*dance*
Intergressives	x	x	x		*tap*
Accomplishments	x	x	x	x	*build the house*

- table 11-

Also worth mentioning, but not worth discussing in detail here, are two minor aktionsart

types: the iterative and serial. The distinction is made best in Freed (1979:59-63, see

above), and is quite clear-cut. However, although Freed does not see iterative as a

---

[16] Freed (1979:64-87) argues persuasively that *begin* actually marks the initial point of dynamic situations. *Start*, on the other hand, seems to refer to the onset, or pre-phase. For example: *Barry started to yawn but didn't* is acceptable. *Barry began to yawn but didn't* is not (73).

situation type, I see no reason not to. In fact, it is the iterative, not serial aktionsart,

which can claim prototypical verbs (*wiggle, jiggle, chuckle*, and perhaps a few more).

All other examples of iterative and serial situations are derived from repeated major

situation types.

Minor aktionsart types	repeated on one occasion	repeated on different occasions	Examples:
Iterative	x		*wiggle, jiggle, tapping, shaking*
Serial		x	*smoke cigarettes*

-table 12-

The major aktionsart inventory above is very similar to Egg (1995) in respect to

situation-types and the feature [bounded]. It is also traditional in respect to the features

[dynamic], [telic], and [durative]. However, as far as I am aware, it is alone in positing a

difference in duration between predications like *vanish* and *tap*. These predications have

either been listed as durative (by implication of being [+ bounded] in Egg (1995)), or

non-durative (Carlson (1981), Olsen (1995), Smith (1997:20)). I call these predications

'acmes' (meaning "edge" or "tip" in Greek) instead of 'achievements' because

'achievement' connotes a planned result, which is misleading with regard to acmes like

notice or *forget*. The inventory above is also an ideal, binary ordering.

2.4.3 Tests

Major aktionsart type	Minor divisions	Examples
Acmes	of states: of dynamic situations:	*learn, notice, vanish, enter, exit, arrive* *begin to cry, stop walking, complete a house*
States		*know, mean, be tall*
Activites		*Run, increase, count*
Intergressives	delimited: "maximal"[17]:	*run for an hour, walk a mile, count fifty* *pop, tap, cough, sneeze*
Accomplishments		*build the house, walk to the store*

-table 13-

---

[17] "Maximal" is Egg's (1995:328, 335-36) term for the limiting principle of these predications. They are intrinsically bounded by the nature of the activities which they name.

Although each category is easy to distinguish notionally, I have assembled linguistic tests below to aid identification.

- To distinguish the [+ telic] from merely [+ bounded]: Remember that, of Egg's three tests for telicity, we found only the first satisfactory. For convenience, I will repeat his examples here:

11) *Fritz is going to enter the pub*
12) *Fritz is going to run a mile*

As said before, it is the definite article which allows us to deduce from (11) that Fritz is outside the pub, and lack of a definite article which leaves us unsure about the truth value of *Fritz has run a mile*. Such would be the case with *building a/the house*, which is object-oriented, as opposed to the distance-oriented *run a/the mile*. Temporal telic predicates seem not to exist, although *fill the unforgiving minute with sixty seconds of distance run* comes close (the metaphor is, however, spatial). The test I advise is a variation of test (9) for performances: If one was V-*ing*, one hasn't V-*ed*. (Garey (1957:109), Kenny (1963:172,175)). A very strict application of the test is required, however. If one was *running a mile*, one may indeed have *run a mile*. If one was *running the mile*, however, one has not *run the mile*. The strict application of the test also has the benefit of weeding out "unintended accomplishments," as in the case of a runner trying to run 5 miles, but getting too tired and stopping at 4.98 miles. With most theorists, *Pat ran 4.98 miles* would be an accomplishment. But here it is an intergressive, and more appropriately so. To be an accomplishment in my understanding (and perhaps Egg's), one would have to say *Pat ran the 4.98 miles*, which is unlikely in this situation, since the distance was arbitrary. Pat's run was indeed bounded, but hardly an accomplishment, for the goal and purpose of the run (to run 5 miles) was never reached.

- To distinguish the [+ bounded] from merely [+ dynamic]: I disagree with Egg's claim that "boundedness indicates that the validity of a predicate is temporally limited" (1995:324). There are no temporal bounds to *Sally walked to a store*, yet clearly this is an intergressive. It is simpler to keep in mind that these activities are bounded as noun phrases are bounded. Like bounded noun-phrases, bounded activities (intergressives or accomplishments) are countable. However, tests where we add *twice* do not fully separate out activities to my satisfaction; *I ran twice* does not seem strange enough, and *The magician vanished twice* is perfectly fine, even though it describes a predication where "boundedness" does not apply. The best test, then, is: bounded + *for an hour* = ∅ (Dowty 1979:56). Iterative reinterpretation is not allowed.

12) *I swam the lap for an hour* (accomplishment)
13a) *I swam a lap for an hour* (intergressive)
13b) #I tapped for an hour* (intergressive)
14) *I swam for an hour* (activity)

It is important to notice that temporally bounded intergressives will always fail: *The skydiver fell for 15 minutes for an hour* (Egg 1985:325), thanks to redundancy.

- To distinguish the [+ dynamic] from the merely [+ durative]: I propose adding *oddly* to any predicate to determine dynamicity. The adverb *oddly* has the advantage of applying equally to "intended" and "non-intended" situations. Tests that add *deliberately, forcefully, carefully* only work for intentional agents; the same is true with tests that place the situation in the imperative mood. *Oddly* may sound somewhat strange for non-intentional uses (since natural processes are often very predictable), but nonetheless the division between dynamic and non-dynamic sentences seem clearly marked.

15a) *Jan built the house oddly*

15b) *The tree matured oddly*
16a) *Jan jerked oddly*
16b) *The mixture bubbled oddly (for three hours)*
17a) *Jan knitted oddly*
17b) *The sea acted oddly*
18a) **Jan knew oddly*
18b) **The bonsai was on the slope oddly*
19a) **The magician vanished oddly*
19b) **The glacier stopped oddly*

The states of (18) are incompatible with *oddly* because *oddly* denotes a strange manner of activity, which conflicts with the inactive meaning of states. The two acme sentences of (19) conflict with the [+ durative] connotation of *oddly*, since they are [- durative]. This is to be expected: since the durative element is a more fundamental feature, it is more obviously the missing element between durativity and dynamicity.

- To distinguish the [- durative] from [+ durative]: Although this is a relatively easy distinction to make metaphysically, it has been commonly ignored linguistically, since events with even a fairly long duration, like *cough* or *sneeze*, were treated similarly to predications with no duration whatsoever, like *arrive* or *learn*. Yet, one test dividing acmes from punctual intergressives is to add *-ing*. If no iterativity appears, then the predicate is an acme: *I was starting to believe you* or *I was realizing what was going on* vs. *I was tapping/typing*. As will be explained in chapter 6, the progressive with acmes shifts the reference to a temporal phase before the acme actualizes (an oft-mentioned result, eg. Smith 1997:75). There also may be exceptions to this rule: *noticing* and *learning*, both acmes marking the starting point of the state of knowing, can be understood as marking many lessons learned (now known) over a period of time. In one way this is iterative, for there are many repeated instances of coming to knowledge. However, if one says *I'm learning that I can't trust my instincts*, the expression implies

not only that little lessons have been learned in quick succession, but that full faith in the statement *I can't trust my instincts* is no yet attained. Thus, the progressive retains its pre-phase or "onset" force.

A second difficulty linguists have had with acmes is that they are difficult to divide from [+ telic] predicates, since they both involve definite changes. As has been mentioned, the difference between the two is that [+ telic] situations like *building the house* connote [+ durative] and [+ dynamic] happenings wherein the actualities are gradually brought into existence. Tests like *It took five days to* V do not highlight the difference between acmes and accomplishments without notional help, however. I recommend separating the two with a compatibility test of *in 10 days*.

20) *He built the house in 10 days*
21) *He noticed/spotted/realized/discovered the dog in ten days*

The expressions in (21) are more comfortable with *after ten days* or *within ten days*.

Theorists like Olsen (1997:26) and Smith (1997:30) consider achievements to be [+ dynamic] situations, as in the sentence *The magician vanished*. However, an acme has no interior, no nucleus, in which dynamicity could possibly be manifest. The [+ dynamic] sense we get from the sentence comes from the proximity of the acme to the [+ dynamic] process of state-change, which, as already noted, comes about from accomplishments.

Lastly, acmes and states, as Vendler realized, share certain similarities: for instance, neither accepts the progressive without reinterpretation: *I am loving* becomes dynamic, *I am starting to x/ I'm realizing* becomes a preceding accomplishment. I recommend any test highlighting the difference of durative value of the two.

22) *I could recite that scene for years*

23) *The scientist discovered that element for years

It should be remembered that [+ bounded] predicates, both accomplishments and

intergressives, cannot take the durative *for* either. The reason they do not, however, is

different: the [+ durative] adverbial places a second constraint on the [+ bounded]

activity, which is for some reason impossible even when the two constraints are

compatible (*He ran a mile for 5 minutes*). Acmes fail the test simply because they take

no time.

2.5   Summary

This chapter examined the aktionsart taxonomies of Egg (1995) and Olsen (1996). Egg

advances the category 'intergressive,' which has the property of being [+ durative],

[+ bounded], but [- telic]. Egg's system, however, is seen to be inadequate because of the

inconsistency involved in considering verbs like *notice* to be bounded. These verbs refer

to true points – points that cannot be reduced and therefore take no temporal "space." As

they have no extension, they cannot be [+ bounded].

Olsen presents us with a more traditional analysis, but one that disregards what I

see to be a natural ontological hierarchy of aktionsart features: all [+ telic] predicates are

[+ bounded], all [+ bounded] predicates are [+ dynamic], all [+ dynamic] predicates are

[+ durative].

Finally, I advance my own model and introduce the term 'acme,' which I believe

better expresses the metaphysical nature of what was formerly called 'achievements.'

Acmes mark the temporal edges of situations. They are evidenced by verbs like *notice,*

win, spot, discover, lose, and *forget*. They are [- durative], and therefore [- dynamic],

[-bounded], and [- telic]. I conclude by offering linguistic tests that distinguish the

various categories from each other.

Chapter 3: Aspect

In the previous two chapters, I examined the variety of basic situation types, or aktionsarten, manifested in (at least) English through prototypical verbs and various compositions of arguments, articles, prepositional phrases, etc. This chapter will examine the manner, or aspect, with which these situations are expressed. Like the previous chapter, here I will critically examine important and detailed inventories of aspect in English.

3.1 Defining and distinguishing aspect

Scholars of Slavic languages led the way in the study of aspect, since Slavic languages mark for aspect in a more systematic manner (see Dahl 1985, for example). From this tradition, Porzig (1927:152) formulated his definition of aspect, "the locutionary agent's view of the situation expressed" (qtd. in Bache 1995:268), long before the concept was widely applied to English. This eventually led to Comrie's (1976) seminal definition of aspect, as a category that is concerned with time but not with time in relation to another event, e.g., the time of utterance or a reference time. Aspect, then, is a non-deictic category concerned with time only in terms of the "internal temporal constituency of the one situation; one could state the difference as one between situation-internal time (aspect) and situation-external time (tense)" (Comrie 1976:4-5). This view of aspect is accepted by many scholars today with little modification, especially by those who distinguish between aspect and aktionsart. For example, Brinton (1988) calls aspect "a matter of the speaker's viewpoint or perspective on a situation" (3), which is a little more vague a definition than Comrie's, but appropriately so since Brinton does not see aspect

as pertaining to the perfective/imperfective distinction alone. Bache (1995:269) calls

aspect the "situational focus with which the locutionary agent represents situations."

Here is a simple example of this dynamic at work:

1) *He was painting the house*

2) *He painted the house*

Here, the tense (past) and the aktionsart (accomplishment) are the same, but the

"portrayal" of the situation in terms of being "inside" or "outside" is different.

Although I hesitate in taking a metaphysical stand on whether aktionsart refers to

situations that have independent reality, the situation types themselves are certainly more

fundamental than the view we take of them. One of Bache's (1995:217-226) arguments

on this matter should suffice: we can conceive of situations on their own without

"locating them in time or assigning any representational focus to them." The reverse,

locating an unknown situation or assigning an aspect to an unknown situation, cannot be

done. Bache expands his argument, which need not be related here, to defend his view

that, of the tense/aktionsart/aspect triad, aspect is in fact the least fundamental category.

However, such an ordering presupposes a distinction between aktionsart and

aspect not universally accepted among experts in the field. Verkuyl (1993) questions the

relevance of the distinction for two reasons. First, the "objective" nature of aktionsart

does not seem so objective when we consider that the same "situation" can be described

various ways by the speaker. Verkuyl points to Galton (1984:24), who argues, "Thus the

same objective situation may be reported either by the sentence *Jane was swimming* or by

the sentence *Jane had a swim*; the first sentence presents the situation as a state of affairs,

the second presents it as the occurrence of an event" (24). (In the terminology suggested

in this thesis, *Jane was swimming* is an imperfective activity, and *Jane had a swim* a perfective intergressive.) Galton uses the word "situation" in two senses here: first, to refer to extra-linguistic reality, and second, to refer to the aktionsart of the sentence describing the reality. I suggest using the word "situation" only in the latter sense, since former use of the word "situation" refers to a referent necessarily unnamable (because if named, it would again be conceptual and linguistic, and fall into one of the categories advanced here and elsewhere). Situations, then, are real properties of sentences. One may easily examine them objectively, aided by concepts like 'accomplishment' or 'activity.'

Verkuyl's (1993:10-12) second objection to the strict distinction between aspect and aktionsart is that this delineation has drawn its strength from the Slavic tradition because Slavic has regular grammatical marking for aspect, unlike English or Dutch. Sasse (1991:38-44) makes a similar point in his investigation of Samoan, in which aktionsart, as well as aspect, is constructed grammatically, not lexically (38-41). On the other end of the spectrum is German, which Sasse claims is strong with regard to lexical aspect but has "no grammatical aspect." In between these two extremes are languages like Modern Greek or Maasai, which Sasse calls "ripe" aspectually, having a clear distinction between lexical and grammatical aspects.

Both Verkuyl and Sasse seem to take umbrage with the "lexical/grammatical" division of aspectual categories more than with the conceptual division between different states of affairs and how those states of affairs are expressed temporally. For this reason, I advocate relying upon conceptual or notional definitions of aktionsart and aspect rather than linguistic ones like "grammatical" or "lexical" aspect.

3.2 Comrie

The most commonly observed feature of aspect is the [+/- perfective] distinction.[18] Imperfective expressions look upon "the internal temporal structure of a situation, viewing a situation from within" (Comrie 1976:24). Perfective situations, on the other hand, are those that view a situation "viewed in its entirety, without regard to temporal constituency" (12). I gloss *He was painting the house* as imperfective, since the sentence places the listener "inside," as it were, the accomplishment of PAINT *the house*. On the other hand, *He painted the house* presents the same accomplishment situation as a whole, and is thus perfective.

As the case with the above discussion on aktionsart, my goal in arriving at an aspect inventory is to arrive at aspect types (preferably ordered hierarchically) such that each main clause would have only one aspect, just as each has only one situation type. If we accept Comrie's definition of perfective and imperfective aspect, we see that the two are complementary, meaning all sentences would be either perfective or imperfective. Other aspects, like the habitual, must either be 1) a type of perfective, 2) a type of imperfective 3) not aspects at all but some other category, or 4) some other aspect, neither perfective nor imperfective, implying that that Comrie's definition – and the long tradition from which it stems – is wrong.

I will begin this analytical literature review with Comrie's aspect inventory, since his monograph *Aspect* (1976) has had a great impact on the field.

Comrie orders the aspects in the following way (1976:25):

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[18] The term 'perfective' here must not be conflated with the aspect/relative tense 'perfect' (see Chapter 4).

Comrie

Perfective——Imperfective

Habitual   Continuous

Nonprogressive   Progressive
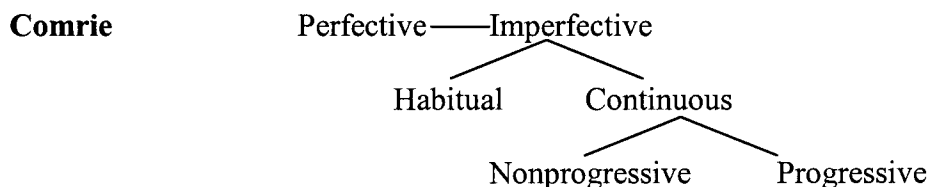
-figure 15-

He believes the essence of a habituality is that it "describes a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period" (27-28). Comrie allows for the habitual to be "iterative" (*The policeman used to stand on the corner for two hours every day*[19]) or not (*The temple of Diana used to stand at Ephesus*). Comrie spends some time defending his view that the past habitual need not apply only to situations that no longer obtain, as with *Bill used to be a member of a subversive organization*, for Bill may still be a member of the subversive organization if that expression is true (28-30). This discussion is probably precipitated by Comrie's apparent suggestion that the *used to* construction is the marker for aspect in English (though he acknowledges later that the habitual can occur with present [+dynamic] situations (30, 77). I feel the possibility of future and present habits are unnecessarily obscured by Comrie's over-reliance upon the *used to* construction for the habitual. If we agree that habitual aspect can occur without *used to*, then present and future habits are easy to create: e.g., *I'll tell my children corny jokes when I get old.*[20]

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[19] This sentence would be considered "serial" to Freed and Brinton (see 1.6 and 1.7). Iterative situations in their sense could not be used with habitual aspect, since one occasion of quick repetition would hardly amount to a habit: *I tapped on the door* vs. *I worked at the mill*.

[20] C. Smith (1997: 183-84) explains that the habitual also comes about via frequency adverbials (*often, regularly*), present-tense nonstatives (*John walks to the store*), and pragmatically unlikely events (*John read the newspaper last year*).

'Continuous' aspect is defined negatively by Comrie as those aspects which are imperfective and not habitual (26). Continuous aspects manifest themselves progressively and non-progressively. Comrie tells us that some languages, like Spanish or Italian, can express progressive meaning without using their progressive markers: *Juan esta cantando* (progressive) or *Juan esta canta* can both be translated into *Juan is singing* (33). In languages like English, however, the progressive is always marked with the *-ing* form, making it easy to diagnose. The non-progressive continuous is primarily reserved for states in conditions that would result in the progressive if any other situation type were being discussed: *I'm washing the car* (accomplishment) vs. *I know how to wash a car* (state) (35, 51).

3.3 Brinton

Brinton (1988) accepts Comrie's definitions for perfectivity and imperfectivity. However, her aspect model is quite different (52-55):

Brinton 1988	sub-category	formal markers
1. perfective		simple forms
2. imperfective	progressive continuative	*be* V-*ing* *continue to* V, *continue* V-*ing, keep on* V-*ing*
3. phase	ingressive egressive	*start/begin to* V, *start/begin* V-*ing* *stop/cease* V-*ing, cease to* V
4. habitual		(be) used to V, be accustomed to V, simple forms
5. perfect		*have* V-*en*

-table 14-

Brinton explains that 'phase' aspects were often considered perfective because they represented points, and points have been commonly seen as perfective, since they resist the internal temporal views the imperfective provides. Brinton (1988:52) reminds us, however, that one of Comrie's descriptions of the perfective disallows phases as a subgroup: "[In the perfective] the whole situation is presented as an unanalysable whole, with beginning, middle, and end rolled into one; no attempt is made to divide the situation" (Comrie 1976:3).

The aktionsart inventory advanced in the last chapter provides a third option. If the boundaries of events and states are considered aktionsarten, then Comrie is not forced into the contradiction Brinton accuses him of making: acmes are indeed perfective in the simple form (except in the present of course): *I won the race*. As far as I can tell, the only difference between verbs like *win* (which Brinton tries to explain under aktionsart) and verb phrases like *start to run* (which Brinton tries to explain under aspect as "phase") are that the former refer to the beginnings of states (in this case, the state of being victorious), whereas the latter refers to a dynamic situation. Both are the situations[21] being referred to in the main clause and can be referred to perfectively or imperfectively: *I was winning the race/starting to run* or *I won the race/started to run*. In both cases the beginning of a situation is the very situation being referred to, and the fact that one type requires "aspectualizers" like *start to* in order to become acmes is as unimportant as the fact that activity verbs like *run* require definite NPs like *the race* to become accomplishments. In the perfective, the acme "as a whole" is referred to, but the progressive shifts to a durative period of time before the acme since acmes have no duration. The aktionsart

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[21] I use "situation" here in the loose sense. As I mentioned earlier, I have reservations about calling states and acmes "situations."

'acme,' then, pays some dividends in allowing us to see *start to rain* and *vanish* in the simple non-present as perfective (in Comrie's sense) after all, which in turn allows us to eliminate one of Brinton's additional aspect categories.

The second aspect type Brinton sees as neither perfective nor imperfective is the habitual, which she claims "views a situation as repeated on different occasions, as distributed over time" (1988:53). In an earlier article, she adds that they are agentive (1987:199-200). From the outset, we may notice that Brinton's habitual is quite unlike Comrie's, which he took pains to define as open in respect to iterativity (e.g., his *Simon used to believe in ghosts*). Comrie also seemed to allow non-agentive states (*The Temple of Diana used to stand in Ephesus*). Problematically, the definition Brinton provides is indistinguishable from her 'series,' which is an aktionsart category referring to multiple durative dynamic events seen as one situation (presumably when looked at perfectively or "above" the constituent situations) (1988:56-57, see also Freed 1979:52-55[22] and section 1.6 of this thesis). Brinton spends much energy in separating the habitual from states, 'generics' (*The sun sets in the west*) (Brinton 1987) and iterative activities (Brinton 1988: 53-54), but she seems content to use 'series' and 'habitual' interchangeably (1988:53-54), an ambiguity particularly serious for her scheme since one is an aktionsart category and the other an aspect category. The only apparent difference is that series may be non-agentive, whereas habituals are always agentive.

Although acknowledging the cross-linguistic evidence advanced by Comrie

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[22] The connection between Freed's series and Brinton's habitual is further confused since Freed considered the habitual aspect a subtype of the imperfective (1979:15), as did Comrie. Adding to the fog surrounding habituality, Freed defines "serial" as "an aspectual verb-type which has the temporal characteristics of either an activity, an accomplishment, or an achievement (or some states), which is considered to occur repeatedly or habitually" (53).

(1976:25-26) and others in which the habitual is cast in the imperfective, Brinton feels

that this is not the case in English, because English often uses the simple form to express

habituality, which Brinton sees as perfective (1987:209-210, see also 1988:15-17). Even

if we grant Brinton that the simple form is the marker for perfective aspect (a conclusion

well-criticized in Olsen 1997:183-191), she never explains why the habitual is not a

species of perfective aspect. We are forced to deduce that her reason for not doing so is

that habits can appear in the progressive (eg., her *That child is continually getting into

trouble*).

Brinton, despite not making her reasoning clear, does seem to have a point: if

habits can be viewed as perfective or imperfective, they themselves are neither.

Although Comrie does not hesitate to gloss *Jones used to live in Patagonia* as habitual

and therefore imperfective, the expression does seem to be "a situation [regarded] as a

single whole, without distinction of the various separate phases that make up that

situation" – or perfective.

Finally, Brinton's inclusion of the perfect as an aspect category will be discussed

in the following chapter.

3.4 C. Smith

Carlota Smith (1997) considers the habitual to be a "derived state" which

"presents a pattern of events, rather than a specific situation, and denotes a state that

holds consistently over an interval" (33-34, see also183-184). Smith explains that habits

are syntactically similar to their constituent events; for instance, habits can work in the

imperative mood (*Refuse dessert every Friday!*), agentive adverbials (*I persuaded Mary*

to play tennis every Friday), and pseudo-cleft constructions (*What Mary did was play*

tennis every Friday) (51). Semantically, however, habituals are like states in that the

truth-value of the expression is determined by "whether there is a pattern which holds

over an interval, not whether a particular situation occurred" (34). Habitual becomes,

therefore, a situation type.[23]

With the habitual out of the way, Smith asserts three aspect classes: the

perfective, the imperfective, and the neutral. Perfective aspect "views a situation as a

whole (66), and, more specifically, "presents a situation with the endpoint properties of

its situation type schema" (171).[24] Whereas the first definition is more standard, the latter

reflects Smith's views concerning the interaction of states and the perfective. To Smith,

states do not have endpoints because "endpoints, or changes into and out of a state, are

not part of the state itself" (69, 171).

This bears out with Smith's tests for perfectivity; whereas all other situations are

completed or terminated in the perfective, states are ambiguous:

3) *Sam owned three peach orchards last year, and he still owns them.*
4) *Sam owned three peach orchards last year, but he no longer owns them.*

Smith's definition of perfectivity accounts for this: "If the temporal schema includes

endpoints, they are included in the perfective viewpoint of that event type" (171). Smith

does not see activities passing the same tests, but does not explain why:

5) * (to Smith) *Lily swam in the pond and she may still be swimming.*
6) **Mrs. Ramsey wrote a letter and she may still be writing it.*

Smith claims both of the above expressions are contradictory, though acknowledging that

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[23] Smith defines the habitual in her chapter on "situation aspect." She makes roughly the same distinction used in   this thesis between situation types and aspect per se, which she calls "viewpoint aspect."
[24] Smith uses the term "endpoint" to refer to both temporal bounds of a situation, not just the coda.

one's interpretation of (5) would necessarily be "more flexible . . . in discourse contexts." Whereas (6), an accomplishment, obviously implies completion of the letter, in (5) "the perfective imposes an implicit bound, [though] the event need not actually terminate" (67). Smith does not explain why this is so, and the difference between (5) and (3) is not clear in my reading.

Smith's imperfective is more like Comrie's: it focuses upon "part of a situation, with no information about its endpoints" (73). The most obvious sub-type of the imperfective in English is the progressive, defined as "the viewpoint [which] presents an interval of an event that includes neither its initial nor final endpoint, and that precedes the final endpoint" (174). This definition is superior to merely "shows the situation as progressing"; for although accomplishments and activities[25] do "progress" in the progressive, Smith's achievements (my acmes) in the progressive shift the reference to a brief phase before attainment: *Helen was reaching the top* (172). A situation can hardly be said to progress if it has not begun.[26]

The second, and less common, subgroup of imperfective in English that Smith describes is the 'resultative,' which "presents an interval of a position or locative that follows the final endpoint of a change of state" (175). Examples are *Your drink is sitting on the table* and *The picture was hanging on the wall.* These sentences are stative (they do not progress because they are not made up of successive stages, are not dynamic, fail pseudo-cleft tests, etc.) but still employ the *–ing* form. As they do not refer to endpoints, they are thus are imperfective (173).

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[25] Smith considers, as I do, iterative "semelfactives" (*tap, knock*) to be derived activities (1997:172).
[26] One may view acmes in the progressive as accomplishments. In that case, Comrie's definition is still helpful.

One last difference between the previous two scholars and Smith remains: Comrie (1976:34) considered states, in the present with simple form (*He knows Spanish*) to be 'continuative,' a sub-type of the imperfective in his ontology. Smith, however, seems to consider states as notionally neutral in regard to being "open" or "closed," though she asserts that English does not have a neutral aspect form (a default that is neither perfective nor imperfective; the simple form is perfective in Smith's view) (170, note 2 on 192). In fact, at one point she claims that "[p]resent sentences in English may have the perfective or imperfective viewpoint" (112). This is a weakness in Smith's explanation, since *He knows Spanish* seems imperfective without opportunity for perfective interpretation. Smith, like Brinton (1988), seems too interested in representing the English aspect system as morphologically regular by equating the simple form with the perfective viewpoint.

Finally, Smith differs from Brinton in not treating the perfect as an aspect, but as a type of state (186-189). More will be said on this in the following chapter.

3.5 Olsen

Olsen (1995) attempts to improve upon the previous works reviewed here in defining perfective and imperfective in terms of Reichenbach's (1947) terms "event time" and "reference time." Explicit use of these two conceptual tools (each of the preceding uses of "view" can be understood as referring to reference time) is very wise in the study of aspect, because it places all temporal concerns within one frame of reference: although aktionsart is concerned with more than time,[27] the temporal features of aktionsart all deal

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[27] For instance, the features [telicity] and [boundedness] are atemporal.

with "event time" in the Reichenbachian sense. If it can be shown that aspect concerns the relation between event time (E) and reference time (R), then the only relation left is that between "coding time" and R, or tense.

However, Olsen considers aspect as not only the relation between R and E, but more particularly as pertaining to the *intersection* between R and E. The imperfective shows the R to intersect with the nucleus of the E:

Time: ───────── R ─────────────────────▶

Event: nucleus > coda

-figure 16-

On the other hand, the perfective, contra Comrie (1976), e.g, who sees it as viewing a situation without regard to its internal complexity, in Olsen actually does point to a part of the situation: the coda.

Time: ───────────── R ──────────────▶

Event: nucleus > coda

-figure 17-

Olsen sees the *be* + V-*ing* as the imperfective marker in English (166). Although she claims the progressive is only a subtype of the imperfective aspect cross-linguistically, she allows the *be* + -*ing* form to apply to states, leaving her to conclude that "English does not have a true progressive imperfective, since it does not require situations to be [+ dynamic] but applies to situations unspecified for dynamicity as well" (165). Personally, I think most of her state + progressive examples (actual recorded utterances) are not yet permissible as standard English: for instance, *I'm just somehow being satisfied with what I'm doing now* (qtd. in Olsen 1997:155) seems over the line. English may be

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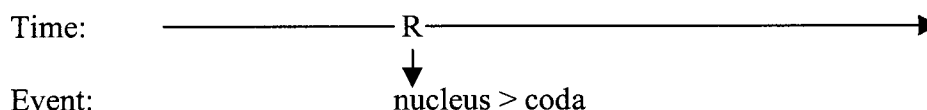
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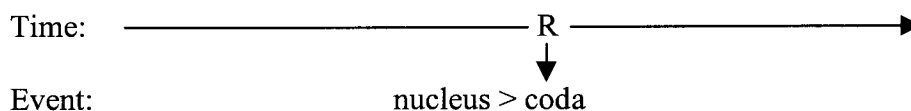
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$\downarrow$

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Personally, I think most of her state + progressive examples (actual recorded utterances)

are not yet permissible as standard English: for instance, *I'm just somehow being satisfied

with what I'm doing now* (qtd. in Olsen 1997:155) seems over the line. English may be

heading in this direction; however, I think Olsen is hasty in her judgment that the *be + -ing* form is more than a standard progressive. Even though Olsen attributes to the English progressive an unusually wide scope, she acknowledges the imperfective possibilities of the simple form (182).

Unlike Brinton (1988) and Smith (1997), Olsen is careful to distinguish between the simple form and the perfective (182). Olsen posits that there are four types of languages in regard to aspect: 1) those that mark for the imperfective only, 2) those that mark for the perfective only, 3) those that mark both independently, 4) and those that mark neither. That a language has a morphological marking for aspect does not mean, however, that all instances of the perfectivity or imperfectivity require the respective form. Her oppositions below are therefore "privative" as opposed to "equipollent." She differs from Smith, then, in claiming that every utterance is either perfective or imperfective notionally – no "neutral" viewpoint is possible, only neutral morphology. Olsen bases her claims on cross-linguistic explications in Comrie (1976), Dahl (1985), and C. Smith (1991). The table below summarizes Olsen (1997:99-106):

Type	Mark Imperfective	Mark Perfective	Representative languages
A	x		Kikuyu, Oneida, Bengali
B		x	Russian, Hungarian, Modern Greek,
C	x	x	Turkish, Swedish, Spanish, English
D			(no examples provided)

- table 15-

Her assertion that English marks for *both* imperfective and perfective rests upon the *–ing* (which marks imperfectivity) and the supposed "perfective auxiliary" *have* and "perfective particle" *-en* (*Pauline had/has/will have eaten*). Of course, these two can combine: *Pauline had been working*. This "imperfective perfective" has the semantic property of the R spanning the E's nucleus and coda; "that is, the imperfective perfective

aspect asserts that a situation is both ongoing and completed at the relevant R, located by tense" (192). Graphically, Olsen represents her imperfective thus:

Time: ————————————— R ————————————————➤
                                    / \
Event: nucleus > coda

- figure 18-

Olsen explains how the imperfective perfective asserts that the nucleus just before the coda was obtaining, as opposed to the (simple) imperfective and progressive, which asserts that the event was continuing with no reference to endpoints. She compares the following sentences:

7) *Your father and I are looking for you.*
8) *Your father and I have been looking for you.* (RSV, Luke 2:48)

Her gloss: example (7) merely asserts that the nucleus is obtaining and could not be uttered to the child's face. However, in (8), "the looking is completed . . . [and (8)] is addressed to the child (Jesus) in his presence" (193).

Clearly Olsen makes a number of mistakes here. First, she uses the present progressive to contrast with (8) rather than the more equivalent *Your father and I were looking for you.* It is the tense that makes it impossible to utter the sentence to the boy's face, not the simple progressive. (Although (8) employs the 'present perfect,' the event (be + *looking*) took place in the past.) Secondly, (8) asserts only pragmatically, not semantically, that Jesus was found, as *Your father and I have been looking for **him*** proves. Third, what Mary is doing in (8) is asserting either the experience of her search or the recent past-ness of the search, not that the search is currently ongoing (see Comrie 1976:58-61).

Olsen's other examples are scarcely better. She compares (9) to (10), drawing the conclusion that "the imperfective perfective ASSERTS that the nucleus held during the R, immediately preceding the coda; [10] is therefore incompatible with the existential reading [of 9]" (193, emphasis Olsen's).

9) *I have looked for you (at least once since noon).*
10) *I have been looking for you (*at least once since noon).*

But once again, the perfect construction has nothing to do with the change:

11) *I looked for you (at least once since noon).*
12) *I was looking for (*at least once since noon).*

The final pair Olsen advances highlighting the [+ perfective] value of the perfect comes from Mittwoch (1988:233):

13) **Tweety was flying for two hours*
14) *Tweety had been flying for two hours*

Olsen writes, "Like the imperfective, [the situation] is ongoing at the R, and like the perfective it must be complete at the R" (195). But does the perfect (supposedly [+ perfective] marker) include the coda in *Tweety has been flying for two hours*?

3.6 A proposed model of aspect

I believe the first step answering the riddle of the perfect involves expunging it from the perfective/imperfective discussion. As the next chapter will show, Olsen is a bit behind the times in recognizing the perfect as a category distinct from both tense and aspect. Also, as mentioned earlier, I am suspicious of her assertion that the *–ing* form in English has a domain wider than the 'progressive' (which works with only [+ dynamic] portrayals). However, Olsen's portrayal of the simple form as an unmarked aspectually is correct, as any non-progressive expression in the present shows. Thus, using Olsen's

privative table of language types in regard to aspect, I advise seeing English as one of Olsen's type "A" languages, which mark only for the progressive imperfective (99-100).[28]

The basic aspect types of English are:

Perfective ————— Imperfective

Continuous   Progressive
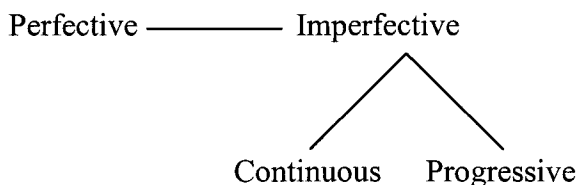
- figure 19-

Brinton's 'phase' aspects are not included because *start to* V, *cease to* V are not ways of viewing a situation, but acmes composed of, e.g., *start to* + dynamic verb. They are the match to verbs like *appear* and *notice*, which mark the beginnings of states. Brinton's *continue to* V, however, falls easily into the continuous aspect.

The 'habitual' is not an aspect, either. As we learned from Brinton, habits can be shown perfectively or imperfectively, contra Comrie. Since every sentence would appear to be either perfective or imperfective, habituality must apply to something other than aspect. Brinton is also correct is seeing habits as agentive, thereby eliminating Comrie's *The Temple of Diana used to stand at Ephesus*, which is not habitual for two reasons: 1) the sentence employs agency via personification, and 2), the *used to* construction does not assert a habit, but rather the fact that the temple is demolished. Comrie's *The Temple of Diana used to stand at Ephesus* is also problematic in that it is not constituted of repeated events. Moreover, since our commonsense understanding of habits implies agency, and states are the only non-agentive class of aktionsart, one is justified in

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[28] According to Olsen, English would be similar to Bengali, Fitzroy Crossing Kriol, Quechua, and Tigrinia in marking the progressive alone.

viewing expressions like *You always know what to say* as poetic uses of state verbs used to describe actions. They are therefore as serial, not stative. The literal understanding of these utterances is that the speaker is remarking upon the speech *acts*, which were repeated enough to deserve habitual expression. I also side with Brinton against Smith in seeing habits as non-stative. States are [- agentive], and thus habits fail tests that find them sensible in the imperative mood and with agentive adverbials like *deliberately* (Brinton 1991:199-201). Despite the truth of Smith's claim that habituals are like states in that the truth-value of the expression is determined by "whether there is a pattern which holds over an interval, not whether a particular situation occurred" (34), this is only true because 1) nothing "occurs" with states, and 2) we are seeing the activities composing the habit from a "super-ordinate" position (to use Freed's term). With these concerns in mind, I advocate viewing habits as a (significant) subtype of the aktionsart 'series.'

3.7 Summary

My goal in this chapter was to show how indicative aspect models of the past 25 years either lump extraneous material into the category or fail to understand the category properly. Comrie's consideration of the habitual as imperfective is seen to be untenable, since expressions such as *John used to eat sushi* are clearly perfective, especially when contrasted with their progressive counterparts, as in *John was always eating sushi*. Brinton's addition of 'phase' aspects (*start to* V, *cease to* V) are more accurately markers of the aktionsart 'acme,' and not relevant to aspect at all, as the contrast between *I was starting the engine* and *I started the engine* proves. Brinton's placement of the habitual

on its own recognizes its perfective and imperfective possibilities, but is unnecessary since the habitual is simply an agentive subgroup of the aktionsart 'series.' Finally, Olsen's 'imperfective perfective' is seen as to be a logical and linguistic labyrinth that can be easily avoided by simply recognizing that the perfect is not a marker for perfectivity (the perfect is actually outside of aspect altogether, as I show in the following chapter). Thus, once all the superfluity is removed, aspect amounts to the imperfective/perfective distinction, with the imperfective manifested either through the progressive (with [+ dynamic] situations) or the simple form (with states, or serial [+ dynamic] situations in the present).

Chapter 4: Orientation

In the first two chapters of this thesis, situations, themselves, were discussed. Although time plays a part in the defining features of the various situations (as in whether they have duration), the situations do not need to be portrayed as obtaining or complete in time (aspect), nor do they require temporal embedding in order to be discussed. Chapter 3 examined the way aspect, in the strict sense of the term, portrays a given situation. Whether in an informal way, as with Comrie, or a more formal way, as with Olsen, the "view" of a situation in regard to completion and on-goingness amounts to a relationship between a reference time and the situation being described.

In the sentence *I was watching the ball drop*, there is no doubt that the tense is past and the aspect progressive. But what about the expression *I have been watching the ball drop*? If it is true that aspect concerns the relationship between the reference time and the situation, then the difference between the first and second examples is one of aspect, not tense. Of course, this raises the problem that many grammars consider the perfect a "relative tense." Furthermore, even granting that the perfect is an aspect, the linguist trying to construct a coherent ontology of aspect is faced with a sentence displaying *two* aspects: the perfect and the progressive (which each may appear independently). In this chapter, I sketch the arguments for viewing the perfect (and its possible counterpart, the 'prospective') as a subcategory of tense and aspect. I ultimately reject both proposals, in favor of a slightly modified version of the theory advanced by Bernd Kortmann (1991, 1995). This approach sees the perfect as a fourth and logically expected member of a temporal tetrad of aspect – aktionsart, tense – orientation.

4.1 Problems with seeing the perfect as tense or aspect

The *have/had*+V construction is usually analyzed as either an aspectual category or a tense category. The construction enters aspectual waters in that linguists often wonder if the phrase *I've eaten caviar* is perfective, since the eating is completed, or imperfective, since it is somehow still relevant at the moment of speaking and beyond. Robert McCoard (1978), in his in-depth investigation of the perfect, considers treating the perfect as an aspect but abandons that position since the perfect does not contribute towards viewing a situation as complete or incomplete. Although critical of those authors who place the perfect in with the aspects "simply [because] there is no other well-defined category into which it fits comfortably" (11), McCoard does so, himself, after contemplating the merits and demerits of seeing the perfect as a tense form:

> Since we will be speaking mainly of those perfects which stand in closest
>
> competition with the preterit – namely present perfects and past perfects –
>
> we are necessarily dealing with tensed perfects. For the present purposes,
>
> then, perfects are tense forms – at least. (17)

But after completing the bulk of his investigation, McCoard, in a very short passage, recommends seeing the perfect as a separate category, called "inclusion," which is merely "subordinate to tense in the hierarchy of categories, while aspect is pretty much coordinate with tense" (152).[29] Reasons why it makes good sense to add yet another category to our grammar by divorcing the perfect from aspect and tense will become apparent as we investigate.

---

[29] This ranking is probably incorrect. See Bache (1995:217-226) on why aktionsart is more fundamental than tense, and tense more fundamental than aspect.

McCoard goes on to examine the four principal explanations of the perfect's role: 1) that it asserts the "current relevance" of a prior situation, 2) that it locates an event in the "indefinite past," 3) that it presents an "extended now, which is stretched to include the prior situation, or 4) that it "embeds the past" merely syntactically. I cannot enter this controversy here, since this chapter is less concerned about what the perfect is than what it is not – namely, an aspect or tense category.

McCoard's initial grouping of the perfect under tense is understandable, since the perfect (or at least the future or past perfect) does locate events (E) on a timeline relative to a reference point (R), which in turn is anchored to a coding time (S, for "speech time"). Such is the influential theory proposed in Reichenbach (1947), but offered in cruder forms over the past four centuries (Binnick 1991:40). Reichenbach, in a chapter entitled "The Tenses of Verbs," advances what becomes a nine-fold system that expresses (sometimes with ambiguity) the thirteen possibilities below (Reichenbach 1947:297). (In this table, assume a left-to-right timeline; the examples are my own.)

|	Structure	Reichenbach's name	Traditional Name	Examples
1)	E – R – S	Anterior past	Past perfect	I had washed the car
2)	E,R – S	Simple past	Simple past	I washed the car
3)	R – E – S			
4)	R – S,E	Posterior past	---	I was going to wash the car
5)	R – S – E			
6)	E – S, R	Anterior present	Present perfect	I have washed the car
7)	S,R,E	Simple present	Present	I wash the car
8)	S,R, -- E	Posterior present	Simple future	I will wash the car
9)	S – E – R			
10)	S, E – R	Anterior future	Future perfect	I will have washed the car
11)	E – S – R			
12)	S – R,E	Simple future	Simple future	I will wash the car
13)	S – R – E	Posterior future	---	I will be going to wash the car

-table 16-

Reichenbach's system is very clear and has the added benefit of replacing the term 'perfect' with 'anterior,' a serendipitous move since 'perfectivity' would become, in later studies, a term applying to the completion or wholeness of a situation. (Since the distinction should be clear by this point, I will use the term 'perfect' instead of 'anterior.' I also prefer the term 'prospective' over 'posterior' to describe the opposite action of the perfect.)

However, Reichenbach's system, ironically, also lays bare one reason for divorcing the perfect from tense. Comrie asserts in *Tense* (1985) that the absolute tenses do not require the 'R' feature at all, since "E before S," "E simultaneous S," and "E after S" suffice. When the reference point is required, absolute tense no longer connects the speaking time to the event time, but rather to the reference time. "Relative tense" becomes the link between the reference point and event. Comrie treats the perfect, then, as an "absolute relative" tense,[30] allowing him to describe the future perfect, for example as "E before R after S." Comrie favors this representation to Reichenbach's because it is silent in regard to the relation of E to S and seems supported by the fact no language seems to differentiate between (9), (10), (11) (Comrie 1985:122-129,64-79). Comrie's treatment of the future perfect portrays it as vague, rather than ambiguous (Binnick 1991:115).

This analysis prompts theorists to see the "relative tense" as not a tense at all, but as aspect. Indeed, it seems more common to see the perfect as an aspect (eg. Leech (1987), Brinton (1988), Greenbaum, et al (1990)). Binnick, for example, asserts that tense "is a matter of how R relates to S" whereas "the relationship of E and R [is]

---

[30] It must be noted the Comrie does not see the present perfect as an "absolute relative" tense, though his reasons, and the responses listed in Kortmann (1994), will not interest us here.

roughly, aspect" (1991:115). We have already examined how Olsen (1997) tries, unsuccessfully, to understand the perfect as an aspect category in a somewhat formal way. For convenience, a relevant figure from Olsen (1997:192) is duplicated here:

Time: ——————————— R ——————————————➤
                               / \
Event: nucleus > coda
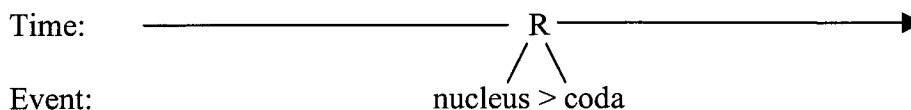
-figure 20-

As remarked, Olsen believes that the R "intersects" *both* the nucleus *and* the coda, "that is, the imperfective perfective aspect asserts that a situation is both ongoing and completed at the relevant R, located by tense" (192). Not only is such a definition paradoxical, as the figure above plainly shows, but as discussed, Olsen fails to provide linguistic evidence for this view.

Of course, Olsen at least attempts to formalize the perfect, a subject notorious for its "fuzzy" analyses (McCoard 1978:1-20,31-32). Another, better attempt to express formally both traditional aspect (perfective/imperfective distinction) and the perfect/prospective uses under one umbrella relation of reference time to situation time can be found in Klein (1994). Klein attempts to explain the perfect and prospective (*going to/about to* V) as aspect by using his version of Reichenbach's three terms. Klein's 'TU' refers to "time of utterance," 'TT' refers to "topic time" (or the reference time), and 'Tsit' the time of the situation itself.[31] Simplified illustrations of Klein's understanding of the tenses, aspects, and perfects are below. In each figure, the lines

---

[31] Klein does not embrace standard understandings of tense and situation wholly, but his reservations on those matters need not be mentioned here, since his belief that aspect involves the relation of TSit to TT is conventional among those who see the "relative tenses" as aspects.

represent the time the situation obtains, with time moving left to right. Brackets refer to

the TT, topic time (Klein 1994:99-119).

a. prospective aspect [   ] +++++++++++++++++++++++++++++++++++++
John is about to sleep

b. progressive/imperfective aspect +++++++++[+++++++++++]+++++++++
John is sleeping

c.1. perfective aspect   +++++++++++++++++++++++++++++++++++[+++++   ]
John slept

c.2.   or   [++   ]
John slept
(in answer to "What are some things you observed between 2 and 5 o'clock?")

c.3.   or   [++++++]++++++++++++++++++++++++
(if John was sleeping past 5 o'clock)

d. perfect aspect   +++++++++++++++++++++++++++++++++++++ [   ]
John has slept

-figure 21-

Klein examines the uses of the perfect advanced in Comrie's *Aspect* (1976) in terms of

the above analysis. Comrie's "perfect of result" (present state due to previous state),

"experiential perfect" (asserts that some previous situation happened), and "perfect of

recent past" are all consonant with Klein's paradigm. But a fourth use of the aspect, the

so-called "perfect of persistent situation," in my estimation jars with Klein's analysis of

the perfect, despite Klein's assertion that it does not. Comrie defines the perfect of

persistent situation as describing "a situation that started in the past but continues

(persists) into the present, as in *we've lived here for ten years . . . I've shopped there for*

years . . .[or] *I've been waiting for hours.*" Comrie goes on to note that Russian, German,

and French, among many others, would use the present tense in these situations

(1976:60). Klein responds:

> This case is tricky, indeed, since it looks as if in this use of the
>
> perfect, the time of the situation – my living, my shopping, my waiting –
>
> includes the TT, which in turn, as before, includes TU. This seems to be
>
> in clear contradiction to the definition: TT after TSit. But it is important
>
> to examine carefully which lexical content is at issue here. There is a
>
> difference in the posttime of *<Chris shop>*, *<Chris shop there>*, and – this
>
> is the crucial point here – *<Chris shop there for ten years>*. A lexical
>
> content such as *<Chris shop>* can be used to describe a situation at which
>
> Chris shops. The interval after the time of this situation, be it long or
>
> short, is the posttime of this situation. The content *<Chris shop there for*
>
> *ten years>* describes a situation whose duration is lexically specified: it
>
> lasts ten years (during which, incidentally, Chris need not shop
>
> uninterruptedly). The posttime of this situation starts with the eleventh
>
> year. Then, Chris may still shop there, but surely not for ten years (maybe
>
> for eleven, or for another ten years). After having lived in London for two
>
> years, you may be living there in the third year; nevertheless, you are in
>
> the posttime of living there for two years. Therefore, the 'perfect of
>
> persistent situation' does not escape the general definition of the perfect:
>
> the situation does not persist, when the FULL LEXICAL CONTENT
>
> which describes it is taken into account. What persists is the situation of

living there but not the situation of living there for ten years. (112-113,

emphasis Klein's)

Although this argument defends Klein's analysis of perfect against delimited activities

(intergressives), it does not stave off open-ended activities, serials, or iteratives such as

Chris has shopped here since 1989. This sentence presents a habit as still in effect – in

fact, as much in effect now as at any point since 1989. With a view of how situations

were presented in figure 21, it would seem that one must analyze *Chris has shopped here*

since 1989 thusly:

Perfect$_1$ [+++++++++++++++++++++++++++++++++++++

           ↑   ↑

         1989   Time of Utterance

- figure 22-

The expression is wholly silent on the habit's end, and no habit (series) contains a self-

limiting temporal component (as intergressives like *sneeze* or *twitch* do) so we must

conclude that the habit still obtains.

A second weakness in Klein's explanation is that he does not explain how the

progressive + perfect could be understood to resemble figure 21(d). I would diagram

Chris has been shopping here since 1989 exactly the same way as figure (22). But *Chris*

had been mowing grass (progressive) could be diagramed as follows:

Perfect$_2$ +++++++++++++   [   ]

-figure 23-

This is exactly similar to figure 21(d), *John has slept* (perfective). Klein's belief that

aspect concerns all the relations of the RT (his TT) to the situation time blocks us, in this

case, from expressing the most obvious aspectual distinction of all: the

perfective/progressive. Klein's theory allows us to see, somewhat explicitly, that the

problem with theories seeking to place the perfect under aspect is that any time a perfect

appears, the scholar suddenly must use two terms (the term 'perfect' and either

'perfective' or 'imperfective') to adequately describe the so-called aspect of the sentence.

If every sentence has only one tense, aktionsart, mood, etc., it is not unreasonable to

assume it to have a single aspect value as well.

4.2 The perfect as 'orientation'

Carl Bache (1994) describes the perfect as a union of two temporal units, each with its

own aspectual, actional, and deictic qualities. For example, Bache translates the sentence

Alex has turned off the telly into figure 24:

$$\begin{bmatrix} \text{simultaneous/anterior} \\ \text{-ACTIONAL/+punctual} \\ \text{-ASPECTUAL/perfective}^{32} \end{bmatrix}$$

- figure 24-

Here, the condition at the time of utterance (simultaneity) is a state of *having turned off*

the telly ([-ACTIONAL]). Since Bache considers states as non-actions, they cannot be

viewed as complete or incomplete, thus [-ASPECTUAL]. The previous (anterior) event

in *Alex has turned off the telly* is punctual in Bache's view (an accomplishment in mine)

---

[32] Bache believes that there are two aspects, perfective and imperfective, but also that some expressions are
[–ASPECTUAL]. In this case, the first column cannot have an aspect in Bache's view, because there is no
"action" ([-ACTIONAL]) to "view" as complete or incomplete. The current condition in the present
perfect is[-ACTIONAL] because it's stative (see section 1.8).

and viewed as whole, or perfectively (54-55). So far Bache manages to explain the

perfect without introducing a new "metacategory," but he feels compelled to do so, albeit

grudgingly, in light of a similar analysis of the past perfect, future perfect, or even non-

finite perfect (55-56):
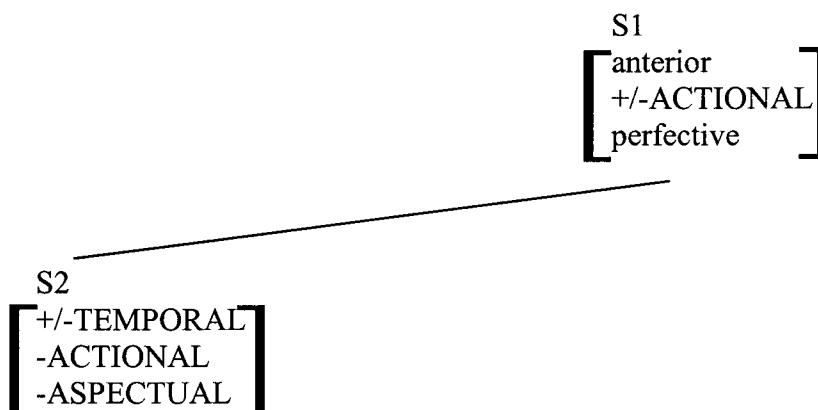
Alex had turned off the telly.
$$\begin{bmatrix} \text{anterior/anterior} \\ \text{-ACTIONAL/+punctual} \\ \text{-ASPECTUAL/perfective} \end{bmatrix}$$

-figure 25-

"The problem with this analysis," Bache writes,

> is that there is no explicit relationship between the two occurrences of the
>
> feature [anterior]. In [figure 24] there is a natural relationship between
>
> [anterior] and [simultaneous], anteriority necessarily preceding
>
> simultaneity. What we need is an explicit constraint on the constellation
>
> of the two occurrences of the feature [anterior] in [figure 25] which marks
>
> the second occurrence as anterior relative, not to the moment of
>
> communication, but to the time represented by the first occurrence rather
>
> than, say, vice versa. (56)

Bache's response is to adopt the principle of "situational dependency," which asserts that

"all perfect forms . . . represent one situation as being governed by the occurrence of

another situation – temporally, actionally, and aspectually." On top of this "temporal

order" the perfect "implies causality" (56). Bache concludes with the following

"dependency tree," which describes the perfect in general:

S1

$$\begin{bmatrix} \text{anterior} \\ \text{+/-ACTIONAL} \\ \text{perfective} \end{bmatrix}$$

S2

$$\begin{bmatrix} \text{+/-TEMPORAL} \\ \text{-ACTIONAL} \\ \text{-ASPECTUAL} \end{bmatrix}$$

-figure 26-

The S2, or the reference time, is correctly understood by Bache as neutral in respect to past, present, future, or time at all (in the case of non-finite forms). The reference is [-ACTIONAL], one may suppose, since it is not a situation. If no situation is present, an aspect value is impossible.

I disagree with Bache in his essential traits for the situations portrayed in perfects (S1), however. Although it is obvious that all perfects refer to situations which obtain *at least in part* before (anterior) the reference point, which in turn may be states, accomplishments, activities, etc. (hence Bache's [+/-ACTIONAL] attribution), Bache gives no rationale for demanding that all S1 situations be viewed perfectively. Clearly *The cows have been eating grass* contrasts with *The cows have eaten grass* at this level, serving to form the so-called "continuative perfects" (see Bauer 1970:194-196). In expressions like *The cows have been eating grass*, the values should be [+ anterior], [+ activity], [+ imperfective].

Probably no theorist has emphasized the uniqueness of the perfect as well as Kortmann (1991, 1994). Kortmann borrows the term "orientation" from King (1983), who similarly defines tense as "that semantic notion by which the speaker associates a

reported situation with a particular temporal perspective, [whereas] 'orientation' is that

semantic notion which allows the speaker to express an ordering relationship for the

reported situation" (126). Kortmann, after a brief literature review, stresses strict

conceptions of each temporal category. He arrives at the following definitions (1991:19-

20):

> **Tense**: grammatical category; deictic; concerned with situation-external
>
> time; location of some situation on the time line relative to coding time.
>
> **Aspect**: grammatical category; non-deictic; concerned with situation-
>
> internal time; presentation of some situation as incomplete/in
>
> progress/existent (from within) or complete (from without) at a given
>
> point/period in time.
>
> **Aktionsart**: lexical category; non-deictic; concerned with situation-
>
> internal time; temporal constitution inherent in the meaning of the verb
>
> (whether simplex, complex, or verbal syntagm) or predicate.
>
> **Perfect**: grammatical category; non-deictic, concerned with situational-
>
> external time; relates some situation to a succeeding reference time which
>
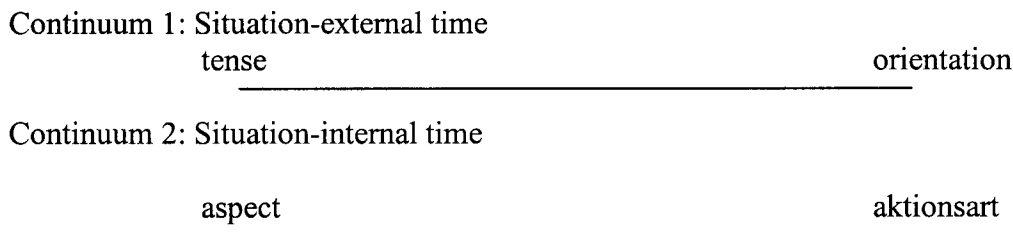> may or may not be identical with coding time.

Although King (1983) investigates orientation in terms of the (past, present, and future)

perfect alone, Kortmann (1991), building off earlier speculations of Jespersen (1931:360-

363), places the *going to* construction in opposition to the perfect (a balance already

touched upon in the review of Klein (1995) above). With the anticipatory role of the

prospective *going to* constructions[33] and "retrospective" perfect + past participle

---

[33] Kortmann adds *BE (about) to do*, and *BE on the point/verge/brink of doing* to possible prospectives, although they "can hardly be said to have achieved a similar degree of grammaticalization" (1991:24).

constructions in mind, one may advance this minor modification of Kortmann's

definition of the perfect:[34]

> **Orientation**: grammatical category; non-deictic, concerned with situational-
>
> external time; relates some situation to a succeeding or preceding reference time
>
> which may or may not be identical with coding time

Kortmann goes on to see orientation, which includes the perfect and prospective, as

forming the second opposition in a tetrad of temporal expression in English. He sees the

four as extremes of two continua (21,24):

Continuum 1: Situation-external time
       tense   orientation
_____

Continuum 2: Situation-internal time

       aspect   aktionsart
_____

-figure 27-

Kortmann places the four temporal features on continua dealing with situation-

internal/external time (as opposed to, say, whether the category is expressed lexically or

grammatically) because he feels that, diachronically, language categories often move

upon the continua above, and "much less frequently, one would predict, will there be a

development from a category expressing situation-internal time to one expressing

situation-external time, or vice versa" (21). Kortmann cites German as an example. In

German, the present perfect has essentially replaced the simple past, showing it to have,

in this respect, moved from the right to left pole of continuum one (21).

---

[34] This definition of orientation differs from Kortmann's (1991:20) definition by adding the phrase "or preceding," which allows it to cover the prospective.

Kortmann's analysis is not without its difficulties, however. First, Kortmann points out that "the subcategories anterior and posterior are sufficiently distinct for their formal representations to be capable of combining with each other, as in *He's been going to write this book for years*" (24). This is an important point to consider, since a main assertion of this thesis is that each category has only one representative in each main clause. In fact, this was a primary reason to separate the perfect from tense and aspect in the first place. If grammatical categories are well understood, then each matter under consideration should have one value. Linguists agree that each main clause has one tense, and as has been argued here, one aspect value as well. Orientation should be no exception, since there is only one reference time and event time in each main clause. However, if it is agreed that *He has been going to write that book for years* is acceptable English, then it is possible to have both orientation values in the same sentence. Adding to the problem, as we will see in the next chapter, the prospective + progressive does not mirror the performance of the perfect + progressive. For these two reasons, I predict that that the prospective will be exiled from the category orientation after the fledgling category draws more attention in future scholarship. For the task at hand, however, I will handle the function of *about to/going to* as orientation, though acknowledging is probationary status.

I also disagree with Kortman's placement of the four temporal categories on continua. Kortmann's categories are very clear, but continua necessarily imply that vagueness is possible. I do not see how anyone, properly understanding the definitions above, would judge a construction to be borderline. Any temporal meaning of a sentence

would fall squarely into aspect, orientation, aktionsart, tense, or some other category altogether.

One such "other category" may be a temporal relation discussed in Johnson (1981). Johnson investigates not only the relation of speaking time to reference time and reference time to event time, but also situation time to event time, which he calls 'status.' This appears to form the final logical possibility of *relational* time (aktionsart often concerns time, but the situation time does not relate to any other time). Johnson supplies the following figure (1981:151):

$$S \xrightarrow{\text{tense}} R$$

status \qquad aspect

$$E$$

-figure 28-
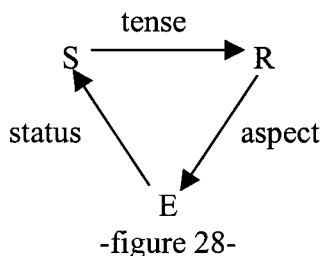
It seems that languages like Kikuyu mark for this relation, as in *a-a-hanyuka* (*he has **just** run*) in contrast to *a-hanyuka* (*he has run **some time ago***) (Johnson 1991:158). 'Status,' defined in the spirit of Kortmann (1991), must be defined as being deictic, dealing with situation-external time, and relating some situation to the moment speech. This overlaps with Kortmann's definition of tense, since he describes tense as "locat[ing] . . . some situation on the time line relative to coding time" (1991:19). Figure 28 claims that tense locates the reference time, not the event itself. The aspect (and the orientation, if one is present in the sentence) determines the relation of R to E.

The theory calling for the divorce of the perfect from aspect is supported by the cross-linguistic evidence presented in Dahl's (1985) *Tense and Aspect Systems*. In a section deemed "a high point" of the book by his reviewer, R. Salkie (1987:91), Dahl

claims the essence of the perfect is that it involves "a point of reference (in Reichenbach's sense) which is different from the 'point of event,' although the role of the R will be slightly different in each case" (1985:133). Dahl notes that unlike the perfective, the perfect is "rarely used narratively," since the perfect commonly rejects definite time reference (*He has left at 4:00). Dahl also points out, as was mentioned earlier, that the perfect can take the progressive (imperfective) form, "something not to be expected if PFCT expressed perfectivity." Finally, the aspectual category is usually marked morphologically, whereas the perfect is overwhelmingly marked syntactically (1985:139).

4.3 Summary

Although contributing little to our understanding of the perfect, this chapter endeavored to show why we must view the perfect as neither aspect nor tense. The perfect is not a tense because it is non-deictic, failing to anchor any time to the speaking time. Nor may it be consistently argued that the perfect is an aspect, since a sentence in the perfect still carries the traditional aspectual information (perfective/imperfective), which is, for the most part, unaffected by the perfect.[35] Therefore, although it does deal with the relation of the reference time to the situation time, the perfect is not an aspect. The perfect only contributes to our understanding of the relation of R to S; after all, the position of R relative to S changes drastically from *I have washed this car* to *I have been washing this car*. The perfect, as Kortmann explains finally, is better placed in a separate

---

[35] Exceptions will be discussed in the following chapter, where the contribution of orientation to aspect and aktionsart construction is investigated.

grammatical category sometimes referred to as 'orientation.' This divorce of the perfect

(which is not even a marker for 'perfectivity') is supported by the cross-linguistic

evidence in Dahl (1985).

With the preliminaries behind us, we may now coherently provide a tense, aspect,

aktionsart, and orientation value for each sentence in English. For example, dealing with

only intergressives (for the sake of space):

examples	aktionsart	aspect	Tense	orientation
I had taken a walk	intergressive	perf	Past	perfect
I had been taking a walk	intergressive	imperf	Past	perfect
I took a walk	intergressive	perf	Past	----
I was taking a walk	intergressive	imperf	Past	----
I have taken a walk	intergressive	perf	Present	perfect
I have been taking a walk	intergressive	imperf	Present	perfect
I take a walk	intergressive	imperf	Present	----
I am taking a walk	intergressive	imperf	Present	----
I will have taken a walk	intergressive	perf	Future	perfect
I will have been taking a walk	intergressive	imperf	Future	perfect
I will take a walk	intergressive	perf	Future	----
I will be taking a walk	intergressive	imperf	Future	----

-table 17-

The above table showcases a simple expression, of course. In the next chapter I will not

dismantle, but try to arrive at and catalog rules of aspect and aktionsart construction.

Doing so will require manipulating not only the verb types and the progressive marker,

but also the verb arguments, tense, adverbials, 'aspectualizers,' and more.

Chapter 5: Compositionality

The previous chapters attempted to define and order the varieties of aktionsarten and aspects. This chapter will draw upon those efforts to arrive at consistent grammatical and lexical rules of aspectual composition.

That sentence aspectuality is constructed from tense, grammatical forms, noun phrases, etc., has become a well-known fact, thanks to works such as Garey (1957) and Verkuyl (1972). But in the last decade, more effort has been expended toward reaching an accurate understanding of aspect categories, themselves, a tendency fully present in this study, as well. Some additional "rules of thumb" in aspectual composition have been offered by most of the authors already cited in this thesis. Nevertheless, it would be very difficult, and often unfair, to try to locate the scholar who discovered each composition investigated below, since many rules are now common knowledge or were imported from linguistic studies of other languages. I will allow the systematic presentation of the forthcoming tables to formulate the compositional rules instead, reserving citations for particular insights I have found helpful.

5.1 Constructing aspect

As argued in the third chapter, the aspects of the English language are two: perfective and imperfective. The imperfective is manifested in two forms: the continuative, which employs the simple form, and the progressive, which employs the *–ing* marking. In this section, I will manipulate the principal lexical and grammatical items that combine to construct the aspect of English sentences.

In general, the simple form in the past and future[36] will result in the perfective.

aktionsart	tense	example	=	aspect type
accomplishment	past	*He washed the car*		perfective
accomplishment	future	*He will wash the car*		perfective
intergressive	past	*He hummed for ten minutes*		perfective
intergressive	future	*He will hum for ten minutes*		perfective
activity	past	*He walked*		perfective
activity	future	*He will walk*		perfective
state	past	*He knew the address*		perfective
state	future	*He will know the address*		perfective
acme	past	*He remembered her name*		perfective
acme	future	*He will remember her name*		perfective

-table 18-

Special attention must be given to states, acmes, and even activities in regard to the

aspect labels. Beginning with states, one may easily observe that this aktionsart type is

less felicitous with the aspect 'perfective' and 'imperfective,' even in the past, which is

where aspects are most apparent. It is this dynamic that prompts Bache (1995: 237-39,

283-85) to see states as [-ACTIONAL], which then leaves them necessarily [-ASPECT-

UAL]. Viewed in one way, states are always perfective, since they obtain wholly at any

point along a stretch of time. Viewed another way, states lack the complexity of

individuals (as in the difference between objects and space in the physical world) and

cannot be discussed as whole or incomplete, making them permanently imperfective.

This approach is supported by the fact those languages that mark for aspect

grammatically often do not allow the perfective marker with states (see Comrie 1976:50-

51; Dahl 1985:69-79). This ambiguity is often resolved with the *used to* construction,

which, when employed with states, is not a habitual marker but signifies the cessation of

the state: *I used to be able to recite Rime of the Ancient Mariner by heart.* Like states,

acmes obtain wholly at a point, but at only one point: namely, the outer boundary of a

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[36] "Past" and "future" will always exclude the perfect forms, unless specified otherwise.

state or even dynamic situation (with the aid of, e.g., *begin to* constructions). Acmes are temporally unbounded because they have no temporal extension. This lack of boundaries makes it difficult to see acmes as a "whole" with an emphasis upon endpoints. However, the internal temporal constituency of acmes cannot exist, let alone be examined, so they do not fall comfortably into the imperfective category, either (for example, *I was stopping the rolling car* refers not to the acme of the car "becoming" stopped but to a pre-phase – which is actually an accomplishment – of the crucial boundary between *rolling* and *is stopped*). Acmes, however, do *imply* a definite change, and this definite change is what makes them seem perfective. In fact, Dahl finds what appears to be acmes as the prototypical instances of perfective use cross-linguistically:

> A PFV verb will typically denote a single event, seen as an unanalysed whole, with a well-defined result or end-state, located in the past. More often than not, the event will be punctual, or at least, it will be seen as a single transition from one state to its opposite, the duration of which can be disregarded. (Dahl 1985:78)

A "fuzzy" approach such as Dahl's is worthwhile in this case. In English, acmes (because they imply, though do not contain, change), accomplishments, and intergressives are equally comfortable in the perfective. Less obviously perfective are activities, for although they do not obtain wholly at each moment, they are not bounded. For example, *They will stamp license plates* does not clearly suggest a whole, completed interval of plate-stamping. Although states like *I had a sports car* do seem quite perfective in the past, classic states like *know* and *love* are least obviously perfective on this scale.

As opposed to the past and future, every sentence is imperfective in the present, even in the simple form.

aktionsart	tense	example	=	Aspect type
accomplishment (usually → serial)	present	*He washes the car*		Continuous
intergressive (usually → serial)	present	*He hums for ten minutes*		Continuous
activity (usually → serial)	present	*He walks*		Continuous
acme (usually → serial)	present	*He forgets her name*		Continuous
state	present	*He knows the address*		Continuous

-table 19-

For each aktionsart category except states, the interpretation in the present is either serial (habitual) or a narrative of some dynamic situation. In the present, serial aktionsart portrays the habit as still in force, hence the continuous reading. A possible subtype of these serial situations, often expressed in the present simple, is 'generic.' These express general truths, like *Babies need lots of attention*. On the other hand, a narrative reading is occasioned by sports commentaries, like *Jordan passes to Rodman*, exclamations like *Here we go!*, dramatic or didactic narrations like *The food then passes to the small intestine*, and performative or ceremonial pronouncements, like *I dub thee Sir Lancelot* (Leech 1987:6-8). The historical present (*So this guy comes up to me and says . . .*) seems to mirror these results in terms of aktionsart and aspect representation. However, the present along with a future adverbial (*We attack at dawn*) occurs rarely with states: *Eat, drink, and be merry, for tomorrow we **die*** vs. **Eat, drink, be merry, for tomorrow we* **are** *dead*.

aktionsart	tense	future adverbial	Examples
accomplishment	present	*tomorrow*	*Tomorrow we climb to zone 2.*
intergressive	present	*tomorrow*	*Tomorrow I work from 8 till 4.*
activity	present	*tomorrow*	*Tomorrow we ride!*
acme	present	(the next) *dawn*	*We attack at dawn.*
state	present	*tomorrow*	*?Tomorrow I know the results.*

-table 20-

This is somewhat to be expected, considering what was said previously about acmes. Since the future adverbial implies that the state is not salient at the time of utterance, the pertinent information becomes the *acquisition* or *relinquishment* of the current state. Therefore, we do not say *Tomorrow I **know** the results*, but rather *Tomorrow I **learn** the results* or *Tomorrow I **find out** what the results are*. Likewise, since acmes mark the end-points of states, we say *At midnight England **loses** control of Hong Kong* more easily than *At midnight, Hong Kong **is** not an English possession*.

The state aktionsart typically has only one reading in the present, namely, that the state is currently salient. Exceptions include *You always know what to say* or *You're always so nice*. These expressions are serial (habits) not only because of the habitual aspectualizers like *always, usually, typically, used to, regularly*, etc., since many states, for obvious reasons, are impervious to the serial (**You're always so tall!*). Rather, expressions like *You always know what to say* refer to actions – in this case, diplomatic or witty speech *acts*, which are seen in a serial way.

As argued in 3.5, I see the *–ing* form as the progressive marker in English. Tense plays no part in determining the aspect here.

aktionsart	-ing	example	=	aspect
accomplishment		*Jill was/is/will be planting the flower*		progressive
delimited intergressive		*Jill was/is/will be walking for a while*		progressive
punctual intergressive (→ iterative)		*Jill was/is/will be beating the rug*		progressive
activity		*Jill was/is/will be window-shopping*		progressive
state		*?Jill was/is/will be loving the attention*		(contingent) imperfective
acme (usually → pre-acme accomplishment)		*Jill was/is/will be winning the race*		progressive

-table 21-

Exceptions to the general rule of states not accepting the progressive (as in *I am knowing all my siblings' birthdays*) are verbs of posture, like *I was lying down*, atypical states, like *Fred is being silly*, and temporary conditions like *I'm living on charity* (Comrie 1976:35-37). Except for the verbs of posture, if a state accepts a progressive at all, the state is neatly summed up by Comrie's "contingent" reading, I believe. The same is true for serial situations: *I'm taking Spanish* (Brinton 1988:40). The acme verbs, because they have no internal time to view, shift the focus to a stage before the acme. Although "punctual" intergressives like *cough*, *tap*, or *knock* do have an internal temporal structure and can be viewed as progressing in a single instance, in the overwhelming majority of contexts they become iterative activities, and this new situation is viewed as progressing.

When we add orientation to the mix of aktionsart, form, and tense, the aspects are affected as shown in Appendix 1.

The aspect of accomplishments and intergressives seem unaffected by the addition of orientation into the sentence. Nevertheless, since aspect refers to seeing a situation "from the outside" or "from the inside," determining the aspect of all prospective sentences – even those of the accomplishments and intergressives – is a bit tricky. What is, after all, the situation being referred to in prospective expressions? In

the sentence *He is about to notice the spill*, one may object to the perfective value I attribute because it describes a state in the present, which certainly smacks of imperfectivity. However, this is a trap. The situation of NOTICE THE SPILL is an acme of the future and presented perfectively – as a whole. The temptation of evaluating the reference time instead of the situation time with prospective (*going to, about to, ready to, on the brink of,* etc) is stronger than parallel cases of the perfect (*He has noticed the spill*), because the situation under examination, NOTICE THE SPILL, is only an expectation.

However, the prospective does not mirror the results of the perfect in an important set of compositions. When progressive acmes are cast in the prospective they are often ungrammatical: **I will be going to be dying/winning/reaching the top*. Notice that these same situations in the future progressive are fine: *I will be dying/winning/reaching the top*. I believe the difference in acceptability can be explained as a processing constraint brought about by the addition of a fourth temporal point, other than the S (speaking time), R (reference time), and E (event time). Without the prospective, we have the following:

Future acme in progressive	Past acme in progressive	Present acme in progressive
S ⌒ RE→ACME	ER→ACME　S	SRE→ACME
She will be dying	*She was dying*	*She is dying*
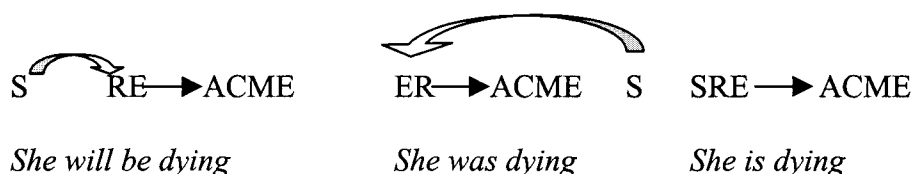
Even without the orientation of the perfect or prospective (*going to*), there is a strong suggestion of another point later on the timeline. This happens because the acme, itself, is not obtaining, but rather some accomplishment which is bringing about the change of

state that the acme marks. So the acme, itself, is after the reference point and progressing accomplishment (R and E, respectively). In the past or future + progressive + acme, the prospective adds yet another temporal point to consider, and the average listener fails to process the sentence.

The diagrams below demonstrate my understanding of the phenomenon. First, the permissible present prospective acme:

SR　　　　　　E —————▶ACME
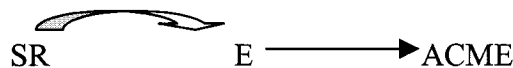
I am going to　ACCOMP -ing　win

I am going to be/about to be winning the race

Here the reference time is the present. The event referred to, my position as leader in the race, is in the future (see table 16 of section 4.1). The actual acme, where the "win" takes place, however, is even beyond that. The acme itself is outside of the time being referred to in the phrase *winning the race*.

Here we see the disallowed past prospective progressive acmes:

R　　　　　　　　E —————▶ACME　　S
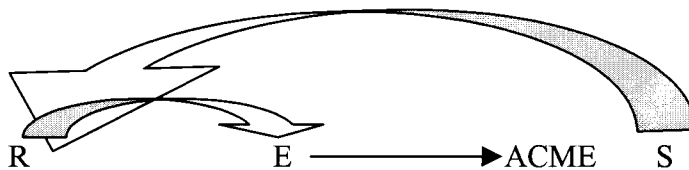
was going to　ACCOMP –ing　　　win　　I

*I was going to/about to be winning the race

In this case, the reference point is in the past, but since the orientation is prospective, the nucleus of the accomplishment is totally after the reference time. If this were the end of

the semantics of the sentence, it would be somewhat acceptable to the ear: eg., ?*I was going to/about to be washing the car*. However, there is an added stress on the listener imposed by the acme, which is outside of the scope of E, unlike an equivalent accomplishment: *I was going to be washing the car*. This seems to be the reason of the processing difficulty. The same is true for the future prospective progressive acmes:

S   R   E ⟶ ACME

I   will be going to   ACCOMP –ing   win

*I will be going to/about to be winning the race

Here, as above, the hearer must keep track of four points, and since there does not seem to be any logical or formal reason that such an utterance is unacceptable, I suspect the fact that the acme stands alone and outside of S, R, and E is the reason. Again, there seems to be a scale of acceptability: *I was about to be walking* (activity) is more acceptable than *I was about to be washing the car* (accomplishment), which in turn is more acceptable than *I was about to be winning* (acme). The reason is that the degree to which a point outside of the event time is important is the degree to which the sentence is unacceptable. Since [- telic] activities demand no endpoint, they occur with relative ease in these rare constructions. Next, [+ telic] accomplishments do have an endpoint but still obtain without the endpoint being reached, so they are only slightly less comfortable. Acmes, however, are points which necessarily lie totally outside of the event time, so they demand a fourth point to be tracked by the listener, an exercise we seem unwilling to deal with in everyday speech.

Acmes are, however, acceptable in the perfect since an extra temporal point is not

forced into being:

S   ER———————▶ACME

I   will have been –ing   win

I will have been winning

In the above diagram, we see that only three temporal points need to be considered.

Because the statement is in the progressive, E overlaps R, making it one temporal point in

the perfect. This in not the case in the prospective, for R does not overlap E in the

progressive because of the semantics of *about to*, *going to*, etc. With both R and E at the

same temporal "place," we seem able to accept the third point of acme obtainment with

ease.

ER ———————▶ACME   S
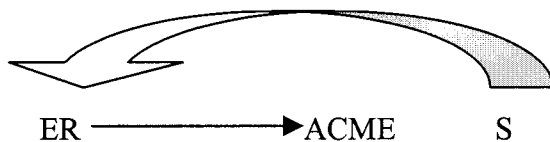
had been -ing   win   I

I had been winning the race

Once again, the E and R occupy one temporal locale, leaving a comfortable three

temporal considerations for the listener to consider.

E ———————▶ ACME   RS

have been –ing   win   I

I have been winning the race
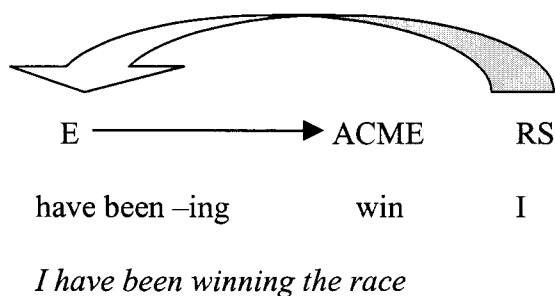
Finally, above we see the same dynamic with the present perfect progressive acme. These infrequent combinations demonstrate that the parallel between the perfect and the prospective is a rough one. A marked difference surfaces in the progressive between the two, in that R and E do not overlap in the prospective + progressive, as they do in the perfect + progressive constructions. This difference works its way out in the construction of aspect.

Returning to Appendix 1, one may easily see that accomplishments and intergressive situation types yield regular results for aspect: all the sentences with progressive markers effect progressive aspect, and all the sentences with the simple form the perfective aspect. Starting with the activities, and especially so with the states, the perfect constructions are ambiguous in terms of aspect. One can read *He has run* as perfective, especially in the sense of the "perfect of experience": *I have had a full life: I've run for president, climbed Everest, ...* With a durative adverbial, on the other hand, it is obviously continuative: *They have run for an hour now.* It seems, as asserted in Bauer (1970:193), that activities + perfect in simple form (without the influence of adverbials like *since then*) are perfective, though less obviously than the accomplishments and intergressives.

With states, the outcome is more difficult to judge. In the present, does *I have known/wanted/lived* mean that the speaker is currently in that state? Of course, this depends on the particular state verb and context. Typically, states that are not expected to last forever will imply perfectivity, even without a context: *I have been a boy scout/been suicidal/been the captain of the high-school football team.* Likewise, states that imply permanence are very continuative, as in *I have been shy.* The tense does not affect our interpretation: *I had known the answer, but when the professor called on me, I drew a blank* demands a perfective reading. However, *I had known the answer when the professor called on me, and recited it with pride* requires us to understand *known* as continuing at R. It is for these reasons that I believe Bauer (1970) overstates the case when he asserts that there are two requirements to continuative aspect with perfects: an atelic verb and adverbial phrases like *for hours.*

With the right prepositional phrase (discussed below), the ambiguous activity + perfect becomes perfective: *He has run to the store.* This is because prepositions of this type change the activity into an accomplishment, which, as shown in the table above, behave regularly in terms of simple form and perfectivity (always perfective in nonpast if in simple form).

Finally, I must note that Brinton (1998:59-94) examines, in detail, the role of "aspectualizers" in English. She sets forth four types: ingressive (*begin to, start to, resume –ing,* etc.), continuative/iterative (*keep on –ing, continue to,* etc.), egressive (*stop –ing, cease to,* etc.), and habitual (*used to, be in the habit of,* etc.). In my understanding of aspect and aktionsart, ingressive, egressive, and habitual aspectualizers affect aktionsart, not aspect. Hence, if *The bull charged* (activity) was combined with an

ingressive or egressive aspectualizer, the outcome is an acme: *The bull began to charge/began charging/ceased its charging*. Similarly, the habitual aspectualizers change their sentences into serial situations: *The bull used to charge/frequently charged*. The aspectualizer type which seems not to affect aktionsart, but actually pertains to aspect, is the continuative variety: *The bull kept charging*. This does not so much change the aspect of the sentence *The bull was charging*, but rather reinforces the progressive aspect.

5.2 Constructing aktionsart

Mourelatos (1981) advances what he feels to be an exhaustive list of "six determinants of verb predication":

> (a) the verb's inherent meaning; (b) the nature of the verb's arguments, that is, of the subject and of the object(s), if any; (c) the adverbials, if any; (d) aspect; (e) tense as phase (e.g. the perfect); (f) tense as time reference to the present, past, or future. (199)

The last three constituents of aktionsart in this list contribute minimally, at most. The influence of tense upon the aktionsart of sentences is restricted to the present making all nonstative situations serial/habitual, except in the narrative contexts, as already discussed. Mourelatos' "tense as phase" (orientation) also affects aktionsart only tangentially: if combined with the proper durative adverbial, acmes, accomplishments, and intergressives become repeated: *We have made huts this way from the days of our fathers*. But it is easy to see that the durative adverbial is really the motivation behind the aktionsart

transformation, not the orientation: *I walked to school for years.* So strictly speaking, orientation does not affect aktionsart, only aspect.

Next, aspect (the only item in English to mark aspect is the *–ing* form) affects aktionsart in three ways:

1) It changes the aktionsart of predications in the rare (and colloquial) modifications of state verbs that usually do not accept the progressive marker: *I'm loving this weather.* This type of expression is commonly described as portraying the state as if it is an activity. In some cases, it may be more accurate to gloss the situation as actually an activity which is portrayed statively: *Stop being silly.*

2) The well-known punctual verb + progressive marker = iterative rule: *Who's knocking at the door?*

3) Depending on how careful the linguist wishes to be, one may argue that the progressive marker + acmes = accomplishment. (After all, in *I'm learning Spanish,* one is referring to a process leading up to point somewhere where the sentence *I'm fluent in Spanish* is true. This can only be described as an accomplishment.)

Moving from the most subtle to the most obvious of these aktionsart constituents, the verb type used in a sentence plays a great role in determining the aktionsart of the sentence. Under "verb constellation," I list the following classes of verbs, which I consider exhaustive in terms of aktionsart:

1) typical [+ telic] verbs like *build, destroy, fill, empty,* etc.

2) typical self-limited ("maximal," or traditionally [+ punctual} verbs like *pop, tap, knock,* etc.

3) typical [+ dynamic] (plain activity) verbs like *run, dance, fly, spin,* etc.

4) typical [+ durative] (stative) verbs like *know, be, love,* etc.

5) typical [- durative] (acme) verbs, like *recognize, discover, lose,* etc.

6) typical iterative verbs, like *wiggle* and *jiggle.*

Another oft-noticed component of aktionsart composition involves the argument NPs. In Appendix 2, I examine how predicate NP articles affect the verbal aktionsart of the sentence. (For convenience of reference, after each verb constellation type I have placed a letter. The letters do not refer to a sub-variety of verb constellation.)

It may be worthwhile to repeat the tests suggested in chapter two for delineating the aktionsarten here. If a statement passes the "if one was V-*ing*, one has not V-*ed*" test, then it is an accomplishment. If an expression has a semelfactive punctual verb, or an activity verb + object that disallows a durative adverbial without iterative reinterpretation, the situation is intergressive (assuming, of course, that it also fails the accomplishment test above). Thus, *The patient coughed* is intergressive because of the semelfactive punctual verb, and *I ate a cookie* is intergressive since it fails to combine with *for a minute* without demanding reinterpretation. Finally, they both fail the test of accomplishments, since the *coughed* expression demands iterative reinterpretation and the *eating* of *a cookie* certainly does not preclude one from *having eaten a cookie.* Next, activity sentences are easily separated from states and acmes by the use of adverbs like *oddly*, which portray the manner of [+ dynamic] events. Since states do not progress in any way, describing a state as *oddly* is absurd. Likewise, because acmes do not take time, to claim an acme progressed *oddly* is also awkward. Activities pass the [+ durative] *for* test, which prevents shows them as unbounded. Finally, states and acmes are easily

separated by tests like the [+ durative] *for* analysis, which separates the acmes, which cannot take time, from the states, which can obtain over a stretch of time.

The two "minor aktionsarten" types, serial and iterative, refer to repetition of other aktionsarten. These aktionsarten are delineated roughly between repeated aktionsarten of one occasion (iterative) and of multiple separate occasions (serial). Context usually makes the distinction. For instance, one may say *I was knocking* and refer to one occasion, in which case the aktionsart is iterative, or many different occasions, as in *I was (periodically) knocking on your door all day,* which is serial. These two aktionsarten do not replace the major types, as my table asserts. Serial and iterative aktionsarten can also be activities (*The villain chuckles menacingly, Sarah always parks facing out*) or intergressives (*He shot the machine gun for 30 seconds, While in college, he typed out his notes*). It may be that one can extend this analysis to claim that there are accomplishments that are also iterative or serial. For example, since *The young boy typed the letters of his name* is an accomplishment composed of iterated intergressives, one might gloss this sentence as an "(iterative) accomplishment." I think such an analysis is faulty, however. Unlike activities and intergressives, each action or phase of an accomplishment builds upon the one before. Thus, in the example above, each letter builds upon the letter before in the construction of the boy's name. With the intergressive or activity corollaries, the character of each action or phase is the exact same: no shot of the gun during the 30 seconds of firing "built" upon the last, nor any single exhalation of the menacing chuckle. Such is the rationale behind my gloss of these accomplishments in the above table as simply 'accomplishments.'

Moving on to specific patterns manifested in the table, let us first examine count nouns. One may see a regular pattern in constellations 1, 2, and 3 in this regard. Each of these constellations yields intergressives with indefinite singular and plural objects ((a) and (d)), accomplishments with definite singular and plural objects ((b) and (e)), and activities with plural objects lacking articles (c). If present with count objects in a sentence featuring a class 1, 2, or 3 verb, the article will determine whether the aktionsart is an accomplishment or intergressive. If not present, these VPs will be activities.

Note that the final three constellations do not produce these results. Paradigmatic state verbs yield states, no matter the nature of the NPs (4α-h). Neither do acme verbs match the results of constellations (1-3). Acme verbs are impervious to the test of "if one was V-*ing*, has one V-*ed*?" because, strictly speaking, acmes are never V-*ing*. The results of constellation 5 differ from constellations 1-3 because the acmes of constellation 1 are unaffected by the nature of the definite article. As pointed out earlier, the statements *Jack ran 4.98 miles* and *Jack ran the 4.98 miles* differ in that the former may not have been intentional but the latter must be. Since accomplishments are supposed to have a predetermined or necessary endpoint, one can see that an interrupted run has neither, and is merely limited by physical distance, not metaphysical telicity. Thus, I argue that the uniqueness marker (definite article) is relevant to distinguish between the two. Acmes, however, are far less complicated concepts. Intentionality, potentiality, and actuality are not concerns, since acmes, being non-durative, have no potentiality. Since there is no potentiality, intentionality is not a problem, because one cannot intend without goals. Therefore, all sentences with acme verbs and singular objects are acmes, without

consideration of articles. The plural acme constructions introduce durativity; thus (5c), (5d), and (5e) suitably match the results of (1-3c), (1-3d), and (1-3e).

Lastly, iterative verbs with count noun objects result in exactly the same aktionsarten as constellations 1-3, except for the (a) constructions. In these latter cases, the iterative verb negates the bounds that the singular count noun usually imposes, resulting in an expression which passes the *for a minute* test.

*I ran a mile for five minutes. (intergressive)

I jiggled a doorknob for five minutes. (activity)

Turning to the mass NPs (listed as (f), (g), and (h) for each constellation in appendix 2, the aktionsart tests, when applied to constellation 1 verbs, result in activities when combined with no article (*moved furniture*), intergressives when combined with an indefinite article (since indefinite articles introduce a boundary, the expression becomes bounded, as in *moved some furniture*), and accomplishments when a definite article is added (*moved the furniture*). The analysis of constellation 2 verbs with mass nouns demands more care: when applying the tests, one must not allow any of the progressive interpretations to make the aktionsart iterative, lest the analysis become a test of iterative aktionsart, not the punctual semelfactive verb. Thus, when testing the sentence, one must conclude "I am dabbing **the** paint, so I have not dabbed **the** paint," since the semelfactive constraint obliges us to see the unique operation of this particular dab (thanks to the definite article) as an accomplishment. Constellation 2 verbs with indefinite articles result in intergressives, for although the paint is mass, the punctual nature of *dab*, *tap*, *jerk*, etc. provides the (atelic) limits. The same is true even with no article: the nature of

the constellation 2 verbs is such that if semelfactive, the statement is bounded by the semantics of the verb.

Constellation 3 verbs do not have this self-limiting component, so the addition of mass nouns lacking articles naturally results in an activity value for sentence aktionsart (*stirred pudding*). Likewise, the addition of a definite article makes the expression telic (*stirred the pudding*). Pragmatic concerns influence the gloss of indefinite articles, however. *I stirred some pudding* passes the addition of *for an hour*, making it an activity. But **I poured some water for an hour* does not, as in this case the act of pouring is affected by the boundary imposed by *some*. This is not the case with pudding, since the pudding is not exhausted by stirring. Skipping down to constellation 6 verbs, the same dynamic is apparent: one can tussle some unfortunate boy's hair for hours, but cannot sift some flour for hours without repeating the process, since the flour is exhausted by the sifting, whereas the boy's hair is not depleted by the tussling. Finally, the behavior of constellation 4 and 5 verbs with mass nouns can be explained with reference to an earlier discussion: the semantics of state and acme nouns are such that, if semelfactive, the articles are irrelevant. To DISCOVER *some pudding on the floor* is exactly the same aktionsart as to DISCOVER *the pudding in the refrigerator*.

Before leaving NPs, some generalizations about subject NPs can be made:

- Plural subject NPs with no article or zero article + serial = "generic"

Thus, *The children used to play kick the can* becomes *Children used to play kick the can*. The aktionsart status of generic expressions is not clear. They can apply to states, as in *Italians know Latin* (from Chierchia 1995:213) or dynamic situations, as in the prior example.

- Plural subject NPs + pragmatically non-simultaneous acme = iterative or serial aktionsart.

This reflects the difference between *The train was stopping* and *The trains were stopping*. The first utterance represents the phase of the train slowing to a stop. The second may refer to multiple trains slowing simultaneously, but this would be rare. The typical context would be that of multiple trains slowing to stops at different times (some of which may have already stopped) within an overall focus, making it an iterative occurrence. If the focus is not one stretch of time, but instances conceived as separate occasions, the result is serial aktionsart (assuming again non-simultaneity): *An inmate escaped* vs. *Some inmates escaped*. The results are the same if the object NP is such that the interpretation is not one of simultaneity, but of multiple occurrence: *He noticed six errors in the paper* (Brinton 1988:50). Since it seems that we process information linearly, one can only notice one error at a time, therefore the interpretation is iterative or serial, as the case may be.

Durative adverbial phrases also help determine the aktionsart of a main clause. If a "specified quantity of X" for either of the verbs arguments combines with a durative adverbial, the result is either impossible or an iterative aktionsart: *#Kathy knitted the sweater for hours* (this expression can be rescued if we reinterpret the sentence to refer to a type of sweater that Kathy repeatedly knits). If reinterpretation is impossible, so is the sentence: **The liter of water poured from the rock for an hour*. Expressions with "unspecified quantities of X" take the durative adverbials with ease: *Water poured out of the rock for an hour* (see Verkuyl 1972:41-97, examples Verkyul's). Durative *for* adverbials, if combined with typically intergressive (i.e., punctual) verbs, like *tap, knock,*

and *twitch*, become iterative: #*The patient twitched for hours*. If combined with

accomplishments the result is typically serial: #*Bill copied his notes for years* (serial)

/*sold the product for years* (here, as discussed just above, *the product* changes meaning

from one product to a kind of product, allowing repetition). Although acmes can

become iterative in the right context (*Jordan won the MVP award for years*), they usually

are semelfactive in the simple since acme verbs introduce states: **The fisherman

disappeared for years* vs. *The fisherman was gone for years*. States and activities are

unaffected by the *for* durative adverbial phrases.

 The durative *in* adverbial phrases work to transform acmes or activities into

accomplishments: *I found the glasses in an hour*. It is widely noted that accomplishment

and acme verbs occur more easily with *in* adverbial phrases, since both involve a clear

border between two states. As mentioned repeatedly in this thesis, acmes with these

adverbials mean that the acme obtained at the end of the particular duration, whereas with

accomplishments, the accomplishment was "accomplishing" for the entirety of the

duration. Activities, even though durative, do not occur as often with durative *in*

adverbial phrases, but when they do, the result implies telicity: *The boy ran in an hour*,

without any context, suggests something like an injured boy took an hour to begin

running. Again, since there is a change of state occurring at the end of the time

described, acmes are more felicitous: *The boy **began to run** in an hour*. Because the

actual activity takes place at the conclusion of the time period of the adverbial, after is

more common for activities and intergressives: *The boy ran after an hour, The boy's

shoulder popped into place after an hour*. States are awkward with these adverbial

phrases since it is the job of an acme to mark the introduction to the new state: ?*He **knew** who the murderer was **in hours*** vs. *He **discovered** who the murderer was **in hours**.*

Finally, we have the effects of prepositions on aktionsart composition. Prepositions can be divided into two groups in terms of aktionsart: those that cross or meet boundaries (*to, over, under, around, in*(*side*), *out*(*side*), *by, through,* etc., and those that do not (*towards, away from, on,* etc.). Any activity combined with the first variety result in a bounded expression: *Neil walked to a/the store.* (As seen earlier, if the object NP is definite, the result will be an accomplishment, which has the uniqueness operator and shows Neil at an opposite state: If Neil is *walking to **the** store*, then he cannot *be at **the** store*. If the article is indefinite, then the result is an intergressive: Neil can be at a store walking to an(other) store.) Prepositional phrases which do not cross or meet a goal do not affect the aktionsart of the sentence in terms of the categories offered in this thesis: *John walks* (activity); *John walks over the rocks* (activity).

The same [+ bounded] prepositions, when used to form the particles of phrasal verbs, serve to make those situations [+ telic]: *ran* (activity) vs. *ran in* (accomplishment); *knock* (intergressive) vs. *knock off* (accomplishment); *wiggle* (iterative) vs. *wiggle out* (accomplishment). These particles do not combine with stative aktionsarten, though on rare occasions stative verbs, as in *I'll be right up.* Such expressions are not states, as evidenced by the reply *See that you do* (Bolinger 1971:88-90; Brinton 1988:173). These particles can combine with accomplishment verbs and acmes, but the result is not a shift in aktionsart class so much a re-emphasis of the endpoint or change of state: *Fill* (accomplishment verb) vs. *Fill up* (accomplishment phrasal verb) *the tank before you*

bring the car back; *I found* (acme verb) vs. *I found out* (acme phrasal verb) *where we are on this map* (see Brinton 1988:171-184).

5.3 Summary

This chapter presents, as far as I am able to judge, a comprehensive survey of the major constituents of aspect and aktionsart construction. As with the discussion of the categories themselves, aktionsart proves to be the more complicated study. Whereas tense, the progressive marker, aktionsart, and adverbial phrases like *since then* and *up till now* account for aspect, aktionsart is constructed from the verb constellation type, aspect, NPs, prepositions, adverbials, and 'aspectualizers' like *begin to* and *finish* V–*ing*, as well as tense and the -*ing* form.

Also made apparent in this chapter is how the semantics of the 'prospective' orientation does not mirror those of the perfect, confirming suspicions raised late in the last chapter. In the progressive or continuative aspect, E overlaps R in the perfect, but not in the prospective. This ultimately results in what seems to be a processing constraint in rare expressions like *I was going to be winning the race*, which is far less natural than the perfect counterpart: *I had been winning the race*. This phenomenon is caused by the fact that the listener is forced to track four temporal points with the past progressive prospective, rather than three with the past progressive perfect.

In the second half of this chapter general rules of aktionsart construction were offered when possible, but often the analysis had to become particular and in-depth, especially in regard to object NPs and the effects of their articles. In all cases, I

employed the tests established in the second chapter to arrive at the aktionsart value for

the resulting main clause as a whole.

Conclusion

The principal attempt of this thesis was to show that the English aspectual system, though lacking the level of grammaticalization manifest in languages like Slavic, is still fairly regular and comprehensible, given a correct understanding of the components of our aspectual system and their relation to one another. At the most basic level, a proper understanding of English aspectuality demands a clear delineation between 'aktionsart' or situation type, aspect, and 'orientation.' Whereas aktionsart describes the type of situation focused upon, aspect describes whether we describe that situation as continuing or complete. Orientation, on the other hand, locates complete aktionsarten relative to R, or 'reference time.'

Aktionsart enjoys the most attention in this study because it demands input from linguistics and metaphysics. With this in mind, even the disproportionately long treatment of this thesis shows itself to merely scratch the surface of this important and difficult component of language studies. My approach uses the metaphysical features of [duration], [dynamicity], [boundedness], and [telicity] – all of which have been employed before – to arrive at an original ordering of the aktionsarten that not only ranks them in a necessary way (given the features), but also obeys metaphysically necessary statements, like "nothing can be bounded if lacking extension." The aktionsarten I present as basic are acmes, which have no temporal extension but mark the outer bounds of situations; states, which have duration; activities, which are [+durative] and [+dynamic]; intergressives, which are [+ durative], [+ dynamic], and [+ bounded]; and accomplishments, which are [+ durative], [+ dynamic], [+ bounded], and [+ telic]. The two secondary aktionsarten repeat the basic ones in different ways: iterative aktionsart is

the repetition of a basic aktionsart (usually punctual intergressives like *tap*, *knock*, or

jerk) within one occasion, whereas serial aktionsart is the repetition of a basic aktionsart

(often accomplishments or activities) on numerous occasions. I conclude the aktionsart

section with linguistic tests to aid aktionsart distinction.

Prevailing theories on aspect, with the exception of the offerings of a handful of

linguists such as Carl Bache, Bernd Kortmann, and Larry King, remain littered with

miscellania. In my investigation of aspect as a narrowly defined category, I divest aspect

of the 'habitual,' which is no more than the aktionsart 'series' used to describe the

repeated behavior of agents. Other so-called aspects, such as the 'egressive' and

'ingressive,' are shown to be aktionsarten as well; in this case, they are acmes. Aspect

becomes, in this view, merely the imperfective/perfective distinction, with the

imperfective manifested via the simple form (in the present or with states) and the

progressive (*–ing* form, used with dynamic aktionsarten).

A study on aspect demands some treatment of the perfect, which, although

properly exiled from tense by most linguists, is improperly foisted upon aspect. After

examining the most valiant efforts to explain how the perfect is an aspect (while at the

same time the traditional aspectual distinctions remain almost wholly unaffected by the

perfect), I subscribe to a small but increasingly held opinion that sees the perfect as

'orientation.' The perfect "orients" the situation to the reference time, while tense locates

the reference point to the moment of speech. Unlike more simplistic analyses, this one

recognizes that aspect and the perfect (if the expression has the perfect) work together to

locate the situation fully.

All these preliminaries facilitate the final analysis, wherein I combine aspect, aktionsart, orientation, tense, argument NPs and their articles, so-called 'aspectualizers,' adverbial phrases, prepositions, verb particles, and other phenomena to arrive at various rules for composition. This compositional study is not as deep as the likes of, say, Verkuyl (1972), but it is methodical and comprehensive in terms of touching upon all primary constituents of aspect and aktionsart construction. My analysis also benefits from a sounder understanding of the categories discussed and an improved conception of categorical interplay. For this reason, the patterns seen in the compositions reflect and support the theories advanced in earlier sections, and exceptions to the patterns described are rare.

Appendix 1: The effects of aktionsart, orientation, tense, and form upon aspect

aktionsart	tense	orientation	form	example	=	aspect
accomp	past	perfect	simple	*He had oiled the ski*		perfective
accomp	pres	perfect	simple	*He has oiled the ski*		perfective
accomp	fut	perfect	simple	*He will have oiled the ski*		perfective
accomp	past	prospective	simple	*He was going to oil the ski*		perfective
accomp	pres	prospective	simple	*He is going to oil the ski*		perfective
accomp	fut	prospective	simple	*He will be about to oil the ski*		perfective
accomp	past	perfect	*-ing*	*He had been oiling the ski*		progressive
accomp	pres	perfect	*-ing*	*He has been oiling the ski*		progressive
accomp	fut	perfect	*-ing*	*He will have been oiling he ski*		progressive
accomp	past	prospective	*-ing*	*He was a minute away from oiling the ski*		progressive
accomp	pres	prospective	*-ing*	*He is going to be oiling the ski (soon)*		progressive
accomp	fut	prospective	*-ing*	*He will be about to be oiling the ski*		progressive
interg	past	perfect	simple	*He had sung a song*		perfective
interg	pres	perfect	simple	*He has sung a song*		perfective
interg	fut	perfect	simple	*He will have sung a song*		perfective
interg	past	prospective	simple	*He was going to sing a song*		perfective
interg	pres	prospective	simple	*He is going to sing a song*		perfective
interg	fut	prospective	simple	*He will be about to sing a song*		perfective
interg (punctual → iterative)	past	perfect	*-ing*	*He had been singing a song*		progressive
interg (punctual → iterative)	pres	perfect	*-ing*	*He has been singing a song*		progressive
interg (punctual → iterative)	fut	perfect	*-ing*	*He will have been singing a song*		progressive
interg (punctual → iterative)	past	prospective	*-ing*	*He was going to be singing a song*		progressive
interg (punctual → iterative)	pres	prospective	*-ing*	*He is going to be singing a song (soon)*		progressive
interg (punctual → iterative)	fut	prospective	*-ing*	*He will be about to be singing a song*		progressive

aktionsart	tense	orientation	form	Example	=	aspect
activity	past	perfect	simple	*He had run*		perfective
activity	pres	perfect	simple	*He has run*		perfective
activity	fut	perfect	simple	*He will have run*		perfective
activity	past	prospective	simple	*He was going to run*		perfective
activity	pres	prospective	simple	*He is going to run*		perfective
activity	fut	prospective	simple	*He will be going/about to run*		perfective
activity	past	perfect	-ing	*He had been running*		progressive
activity	pres	perfect	-ing	*He has been running*		progressive
activity	fut	perfect	-ing	*He will have been running*		progressive
activity	past	prospective	-ing	*?He was about to be running*		progressive
activity	pres	prospective	-ing	*He is going to be running (soon)*		progressive
activity	fut	prospective	-ing	*?He will be going to be running*		progressive
state	past	perfect	simple	*He had known the answer*		continuative, but easily perfective
state	pres	perfect	simple	*He has known the answer*		continuative, but easily perfective
state	fut	perfect	simple	*He will have known the answer*		continuative, but easily perfective
state	past	prospective	simple	*?He was about to know the answer*		perfective
state	pres	prospective	simple	*?He is about to know the answer*		perfective
state	fut	prospective	simple	*?He will be about to know the answer*		perfective
state	past	perfect	-ing	**He had been knowing the answer*		∅
state	pres	perfect	-ing	**He has been knowing the answer*		∅
state	fut	perfect	-ing	**He will have been knowing the answer*		∅
state	past	prospective	-ing	**He was about to be knowing the answer*		∅
state	pres	prospective	-ing	**He is about to be knowing the answer*		∅
state	fut	prospective	-ing	**He will be about to be knowing the answer*		∅

aktionsart	tense	orientation	form	Example	=	aspect
acme	past	perfect	simple	*He had noticed the spill*		perfective
acme	pres	perfect	simple	*He has noticed the spill*		perfective
acme	fut	perfect	simple	*He will have noticed the spill*		perfective
acme	past	prospective	simple	*He was about to notice the spill*		perfective
acme	pres	prospective	simple	*He is about to notice the spill*		perfective
acme	fut	prospective	simple	*He will be about to notice spill*		perfective
acme (→ accomp)	past	perfect	*-ing*	*He had been winning the race*		progressive
acme (→accomp)	pres	perfect	*-ing*	*He has been winning the race*		progressive
acme (→accomp)	fut	perfect	*-ing*	*He will have been winning the race*		progressive
acme (→accomp)	past	prospective	*-ing*	**He was going to be winning the race*		progressive
acme (→accomp)	pres	prospective	*-ing*	*He is going to be winning the race*		progressive
acme (→accomp)	fut	prospective	*-ing*	**He will be going to be winning the race*		progressive

Appendix 2: The effects of verb class, articles, and noun phrases upon aktionsart

verb constellation	mass /count	singular/ plural	0, (in)definite	Examples	=	aktionsart
1a	count	singular	indefinite	*built a house*		intergressive
1b	count	singular	definite	*built the house*		accomplishment
1c	count	plural	0	*built houses*		(serial) activity
1d	count	plural	indefinite	*built some houses*		(serial) intergressive
1e	count	plural	definite	*built the houses*		accomplishment
1f	mass		0	*moved furniture*		activity
1g	mass		indefinite	*moved some furniture*		intergressive
1h	mass		definite	*moved the furniture*		accomplishment
2a	count	singular	indefinite	*flicked a marble*		intergressive
2b	count	singular	definite	*flicked the marble*		accomplishment
2c	count	plural	0	*flicked marbles*		(serial or iterative) activity
2d	count	plural	indefinite	*flicked some marbles*		(serial or iterative) intergressive
2e	count	plural	definite	*flicked the marbles*		accomplishment
2f	mass		0	*dabbed paint*		intergressive
2g	mass		indefinite	*dabbed some paint*		intergressive
2h	mass		definite	*dabbed the paint*		accomplishment

verb constellation	mass /count	singular/ plural	0, (in)definite	examples	=	aktionsart
3a	count	singular	indefinite	*ran a mile*		intergressive
3b	count	singular	definite	*ran the mile*		accomplishment
3c	count	plural	0	*ran miles*		(serial or iterative) activity
3d	count	plural	indefinite	*ran some miles*		(serial or iterative) intergressive
3e	count	plural	definite	*ran the miles*		accomplishment
3f	mass		0	*stirred pudding/ poured water*		activity
3g	mass		indefinite	*stirred some pudding/ poured some water*		activity intergressive
3h	mass		definite	*stirred the pudding*		accomplishment
4α	count	singular	0	*?know name/ "got game"*		state
4a	count	singular	indefinite	*know a name*		state
4b	count	singular	definite	*know the name*		state
4c	count	plural	0	*know names*		state
4d	count	plural	indefinite	*know some names*		state
4e	count	plural	definite	*know the names*		state
4f	mass		0	*loved pudding*		state
4g	mass		indefinite	*loved some pudding*		state
4h	mass		definite	*loved the pudding*		state

verb constellation	mass /count	singular/ plural	0, (in)definite	examples	=	aktionsart
5a	count	singular	indefinite	*learned a fact*		acme
5b	count	singular	definite	*learned the fact*		acme
5c	count	plural	0	*learned facts/ noticed new faces*		(serial or iterative) activity
5d	count	plural	indefinite	*learned some facts*		(serial or iterative) intergressive
5e	count	plural	definite	*learned the facts*		accomplishment
5f	mass		0	*discovered pudding*		acme
5g	mass		indefinite	*discovered some/ pudding*		acme
5h	mass		definite	*discovered the pudding*		acme
6a	count	singular	indefinite	*jiggle a doorknob*		(iterative) activity
6b	count	singular	definite	*jiggle the doorknob*		accomplishment
6c	count	plural	0	*jiggle doorknobs*		(serial or iterative) activity
6d	count	plural	indefinite	*jiggle some doorknobs*		(serial or iterative) intergressive
6e	count	plural	definite	*jiggle the doorknobs*		accomplishment
6f	mass		0	*sifted flour*		(iterative) activity
6g	mass		indefinite	*sifted some flour/ tussle some hair*		(iterative) intergressive (iterative) activity
6h	mass		definite	*sifted the flour*		accomplishment

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